



Scuola Normale Superiore  
Classe di Lettere e Filosofia

Sorbonne Université – Faculté des Lettres  
École doctorale V: Concepts et Langages  
Centre Léon Robin (UMR 8061)

Avicenna (Ibn Sīnā)

*Book of the Cure, Categories (al-Maḳūlāt)*

Part I: Introduction and Translation

by

Niccolò Caminada

Supervisors:

Prof. AMOS BERTOLACCI (IMT Lucca / SNS)

Prof. MARWAN RASHED (Sorbonne Université)

2018/2019



Πολλοὶ πολλὰς κατεβάλλοντο φροντίδας εἰς τὸ τῶν Κατηγοριῶν τοῦ Ἀριστοτέλους βιβλίον, οὐ μόνον ὅτι προοίμιόν ἐστι τῆς ὅλης φιλοσοφίας [...] ἀλλὰ καὶ ὅτι τρόπον τινὰ περὶ ἀρχῶν ἐστὶ τῶν πρώτων [...].

Many people wrote several commentaries on Aristotle's book of the *Categories*, not only because it is a proem to all philosophy [...], but also because, in a certain way, it deals with the first principles.

Simplicius, *In Aristotelis Categorias*, 1.3-7

Der Anfang des Kategorienproblems ist nicht identisch mit dem Anfang der Philosophie.

The beginning of the problem of the categories is not identical with the beginning of philosophy.

Klaus Oehler, *Aristoteles. Kategorien, Einleitung*, p. 37

أقول أولاً إنه ربما أوجب استقصاء النظر عدولاً عن المشهور.

First of all, I say that attaining the utmost in theoretical speculation could make it necessary to turn away from what is commonly accepted.

Ibn Sīnā, *al-Šifā'*, *al-Maqūlāt*, 18.4





# PART I

## SUMMARY

<b>INTRODUCTION</b> .....	<b>IX</b>
<b>1. PREMISE. STATE OF THE ART</b> .....	<b>XII</b>
<b>2. AVICENNA’S RECEPTION OF ARISTOTLE’S <i>CATEGORIES</i></b> .....	<b>XVI</b>
2.1 The Previous Arabic Tradition: Translation and Exegesis.....	xvi
2.1.1 Bio-bibliographical Sources .....	xvi
2.1.2 Translations.....	xvii
2.1.3 Greek Commentaries .....	xviii
2.1.4 Arabic Commentaries .....	xix
2.2 <i>Categories</i> and Categories in the Avicennan corpus.....	xxiii
2.2.1 Between Logic and Metaphysics .....	xxiii
2.2.2 Classifications of Sciences.....	xxiii
2.2.3 <i>Summae</i> .....	xxiv
2.2.4 Other Works.....	xxvii
2.2.5 Summary .....	xxix
2.3 The <i>Maqūlāt</i> of the <i>Kitāb al-Šifā’</i> .....	xxxI
2.3.1 Composition and Structure .....	xxxI
2.3.2 Style .....	xxxv
2.3.3 Sources.....	xxxv
2.3.4 Aftermath .....	xxxviii
<b>3 AVICENNA’S INTERPRETATION OF ARISTOTLE’S <i>CATEGORIES</i></b> .....	<b>XL</b>
3.1 The subject-matter of the Categories: a non-scientific ontology of quiddity.....	xli
3.1.1 The Greek Tradition. Porphyry’s Semantics .....	xli
3.1.2 The Arabic Tradition .....	xlii
3.1.3 Avicenna’s Ontological Reading .....	xlv
3.1.4 Categories and Metaphysics .....	xlviii
3.1.5 Avicenna’s Attitude towards Aristotle. ....	l
3.2 Substance and accident: against “Porphyrian” onto-relativism .....	lii
3.2.1 The Problem with Constitutive Properties.....	lii
3.2.2 <i>Maqūlāt</i> I.3-5: the Distinction between accident and accidental, and the status of form .....	liv
3.2.3 <i>Maqūlāt</i> I.6 and the short treatise <i>Fī ḥata’</i> .....	lvii
3.3 The Synonymy of Substance .....	lxiii
3.3.1 The problem.....	lxiii
3.3.2 Avicenna’s Arabic predecessors.....	lxviii
3.3.3 Avicenna on the synonymy of substance: <i>Maqūlāt</i> II.4 and III.1 .....	lxxi
3.4 Quantity .....	lxxviii
3.4.1 Substantial and quantitative bodies.....	lxxviii
3.4.2 Physical <i>continua</i> : place and time .....	lxxix
3.4.3 Speech.....	lxxxii
3.5 Relatives .....	lxxxv
3.5.1 Aristotle’s four definitions of relatives.....	lxxxv
3.5.2 Avicenna’s exegesis of <i>Cat.</i> 7.....	lxxxvii
3.6 Quality .....	xcii
3.6.1 Defining and dividing quality .....	xcii
3.6.2 Active capacities.....	xcv
3.6.3 Categorical complexes: figures, angles, external forms .....	xcviii
<b>4. THE TRANSLATION: INTRODUCTORY REMARKS</b> .....	<b>CI</b>
<b>APPENDIX</b> .....	<b>CV</b>
<b>BIBLIOGRAPHY</b> .....	<b>CXIII</b>
<b>TRANSLATION</b> .....	<b>2</b>

<b>FIRST TREATISE</b> .....	4
[I.1]	
<i>On the goal of the Categories</i> .....	6
[I.2]	
<i>On the utterances of homonyms, synonyms, heteronyms, paronyms, and the like</i> .....	11
[I.3]	
<i>On the explanation of the meaning of what is said of a subject or is not said [of a subject], and [what] exists in a subject or does not exist [in a subject]</i> .....	19
[I.4]	
<i>On explaining the definition of the accident, that is “existent in a subject”</i> .....	28
[I.5]	
<i>On the combinations occurring between “to say of” and “to exist in”, and what they lead to</i> .....	37
[I.6]	
<i>On destroying the claim of those who said that one thing may be an accident and a substance in two respects</i> .....	44
<b>SECOND TREATISE</b> .....	49
[II.1]	
<i>On the state of the relation of genera and their divisive and constitutive differentiae; on making known these ten highest genera, and the state of the relation of “existent” with them; [on] beginning the treatment of the fact that they are ten, they do not fall under a genus, none of them belongs to any other, and there is no genus outside them.</i> .....	50
[II.2]	
<i>On the fact that accident is not a genus for the nine [accidental categories], and the examination of what was said about this</i> .....	57
[II.3]	
<i>On investigating what was said by those who required that the [categories] be less, or more</i> .....	61
[II.4]	
<i>On mentioning realities that made [people] suspect them either to be common to some of the ten [categories] as a genus, or to fall outside the ten [categories]; [on] completing the discussion of this [topic]</i> .....	65
[II.5]	
<i>On notifying the state of the number of the categories</i> .....	76
<b>THIRD TREATISE</b> .....	82
[III.1]	
<i>On primary, secondary and tertiary substances; in general, on the state of the ranks of universal and particular substances with regard to substantiality.</i> .....	83
[III.2]	
<i>On primary, secondary and tertiary substance</i> .....	88
[III.3]	
<i>On the descriptions of substance, and its properties</i> .....	95
[III.4]	
<i>On beginning the treatment of quantity</i> .....	105
<b>FOURTH TREATISE</b> .....	119
[IV.1]	
<i>On the clarification of the second division of quantity, and the clarification of quantity by accident</i> .....	120
[IV.2]	
<i>On the properties of quantity</i> .....	128
[IV.3]	
<i>On beginning the treatment of the relative, notifying its former definition and explaining that definition; on the general indication of the types of relative.</i> .....	137
[IV.4]	
<i>On the properties of the relative</i> .....	145

[IV.5]	
<i>On verifying the relative that is a category; on the difference between what is relative by itself and what has relation by accident, or as a necessary concomitant; on the properties of the relative that is a category.</i>	151
<b>FIFTH TREATISE</b>	161
[V.1]	
<i>On notifying quality and its primary subdivisions</i>	162
[V.2]	
<i>On the investigation of the ways according to which a group of people divided quality into its four species</i>	169
[V.3]	
<i>On notifying the essence of every two species of quality, namely state and habit and capacity and incapacity</i>	176
[V.4]	
<i>On mentioning doubts about the species related to capacity and incapacity</i>	181
[V.5]	
<i>On affective qualities and affections</i>	187
[V.6]	
<i>On solving the remaining doubts</i>	192
<b>SIXTH TREATISE</b>	196
[VI.1]	
<i>On mentioning the species of the fourth genus of quality</i>	197
[VI.2]	
<i>On notifying the state of the angle, and the way in which it falls under quantity, or quality, or position and others; the notification of the state of countenance, and how it may become a species despite its composite nature; the remaining doubts concerning this genus of the four genera.</i>	204
[VI.3]	
<i>On notifying the difference between quality and qualified, and the states which subsist in between them; on the accidents of quality, and its properties</i>	209
[VI.4]	
<i>On solving a doubt which depends on the intrusion of certain species of quality and other categories in certain species of the relative.</i>	214
[VI.5]	
<i>On where and when</i>	219
[VI.6]	
<i>On the rest of the ten categories</i>	224
<b>SEVENTH TREATISE</b>	229
[VII.1]	
<i>On opposites</i>	230
[VII.2]	
<i>On doubts attached to what was said about opposition</i>	238
[VII.3]	
<i>On interpreting rules and properties regarding contraries</i>	247
[VII.4]	
<i>On the prior and the posterior</i>	252



## INTRODUCTION



## **Bibliographic conventions**

Throughout the Introduction, all passages from the Cairo edition of Avicenna's *Maqūlāt* are simply referred to by chapter number and structural unit, occasionally also by page and line numbers (e.g. VII.3 [§2]; VI.4 [§5.2.3], 67.9-10); Avicenna's works are simply referred to by abridged title of the work, chapter and page number (e.g. *Ilāhiyyāt* III.1, 94.1-4); other primary sources, Aristotle included, are referred to by author's name, abridged title of the work and page number (e.g. Arist. *Cat.* 5 a1-9); secondary literature is referred to by author's surname and year of publication (e.g. VAN ESS 1986).

## 1. PREMISE. STATE OF THE ART

Scholarly interest in Avicenna's *Maqūlāt* has been increasing ever since 1988, when Dimitri Gutas underscored the interest and novelty of Avicenna's interpretation of Aristotle's *Categories* in the first edition of his book *Avicenna and the Aristotelian Tradition*. In the chapter devoted to Avicenna's "major points of conflict with the Aristotelian tradition" Gutas presented an English translation of some passages of *Maqūlāt* I.1, where the philosopher – against the totality of his "Peripatetic" forerunners – explicitly argues for the uselessness of categories in the domain of logic<sup>1</sup>. The same issue was later tackled by Richard Bodéüs in a dedicated article appeared in 1993, where he argued for the necessity of doing further research in this field<sup>2</sup>.

After the pioneering studies of Gutas and Bodéüs, the Avicennan scholarship has made great progress in understanding the difficulties and problems posed by Avicenna's reading of the *Categories*. Studies on Arabic and Avicennan logic in general have certainly flourished in the last few decades, but also specific studies on the *Maqūlāt* have been growing exponentially in recent times.

The section of Avicenna's *Maqūlāt* that has drawn so far most attention is the first treatise, which contains the gist of Avicenna's analysis of *Cat.* 1-3. Allan Bäck has devoted two interesting studies to some of these pages, both in a theoretical and historical perspective. In 1999, he has provided an analysis of the five-fold classification of "attributes" found at *Maqūlāt* I.3; in 2008, he has made an extensive appraisal of Avicenna's account of homonymy, synonymy and paronymy as it is expounded in *Maqūlāt* I.2 (which he has used as a basis for providing more general remarks on Avicenna's exegetic technique)<sup>3</sup>. Avicenna's discussion of homonyms has also been the subject of a 2010 contribution by Alexander Treiger, who studied the important notion of *taškīk*, employed by Avicenna in *Maqūlāt* I.2 to describe the way that "existence" is predicated of existent things<sup>4</sup>. Moreover, *taškīk* has also been taken into account by Amos Bertolacci in 2011, in a contribution about the phenomenon that he has dubbed "ontologization of logic" (i.e. the penetration of ontological issues in the Logic of Avicenna's *Kitāb al-Šifā'*) – alongside a short passage from chapter I.6<sup>5</sup>.

In limited measure, I have personally contributed to this recent wave of new studies on Avicenna's *Antepaedica*. In an article appeared in 2016, I have analysed a literal quotation of an anonymous commentator presented by Avicenna at *Maqūlāt* I.3. Given the striking resemblance that it bears with a passage of Porphyry's *Commentary* on Aristotle's *Categories*, I have argued that it comes either from an Arabic translation of that commentary or from a reworking paraphrase of it<sup>6</sup>. I also have insisted on the doctrinal contents of that

---

<sup>1</sup> GUTAS 1988, pp. 265-267. This section is entirely reprised in the second edition of the work, with an updated

<sup>2</sup> BODÉÜS 1993.

<sup>3</sup> BÄCK 1999; 2008.

<sup>4</sup> TREIGER 2010.

<sup>5</sup> Cf. BERTOLACCI 2011, pp. 35-37 (for the translation and discussion of *Maqūlāt* I.6, 46.4-7); 41-49 (for an English translation and analysis of *Maqūlāt* I.2, 10.4 – 11.7).

<sup>6</sup> CAMINADA 2016, esp. pp. 208-222. See also below, I.3 [§5-7] and the COMMENTARY *ad loc.*



passage, particularly on the main philosophical implications of Avicenna's criticism of Porphyry – which concerns both philosophers' understanding of Aristotle's predication “of a subject” (καθ' ὑποκειμένου)<sup>7</sup>. In the same volume an article by Silvia Di Vincenzo appeared, which inspected the development of the same doctrinal issue in Avicenna's paraphrase of Porphyry's *Isagoge* (*Madḥal*)<sup>8</sup>. In 2017, Fedor Benevich has published an article about Avicenna's distinction of accidents and substances, and the related issue of constitutive properties, as it is tackled by Avicenna at *Maqūlāt* I.6<sup>9</sup>.

Other parts of the *Maqūlāt* have so long attracted the attention of scholars: most notably, treatise II (devoted essentially to Aristotle's list of the categories at *Cat.* 4), chapters III.1-3 (devoted to the category of substance) and the discussion of relatives carried out in chapters IV.3-5, and VI.4. Hatem Zghal has devoted a deep and lengthy article (appeared in 2006) to the difficulties of Avicenna's doctrine of relations, which presented extensive French translations of *Maqūlāt* IV.5 and VI.4<sup>10</sup>. In 2012, Amos Bertolacci has translated and analysed an important passage of *Maqūlāt* II.1 where it is possible to read a very clear formulation of the essence-existence distinction<sup>11</sup>. Furthermore, Jules Janssens has provided in 2013 an analysis of *Maqūlāt* III.2, the important chapter where Avicenna deals with the distinction between primary and secondary substances. Eventually, in 2015 Paul Thom has studied Avicenna's different divisions of categories, as they are presented at *Maqūlāt* II.5 and in his Persian *summa*, the *Dānešnāme*<sup>12</sup>.

Treatises I-III also constitute, in part, the focus of a section of a monograph by Tiana Koutzarova on Avicenna's doctrine of transcendentals (2009). The section in question contains partial German translations, accompanied by extensive philosophical analyses, of chapters I.2, II.1 and III.1<sup>13</sup>.

Other recent contributions do not focus specifically on the *Maqūlāt* of the *Šifā'*, but tackle other Avicennan texts that prove all the same very helpful for our understanding of Avicenna's doctrine of categories. In 2012, Alexander Kalbarczyk has published a critical edition of the *Kitāb al-maqūlāt* (book of the *Categories*) contained in a minor logical work, the *Muḥtaṣar al-awsaṭ fi l-mantiq*; whereas in 2013 Heidrun Eichner has devoted a specific contribution to the possibility of identifying a “developmental” account in Avicenna's interpretation of the *Categories*<sup>14</sup>.

As regards the aftermath of Avicenna's *Maqūlāt*, much work is still to be done: no specific contribution has yet been devoted, for instance, to the Islamic reception of this section of the *Šifā'* (except for some chapters of a recent book by Kalbarczyk, of which I will speak in more detail below). As for the Latin fortune, in an article appeared in 1972 Mario Grignaschi made the hypothesis that Albert the Great knew a Latin version of Avicenna's *Maqūlāt* (to this date, neither extant nor attested), on the basis of some

---

<sup>7</sup> CAMINADA 2016, esp. pp. 222-231. See also below, 3.2.2.

<sup>8</sup> DI VINCENZO 2016.

<sup>9</sup> BENEVICH 2017.

<sup>10</sup> ZGHAL 2006. The translated passages are found at pages 239-243 259-260; 267; 272-273 (IV.5); pp. 276-278 (VI.4).

<sup>11</sup> See BERTOLACCI 2012b, esp. pp. 284-286.

<sup>12</sup> JANSSENS 2013b; THOM 2015.

<sup>13</sup> KOUTZAROVA 2009, pp. 213-230 (on ch. I.2); 230-258 (on ch. II.1); 259-277 (on ch. III.1).

<sup>14</sup> See for instance KALBARCZYK 2012; EICHNER 2013.

quotations of Avicenna found in Albert's *De praedicamentis*<sup>15</sup>. Jules Janssens, who firstly reassessed Grignaschi's *dossier* in an contribution appeared in 2013, has come to the conclusion that this hypothesis is very unlikely; in a subsequent reappraisal (2017) of Grignaschi's and Janssens' work I have substantially confirmed Janssens' counter-hypothesis<sup>16</sup>.

As I started working on this English translation and commentary, no complete or extensive translation of Avicenna's *Maqūlāt* existed in print, and no book-long study of issues related to Avicenna's reading of the *Categories* had yet been published. Nonetheless, two comprehensive works on the *Maqūlāt* came out in the last few years. In 2016, Allan Bäck published a complete English translation of the Avicennan treatise<sup>17</sup>, being the second integral version of this treatise in a Western language – after the Russian translation published in 2010 by T.N. Mardoni and N.B. Nazaryev<sup>18</sup>. In 2018, Alexander Kalbarczyk published *Predication and Ontology*, a substantive monograph focusing on some crucial aspects of Avicenna's interpretation of the *Categories*, which also presents English translations of extensive passages<sup>19</sup>.

Although Bäck's work certainly is a commendable achievement, his translation presents flaws and inaccuracies that have discouraged me from using it as a term of comparison. As a matter of fact, Bäck appears not to have revised the Cairo text – often unreliable and faulty – on the basis of manuscripts; furthermore, his translation sometimes is too heavily interpretative, and his explicative notes are rather scarce, especially when they are most needed (e.g. in some particularly difficult chapters). On the whole, I have preferred not to consult other translations systematically, in order not to be excessively influenced by the choices of other translators. I have done so only when confronted with particularly difficult passages.

On the contrary, the English translations found in Kalbarczyk's book are much more reliable, being based on an accurate revision of the Arabic text. Furthermore, the clarity and depth of the author's historical-philosophical analysis are undisputable. Unfortunately the book came out too late, and I could not avoid some thematic overlaps, most notably with regard to the issue of the subject-matter of the *Categories* and the idea of a 'developmental' account of Avicenna's understanding of the *Categories* (tackled by Kalbarczyk in chapter 1, by myself in pars. **2.2** and **3.1** of this INTRODUCTION)<sup>20</sup>; and the synonymy of substance, i.e. the question whether substance is a genus (taken up by Kalbarczyk in chapter 3, by myself in paragraph **3.3** of this INTRODUCTION)<sup>21</sup>. The reader will certainly benefit from comparing my interpretation of these problems, which I have presented in the rather synthetic fashion appropriate for an Introduction, with Kalbarczyk's more in-depth analyses: this is particularly useful, for instance, in the case of Avicenna's analysis of predication *de subiecto*,

---

<sup>15</sup> GRIGNASCHI 1972, pp. 69-73.

<sup>16</sup> Cf. JANSSENS 2013a, pp. 256-257; CAMINADA 2017.

<sup>17</sup> BÄCK 2016. Bäck's translation of the *Maqūlāt* follows his English version of another Avicennan paraphrase, *al-'Ibāra*, which deals with Aristotle's *De Interpretatione* (BÄCK 2013).

<sup>18</sup> MARDONI, NAZARYEV 2010. Unfortunately I could not consult this translation; I am grateful to Teymur Malikov for the reference.

<sup>19</sup> KALBARCZYK 2018. Throughout his work Kalbarczyk presents integral English translations of chapters I.3 (pp. 126-139) and I.4 (pp. 238-252), II.2 (pp. 253-258), II.5 (pp. 191-200), III.1-3 (pp. 261-293).

<sup>20</sup> KALBARCZYK 2018, esp. pp. 11-31.

<sup>21</sup> KALBARCZYK 2018, pp. 221-226.

which I have quickly dealt with in the Introduction and Commentary, and to which Kalbarczyk has devoted a lengthy and masterful discussion<sup>22</sup>. In some other cases my approach and interpretation differ from Kalbarczyk's, for instance as regards Avicenna's changing attitude towards the scope of the *Categories*: whereas Kalbarczyk has taken a more limited number of works into account (*Muḥtaṣar al-awsaṭ fī l-manṭiq, Maqūlāt, Ta'liqāt, Iṣārāt*), I have tried – especially in chapter 2.2 of the INTRODUCTION – to reconstruct as broad a picture as possible, by inspecting the doctrine of categories in all of Avicenna's most important works. As concerns the synonymy of substance, instead, I have tried to provide a wider overview of the debate in the late ancient and Arabic sources, and given a more detailed evaluation of Fārābī's position (which Kalbarczyk deduces from his extant commentaries on the *Categories*, without taking other sources, such as the *Kitāb al-Hurūf*, into account)<sup>23</sup>.

Against this background, my ambition is to present here – after the first complete English translation (Bäck) and the first thematic study based on a partial English translation of the revised Arabic text (Kalbarczyk) – the first complete English translation, based on a systematic revision of the Arabic text and accompanied by a commentary, of the *Maqūlāt* of Avicenna's *Kitāb al-Šifā'*. Both my revision of the Arabic text and Kalbarczyk's are based on sixteen direct witnesses: among Kalbarczyk's manuscripts, six were also used by Cairo editors, whereas among my codices ten were already employed in the making of the Cairo edition<sup>24</sup>.

In the subsequent chapters of this Introduction I shall deal firstly with the Arabic reception of Aristotle's *Categories* and the penetration of the doctrine of categories in Avicenna's *corpus* (ch. 2). Secondly, I will point out the major interesting aspects of Avicenna's interpretation of the *Categories*, with a special focus on the categories of substance, quantity, quality and relation (ch. 3). Eventually I will make some short general remarks about the Arabic text and my English translation (ch. 4).

---

<sup>22</sup> KALBARCZYK 2018, pp. 57-140.

<sup>23</sup> KALBARCZYK 2018, pp. 226-227.

<sup>24</sup> For the direct and indirect sources used by the author, see KALBARCZYK 2018, pp. 309-313. For a list of my sixteen manuscripts, see below, ch. 4 of the INTRODUCTION.

## 2. AVICENNA'S RECEPTION OF ARISTOTLE'S *CATEGORIES*

### 2.1 The Previous Arabic Tradition: Translation and Exegesis

#### 2.1.1 Bio-bibliographical Sources

There exists nowadays an extensive literature about the great movement of translations from Greek, Syriac and Persian into Arabic that accompanied the development of classical Islamic science and philosophy<sup>25</sup>. I am not going to recall here all the stages of this important historical process: in this first section I will limit myself to collecting, in short, all the available information about the Arabic reception and circulation of Aristotle's *Categories* in the period that precedes Avicenna's philosophical activity (7th-10th century a.D.)<sup>26</sup>.

A classic starting point for reconstructing the Arabic, pre-Avicennan tradition of the *Categories* is Ibn al-Nadīm's *Kitāb al-Fihrist* ("Index", "Book of the Index"), a work of fundamental importance for our knowledge of Arabic-Islamic culture in the first centuries of its development. In the seventh book of the *Fihrist*, in the section devoted to Aristotle's life and works, Ibn al-Nadīm writes the following lines about the work named *Categories* (*Qāṭiḡūryās*)<sup>27</sup>:

Discourse concerning the *Categories*, translated by Ḥunayn Ibn Ishāq. Among those who explained it and commented upon it there are Porphyry, Stephanus of Alexandria, Illīnūs, John the Grammarian, Ammonius, Themistius, Theophrastus, Simplicius; [it has been explained] also by a man known as Theon, in Syriac and Arabic<sup>28</sup>. From Simplicius' commentary there is an addition up to the [category] of relative<sup>29</sup>. Among the foreign commentaries<sup>30</sup>, a part is attributed to Iamblichus. The *ṣayḥ* Abū Zakariyyā' said: «It is doubtful whether it is to be ascribed to Iamblichus, for I could see, in between the lines, "Alexander said"». The *ṣayḥ* Abū Sulaymān said that he asked the *ṣayḥ* Abū Zakariyyā' for a translation of this book, along with the commentary by Alexander of Aphrodisias (around three hundred folia). Among those who commented (*fassara*) upon this book

---

<sup>25</sup> Just to mention a few studies: G. Endress' long monographic article devoted to Arabic scientific literature and its developments, forms and literary genres, contained in the *Grundriss der Arabischen Philologie* (ENDRESS 1987, 1992); D. Gutas' work on the origin, causes and social function of the translation movement (GUTAS 1998); C. D'Ancona's synthetic account of the translation of philosophical works (D'ANCONA 2005).

<sup>26</sup> For other detailed accounts of the Arabic reception of the *Categories*, see HEIN 1985 (pp. 247-251), ELAMRANI-JAMAL 1988 and FERRARI 2006 (pp. 12-14).

<sup>27</sup> Ibn al-Nadīm, *Fihrist* 248.20-28. For other English translations of this passage, see PETERS 1968 (p. 7) and DODGE 1970 (pp. 598-599).

<sup>28</sup> Given the reference to Syriac and Arabic, Dodge thinks that translations are at stake here ("A man known as Theon has made both Syriac and Arabic [translations]"); however, I believe - following Peters - that al-Nadīm is rather speaking about commentaries, since Theon is mentioned after a long list of commentators.

<sup>29</sup> The Arabic reads: *wa-yuḍāfu min tafsīri Sinblīqūs ilā l-muḍāfi*. Dodge reads "there is an addition to the supplement", which seems more faithful to the original; Peters renders differently ("part of the interpretation of Simplicius is attributed to someone else"). I translate "relative", in agreement with KALBARCZYK 2018, p. 316.

<sup>30</sup> Ar. *min ḡarībi l-tafsīri*. Dodge: "among the odd commentaries"; Peters: "among the less common commentaries"; Kalbarczyk: "among the remote commentaries".

there are Abū Nasr al-Fārābī and Abū Bišr Mattā; of this book there are also compendia (*muhtaṣar*) and epitomai (*ḡawāmi'*), comprising diagrams or not<sup>31</sup>, authored by all the following [scholars]: Ibn al-Muqaffā', Ibn Bahrīz, Al-Kindī, Ishāq Ibn Ḥunayn, Aḥmad Ibn al-Ṭayyib, Al-Razī.

This short passage from the *Fihrist*, reprised almost literally by the later bibliographer Ibn al-Qifṭī in his *Ta'rīḥ al-ḥukamā'*<sup>32</sup>, attests to **(1)** the existence of one or more Arabic translation of the *Categories*; **(2)** the knowledge, by name or by translation, of commentaries written by late ancient Greek authors; **(3)** a conspicuous exegetical activity on the part of Arabic-speaking scholars and philosophers. Each of these three points needs now to be discussed in more detail.

### 2.1.2 Translations

The Arabic version of the *Categories* known to us, that the *Fihrist* ascribes to the physician and translator Ḥunayn Ibn Ishāq (d. 260/873, especially known for his Arabic version of Galenus), must very likely be attributed to his son Ishāq Ibn Ḥunayn (d. 289/910-911). Our main available source for this translation is the famous Parisian codex BnF ar. 2346, containing a complete Arabic “edition” of Aristotle’s *Organon* (preceded by Porphyry’s *Isagoge* and followed by the *Poetics* and the *Rhetoric*). The marginal glosses to the text of the *Categories* attribute the paternity of the translation to Ishāq<sup>33</sup>, and signal the existence of a Syriac translation, authored by Ḥunayn<sup>34</sup>, which Ishāq himself might have used as a base for his own Arabic version. To this date, there exist four modern editions of Ishāq’s translation: the oldest one was published in 1846 by J.T. Zenker<sup>35</sup>, whereas there are more recent edition by M. Bouyges<sup>36</sup>, K. Geor<sup>37</sup> and ‘A. Badawī<sup>38</sup>. The *Fihrist* also notifies the possible existence of another translation of the *Categories*, commissioned by Abū Sulaymān al-Siḡistānī to the Christian philosopher Abū Zakariyyā’ (Yaḥyā Ibn ‘Adī); besides Ibn al-Nadīm’s testimony, however, we dispose of no other information about this second Arabic version. Moreover, Ibn al-Qifṭī reports a different version of the same story, according to which Yaḥyā did not execute the translation personally, but only commissioned it<sup>39</sup>.

<sup>31</sup> Literally: *mušaḡḡara wa-lā mušaḡḡara*, “containing tree-shaped diagrams and not”. Cf also Dodge’s note (p. 599 n107). Peters: “ordered and disordered”; Kalbarczyk:

<sup>32</sup> Ibn al-Qifṭī, *Ta'rīḥ al-ḥukamā'*, p. 35.1-15.

<sup>33</sup> Cf. GEORR 1948, p. 386.7, where Ishāq is said to be “the translator of this book” (*nāqil hādā l-kitāb*).

<sup>34</sup> *Ibid.* p. 380.12.

<sup>35</sup> *Aristotelis Categoriae graece cum versione arabica Isaaci Honeini filii et variis lectionibus textus graeci e versione arabica ductis. Edidit Iulius Theodorus Zenker, Dr., Lipsia 1846.*

<sup>36</sup> The Arabic text of the *Categories* is printed below Bouyges’ edition of Averroes’ *Middle Commentary on the Categories* (Averroes, *Talḥīṣ al-maqūlāt*).

<sup>37</sup> GEORR 1948.

<sup>38</sup> *Manṭiq Arīṣṭū*.

<sup>39</sup> Cf. Ibn al-Qifṭī, *Ta'rīḥ al-ḥukamā'* 35. see also KALBARCZYK 2018, p. 317 (and the note *ad loc.*).

### 2.1.3 Greek Commentaries

Many of the late ancient commentators mentioned by al-Nadīm are well-known to us, notably Alexander of Aphrodisias, Porphyry, Ammonius, Themistius, Theophrastus, Simplicius and “John the Grammarian” (ar. Yaḥyā al-naḥwī, i.e. John Philoponus). The others are either unknown authors, or known authors that we do not know as commentators of the *Categories*. We do not know anything, for instance, about the commentary on the *Categories* by Stephanus of Alexandria (6th – 7th century a.D.), whereas we may read his commentary on the *De interpretatione*. The same can be said about “the man known as Theon”, about whose identity only conjectures can be made<sup>40</sup>; and about Illīnūs, whose identity is disputed by scholars<sup>41</sup>. Unluckily, al-Nadīm’s account of the Arabic reception of the late ancient exegesis is too synthetic to provide precise information regarding the circulation of these works: the only Arabic translation of a commentary that is explicitly mentioned in the *Fihrist* is that, commissioned to Yaḥyā Ibn ‘Adī, of Alexander’s commentary<sup>42</sup>. We certainly know some Arabic fragments of Porphyry’s commentary *per interrogationem et responsionem*, one of which is possibly preserved in Avicenna’s *Maqūlāt*<sup>43</sup>; but we also know fragments of an Arabic translation of Simplicius’ commentary, preserved in Ibn Suwār’s glosses on the Parisian *Organon* and – again – in Avicenna’s *Maqūlāt*<sup>44</sup>.

On the other hand, in the Arabic sources known to us it is obviously possible to detect the presence of authors that Ibn al-Nadīm does not mention: for example, C. Ferrari has well shown the possible dependence of Ibn al-Ṭayyib’s *Tafsīr al-maqūlāt* on Elias/David’s commentaries, whereas M. Rashed has proven its direct or indirect dependence on the byzantine *scholia* authored by Arethas of Caesarea<sup>45</sup>.

Only further research on the sources of extant Arabic commentaries will maybe shed some light upon this issue, although the fragmentary or indirect attestations of these works make it very likely that they were not transmitted independently, but rather in manuals or anthologies, and that they were mostly employed as school material<sup>46</sup>.

---

<sup>40</sup> PETERS 1968 (pp. 7-11) does not even take him into account.

<sup>41</sup> “Illīnūs” has been identified in past studies with Apollonius of Alexandria (ROSENTHAL 1972), with Elias, a commentator of Olympiodorus’ school (GYEKYE 1975), with the title of a Syriac manual of Greek logic (ZIMMERMANN 1981, pp. XCVII-XCVIII) or with the commentator David (M. RASHED 2004); Rashed later revised his interpretation (M. RASHED 2016, pp. 837-839). For the discussion of Illīnūs’ identity, see ELAMRANI-JAMAL 1989; M. RASHED 2016, pp. 830-839.

<sup>42</sup> The account provided by Ibn al-Qifṭī is slightly different:

<sup>43</sup> For an analysis of the possible fragment found in *Maqūlāt*, and an overview of the Arabic tradition of Porphyry’s commentary on the *Categories*, see CAMINADA 2016, pp. 208-222; On Porphyry’s Arabic tradition in general, see WALZER 1965, D’ANCONA 2011, HUGONNARD-ROCHE 2012.

<sup>44</sup> Cf. GEORR 1948, pp. 168-169 (Arabic text at pp. 376-377); I have translated and analysed this fragment in CAMINADA 2016, pp. 217-222. For the other possible fragment, see below, V.1 [§7.1] and the COMMENTARY *ad loc.* More in general on Simplicius’ Arabic tradition, see GÄTJE 1982; CODA 2016.

<sup>45</sup> Cf. FERRARI 2006, pp. 92-94; M. RASHED 2016, pp. 825-830. On Ibn al-Ṭayyib see right below, 2.1.4.

<sup>46</sup> P. Vallat even makes the hypothesis that the manuscripts of these works “were never copied or ceased to be very early” (VALLAT 2011, p. 68).

#### 2.1.4 Arabic Commentaries

In his short account of the Arabic exegesis, Ibn al-Nadīm seems to present a distinction between authors of compendia and authors of systematic commentaries: this difference is suggested by the distinct use of the term *fassara* (whose verbal name, *tafsīr*, normally refers to systematic or lemmatic commentaries) and the words *muḥtaṣar e ḡawāmi‘*, which refer instead to compendia and epitomes<sup>47</sup>. When examining summarily the tradition, in the following pages, I will indicatively maintain this preliminary division.

Among the authors of epitomes, the earliest one is certainly Ibn al-Muqaffa‘, to which a compendium of the first four books of the *Organon* is ascribed that in some codices is transmitted as a “translation” of Aristotle’s works<sup>48</sup>. The identity of Ibn al-Muqaffa‘ is debated: some manuscripts attribute the work to Abū Muḥammad ‘Abdallāh (d. 137-139/755-756), of Persian origins, working as a secretary for members of the ‘abbasid family and author of translations from middle Persian (most notably, of the celebrated *Kalīla wa-Dimna*)<sup>49</sup>; others ascribe it to his son Muḥammad Ibn ‘Abdallāh, a secretary to caliph al-Manṣūr. It is also debated whether the compendium should be considered a translation from Persian (executed more probably, in that case, by Ibn al-Muqaffa‘ senior) or from another language, for instance Syriac<sup>50</sup>. Be as it may, the compendium contains a synthesis of the *Categories*, comprising also some explicative tables, which seems to take into account some aporiae raised in the Greek exegetical tradition.

Ḥabīb Ibn Bahrīz (2nd-3rd/8th-9th c.), known especially as a translator of Nicomachus’ *Arithmetica* for al-Kindī’s circle, is mentioned in the *Fihrist* right after Ibn al-Muqaffa‘ as an epitomist of the *Categories*. His work on the *Categories* is unfortunately lost: we only have a short manual of definitions relative to logic, where terms related to Aristotle’s work appear, but no independent exegetical work is extant<sup>51</sup>.

Ibn al-Nadīm mentions, in the third place, al-Kindī (d. 247-252/861-866), the first great Arabic philosopher, as the author of an epitome of the *Categories*. The inventory of Kindī’s works contained in the *Fihrist* numbers, among his philosophical texts, a *Book on the Intent of Aristotle in the Categories* (*Kitāb fī qaṣd Aristā[ṭā]līs fī l-maḡūlāt*) and, among his logical works, an *Epistle on the ten categories* (*Risāla fī l-maḡūlāt al-ašara*)<sup>52</sup>. Neither of these works came down to us; we dispose, nonetheless, of a brief discussion of the *Categories* contained in Kindī’s *Epistle on the quantity of Aristotle’s books, and what is needed for the acquisition of philosophy* (*Risāla fī kammiyyati kutub Aristāṭālīs wa-mā yuḥtaḡu ilayhi fī taḥṣīli l-falsafati*)<sup>53</sup>, and of some definitions related to the *Categories* in the *Epistle on the definitions and descriptions of things* (*Risāla fī ḥudūd al-ašyā’ wa-rusūmi-hā*), whose attribution to Kindī is however disputed.

---

<sup>47</sup> On the genres of Arabic scientific and philosophical literature, see ENDRESS 1987, pp. 460-473.

<sup>48</sup> Extant and edited by M.T. Danišpažūh (Ibn al-Muqaffa‘ *Manṭiq*).

<sup>49</sup> Cf. GABRIELI 1971, p. 883.

<sup>50</sup> For a more detailed discussion of problems related with Ibn al-Muqaffa‘’s figure, see HEIN 1985, pp. 41-46; cf. also GUTAS 2012, pp. 72-74. For a more recent reappraisal of this work, see HERMANS 2018.

<sup>51</sup> Extant and edited by Danišpažūh (Ibn al-Muqaffa‘ *Manṭiq*, pp. 97-126); Cf. GUTAS 2012, p. 78; ADAMSON, ENDRESS 2012, p. 101.

<sup>52</sup> *Fihrist* 256.1-2; 13.

<sup>53</sup> Edited and translated into Italian by M. Guidi and R. Walzer (al-Kindī, *Risāla fī l-kammiyya*); into English by P. Adamson and P. Pormann (ADAMSON, PORMANN 2012, pp. 279-296).

The last names cited by Ibn al-Nadīm are that of Aḥmad Ibn al-Ṭayyib al-Saraḥsī (d. 286/899), a pupil of al-Kindī, author of a *Compendium of the book of the Categories* (*Muḥtaṣar kitāb Qaṭīgūryās*) of which only an unpublished fragment is extant (preserved in a Turkish manuscript)<sup>54</sup>; Abū Bakr al-Razī (d. 313/925), well known as a physician and philosopher, who wrote a - nowadays lost - *Epitome of the Categories* (*Ġumal ma‘ānī Qaṭīgūryās*); Ishāq Ibn Ḥunayn, who might have completed his Arabic translation with a synthesis or a paraphrase. Among the epitomists we may also list Ṭābit Ibn Qurra (d. 209-288/824-901), who wrote – according to Ibn al-Qifī – a “compendium of the *Categories*” (*Iḥtiṣār Qaṭāgūryās*), along with epitomai of other logical works by Aristotle (*De interpretatione, Prior Analytics*)<sup>55</sup>. This compendium is unfortunately lost, but – as I will argue below – Avicenna himself might have been acquainted with it<sup>56</sup>.

As to the systematic commentaries, Ibn al-Nadīm only mentions two names: that of Abū Naṣr Muḥammad al-Fārābī (d. 339/950-951) and that of Abū Biṣr Mattā Ibn Yūnus (d. 328/940). Al-Fārābī apparently wrote at least two works on Aristotle’s *Categories*: an extant short paraphrase, which better fits the genre of *muḥtaṣar* or epitome<sup>57</sup>; a long and systematic commentary, unfortunately lost and preserved in scattered fragments, that might have been structured like the *Šarḥ* of the *De interpretatione*<sup>58</sup>. Abū Biṣr Mattā, instead, the founder and most illustrious member of the so-called School of Baghdad<sup>59</sup>, wrote another lost commentary on the *Categories*, some fragments of which are preserved in Al-Dahabī’s *Kettenkommentar*<sup>60</sup>.

Other works of other authors are extant, besides Ibn al-Nadīm’s account. It is necessary to recall, within the Baghdad School, the works of Yaḥyā Ibn ‘Adī (d. 363/974), whom Ibn al-Nadīm mentions only by his *kunya* (as “*šayḥ* Abū Zakariyyā”). As far as we know, Yaḥyā did not write integral commentaries on the *Categories*; nonetheless, we may read some exegetical fragments of his in Ibn Suwār’s glosses<sup>61</sup>, as well as short notes preserved in a collection of *Ta‘ālīq*<sup>62</sup>. On the contrary, a number of short writings of his are attested and preserved, which deal with specific exegetical issues associated with the *Categories*. In his first inventory of Ibn ‘Adī’s works, G. Endress listed seven texts<sup>63</sup>: a treatise on the *sufficiencia praedicamentorum* (*Maqāla fī anna l-maqūlāt ‘ašr lā aqall wa-lā akṭar*)<sup>64</sup>, one on the distinction between substance and accident (*Maqāla fī ibānat anna ḥarārat an-nār*

<sup>54</sup> Preserved in Istanbul, in the manuscript Ayasofya 4855; cf. ROSENTHAL 1943, p. 54.

<sup>55</sup> *Ta‘rīḥ al-ḥukamā’* 118.7; 120.7.

<sup>56</sup> Cf. below, 3.6.3; VI.1 [§6.3-4] and the COMMENTARY *ad loc.*

<sup>57</sup> Edited once by DUNLOP 1958-1959 (with an English translation); more recently by ‘Aḡam (*Al-manṭiq ‘inda l-Fārābī*).

<sup>58</sup> Some of these fragments are preserved in Al-Wāhibī’s *Kettenkommentar*, some others in a 15th-century Hebrew commentary of Averroes’ *Middle Commentary on the Categories*, written by Yehuda b. Yiṣṣāq b. Mošeh Kohen. These latter Hebrew fragments are edited and translated into English in ZONTA 2006.

<sup>59</sup> For a general introduction to the school’s activity, and its main exponents, see FERRARI 2005.

<sup>60</sup> See TÜRKER 1965, pp. 109.4-12; 110.4-6; 110.12-15; 111.6-9; 112.11-14; 119.12-120.3; 120.9-121.8; 122.1-5.

<sup>61</sup> Yaḥyā is mentioned as a commentator at pp. 371.16 and 379.15.

<sup>62</sup> A collections of possible school notes, edited by Sh. Khalifat (Ibn ‘Adī, *Ta‘ālīq*). For a list of these notes, twenty-two of which are devoted to the *Categories*, see ENDRESS 1977b pp. 87-96.

<sup>63</sup> Cf. ENDRESS 1977b, nn. 3.31-37, pp. 48-51; WISNOVSKY 2012, pp. 307-326.

<sup>64</sup> Preserved in the manuscript Madrasa-yi Marwī 19, ff. 52 a19 – 53b18; cf. WISNOVSKY 2012, p. 312.



*laysat ǧawharan li-n-nār*)<sup>65</sup>, a polemical treatise written against his brother Ibrāhīm on the substancehood of body<sup>66</sup>, a treatise tackling the question whether accident is a genus for the nine accidental categories (*Maqāla fī anna l-‘araḍ laysa huwa ǧinsan li-l-tis ‘al-maqūlāt al-‘araḍiyya*)<sup>67</sup>, a work on the six minor categories (*Maqāla fī qismat al-sitt al-maqūlāt allatī lam yaqsimhā Aristūṭālīs ilā l-aǧnās wa-l-anwā ‘allatī taḥtahā*)<sup>68</sup>, a treatise devoted to the properties of quantity (*Maqāla fī anna l-kam laysa fīhi taḍādd*)<sup>69</sup> and a treatise devoted to relatives and numbers (*Kitāb fī tabyīn anna li-l-‘adad wa-l-iḍāfa dātayn mawǧūdatayn fī l-a‘dād*). All of these works are edited and extant in manuscripts except for the last one (which is only attested).

Two other important commentaries must be mentioned. Firstly, the marginal glosses to the Parisian codex ar. 2346, authored by the philosopher al-Ḥasan Ibn Suwār (d. after 407/1017). Despite being incomplete and limited to the first four chapters of the *Categories*, these notes contain extremely interesting material, from both a historical and a philosophical point of view: most notably references to various Greek and Arabic commentators, and an extensive quotation of Simplicius’ commentary. The second commentary, dated from around the first half of the 11th century and dubbed *Kettenkommentar* or *Kommentar-Katene* by G. Endress<sup>70</sup>, collects and compares a number of quotations taken from various Greek and Arabic exegetes of the *Categories*. The probable author of this text is a certain ‘Abdallāh al-Ḍahabī, physician and philosopher (d. 448/1056 in Valencia). Among the exegetes quoted<sup>71</sup> by the author of this commentary there are Greek (Plato, Herminus, Alexander, Plotinus, Porphyry, Themistius and Simplicius) and Arabic philosophers, like Abū Ishāq Ibrāhīm Quwayrā<sup>72</sup>, Abū Bišr Mattā, Al-Fārābī, Ishāq Ibn Ḥunayn, Abū Sulaymān al-Siǧistānī (d. 374/985)<sup>73</sup> and Abū l-Ḥasan al-‘Āmirī (d. 381/992) and the mathematician Abū Ġa‘far al-Ḥāzin (d. 350-360/961-971).

This much can be said, as far as Avicenna’s predecessors are concerned. Eventually, I have to recall a contemporary of Avicenna, Abū l-Faraǧ ‘Abdallāh Ibn al-Ṭayyib (d. 435/1043), physician and philosopher, who wrote a lengthy lemmatic commentary on Porphyry’s *Isagoge*<sup>74</sup> and one on the *Categories*, recently edited by C. Ferrari with an introductory study<sup>75</sup>.

This overview has shown how important the *Categories* has been in the golden age of Islamic Philosophy, even before the great development of logical studies that took place in

<sup>65</sup> Forthcoming, in a critical edition (with an English translation) by R. Hansberger and R. Wisnovsky.

<sup>66</sup> Recently edited by S. Menn and R. Wisnovsky (MENN, WISNOVSKY 2017).

<sup>67</sup> Edited by Sh. Khalifat (Ibn ‘Adī, *Maqāla fī anna l-‘araḍ*).

<sup>68</sup> Preserved in the manuscript Madrasa-yi Marwī 19, ff. 64b22–65a33; cf. WISNOVSKY 2012, pp. 314-315.

<sup>69</sup> Preserved in the manuscript Madrasa-yi Marwī 19, ff. 32b34–33a29; cf. WISNOVSKY 2012, p. 315.

<sup>70</sup> Cf. ENDRESS 1987, p 462. The name comes from the *Catena*, collections of excerpts from the Bible, used in theology schools from the 6th century onwards. This text, preserved in the Istanbul manuscript Ayasofya 2483, has been so far only partially edited, with a Turkish translation, by M. Türker (TÜRKER 1965).

<sup>71</sup> See the complete list in TÜRKER 1965, pp. 73-74/85.

<sup>72</sup> Mentioned in the *Fihrist* as a teacher of Abū Bišr Mattā; according to Ibn al-Nadīm, he wrote a “commentary on the *Categories* with explicative graphs” (*tafsīr Qāṭiǧūriyās mušāǧǧar*): cf. Ibn al-Nadīm, *Fihrist* 262.25.

<sup>73</sup> A contemporary and a student of Yaḥyā Ibn ‘Adī, whose nickname was *al-Manṭiqī* (the logician). Cf. ENDRESS 2012, pp. 198-209.

<sup>74</sup> Edited and translated into English by K. Gyekye (Ibn al-Ṭayyib, *Tafsīr Isāǧūǧī*).

<sup>75</sup> FERRARI 2006. For Ibn al-Ṭayyib’s life and works see the introductory essay, pp. 17-42.

Baghdad during the 10th century. The short Aristotelian treatise raised the greatest interest among philosophers from all schools, and triggered doctrinal debates whose echo certainly came down to Avicenna, and influenced his complex interpretation of this work.

## 2.2 Categories and Categories in the Avicennan corpus

### 2.2.1 Between Logic and Metaphysics

In the works of Avicenna (Ibn Sīnā, d. 428/1037) the study of the doctrine of categories notoriously oscillates between the domain of logic and that of metaphysics: that is not surprising, given the intrinsic ambiguity of the subject-matter of Aristotle's *Categories*, its traditional position at the principle of logic and Avicenna's ontological interpretation of the treatise. Before taking up in more detail the philosophical issue of the goal of the *Categories* (on which I will focus below, 3.1), in the following pages I will limit myself to presenting a recognition – as exhaustive as possible – of all the Avicennan works where the *Categories* or the doctrine of categories are at stake, to the aim of better contextualizing the *Maqūlāt* of the *Šifā'* in the whole *corpus*. In the end, I will briefly discuss the possibility of a tentative “developmental” reconstruction of Avicenna's attitude towards the doctrine of categories, already proposed by H. Eichner and A. Kalbarczyk.

### 2.2.2 Classifications of Sciences

Avicenna's ambivalent attitude towards the *Categories* is clearly attested by two works that present a division of sciences, i.e. the juvenile *Compendium on the Soul* (*Maqāla fī l-nafs 'alā sunnat al-iḥtišār*) and the *Epistle on the subdivisions of intellectual sciences* (*Risāla fī aqsām al-'ulūm al-'aqliyya*)<sup>76</sup>.

As is known, the *Compendium on the Soul* contains a brief classification of sciences according to the traditional order, presented in the eighth chapter as a list of the intelligible forms that the rational soul can acquire by means of demonstrative knowledge<sup>77</sup>. Here, Avicenna expressly excludes the discussion of categories from logical matters: as the soul undertakes the conceptualization of “logical truths” (*al-ḥaqā'iq al-manṭiqiyya*), it moves directly from the knowledge of the predicables, which are dealt with in Porphyry's *Isagoge*, to that of “simple and complex utterances, alongside the different kinds of composition” (*al-alfāz al-mufrada wa-l-murakkaba bi-l-ḍurūb al-muḥtalifa min al-tarkīb*), which refers presumably to the classification of statements found in Aristotle's *De Interpretatione*<sup>78</sup>. However, Avicenna later mentions “substance and accident” (*al-ḡawhar wa-l-'araḍ*) among the “divine realities” (*al-umūr al-ilāhiyya*) that the soul moves on to conceptualize after natural science and mathematics, most notably among the “attributes” (*lawāḥiq*) of the “absolute existent, in so far as it is existent” (*al-mawḡūd al-muṭlaq min ḥaytu huwa mawḡūd*)<sup>79</sup>; a characterization which is certainly reminiscent of al-Fārābī's description of the

---

<sup>76</sup> On the *Compendium* (edited by S. Landauer, *Maqāla fī l-nafs*) and its very early date of composition, see GUTAS 2014, pp. 80-86; on the *Aqsām al-'ulūm* see GUTAS 2014, p. 416 and LIZZINI 2006. Gutas argues for an early date of composition also in the case of the *Aqsām*, but does not provide compelling arguments for that.

<sup>77</sup> *Maqāla fī l-nafs* (translated into English in GUTAS 2014, pp. 5-8).

<sup>78</sup> *Maqāla fī l-nafs* 361.14-16.

<sup>79</sup> *Maqāla fī l-nafs* 362.4-5. This passage is also discussed in EICHNER 2013, pp. 61-62.

categories as “species” of the absolute existence, in his work *Fī agrād* (*On the Goals of Aristotle’s Metaphysics*)<sup>80</sup>.

If we turn to the *Aqsām al-‘ulūm*, instead, we find that the list of “notions common to all existents” (*al-ma‘ānī l-‘amma li-ḡamī‘ al-mawḡūdāt*) that constitute the first subdivision of metaphysics comprises most items found in the list of *lawāḥiq* of the *Compendium*, except for substance and accidents<sup>81</sup>. However, in the chapter devoted to the subdivisions of logic there is a second subdivision, which explains

[...] the number of the simple essential notions that embrace the whole of existents, in respect of what those notions are, without [considering] the condition of their being realized in existence or their subsistence in the intellect. This is included in the book of Aristotle known as *Qāṭiḡūryās*, i.e. the categories<sup>82</sup>.

Thus, according to the *Aqsām al-‘ulūm* the doctrine of categories belongs to logic – inasmuch as the ten categories are understood as mere quiddities, and independently of the way that they exist in reality: a position that – as we shall see below – resembles the characterization of the scope of the *Categories* provided by Avicenna in the *Maqūlāt* of the *Šifā*<sup>83</sup>.

### 2.2.3 Summae

If we turn to Avicenna’s *summae*, i.e. the comprehensive works on philosophy that constitute the bulk of the philosopher’s writings, we may remark some major oscillations of the categorial doctrine from one sector of philosophy to the other. In the following pages, I will briefly indicate how and to what extent categories are dealt with in each Avicennan *summa*.

[1] The first *summa* to be taken into account is Avicenna’s earliest comprehensive work, the *Philosophy for al-Arūḏī* (*Ḥikma ‘Arūdiyya*)<sup>84</sup>. The text of this *summa* is preserved in a single known manuscript, and is rather fragmentary and incomplete<sup>85</sup>. In the manuscript, a partial discussion of categories is found right in the beginning, after a short introduction on the utility of the science of logic and right before a passage dealing with ontological themes (potency, act, necessity, possibility, perfection, priority and posteriority), which in turn gives way again to a logical discussion on propositions<sup>86</sup>. The context makes it quite clear that this section belongs to a metaphysical enquiry about the “existent” in general and its attributes: moreover, part of this metaphysical *excursus* (including the fragment on categories) is

---

<sup>80</sup> Fārābī, *Fī agrād* 36.12-13. the text is translated into English in BERTOLACCI 2006, pp. 65-103 and in German in KOUTZAROVA 2009, pp. 17-38.

<sup>81</sup> *Aqsām al-‘ulūm* 112.13-15. For a comparison between the structure of metaphysics in the *Compendium on the Soul* and that of the *Ilāhiyyāt* of the *Šifā* see BERTOLACCI 2006, pp. 160-161.

<sup>82</sup> *Aqsām al-‘ulūm* 113.13-16.

<sup>83</sup> See below, 3.1.3-4.

<sup>84</sup> On which see ANAWATI 1957; GUTAS 2014, pp. 86-93.

<sup>85</sup> The codex in question is manuscript Uppsala, Universiteitsbibliotek 364; a critical edition of the Arabic text based on this manuscript was published in 2007 by M. Sāliḥ (*Ḥikma ‘Arūdiyya*).

<sup>86</sup> Cf. *Ḥikma ‘Arūdiyya* 31-32.5 (introduction); 32.6 – 39.4 (metaphysical digression); 41 ff. (logical discussion).

identical with part of the metaphysical section of the *Nağāt* (cf. below, [5])<sup>87</sup>. This prompted Gutas to make the hypothesis that this section on categories was originally found in a metaphysical section of the *summa*, and it ended up in logic because of a binding mistake. This hypothesis is also supported by the fact that in the misplaced folia a clear reference to “Logic” is found, as a preceding section of the work<sup>88</sup>. Therefore, although in the *Hikma ‘Arūdiyya* as we know it from the *codex unicus* the categories appear in logic, they were probably discussed in the metaphysical section; however, even if Gutas’s hypothesis is true there remains the possibility that a specific chapter on categories existed also in the original logical section of the *summa* (highly incomplete in our manuscript, where the whole sections on the *Isagoge* and the *Prior Analytics*, as well as substantial parts of the chapters on the *De interpretatione* and the *Posterior Analytics*, are missing).

[2] The work known by the title ‘*Uyūn al-ḥikma* (“Sources of knowledge” or “Elements of Philosophy”)<sup>89</sup> is probably not an original *summa* entirely planned and written by Avicenna, but a patchwork that some scholar produced by joining together an independent work on Logic (the *Small Epitome on Logic, al-Muğāz al-ṣağīr fī l-mantiq*) and a short Avicennan *summa* on Physics and Metaphysics, which he dictated to his disciple Bahmanyār<sup>90</sup>. Now, the logical section of the *summa* (and the *Muğāz*) contains a brief enumeration of the ten categories. Here, after having dealt with the properties of simple utterances, the definitions of “universal”, “particular”, “essential”, “accidental” and the five predicables, in the second chapter of this first section Avicenna lists the ten categories with examples, to the aim of indicating all the kinds of existents (*mawğūdāt*) that simple utterances can signify<sup>91</sup>. The chapter that follows immediately, right before tackling the distinction (found in the *De interpretatione*) between *ism* (name, ὄνομα) e *kalima* (“word” or verb, ῥῆμα), makes a distinction between synonyms and homonyms that reprises Aristotle’s classification of homonyms at *Cat.* 1<sup>92</sup>. In the metaphysical section of this *summa*, Avicenna begins by explaining the attributes of the existent in so far as it is existent: however, he limits himself to presenting a distinction between accident and substance – on which I will return below<sup>93</sup> - and a classification of substances, but no detailed discussion of the ten categories<sup>94</sup>.

[3] In the *Book of Guidance (Kitāb al-Hidāya)* Avicenna devotes to the categories the whole second chapter (*faṣl*) of the first part (*bāb*), focusing on the discipline of logic<sup>95</sup>. The exposition here is very schematic: a first hint at the distinction of homonyms, synonyms and “ambiguous” (*mušakkika*)<sup>96</sup> names is followed by a simple enumeration of the ten categories,

<sup>87</sup> Cf. for instance *Hikma ‘Arūdiyya* 32.6 – 34.4 = *Nağāt* 513.2 – 515.15; *Hikma ‘Arūdiyya* 34.6-19 = *Nağāt* 524.8 – 525.13. For a systematic comparison between the two texts see EICHNER 2013, pp. 72-79.

<sup>88</sup> *Hikma ‘Arūdiyya* 33.16-17 (= *Nağāt* 515.3); GUTAS 2014, p. 90.

<sup>89</sup> Edited by ‘A. Badawī (*‘Uyūn al-ḥikma*).

<sup>90</sup> Cf. GUTAS 2014, pp. 417-419. According to Gutas, the only differences between the logical section of the *‘Uyūn* and the *Muğāz* consist in minor stylistic variations, and in the fact that some sections absent from the *Muğāz* are found in the *‘Uyūn*.

<sup>91</sup> *‘Uyūn al-ḥikma* 45.1-11.

<sup>92</sup> *‘Uyūn al-ḥikma* 46 ff.

<sup>93</sup> Cf. below, 3.2.

<sup>94</sup> *‘Uyūn al-ḥikma* 85.14 ff.

<sup>95</sup> *Hidāya* I.2, pp. 71-76.

<sup>96</sup> On “ambiguous” names see below, I.2 [§3.2] and the COMMENTARY *ad loc.*

each of which is accompanied by a short description and an example. In the first chapter of the third part, corresponding with metaphysics, Avicenna divides the existent (*al-mawǧūd*) into substance and accidents, saying that these latter are nine; however, he goes on immediately to dividing substance without taking them into account singularly<sup>97</sup>. Hence, the metaphysics of the *Hidāya* presents only a cursory mention, but not a systematic treatment of the categories.

[4] The logical section of the *Book of the Cure* (*Kitāb al-Šifāʾ*), Avicenna’s most extended *summa*, contains the deepest and longest treatment of categories in the Avicennan corpus: *al-Maqūlāt*, the treatise we are dealing with here, which I will present in more detail in section 2.3. Nonetheless, categories are also discussed in the metaphysical section, most notably in the second and third treatise of the *Ilāhiyyāt*, where Avicenna commits himself to, respectively, establishing the distinction between substance and accidents (II) and proving the accidentality of the three main accidental categories, i.e. quantity, quality and relation (III). The *Šifāʾ* is probably (alongside the *Naǧāt*) the only *summa* where the categories are dealt with extensively both in logic and metaphysics<sup>98</sup>.

[5] In the *Book of Salvation* (*Kitāb al-Naǧāt*)<sup>99</sup>, slightly posterior to the *Šifāʾ* according to D. Gutas’s relative chronology, Avicenna removes the discussion of categories from the place they traditionally occupy in the order of logical writings. In the logical part of the *summa*, the discussion moves directly from the chapter devoted to common accident (*Fī l-ʿaraḍ*), closing the section corresponding to the *Isagoge*, to the chapter on the relation between concrete beings, notions and utterances (*Fī l-aʿyān wa-l-awhām wa-l-alfāz wa-l-kitābāt*) that inaugurates the section corresponding to the *De interpretatione*. However, a long chapter devoted to the “ten genera” is found within the section related with the *Posterior Analytics*, right after the chapters devoted to the theory of definition<sup>100</sup>. This variation is certainly not casual, for it perfectly suits what Avicenna says at *Maqūlāt* I.1 about the only possible benefit that a logician can take from the doctrine of categories: they are helpful, somehow, when it comes to formulating definitions<sup>101</sup>. In this chapter Avicenna lists the ten categories, and discusses their descriptions and properties: he focuses, in particular, on the characters and species of quantity and quality. Like the *Šifāʾ*, the *Naǧāt* also presents a long discussion of categories in the first chapters of the metaphysical section, many passages of which are taken from the “metaphysics” of the *Philosophy for al-ʿArūḍī*.

[6] In the *Book of Science for ʿAlā al-Dawlā* (*Dānešnāme-ye ʿAlāʾī*)<sup>102</sup>, dated approximately around the same time as the *Naǧāt*, an extended treatment of categories is carried out in the metaphysical section. In the *Dānešnāme*, following the same order adopted in the *Ilāhiyyāt* of the *Šifāʾ* (treatises II and III), after subdividing being into substance and accidents and the analysis of corporeal substance, Avicenna focuses on accidents (to which he devotes three short chapters). In the first one, related to accident in general, he presents a short “deduction” of accidental categories; in the second one, he demonstrates the

<sup>97</sup> *Hidāya* III.1, pp. 232-233. See also the Italian translation in LIZZINI 1995, pp. 367-424; p. 391.

<sup>98</sup> In particular *Ilāhiyyāt* II.1; III.3-5, 7-8, 10.

<sup>99</sup> Edited by M. Danišpazūh (*Naǧāt*).

<sup>100</sup> *Naǧāt* 153.10 – 157.2; see also the English translation in AHMED 2011, pp. 120-123.

<sup>101</sup> See below, *Maqūlāt* I.1, 6.1-4 and the COMMENTARY *ad loc.*

<sup>102</sup> A *summa* that Avicenna wrote in Persian at the request of his protector, the *Amir ʿAlā al-Dawlā*: see GUTAS 2014, pp. 118-119.

accidentality of quantity and quality; in the third one, eventually, he discusses the categorial status of being<sup>103</sup>.

[7] The *Logic of the Easterners* (*Manṭiq al-Mašriqiyyīn*), dated by Gutas before 1030, contains neither a chapter specifically devoted to the *Categories*, nor a short enumeration of the ten genera in other contexts. On the contrary, in the end of the chapter devoted to the subject-matter of logic Avicenna argues once again that logic enquires about notions inasmuch as they can be composed in a certain way, not inasmuch as they exist as substances, quantities, qualities, and so forth: thus, the categories are taken into account by logicians only inasmuch as they may take part in a definition (*qawl šāriḥ*) or a proof (*ḥuḡḡa*)<sup>104</sup>. The absence of the *Metaphysics* of this *summa*, which unfortunately went lost, prevents us from checking for the existence a metaphysical treatment of categories.

[8] The *Book of Pointers and Reminders* (*Kitāb al-Išārāt wa-l-Tanbīhāt*), whose date of composition is disputed<sup>105</sup>, does not deal with the categories in metaphysics. In the logical section, on the contrary, in the second chapter or “directive” (*nahḡ*), Avicenna argues that the problem of categories is irrelevant with respect to the enquiries of logicians, who must content themselves just with knowing that there exist “genera of genera” (*aḡnās al-aḡnās*) without committing themselves to inspecting their number and nature<sup>106</sup>.

#### 2.2.4 Other Works

Among the non-encyclopedic works devoted to categories, the most important and extended is probably the *Book of Categories* (*Kitāb al-maqūlāt*) contained in the *Middle compendium on Logic* (*Muḥtasar al-awsaṭ fī l-manṭiq*), dated by the editor A. Kalbarczyk around 1013/1014 (namely to the period of transition between the composition of the first works and the redaction of *Šifā'* and *Hidāya*)<sup>107</sup>. This work is structured as a paraphrase of Aristotle's *Categories*, which follows quite closely the ordering and structure of the Aristotelian text: subdivided into seventeen chapters, after a first section devoted to the *Antepaedicamenta* (1-4) it focuses on each of the ten categories: substance (5), quantity (6), relation (7), quality (8), where (9), when (10), position (11), having (12), acting and undergoing (13). The last three chapters take into account the issues that Aristotle tackles in the *Postpaedicamenta* (14-17).

Other minor works introducing to logic contain brief expositions of the doctrine of categories: the *Epitome on the principles of logic* (*Risāla l-muḡāza fī uṣūl al-manṭiq*)<sup>108</sup> and

---

<sup>103</sup> *Dānešnāme, Elāhiyyāt* 28.5 – 39.7 (tr. ACHENA-MASSÉ 1958, vol. I, pp. 108-116).

<sup>104</sup> *Manṭiq al-Mašriqiyyīn* 10.15-20: “The subject-matter [of logic] is concepts, in so far as they are subject to the composition by means of which they lead [us] to acquire something, in our minds, that is not in our minds; not in so far as they are things that exist among concrete beings (like substances, quantities, qualities, and so forth) [...]”.

<sup>105</sup> D. Gutas dates the *Išārāt* to the second half of Avicenna's period in Isfahan, i.e. to the years 1030-34 (GUTAS 2014, pp. 155-157); D. Reisman, basing on his study of the text of the *Mubāḥatāt*, argues for the earlier dates 1027-1030 (REISMAN 2002, pp. 221-223). Y. Michot firstly proposed a very early date of composition, i.e. around 406/1016 (MICHOT 1997), but later changed his mind and argued for a later date, in agreement with Reisman's conjecture (MICHOT

<sup>106</sup> *Išārāt, Manṭiq* 236.13-15 (The passage is cited and discussed in KALBARCZYK 2018, pp. 30-31).

<sup>107</sup> KALBARCZYK 2012, pp. 309-312.

<sup>108</sup> Unedited, and preserved in four known manuscripts: cf. GUTAS 2014, pp. 434-435.

the *Minor Epitome on Logic*, which – as has been said – constitutes the logical section of the ‘*Uyūn al-ḥikma. A Treatise on indicating the Science of Logic (Maqāla fī iṣāra ilā ‘ilm al-manṭiq)*, a juvenile work according to Gutas, deals with the usefulness of logic and, in particular, of categories<sup>109</sup>. A small number of verses of the *Poem on Logic (Qaṣīda muzdawīḡa fī l-manṭiq)*, a poetic *divertissement*, are also devoted to the *Categories*<sup>110</sup>.

Many passages of the so-called *Ta‘līqāt* (“Annotations”), a collection of paragraphs focusing on various issues, tackle a number of questions related with the categories. Among others, it is possible to read in ‘A. Badawī’s critical edition a short passage on the categories of position, where and when<sup>111</sup>, and a long section on the categories of quantity and relatives<sup>112</sup>, that J. Janssens identified as possible Avicennan “metacommentaries” on chapters III.4 – IV.5 of the *Maqūlāt* of the *Šifā*<sup>113</sup>. Moreover, A. Kalbarczyk has highlighted and first translated into English a passage of the *Ta‘līqāt* where the subject-matter of the *Categories* is at stake. No explicit reference to the *Categories*, or to related doctrines, appears instead in the known redactions of the *Mubāḡaṭāt*.

It is also necessary to mention here some short treatises focusing on *Categories*-related issues, which are listed in the Inventories of Avicenna’s works. Among these there is for instance a certain *Treatise on the goal of the Categories (Maqāla fī ḡarad Qāṭīḡūryās)*, which is not found in any known manuscript and which might be – according to Gutas – a version of *Maqūlāt* I.1 circulating as an independent work<sup>114</sup>. Eventually, four short treatises are attested and extant, which focus on the issue of onto-relativism (on which I will return below in par. 3.2):

(1) *The Error of those who said that quantity is substantial, and of those who said that a single thing can be a substance and an accident simultaneously (Ḥaṭā’ man qāla inna l-kammiyya ḡawhariyya wa-man qāla inna šay’an huwa ḡawhar wa-‘araḡ ma’an)*, preserved in six codices, which I have here edited and translated into English<sup>115</sup>;

(2) *The Difference between Intrinsic and Extrinsic Heat (Al-farq bayna l-ḡarāra l-ḡariziyya wa-l-ḡarība)*, preserved in nine manuscripts and unedited<sup>116</sup>;

(3) *On the fact that Quantity, Coldness and Hotness are not a Substance (Fī anna l-kammiyya wa-l-burūda wa-l-ḡarāra laysat bi-ḡawhar)*, preserved in three known manuscripts and still unedited<sup>117</sup>;

(4) *Replies to questions (Al-aḡwiba ‘an al-masā’il)*, also known as *The Substancehood of Fire (Ḡawhariyyat al-nār)*, preserved in twelve known manuscripts and still unedited<sup>118</sup>.

<sup>109</sup> Unedited, and preserved in four known manuscripts (cf. GUTAS 2014, p. 436).

<sup>110</sup> *Manṭiq al-maṣriḡiyyīn*, pp. 6-7. An English translation of this section of the Poem is found in GUTAS 1993, p. 64.

<sup>111</sup> *Ta‘līqāt*, 43.6 – 44.2.

<sup>112</sup> *Ta‘līqāt*, 88.15 – 96.6.

<sup>113</sup> JANSSENS 2012, p. 202.

<sup>114</sup> GUTAS 2014, p. 437-438.

<sup>115</sup> ANAWATI 1950, pp. 130-131; MAHDAVI 1954, p. 98; GUTAS 2014, p. 438. For the critical edition, see the APPENDIX below; for the synopsis, see below, 3.2.3.

<sup>116</sup> ANAWATI 1950, p. 135; MAHDAVI 1954, p. 186.

<sup>117</sup> ANAWATI 1950, pp. 136; MAHDAVI 1954, p. 97-98; GUTAS 2014, p. 438.

<sup>118</sup> ANAWATI 1950, pp. 133; MAHDAVI 1954, p. 19; GUTAS 2014, p. 446.



## 2.2.5 Summary

If we stick to the relative chronology proposed by Gutas, we may sketch the following comprehensive table:

Date	Title	Position of the <i>Categories</i>
<i>Ante</i> 389/999	A. <i>Ḥikma ‘Arūḍiyya</i>	- Logic? (Before <i>Posterior Analytics</i> , presumably between <i>Isagoge</i> and <i>De interpretatione</i> ) - <b>Metaphysics</b>
	B. <i>Compendium on the Soul</i>	- <b>Metaphysics</b>
?	C. <i>Aqsām al-‘ulūm</i>	- <b>Logic</b>
403-404/1013-1014	D. <i>Muḥtasar awsaṭ</i> E <sub>a</sub> . ‘ <i>Uyūn al-ḥikma (Muḡāz aṣḡar)</i> <sup>119</sup>	- <b>Logic</b> (between <i>Isagoge</i> and <i>De interpretatione</i> ) <sup>120</sup>
	E <sub>b</sub> . ‘ <i>Uyūn al-ḥikma</i>	- <b>Metaphysics</b>
414/1023 411-418/1020-1027	F. <i>Hidāya</i>	- <b>Logic</b> (between <i>Isagoge</i> and <i>De interpretatione</i> )
	G. ‘ <i>Šifā’</i>	- <b>Logic</b> (between <i>Isagoge</i> and <i>De interpretatione</i> ) - <b>Metaphysics</b>
418-420/1027-1029	H. <i>Naḡāt</i>	- <b>Logic</b> ( <i>Posterior Analytics</i> ) - <b>Metaphysics</b>
	I. <i>Dānešnāme</i>	- <b>Metaphysics</b>
	J. <i>Mašriqiyyūna</i>	- Om. Logic (Metaphysics?)
421-425/1030-1034	K. <i>Išārāt*</i>	- Om. Logic and Metaphysics

This table does not offer material for a straightforward progressive reconstruction: the logic/metaphysics ambiguity seems to have been quite constant along Avicenna’s career. In the light of this scheme, however, we may be tempted to isolate tentatively three phases:

(1) A first phase of Avicenna’s reception of the *Categories*, where the philosopher maintained the treatise mostly within the domain of logic (C, D, E<sub>a</sub>) though without denying some metaphysical relevance to it (A, B, E<sub>b</sub>);

(2) A turning point marked by the extensive analysis conducted in the *Kitāb al-Šifā’* (G), where Avicenna reinterpreted the role and function of the *Categories* before either moving it to other sections of logic (H) or including it integrally in metaphysics (I);

<sup>119</sup> This is the date of composition suggested by Gutas (GUTAS 2014, pp. 418-419).

<sup>120</sup> Although the *Muḥtasar* is not a *summa*, it is counted here inasmuch as it is a logical work that contains an extensive discussion of categories.

(3) A conclusive phase marked by the *Iṣārāt*, where Avicenna totally abandoned the doctrine of categories both in logic and in metaphysics (**K**; the *Metaphysics of the Easterners* is missing).

This suggestive scheme works better if we maintain Gutas's hypothesis of a very late date of composition for the *Iṣārāt*, rather than Michot's and Reisman's "intermediate" hypothesis. Be that as it may, the varying prevalence of the ontological or logical function of categories (or their co-existence) might also be a matter of occasion, depending on the scope of the single works in question and the kind of public they were addressed to. Besides the overview that I have conducted in this chapter, only a deeper understanding of the context and function of these treatises will contribute to provide a conclusive interpretation.

## 2.3 The Maqūlāt of the Kitāb al-Šifā'

### 2.3.1 Composition and Structure

As is known, Avicenna's *Kitāb al-Šifā'* counts four main "parts" (*ḡumal*): Logic, Natural Philosophy, Mathematics and Metaphysics<sup>121</sup>. The *Maqūlāt* constitutes the second "section" (*fann*) of the first part: it comes right after the paraphrase of Porphyry's *Isagoge* (*Madḥal*) and right before a paraphrase of Aristotle's *De Interpretatione* (*'Ibāra*). According to D. Gutas' relative chronology of the *Cure*'s composition, it was probably written by Avicenna in Hamaḍān during the years 412-414/1022-1024<sup>122</sup>.

The *Maqūlāt* is the fourth longest text among those that build the first *ḡumla* (273 pages in the Cairo edition, after the 580 pages of the *Qiyās*, the 336 pages of the *Ḡadal*, and the 285 pages of the *Burhān*), but is undoubtedly the longest of all the *Šifā'* with regard to the length of the corresponding Aristotelian text (which only counts 15 pages in Immanuel Bekker's edition).

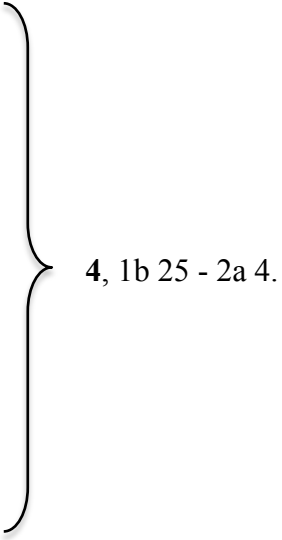
As for the structure, the *Maqūlāt* is subdivided into seven treatises (*maqālāt*) and comprises thirty-six chapters (*fusūl*) in total, whose correspondence with Aristotle's text is synthesized in the table below:

Avicenna, <i>Maqūlāt</i>	Aristotle, <i>Categories</i> <sup>123</sup>
<b>First Treatise</b>	
1. ON THE GOAL OF THE <i>CATEGORIES</i> (3.7 - 8).	
2. ON THE UTTERANCES OF HOMONYMS, SYNONYMS, HETERONYMS, PARONYMS, AND THE LIKE (9 - 17).	<b>1</b> , 1a 1-15.
3. ON EXPLAINING THE MEANING OF WHAT IS SAID OF A SUBJECT OR IS NOT SAID [OF A SUBJECT], AND [WHAT] EXISTS IN A SUBJECT OR DOES NOT EXIST [IN A SUBJECT] (18-27).	<b>2</b> , 1a 20 - 1b 9.
4. ON EXPLAINING THE DEFINITION OF "ACCIDENT", NAMELY "EXISTENT IN A SUBJECT" (28 - 38.5).	
5. ON THE COMBINATIONS OCCURRING BETWEEN "TO SAY OF" AND "TO EXIST IN", AND WHAT THEY LEAD TO (38.6 - 45.7).	<b>3</b> , 1b 10-15.
6. ON REFUTING THE CLAIM OF THOSE WHO SAID THAT ONE THING MAY BE AN ACCIDENT AND A SUBSTANCE IN TWO RESPECTS (45.9 - 51).	

<sup>121</sup> For a sketch of its structure, see GUTAS 2014, p. 105.

<sup>122</sup> See GUTAS 2014, p. 107.

<sup>123</sup> I luoghi corrispondenti sono indicati mediante il numero del capitolo, seguito dalla paginazione Bekker.

<b>Second Treatise</b>	
1. ON THE STATE OF THE MUTUAL RELATION OF GENERA AND THEIR DIVISIVE AND CONSTITUTIVE <i>DIFFERENTIAE</i> ; ON MAKING KNOWN THESE TEN HIGHEST GENERA, AND THE STATE OF THE RELATION OF “EXISTENT” TO THEM; BEGINNING OF THE TREATMENT OF THE FACT THAT THEY ARE TEN, THEY DO NOT FALL UNDER A GENUS, NONE OF THEM BELONGS TO ANY OTHER, AND THERE IS NO GENUS OUTSIDE THEM (55 - 62).	3, 1b 16-24.
2. ON THE FACT THAT ACCIDENT IS NOT A GENUS FOR THE NINE [ACCIDENTAL CATEGORIES], AND THE EXAMINATION OF WHAT WAS SAID ABOUT THIS (63 – 66.5).	
3. ON INVESTIGATING WHAT WAS SAID BY THOSE WHO REQUIRED THAT [THE CATEGORIES] BE LESS, OR MORE (66.7 - 69).	
4. ON MENTIONING REALITIES THAT WERE IMAGINED EITHER TO BE COMMON TO SOME OF THE TEN [CATEGORIES] AS A GENUS, OR TO FALL OUTSIDE THE TEN [CATEGORIES], AND COMPLETING THE DISCUSSION OF THIS [TOPIC] (70 - 81).	
5. ON NOTIFYING THE STATE OF THE NUMBER OF THE CATEGORIES (82 - 88).	
<b>Third Treatise</b>	
1. ON PRIMARY, SECONDARY AND TERTIARY SUBSTANCES; IN GENERAL, ON THE STATE OF THE RANKS OF UNIVERSAL AND PARTICULAR SUBSTANCES WITH REGARD TO SUBSTANTIALITY (91 – 95.11).	
2. ON PRIMARY, SECONDARY AND TERTIARY SUBSTANCE (95.12 – 102.9).	5, 2a11 - 3a 6.
3. ON THE DESCRIPTIONS OF SUBSTANCE AND ITS PROPERTIES (102.10 - 111).	5, 3a 7 - 4b 19.
4. ON BEGINNING THE DISCOURSE ON QUANTITY (112 - 124).	6, 4b 20 - 5a 14.
<b>Fourth Treatise</b>	
1. ON THE CLARIFICATION OF THE SECOND DIVISION OF QUANTITY, AND THE CLARIFICATION OF QUANTITY BY ACCIDENT (127 – 134.12).	6, 5a 15 - 5b 10.
2. ON THE PROPERTIES OF QUANTITY (134.13 – 143.8).	6, 5b 11 - 6a 35.
3. ON BEGINNING THE TREATMENT OF THE RELATIVE, THE	7, 6a 36 - 6b 14.

NOTIFICATION OF THE FORMER DEFINITION THEREOF AND THE EXPLANATION OF THAT DEFINITION; ON THE GENERAL INDICATION OF THE SUBDIVISIONS OF THE RELATIVE (143.9 – 150.13).	
4. ON THE PROPERTIES OF THE RELATIVE (150.14 – 155.12).	7, 6b 15 - 7b 12.
5. ON THE VERIFICATION OF THE RELATIVE WHICH IS THE CATEGORY; ON THE DIFFERENCE BETWEEN WHAT IS RELATIVE BY ITSELF AND WHAT HAS THE RELATION AS AN ACCIDENT OR A NECESSARY CONCOMITANT; ON THE PROPERTIES OF THE RELATIVE WHICH IS THE CATEGORY (155,13 - 164).	7, 7b 13 - 8b 24.
<b>Fifth Treatise</b>	
1. ON NOTIFYING QUALITY AND ITS FIRST SUBDIVISIONS (167 - 173).	8, 8b 25-26.
2. ON INVESTIGATING THE WAYS ACCORDING TO WHICH A GROUP OF PEOPLE DIVIDED QUALITY INTO ITS FOUR SPECIES (174 - 180).	
3. ON NOTIFYING THE ESSENCE OF EVERY TWO SPECIES OF QUALITY, NAMELY STATE AND HABIT AND CAPACITY AND INCAPACITY (181 - 185).	8, 8b 26 - 9a 27.
4. ON MENTIONING DOUBTS ABOUT THE SPECIES RELATED TO CAPACITY AND INCAPACITY (186 – 191.11).	
5. ON AFFECTIVE QUALITIES AND AFFECTIONS (191,12 - 196).	8, 9a 28 - 10a 10; 10 a16-24
6. ON SOLVING THE REMAINING DOUBTS (197 - 201).	
<b>Sixth Treatise</b>	
1. ON MENTIONING THE SPECIES OF THE FOURTH GENUS OF QUALITY (205 - 212).	8, 10 a11-16; a25-26.
2. ON NOTIFYING THE STATE OF THE ANGLE, AND THE WAY IT FALLS UNDER QUANTITY, OR QUALITY, OR POSITION OR OTHER CATEGORIES; [ON] NOTIFYING OF THE STATE OF COUNTENANCE, AND HOW IT MAY BECOME A SPECIES DESPITE ITS COMPOSITE NATURE; [ON] THE REMAINING DOUBTS CONCERNING THIS GENUS OF THE FOUR GENERA (213 – 218.5).	
3. ON NOTIFYING THE DIFFERENCE BETWEEN QUALITY AND QUALIFIED, AND THE STATES WHICH SUBSIST IN BETWEEN THEM; ON THE ACCIDENTS OF QUALITY, AND ITS PROPERTIES (218.6 - 222).	8, 10 b12 – 11 a19.
4. ON THE SOLUTION OF A DOUBT REGARDING THE INTRUSION OF CERTAIN SPECIES OF QUALITY AND OTHER CATEGORIES IN CERTAIN SPECIES OF THE RELATIVE (223 – 228.4).	8, 11 a20-38.

5. ON WHERE AND WHEN (228.5 – 233.4).	9, 11 b1 – 14.
6. ON THE REST OF THE TEN CATEGORIES (233.5 – 238.7).	
<b>Seventh Treatise</b>	
1. ON OPPOSITES (241 – 249.8).	10, 11 b15 - 13 b35.
2. ON DOUBTS APPENDED TO WHAT WAS SAID ABOUT OPPOSITION (249.9 - 259).	
3. ON INTERPRETING RULES AND PROPERTIES REGARDING CONTRARIES (260 – 265.12).	11, 13 b36 – 14 a25.
4. ON THE PRIOR AND THE POSTERIOR (265.13 - 273).	12-15, 14a 26 - 15b 33.

Some clues in the text may point to this division into books and chapters being made *a posteriori*, arguably not by Avicenna himself but by someone else in his school<sup>124</sup>: this is made likely by the imperfect nature of this division, and by some evident discrepancies between the titles of chapters and their contents.

As a matter of fact, whereas the content of the *Categories* is quite easy to divide regularly into sections, there are some macroscopic divisions that look somewhat nonintuitive, most notably the fact that the treatment of quantity is split between the third and the fourth treatise and the fact that the discussion of quality occupies nearly two treatises. Both cases can be explained as a concern of order on the redactor's part: as a matter of fact, to the exception of the first (50 pages in the Cairo edition) all treatises are more or less the same length (around 30 pages). The editor of the work (Avicenna himself or a student of his) could thus have split the discussions of quantity and quality to the aim of crafting regular textual units. In the subsequent manuscript tradition, there are also cases where chapter III.4 has been inauthentically rearranged as the first chapter of the fourth treatise, in order to correct this apparent inconsistency<sup>125</sup>.

Other cases are more difficult to explain: for instance, the division of chapters V.5 and V.6 interrupts for no reason Avicenna's continuous discussion of affective qualities, and the title of V.6 ("On solving the remaining doubts", *Fī ḥall bāqī l-šukūk*) seems to be given quite superficially, for the chapter in question is surely more exegetical than aporetic<sup>126</sup>. Other interesting cases are found in the end of chapter I.5, where a short ontological digression is found which is seemingly unrelated with what precedes, and suits much better

<sup>124</sup> A. Bertolacci's studies of the numerous structural variations affecting the fifth book of the *Ilāhiyyāt*, both in the Latin translation and in the manuscript tradition, have shown that such variations – or other phenomena related to the arrangement of chapters – may attest to different recensions of the text (BERTOLACCI 2012c; BERTOLACCI 2017)

<sup>125</sup> To my knowledge, this only happens in the manuscript London, Royal Asiatic Society 58 (see f. 27v); further research on the tradition, and on the main structural variants attested by the *Maqūlāt*, will probably bring similar cases into light.

<sup>126</sup> See below the COMMENTARY on chapters VI.5-6.

the contents of the following chapter<sup>127</sup>; or in the last two lines of chapter VI.6, which would probably work much better as a poem for VII.1<sup>128</sup>.

The category to which Avicenna devotes the most space is undoubtedly quality (ten chapters, 61 pages), followed by quantity (three chapters, 61 pages), relatives (three chapters, 22 pages) and substance (three chapters, 21 pages). As for the minor categories, he deals with where and when in a separate chapter (VI.5), and regroups the discussion of the remaining genera in chapter VI.6. The reason for quality being treated so lengthily seems not to lie in its being particularly interesting from a theoretical point of view; it is certain, however, that it is the category that poses the most problems, notably in virtue of its quasi-circular definition and the apparent heterogeneity of its four species<sup>129</sup>.

### 2.3.2 Style

Like other sections of Avicenna's *Šifā'*, the *Maqūlāt* can be reduced univocally to none of the traditional Arabic genres of commentary: it is neither a lemmatic commentary (*tafsīr*), nor a paraphrase (*talhīs*), nor an epitome (*ġawāmi'*), but it somehow incorporates different characters of each style<sup>130</sup>. It is, on the whole, a reworking paraphrase of Aristotle's *Categories*: despite following quite closely the order of questions found in the Aristotelian original, it often deviates from the plain explanation of the text to present more or less extended theoretical or aporetic digressions. Direct quotations of Ishāq's translation of the *Categories* are very rare, and always slightly paraphrased<sup>131</sup>; more frequently, Avicenna reports short phrases that require detailed explanation, often complaining about their lack of clarity.

### 2.3.3 Sources

Besides Aristotle's *Categories*, Avicenna's *Maqūlāt* draws on a number of relevant Aristotelian works: most notably, it is possible to detect some direct or indirect references to the *Metaphysics* and the *Physics*<sup>132</sup>. The book of the *Metaphysics* whose direct or indirect presence is most frequently detectable is certainly book Δ, where important *loci paralleli* are found for Aristotle's detailed discussion of the categories and the *Postpraedicamenta*. Avicenna very likely made use of Δ in reading the *Categories*, and tried in some cases to harmonize the doctrinal content of the two books. I will argue that it is very likely so, for instance, with regard to the category of relatives<sup>133</sup>. Another book that is plausibly referred to directly by Avicenna throughout the text is B, which occurs in the context of Avicenna's

---

<sup>127</sup> See below, I.5 [§6].

<sup>128</sup> See below, VI.6 [§4].

<sup>129</sup> See below, 3.6.1.

<sup>130</sup> On the style of Avicenna's *Šifā'* see BERTOLACCI 2006, pp. 607-612.

<sup>131</sup> For some examples of these literal or paraphrastic quotations, see: I.4 [§1], 28.4-5; V.3 [§1.4], 183.9; VII.2 [§7], 255.11.

<sup>132</sup> A clear reference to *Metaph.* Δ 14 is found, for instance, in the beginning of chapter I.6 [§1], 45.15-17 (see the COMMENTARY *ad loc.*).

<sup>133</sup> The relationship between the *Categories* and *Metaphysics* Δ has been recently studied in detail by R. Bodéüs, in the Introduction to his critical edition (Cf. BODÉÜS 2001, pp. XLI – LXIV). For the reception of book Δ in Avicenna's *Ilāhiyyāt*, see BERTOLACCI 2006, pp. 328-335 (explicit indeterminate quotations); pp.

demonstration of the fact that “existent” is not a genus for the ten categories<sup>134</sup>. I have not mapped the

Nonetheless, the influence that is most clearly traceable is that of the previous exegetical tradition, Greek and Arabic, which is surely responsible for the majority of the doubts and aporiae discussed by Avicenna throughout the treatise.

On the whole, in the *Šifā'* Avicenna very rarely mentions the names of his sources; he mostly recurs to generic formulae like “a group of people” (*qawmun*) or “the commentators” (*al-mufassirūn*), or to more connotated expressions like “some of those pedantic commentators” (*ba‘du hā‘ulā‘i l-mutaḥadliqīna min al-mufassirīna*)<sup>135</sup>. He sometimes makes a distinction between “ancient” and “modern” commentators, corresponding roughly to a distinction between Greek and Arabic, contemporary exegetes: this is particularly evident for instance in chapter VI.5, where Avicenna reconstructs a debate about the category of where that involves an “ancient” commentator, a “modern” respondent and a further “modern” respondent<sup>136</sup>.

As for the late ancient exegetes, it is possible to identify materials that derive very likely from the works of Alexander, Porphyry, Simplicius, Philoponus, Olympiodorus and Elias/David; the issue of their reception is nonetheless problematic, and pretty much related with the first Arabic reworking of these exegetical works (of which we know practically nothing). In chapter I.3 Avicenna presents a literal quotation of a commentator, which looks somewhat like a paraphrastic translation of a passage of Porphyry’s short *Commentary* on the *Categories*; it is hard to tell whether Avicenna read it in a wholesome translation of Porphyry’s work, or just in a later compilation made by an Arabic author<sup>137</sup>. The same can be said for a passage that evidently draws upon Simplicius’ commentary, i.e. an incorrect division of the category of quality presented in chapter V.1; in the end of the following chapter, devoted to refuting Simplicius’ division and another wrong, anonymous division, Avicenna makes a vague remark that might point to a stylistic character of some of his sources:

How astonishing that someone pays attention to what those people say, writes it down (*yaktubuhū*) and compiles it (*yudawwinuhū*); and that we [even] need to contradict him!<sup>138</sup>

The sentence may be read in many ways, due to its sybilline formulation: it is also possible to refer the verbs *yaktubuhū* and *yudawwinuhū* to “those people”, and the suffix pronoun in *munāqadatumū* to “what those people say”. Be as it may, it is interesting to remark Avicenna’s use of the unusual verb *dawwana* (the same root as *diwān*, a term that – as is known – may also signify “collection of poems”), which refers to the action of recording, collecting and compiling. This does not exclude a direct knowledge of Simplicius’ commentary, on Avicenna’s part, for Simplicius can be deemed in many respects a compiler; nonetheless, it may testify in general the philosopher’s use of exegetical

---

<sup>134</sup> See II.1 [§4.3.3], 62.6-11.

<sup>135</sup> IV.2 [§2.5], 139.4.

<sup>136</sup> See VI.5 [§2].

<sup>137</sup> See I.3 [§5], and the commentary *ad loc.* In CAMINADA 2016, I have argued ultimately in favour of the compilation-hypothesis.

<sup>138</sup> V.2 [§4.3], 180.18-19.



compilations or anthologies – very likely produced in the Arabic *milieu*.

As for the Arabic sources, the issue is complex as well. A parallel reading of Ibn al-Ṭayyib’s *Tafsīr al-maqūlāt* proves very often useful to understand Avicenna’s arguments and objections, especially when they refer to doubts and opinions that in *Maqūlāt* are presented unclearly or elliptically. Despite this fact, it is hard to tell whether Avicenna had direct access to Ibn al-Ṭayyib’s work, or he found the same materials in Ibn al-Ṭayyib’s sources (very likely, commentaries stemming from the Baghdadian scholastic tradition). Avicenna’s rivalry with Ibn al-Ṭayyib is renowned and historically attested: a letter written by an anonymous disciple (possibly Ibn Zayla) reports the purchase in Baghdad, on Avicenna’s behalf, of copies of Ibn al-Ṭayyib’s commentaries on Porphyry’s *Isagoge* and Aristotle’s *Categories*, *De interpretatione*, *Sophistici elenchi*, *De caelo*, *De sensu et sensato* and *Metaphysics*, and recounts Avicenna’s pitiless comments about Ibn al-Ṭayyib’s philosophical skills<sup>139</sup>. This letter dates almost certainly from 421/1030, and is thus posterior to Avicenna’s redaction of the *Šifā’* (in general) and the *Maqūlāt* (in particular): in the light of this fact, Avicenna’s direct knowledge of Ibn al-Ṭayyib’s *Tafsīr* when writing on the *Categories* seems very unlikely. Nonetheless, in a passage of the same letter, when commenting on Ibn al-Ṭayyib’s exegetic technique, Avicenna is reported to have said:

“Didn’t I tell you that this is the level [of Ibn al-Ṭayyib] and this the procedure? And that Abu-l-Ḥayr Ibn al-Ḥammār and Ibn as-Samḥ, because their scope is so narrow, adhered more closely than others to the traditional transmission of certain books? [...]”<sup>140</sup>

If these lines attest to Avicenna’s previous knowledge of Ibn al-Ḥammār’s (Ibn Suwār) and Ibn al-Samḥ’s exegetical practice, this makes them potentially good candidates, among others, for being Avicenna’s polemical targets in the *Maqūlāt* (especially Ibn Suwār, who was certainly very committed with the study of Aristotelian logic, and the *Categories* in particular)<sup>141</sup>. Also Yaḥyā ibn ‘Adī very likely played some role, either as a positive influence (for instance as concerns the discussion of constitutive properties)<sup>142</sup> or as a polemical target (as he might be in the discussion about the quantitative nature of bodies)<sup>143</sup>.

Another important Arabic source is certainly al-Fārābī, whose influence on Avicenna’s interpretation of the *Categories* is arguably very important: many clues in the text make us suppose that Avicenna had direct access to a Farabian commentary on the *Categories*, either the epitome known as *Qāṭāgūryās* or even the lost *Šarḥ Kitāb al-Maqūlāt*. Throughout the *Maqūlāt*, Fārābī is referred to explicitly by Avicenna no less than two times: in chapter III.4, where he is simply alluded to as a “better-discerning” philosopher; in chapter VI.5, where he is called very clearly “the later eminent scholar” (*fāḍil al-muta’ahḥirīn*), and where

---

<sup>139</sup> An English translation of this letter is found in GUTAS 2014, pp. 59-67; for the tentative attribution to Ibn Zayla, see REISMAN 2002, pp. 195-203; p. 253. C. Cerami has recently made the hypothesis that Ibn al-Ṭayyib might be also the anonymous neo-Philoponian author whom Avicenna criticizes in his paraphrase of Aristotle’s *De caelo* (CERAMI 2017, pp. 312-314).

<sup>140</sup> GUTAS 2014, p. 63.

<sup>141</sup> Cf. above, 2.1.3.

<sup>142</sup> See below, 3.2.1-2; BENEVICH 2017, p. 267. For Ibn ‘Adī’s influence on Avicenna, see also M. RASHED 2004a.

<sup>143</sup> See below, 3.4.1.

Avicenna quotes literally a short text of his on the category of when<sup>144</sup>. Nonetheless, as I shall argue both in this Introduction and in the Commentary, Fārābī’s implicit influence seems particularly evident in Avicenna’s interpretation of substance and in that of relatives<sup>145</sup>. Sadly enough, the loss of Fārābī’s *Šarḥ* very likely prevents us from appreciating much of Avicenna’s confrontation with his illustrious predecessor, and from evaluating in detail their differences.

Other authors are referred to anonymously in the *Maqūlāt*, most notably in the section on the properties of angles and figures: in chapter VI.2 it is certainly possible to detect a criticism of the philosopher and mathematician Abū Ḥāmid al-Isfīzārī (4<sup>th</sup>/10<sup>th</sup> century) about the categorial status of angles, which Avicenna also makes in the presumably coeval *Risāla fī l-zāwiyya*<sup>146</sup>; in chapter VI.1, a possible reference to Ṭābit ibn Qurra, presented as a supporter of the theory according to which figures belong to the category of position<sup>147</sup>. I shall deal with this issue more in detail below<sup>148</sup>.

Several other authors mentioned – implicitly or explicitly – throughout the text remain unidentified; when not for my ignorance or negligence, only for the lack of available and consultable sources.

### 2.3.4 Aftermath

The Arabic reception of the *Maqūlāt* still needs to be studied in more detail, as concerns both the exegetical activity of subsequent scholars and the legacy of Avicenna’s doctrines among later philosophers.

The only extant commentary on the *Šifā’* that we have, relative to the 11<sup>th</sup>-16<sup>th</sup> century period, is precisely a partial commentary of Avicenna’s *Maqūlāt* written by ‘Allāma al-Ḥillī (d. 726/1325)<sup>149</sup>. Besides, S. Di Vincenzo has recently discovered and edited a number of *marginalia* to the Logic of the *Šifā’*, ascribed to the philosopher and theologian Fahr al-Dīn al-Rāzī (d. 606/1210) and arguably transmitted as a scholastic “exegetical apparatus functional to the reading of the main text”<sup>150</sup>: among the glosses edited by Di Vincenzo, eleven comment upon passages of the *Maqūlāt*<sup>151</sup>. Furthermore, A. Kalbarczyk has shown that Rāzī’s critical reception of some key issues in Avicenna’s interpretation of the *Categories*, even in his commentaries on other works (e.g. the *Išārāt* and the *‘Uyūn al-*

<sup>144</sup> VI.5 [§3.2] (and par. 3.4.2). I analyze the quotation in the COMMENTARY *ad loc.* As T. Street has demonstrated, the formula “later eminent scholar” in Avicenna’s writings mainly refers to Fārābī (STREET 2001).

<sup>145</sup> See below, 3.4.2.

<sup>146</sup> VI.2 [§1.3].

<sup>147</sup> VI.1 [§6.3-4].

<sup>148</sup> See below, 3.6.3.

<sup>149</sup> As is known, the early exegetical activity on Avicenna’s works is heavily imbalanced towards the *Išārāt* (WISNOVSKY 2013, pp. 193-199). Al-Ḥillī’s commentary is extant in only one manuscript (Dublin, Chester Beatty Library, Ar. 5151); it is presented as “the second volume” (*al-muğallad al-tānī*) of a commentary called *Kašf al-Ḥafā’ min Kitāb al-Šifā’*, which comments on Avicenna’s text up to the end of *Maqūlāt* IV.5. A short section is edited and translated into English in KALBARCZYK 2018, pp. 48-50.

<sup>150</sup> DI VINCENZO 2017, p. 47.

<sup>151</sup> DI VINCENZO 2017, pp. 56-61.

*ḥikma*), is very likely influenced by the *Maqūlāt* itself<sup>152</sup>. At least another document attests to the circulation and knowledge of the *Maqūlāt* in the 13th century: the extensive quotation of chapter VI.2 found in Kamāl al-Dīn al-Fārisī's *Risāla fī l-zāwiya*<sup>153</sup>. Although the Arabic and Persian reception of Avicenna's *Maqūlāt* are still waiting to be mapped in detail, there is promising

Not much can be said, instead, about the Latin posterity of Avicenna's *Maqūlāt*. Like most logical sections of Avicenna's *Šifā'* (except for the *Madḥal* and part of the *Burhān*) it was probably never translated into Latin: as a matter of fact, a translation of Avicenna's *Categories* is neither extant nor attested, except for a few doubtful quotations in Albert the Great's *De praedicamentis*<sup>154</sup>. However, most of these quotations can be reconducted in all likelihood to other Avicennan works; for the very few cases where such an attribution seems viable, it is not possible to exclude the existence of selective translations or *florilegia* containing fragments from Avicenna's commentary<sup>155</sup>.

---

<sup>152</sup> Kalbarczyk has studied most notably Rāzī's reception of Avicenna's doctrine of the "scope" of the categories, his account of the division of categories and his refutation of Avicenna's defense of the synonymy of substance (KALBARCZYK 2018, pp. 32-36; 178-189; 230-237). On the other commentators' use of the *Šifā'* as an exegetical tool for understanding the *Išārāt* see WISNOVSKY 2013, pp. 203-205.

<sup>153</sup> R. RASHED 2015, pp. 276-283; see below, par. 4.

<sup>154</sup> On the Latin translations of Avicenna's works, see BERTOLACCI 2011 and JANSSENS 2013.

<sup>155</sup> For an analysis of these quotations, see CAMINADA 2017.

### 3 AVICENNA'S INTERPRETATION OF ARISTOTLE'S *CATEGORIES*

In the present section I will expound some major aspects of originality of Avicenna's interpretation of the *Categories*, as it is found in the *Maqūlāt* of the *Šifā'* and in other related works.

The first two paragraphs (3.1-2) take up some general aspects of Avicenna's interpretation, concerning his overall understanding of the doctrine of categories and the distinction between substance and accident. More specifically, paragraph 3.1 is devoted to Avicenna's conception of the subject matter of the *Categories*, which he reads as a work that deals non-demonstratively with ontological issues. Paragraph 3.2 focuses on Avicenna's refutation of what I have labelled "Porphyrian" onto-relativism, i.e. the doctrine according to which beings may belong to different categories (most notably, substance and accident) simultaneously.

Each of the following paragraphs (3.3-6) is devoted to one of Aristotle's main four categories: substance, quantity, relatives and quality. Paragraph 3.3 deals more specifically with the category of substance: notably with Avicenna's definition of substance, his division of it and his way of dealing with the millenary puzzles concerning the possible homonymy of the genus "substance". Paragraph 3.4 expounds Avicenna's main innovations with regard to the category of quantity, particularly his discussion of the ontological status of body, place and spoken language. Paragraph 3.5 focuses on the original aspects of Avicenna's analysis of relatives, most notably on his interpretation of Aristotle's accounts of relatives in *Categories* 7 and *Metaphysics* Δ 15. Finally, in paragraph 3.6 I examine Avicenna's innovations in the treatment of quality, particularly with regard to the definition and division of the category, the account of active and passive capacities and the ontological status of geometrical beings (forms, figures and angles).

As far as the minor accidental categories are concerned, the essentials are already said – or at least alluded to – in the discussion of the "big" categories: where, when and position are cursorily tackled in par. 3.4, action and affection in par. 3.6. For this reason, and also for a matter of space, I have decided not to devote a further, specific paragraph to them. Again for a matter of space, I have also chosen not to write a separate paragraph on the *Post-predicamenta*, where Avicenna sticks quite closely – on the whole – to Aristotle's text. For the rest, I hope to have discussed all the relevant issues in a satisfactory way in the COMMENTARY, and not to have dwelt too lengthily upon the irrelevant ones.

### 3.1 The subject-matter of the *Categories*: a non-scientific ontology of quiddity

#### 3.1.1 The Greek Tradition. Porphyry's Semantics

That which most clearly highlights the originality of Avicenna's interpretation of the *Categories* is his account of the "scope" (*ḡaraḡ*), i.e. the subject-matter, of the Aristotelian opusculum.

It is well-known that the *Categories*, despite being traditionally placed at the beginning of the *Organon*, deals with some crucial issues of Aristotelian ontology: most notably, the doctrine of the ten categories and the definition of substance, which play a major role in Aristotle's analysis of being<sup>156</sup>. Hence, it is no coincidence that Plotinus formulated against the *Categories* a celebrated book-long refutation (i.e. the three treatises *On the Kinds of Being*), based on a wholly ontological reading of the short treatise<sup>157</sup>. Nonetheless, the theory that bore the heaviest influence on subsequent interpretations, and set the standard for late ancient and medieval exegesis, was certainly the "semantic" reading adopted by Plotinus's most famous disciple, Porphyry of Tyre (234-305).

As is known, Porphyry conceived the philosophical project of reconciling the philosophies of Plato and Aristotle, and the position of philosophers in general, probably in order to counter the doctrines of Christians and to reject some doctrines of his master Plotinus<sup>158</sup>. As a part of this project he wrote commentaries on various Aristotelian works – including the *Categories*, to which he devoted two exegetical works: a short extant Commentary "by questions and answers" and a long commentary in seven books, which unfortunately went lost (and a few fragments of which are preserved by Simplicius)<sup>159</sup>.

Porphyry opens his short commentary on the *Categories* by means of an explanation of the title, Κατηγορία. As a matter of fact, according to common usage in Greek the term κατηγορία refers to the accusation speech in court, as opposed to ἀπολογία (meaning the defense speech); in his treatise, Aristotle employs it in a technical sense, i.e. as meaning "the fact of attributing significant utterances to things" (τῶν λέξεων τῶν σημαντικῶν κατὰ τῶν πραγμάτων ἀγόρευσις)<sup>160</sup>. The notion of "significant utterance" is again at stake a few lines below, as Porphyry takes up the issue of the "purpose" (πρόθεσις) of the book. In order to explain what the *Categories* is about, he presents a short natural history of human language, according to which humans were originally responsible for two successive impositions of names: a primary imposition, where sensible things were named, and a secondary imposition, where names themselves were named and a sort of meta-language was created<sup>161</sup>. The

---

<sup>156</sup> Just to mention a few relevant passages, see Arist. *Metaph* Z 1, 1028a 10-13 and Λ 1, 1069a 18-21.

<sup>157</sup> Plot. *Enn.* VI.1-3 [42-44].

<sup>158</sup> For some remarks on Porphyry's project see CHIARADONNA 2016, esp. pp. 332-338.

<sup>159</sup> CHASE 2012, pp. 1351 – 1354.

<sup>160</sup> Porph. *In Cat.* 56.5-13.

<sup>161</sup> Porph. *In Cat.* 57.19 – 58.20. On Porphyrian semantics in general, see EBBESEN 1990, pp. 146-162; LLOYD 1990, pp. 36-75. P. Hoffmann has argued that the secondary imposition of names only concerns those names that do not signify sensible realities, such as articles, conjunctions and other kinds of words (HOFFMANN 1999, pp. 234-235).

*Categories* focuses on the first kind of words, i.e. words that signify things, in so far as they can be reduced to ten *summa genera*: for this reason neither the purely “vocalist” interpretation proposed by the Stoics Athenodorus and Cornutus, nor the “ontological” interpretation presented by Plotinus are correct<sup>162</sup>.

The inclusion of sensible beings into the subject-matter of Aristotle’s *opusculum* allowed Porphyry to incorporate the Aristotelian doctrine of categories into a Platonic metaphysical framework, as an ontology of sensible reality; in the same time, it allowed him to safeguard the place of the *Categories* in the beginning of logic, as a treatise devoted to simple terms<sup>163</sup>.

In the later exegetical tradition (Ammonius, Simplicius and the others), the dispute came to assume the schematized form of a debate among three main schools of thought: grammaticalists (arguing for the subject-matter of the treatise being “simple utterances”, φωναί), conceptualists (proposing “simple concepts”, νοήματα) and realists (proposing “simple things”, πράγματα)<sup>164</sup>. The standard solution of the exegetes became a “tripartite” adaptation of Porphyry’s semantic scheme, marked by the introduction of concepts: none of three schools is totally wrong or totally right, since Aristotle’s *Categories* focuses on “utterances that signify realities by means of concepts” (περὶ φωνῶν σημαίνουσῶν πράγματα διὰ μέσων νοημάτων, according to Ammonius’ formulation)<sup>165</sup>.

Besides justifying the traditional place of the *Categories* at the beginning of logic, the semantic reading of Aristotle’s work developed in the Greek exegetical tradition also managed to explain the presence of several ontological themes in it; however, it did nothing but amplify the original ambiguity of the Aristotelian *opusculum*.

### 3.1.2 The Arabic Tradition

Porphyry’s semantic device was inherited by the first Arab commentators, most notably within the so-called Baghdad school (where Arabic logic knew its first substantial developments). These commentators adopted it on a double level: when defining the subject-matter of logic in contrast with grammar and other linguistic disciplines, on the one hand, and when establishing the scope of the *Categories* on the other hand.

In the famous dispute with the grammarian al-Sirāfi, recorded by Abū Ḥayyān al-Tawhīdī, the logician Abū Biṣr Mattā held a hyper-conceptualist position that excluded language from the field of competence of his discipline: logic, he said, focuses on “intelligible accidents and apprehensible notions” (*al-a’rāḍ al-ma’qūla wa-l-ma’ānī l-mudraka*), more in general with universal mental contents, whereas grammar deals

---

<sup>162</sup> Porph. *In Cat.* 59.3 ff.

<sup>163</sup> As recently argued by CHIARADONNA 2016, the ontology that Porphyry incorporates is certainly influenced by the essentialism of Alexander of Aphrodisias (pp. 325-329).

<sup>164</sup> Cf. *Simpl. In Cat.* 9.4-10.5. GRIFFIN 2012 treats the ‘bipartite’ and ‘tripartite’ conception of the *skopos* as two different doctrines. It is debated, however, whether or not Porphyry’s semantic account did also implicitly comprise concepts as intermediaries between things and expressions. According to LLOYD 1990 and EBBESEN 1990, Porphyry did take concepts into account, but he neglected them in the *Commentary by questions and answers* because of the introductory nature of that work. More recently, R. Chiaradonna has argued that Porphyry’s logic is not at all conceptualist, since the philosopher’s theory of knowledge seems to presuppose a direct abstraction of forms, without the intermediation of mental images (cf. CHIARADONNA 2007b).

<sup>165</sup> *Amm. In Cat.* 9.17-18. Cf. also *Simpl. In Cat.* 13.11-18.

exclusively with words<sup>166</sup>. In spite of that, some of his contemporaries and successors showed a tendency to correcting this approach, by integrating again the study of words into the domain of logical studies: a tendency shown, for instance, by two of the greatest names of the 10th-century Baghdadian *milieu*, notably al-Fārābī and Yaḥyā Ibn ‘Adī<sup>167</sup>.

In the *Enumeration of sciences (Iḥṣā’ al-‘ulūm)*, Fārābī firstly presents the linguistic sciences as dealing with utterances, inasmuch as they are the expression of the language proper to a certain community; logic, as a discipline that guides us to reasoning correctly about intelligibles, whose subject-matter – nonetheless – is represented by “intelligibles, in so far as they are signified by utterances, and utterances, in so far as they signify intelligibles” (*al-ma’qūlātu min ḥayṭu tadullu ‘alayhā l-alfāzu, wa-l-alfāzu min ḥayṭu hiya dāllatun ‘alā l-ma’qūlāti*)<sup>168</sup>. As a matter of fact, whereby the logical adjustment of our opinion depends exclusively on intelligibles, language is needed to express reasoning, and to rectify the opinion of others. Below, Fārābī returns to the distinction between logic and grammar, and claims that grammar presents rules applicable to the expressions of a particular language, whereby logic studies rules that apply to the utterances of all languages and communities. In this context, when presenting and dividing the eight main parts of logic, Fārābī claims that the subject-matter of the *Categories* – perfectly in line with the main focus of the discipline – is represented by “the canons concerning simple intelligibles, and the utterances that signify them” (*qawānīn al-mufradāt min al-ma’qūlāt wa-l-alfāz al-dālla ‘alayhā*)<sup>169</sup>.

Although the reference to simple things and concrete reality seems to have disappeared from this account of the *Categories*, Fārābī maintains it on other occasions – although his primary focus always lies on concepts, rather than words and things. In one of the few extant fragments of Fārābī’s *Long Commentary (Šarḥ)* on the *Categories*, preserved in Hebrew in Yehudah Cohen’s 15<sup>th</sup>-century commentary on Averroes’ *Talḥiṣ al-maqūlāt*, Fārābī presents the goal of the *Categories* by means of the canonical tripartition, but with an unusual emphasis on concepts: “The intention of the *Categoriae* is to enumerate the single notions related to sense-objects, as far as single expressions signify those notions”<sup>170</sup>.

This emphasis is not totally irrelevant, I think, if we take a look at another important Farabian text where intelligible notions play a primary role: the *Book of Letters (Kitāb al-Ḥurūf)*. In the very beginning of this work, Fārābī defines again a “category” (*maqūla*) as “every intelligible notion signified by a certain utterance, by which some of these individual things are described”<sup>171</sup>. Now, given that these things notify something about their real, concrete referents, their different ways of notifying correspond to different categories: when they notify what the thing is, they notify the category of substance; when they notify its quantity, they notify the category of quantity; etc. Well, for Fārābī these intelligibles bearing a direct reference to individual things are labelled “primary” intelligibles; to these other secondary states are attached in the soul (for instance, universality and particularity) that are

<sup>166</sup> MARGOLIOUTH 1905, p. 94. On this celebrated dispute, see ENDRESS 1977a, 1986; ELAMRANI-JAMAL 1983; more recently, ADAMSON, KEY 2016 (particularly pp. 76-82).

<sup>167</sup> On Fārābī’s interpretation of the scope of the *Categories*, see also VALLAT 2004, esp. pp. 239-245; more in general on his interpretation of the *Categories*, see DIEBLER 2005.

<sup>168</sup> Fārābī *Iḥṣā’ al-‘ulūm* 74.10-12.

<sup>169</sup> Fārābī *Iḥṣā’ al-‘ulūm* 86.14 – 87.3.

<sup>170</sup> ZONTA 2006, p. 195.

<sup>171</sup> Fārābī *Ḥurūf* 62.21-22.

named “secondary intelligibles”, and have with primary intelligibles the same relation as words of secondary imposition have with words of primary imposition<sup>172</sup>. In the following pages, Fārābī uses this “conceptualized” version of Porphyry’s semantics to distinguish the subject-matter of logic from the subject-matter of other sciences: these notions referring to concrete beings, i.e. primary intelligibles, are studied by all sciences, but in logic they are studied in so far as they are expressed by utterances and in so far as they are accompanied by secondary notions, whereby other sciences consider them as abstracted from their being signified by words, and from the accidents that accompany them in mental existence<sup>173</sup>.

Hence, Fārābī’s interpretation reprises in the main Porphyry’s semantics, by re-evaluating the function of language and re-establishing a nexus between notions and things, for neglecting which Sirāfī had harshly reproached Mattā. Despite recognizing, in his famous opusculum *On the Goals of Aristotle’s Metaphysics* (*Fī agrād al-ḥakīm fī kullī maqāla min al-kitāb al-mawṣūf bi-l-ḥurūf*), that categories are also part of the subject-matter of metaphysics inasmuch as they “are like species” (*taqūmu [...] maqām al-anwā*) of the absolute existent, Fārābī never questions explicitly the appropriateness of their being treated in the beginning of logic<sup>174</sup>.

As for Yaḥyā ibn ‘Adī, it is sufficient to look at the conclusion of his short work named *The Explanation of the Difference Between the Art of Philosophical Logic and Arabic Grammar* (*Tabyīn al-faṣl bayna ṣinā‘at al-mantiq al-falsafī wa-l-naḥw al-‘arabī*) to see a restatement of the semantic interpretation: Ibn ‘Adī distinguishes between logic and grammar on account of the fact that grammar deals with utterances absolutely, whereas logic deals with them in so far as they signify, and in so far as they signify “universal things” (*al-umūr al-kullīyya*)<sup>175</sup>.

---

<sup>172</sup> Fārābī *Ḥurūf* 64.9-19: “Moreover, when these intelligibles that come to be in the soul from sensible things are realized in the soul, they are accompanied – inasmuch as they are in the soul – by concomitants in virtue of which one of them becomes a genus, another one a species, and [they become] such that some of them make others known. As a matter of fact, the notion because of which the intelligible becomes a genus or a species, i.e. its being predicated of many things, is a notion that accompanies it in so far as it is in the soul. Likewise, the relations that accompany [these intelligibles] (like the fact that one of them is more general or more specific than another) are also notions that accompany them in so far as they are in the soul. Similarly, the fact that some of them notify some others belongs to the states and things that accompany them while they are in the soul. Likewise, our saying about them that they are knowable and intelligible is something that accompanies them inasmuch as they are in the soul. These [things] that accompany them after their being realized in the soul are also intelligible things, but they are not intelligibles that become realized in the soul as being copies of sensibles or as depending on sensibles, [nor are they] intelligibles of things [existing] outside the soul; and they are called “secondary intelligibles”.

<sup>173</sup> Fārābī *Ḥurūf* 66.18 - 67.12: “These [intelligibles] are the primary subjects of the discipline of logic, natural science, political science, mathematics and metaphysics. As a matter of fact, inasmuch as they are expressed by utterances, as they are universal, as they function as predicates and subjects, as they are taken as answers to questions about them, they are logical. [...] As for the remaining sciences, they are only considered [by them] inasmuch as they are intelligibles of things outside the mind, as abstracted from the utterances that express them and from the other aforementioned accidents that accompany them in the mind”.

<sup>174</sup> Fārābī *Fī agrād* 36.11-15 (Tr. BERTOLACCI 2006, p. 69): “Then, after these subject-matters and their verification, it investigates the things which are like species to them, like the ten categories of the existent, the species of the one (like the individual one, the one by species, the one by genus, the one by analogy, and the divisions of each one of these), and similarly the species of non-existence and many”.

<sup>175</sup> Ibn ‘Adī *Tabyīn al-faṣl* 423.16 - 424.3: “[...] the subject-matter of the discipline of logic is significant utterances, not utterances absolutely; and among utterances, those that signify universal things, not those that signify particular things. The subject-matter of the discipline of grammar are utterances absolutely, significant ones and non-significant ones”.



In later scholastic commentaries on the *Categories* we see a plain reprise of the classical, tripartite formulation of the goal, found in the Alexandrian commentators' exegeses. It happens for instance in Al-Ḥasan ibn Suwār's glosses to the Parisian Organon, where Aristotle's goal in the *Categories* is said to be "speaking of the simple utterances, [posited] in the primary imposition, that signify the highest genera of things, in so far as they are significant by the mediation of the traces that [derive] from those in the soul; and [speaking of] things, in so far as they are signified by utterances" (*al-kalāmu fī l-alfāzi l-basīṭati llatī fī l-waḍ'ī l-awwali l-dāllati 'alā aḡnāsi l-umūri l-'āliyati min ḥaytu hiya dāllatun bi-tawassuṭi l-ātāri llatī fī l-nafsi minhā wa-fī l-umūri min ḥaytu yustadallu 'alayhā bi-l-lafzi*)<sup>176</sup>. The later commentator Abū l-Faraḡ 'Abdallāh ibn al-Ṭayyib presents an almost identical formulation in his *Tafsīr Kitāb al-Maqūlāt*: "[...] his goal in this book only consists of speaking about the utterances that signify the universal things that are supreme genera, that are in the primary imposition, and about the things that correspond to them" (*ḡaraḍuhū fī hādā l-kitābi innamā huwa l-kalāmu fī l-alfāzi l-basīṭati l-dāllati 'alā l-umūri l-kulliyati llatī hiya aḡnāsun 'āliyatun allatī fī l-waḍ'ī l-awwali wa-fī l-umūri bi-ḥasabihā*)<sup>177</sup>.

### 3.1.3 Avicenna's Ontological Reading

Avicenna's account of the object and function of logic is reminiscent of Farābī's classification of intelligibles, but also innovative with regard to it<sup>178</sup>. In a famous passage of the *Ilāhiyyāt* of the *Šifā'*, Avicenna provides the following description of the subject-matter of logic:

The subject-matter of logic, as you know, is given by the secondary intelligible notions based on the first intelligible notions, with regard to how it is possible to pass by means of them from the known to the unknown, not in so far as they are intelligible and possess intellectual existence ([an existence] which does not depend on matter at all, or depends on an incorporeal matter)<sup>179</sup>.

This account clearly differs from the one given by Farābī in the first book of the *Kitāb al-Ḥurūf*: the subject-matter of logic is not primary intentions, inasmuch as they are accompanied by secondary intentions, but secondary intentions in themselves, insofar as they are apt – in a sense – to making us capable of knowing the unknown. This aptitude of theirs consists of their being possibly combined so as to form definitions and syllogisms, the two mental operations that make our knowledge advance.

The distinction between these two kinds of states is expressed, in *Madḥal* I.4, in the following terms:

Knowledge of simple things is of two kinds: for it may be either knowledge of them, in so far as they are apt to being composed according to the mentioned kind of composition; or knowledge

<sup>176</sup> Ibn Suwār, *Glosses* 361.1-4.

<sup>177</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 18.5-10.

<sup>178</sup> For a classic account of Avicenna's interpretation of the subject-matter of logic, see SABRA 1980. The issue is also reprised in BERTOLACCI 2006, especially with regard to the relation between logic and metaphysics (pp. 272-279). See also LIZZINI 2012, pp. 15-18.

<sup>179</sup> *Ilāhiyyāt* I.2, 10.17 – 11.2 (English translation taken from BERTOLACCI 2006, p. 273).

thereof, in so far as they are natures and things to which that thing occurs adventitiously<sup>180</sup>.

The “thing” or “notion” (*ma'nā*) mentioned in the end of this passage is very likely the aptitude to being composed. In the following lines, Avicenna presents an image that exemplifies better what he has just claimed. The builder of a complex artefact, like a house, must know, in a sense, the simple elements of the thing he wants to build: wood, bricks, stones, and the like. However, he must not know everything about them, but only what is strictly relevant for his scope: not the natures and quiddities of these elements, but those among their characters that make them suitable for being assembled, and forming a house (e.g. their solidity). In sum, a logician must not commit himself with knowing the essence of the notions he works with, but only to studying those properties of their that are relevant to the goal of his discipline.

This distinction between relevant and irrelevant properties or “states” also applies to the utterances that correspond to those notions. As for the role of words and language in logic, Avicenna’s position is uncertain: in the *Madḥal* of the *Šifā'*, notably in the chapter devoted to the subject-matter of logic, Avicenna openly criticizes the “vocalist” approach – held for instance, as we have seen, by Yaḥyā Ibn 'Adī and Ibn al-Ṭayyib – that makes “significant utterances” (*al-alfāz al-dālla*) the actual focus of the discipline<sup>181</sup>. However, he also argues that a logician cannot abstain himself totally from taking words into account, since the limited nature of human beings forces them to use words in order to signify and communicate their thoughts. In the beginning of the *Ibāra*, he argues that the logician must focus on utterances, but only insofar as they have certain “states” (*aḥwāl*) that may help him achieve the primary goal of his discipline, which consists of performing the two mental operations of conceptualization (*taṣawwur*) and assent (*taṣdīq*); he must not be concerned, on the contrary, with any other sorts of states that pertain to simple utterances<sup>182</sup>.

It is on such an opposition between relevant and irrelevant “states” of concepts and utterances that Avicenna bases his account of the scope of the *Categories*, in *Maqūlāt* I.1. The scope is here defined in contrast with the subject-matter of the *Isagoge*, which focuses on those properties of simple utterances that are useful in constructing syllogisms and demonstrations: essentiality and accidentality, universality and particularity, based on which they are classified into the five predicables: genus, species, differentia, proprium and common accident. Among the states or properties of simple utterances that logic must not take into account, on the contrary, there is their reference to existent beings, i.e. their being significant of things, which is normally dealt with in the *Categories*:

It is absolutely unnecessary to get acquaintance with these, I mean in apprehending the discipline of logic, nor even quasi-necessary; neither under the respect of their state of expressing particular individuals, for this belongs to what is absolutely useless in any science, not to speak of logic; nor under the respect of their state of expressing the species, since this is something by which

---

<sup>180</sup> *Madḥal* I.4, 21.17– 22.1.

<sup>181</sup> *Madḥal* I.4, 23.5 – 24.2.

<sup>182</sup> *Ibāra* I.1, 5.13-17: “Moreover, the consideration about which utterance is imposed as signifying such-and-such meaning, and which written expression is imposed as signifying such-and-such meaning and affection (*aṭar*), this is up to the art of linguists and scribes, and the logician only speaks thereof accidentally. Rather, what the logician must know about is the state of utterances is knowing its state in respect of signifying simple and complex notions”.

no one is helped in the discipline of logic, and the discipline of logic is complete without that; nor under the respect of their state of expressing the supreme genera, which are customarily called “categories”, and to which a book named *Qātīgūryās* is customarily devoted in the beginning of the science of logic<sup>183</sup>.

The consequence of this irrelevance to logic is that, against the traditional order of logical teaching, the student may move directly from the *Isagoge* to the *De interpretatione*, where he will learn the distinction between name and verb (*ism* and *kalima*) and the types of propositions, before moving to the theory of syllogism and demonstration dealt with in the *Prior* and *Posterior Analytics*<sup>184</sup>.

Although such remarks may suggest that Avicenna accepts the standard semantic interpretation, in *Maqūlāt* I.1 he presents a number of more or less explicit arguments against it. Firstly, he argues that words expressing things by means of concepts are not to be dealt with altogether in logic, but at least in three different disciplines: in metaphysics, insofar as the things are existing things; in psychology, inasmuch as they are conceptualized notions; in “the discipline of linguists” (*šinā’at al-luḡawīyyīn*), insofar as they are words<sup>185</sup>. Secondly, towards the end of the chapter he charges all of his “validating” (*muḥaṣṣilūna*) predecessors, i.e. the reliable interpreters of Aristotle, with insisting on the fact that the *Categories* is not a treatise about the nature of beings, but about beings, *in so far as they are expressed by simple utterances*. This is not a comprehensible subject-matter, Avicenna claims, for nothing can be demonstrated about an existing nature, in so far as it is expressed by simple utterances; and the demonstrations that are customarily made when discussing the *Categories* are, in fact, demonstrations about the very nature of beings<sup>186</sup>.

Even though the *Categories* focuses on the nature of beings, however, it does not in a scientifically acceptable manner: as a matter of fact, according to Avicenna, Aristotle’s treatment of ontological themes in this short treatise is mostly cursory and conventional, as if the *Categories* were a sort of synthetic, didactic presentation of issues to be expounded in detail in other works (mostly the *Metaphysics*, but also the *Physics* and other books of natural philosophy). Therefore, when it comes to explaining the “goal” (*ḡaraḍ*) of the book, Avicenna presents it as follows:

So, you must not exceed this measure of ambition for this art, convince yourself that it belongs to the discipline of logic, and know something else: namely, that the author of this book did not write it as a teaching, but according to the way of convention and uncritical acceptance; for there is no way to know by verification, by means of the way of explanation related to logic, what is known in it. [...] Hence, we must confirm that the goal of this book is that you believe, by way of convention and concession, that ten things are high genera containing beings, and upon which simple expressions fall; and that you know that one of them is substance, and the other nine are accidents, without that the nine’s being accidents is demonstrated to you; but you just must accept it<sup>187</sup>.

---

<sup>183</sup> I.1 [§2.1], 4.16-21.

<sup>184</sup> I.1 [§2.2], 5.1-5.

<sup>185</sup> I.1 [§2.2], 5.9-11.

<sup>186</sup> I.1 [§5], esp. 7.9 – 8.1.

<sup>187</sup> I.1 [§4], 6.8-11; 6.17-20.

The *Categories* is useful for the logician only in a certain respect, that is to say, only inasmuch as it presents a catalogue of beings, organised into genera and species, that may help him formulate correct definitions<sup>188</sup>. It is very likely for this reason that the discussion of categories in the logical section of the *Nağāt* is not found in its customary place, between the logic of universals and that of propositions, but right after the treatment of definitions<sup>189</sup>.

In summary, in the *Maqūlāt* of the *Šifā'* Avicenna discards the standard semantic interpretation of the *Categories* to opt for a fully ontologic reading; he argues, nonetheless, for the incompleteness and inappropriateness of the doctrines contained therein. This has been rightly deemed by D. Gutas a major point of disagreement with the preceding Aristotelian tradition<sup>190</sup>.

### 3.1.4 Categories and Metaphysics

The metaphysical relevance of categories depends on the fact that Avicenna, like Fārābī, holds them to be closely related with the subject-matter of metaphysics, since they may be considered “like species” of the existent *qua* existent. In *Ilāhiyyāt* I.2, Avicenna states that the “first subject” (*al-mawḍū' al-awwal*) of metaphysics is represented by the existent, inasmuch as it is existent (*al-mawḡūd bi-mā huwa mawḡūd*), and that this science enquires into things that are attached to the existent, among which Avicenna mentions the categories:

Therefore the first subject of this science is the existent inasmuch as it is existent; and the things sought by it are the things attached to it inasmuch as it is existent, unconditionally. Some of these things are like its species (*lahū ka-l-anwā'*), such as substance, quantity and quality. Indeed, in order to be divided into them, the existent does not need any division prior to them, in the same way as substance needs some divisions [to take place] in order for the division into man and not-man to follow necessarily<sup>191</sup>.

Such a formulation is almost identical with the one found in Fārābī's *Fī aḡrād*<sup>192</sup>: it is also one of the few places, if not the only one, where Avicenna labels the categories as quasi-“species” of the existent<sup>193</sup>. Nonetheless, following Aristotle, Avicenna argues that being is not an actual genus for the ten categories: rather than recurring to the Aristotelian notion of  $\pi\rho\delta\ \acute{\epsilon}\nu$  predication, he claims that it is just an attribute that is said of them analogically, or rather – using Avicenna's terminology – “by way of ambiguity” (*bi-l-taškīk*)<sup>194</sup>.

---

<sup>188</sup> I.1 [§3], 5.17 – 6.8: knowing the nature of beings, the logician has good material to present “examples” or “paradigms” (*al-amṭila*). See the discussion in the COMMENTARY *ad loc.*

<sup>189</sup> See above, par. 2.2.

<sup>190</sup> GUTAS 2014, pp. 300-303.

<sup>191</sup> *Ilāhiyyāt* I.2, 13.12-16. For an analysis of this text, focusing in particular on the notion of “first subject”, see QUARTUCCI 2017.

<sup>192</sup> Fārābī, *Fī aḡrād* 36.12-13.

<sup>193</sup> In the metaphysics of the *Dānešnāme* Avicenna mentions “substance and accidents” among the states that the existent has inasmuch as it is existent *Dānešnāme – Ilāhiyyāt* 7.12 – 8.2 (French translation: ACHENA-MASSÉ 1955, p. 93).

<sup>194</sup> *Hidāya* III.1, 232.9-12: “The existent is said of substance and accidents, that are notoriously believed to be nine, neither by homonymy, nor by similarity, nor by absolute synonymy [...] but by ambiguity, as a single

In the *Maqūlāt*, Avicenna mainly deals with the relation between “existent” and the categories in two places: I.2, a chapter devoted to homonyms, and II.1, the first of a series of chapters that focus on justifying the number of Aristotle’s categories (II.1-5). In I.2, Avicenna provides the most extensive account of predication *bi-l-taškīk* found in his *corpus*: he presents *taškīk* as a sort of modulated synonymy, where a single notion is said of different things without losing its fundamental unity of meaning, but by becoming differentiated with regard to certain non-essential attributes (priority and posteriority, greater or lesser dignity, strength and weakness). There, he argues that the existent is differentiated, among the categories, with regard to priority and posteriority (as concerns the distinction between substance and accidents) and greater and lesser dignity (as regards the distinction between what is existent by itself and what is existent by virtue of something else)<sup>195</sup>. In II.1, besides recalling that “existent” is not said of the ten categories by synonymy, he argues that even if it were synonymous it would not be a genus, since it is in any case a necessary concomitant (*lāzim*) that does not constitute the quiddity of any category<sup>196</sup>. Besides displaying very clearly the penetration of ontological themes in the Logic of the *Šifā’* (a tendency that A. Bertolacci has labelled as “ontologization of logic”)<sup>197</sup>, this latter text is also one of the clearest and most solid formulations of the essence/existence distinction in the Avicennan *corpus*.

When referring to a category, Avicenna always means either the supreme genus, i.e. the most essential universal predicate shared by a certain class of beings, or the class of beings itself. According to Avicenna’s “nominalist” theory of universals presented in *Madḥal* I.12 and *Ilāhiyyāt* V.1 genera, inasmuch as they are natures that exist according to a certain attribute (being said of many things in a certain way), are other than that very natures taken in themselves<sup>198</sup>. Although the *Categories* focuses on a number of supreme genera, as well as the division of these genera into their proximate species, its ontological relevance lies in the fact that it provides an account of quiddities, i.e. of the nature of things independently of the extrinsic attributes that make them suitable for being employed as “logical” tools. This understanding of categories as natures in themselves, or as natures existing in external reality – rather than genera, is particularly evident in Avicenna’s discussion of the quiddity and unity of substance (that I will discuss in detail below, par. 3.3), which Avicenna establishes independently of the extrinsic properties that accompany its possible realizations in the world. In the *Ilāhiyyāt* III.1, when introducing the section of the work that deals with the main accidental categories, Avicenna argues for the necessity of ascertaining their way of existence, after that the quiddity of the ten categories has become known in the beginning of logic<sup>199</sup>.

Regardless whether the “developmentalist” account proposed in the previous chapter is plausible or not, however, it is undeniable that the main focus of the other *summae* that

---

notion falls [upon its subjects] by priority and posteriority”. The reference text on Aristotle’s *πρὸς ἕν* predication and the so-called doctrine of “focal meaning” is OWEN 1960.

<sup>195</sup> I.2 [§3.2], 10.8 – 11.7. On the notion and the history of *taškīk*, see TREIGER 2011; on this passage and, more in general, on Avicenna’s account of homonyms and synonyms, see BÄCK 2008.

<sup>196</sup> II.1 [§4.3], 60.13 – 62.6. This text is translated and analysed into English in BERTOLACCI 2012b (pp. 284-286).

<sup>197</sup> BERTOLACCI 2011.

<sup>198</sup> *Madḥal* I.12, 65.10 ff.; *Ilāhiyyāt* V.1, 196.6-17.

<sup>199</sup> *Ilāhiyyāt* III.1, 93.11.

present a metaphysical discussion of categories lies mostly on causation, creation, and the nature of the Necessary Existent (e.g. *Dānešnāme*, *Nağāt* and *Hidāya*). The same can be said for the metaphysics of the *Išārāt*, where Avicenna limits himself – in the first ontological section – to affirming the non-sensible nature of the existent, to expounding the difference between quiddity and existence and the distinction between possible and necessary existent, without even taking into account the distinction between substance and accident<sup>200</sup>. If the enquiry on the natures of things is useful for understanding concrete reality, and for providing a more complete account of the attributes and concomitants of the existent *qua* existent, it turns out to be irrelevant with regard to the ultimate goal of the discipline, being the knowledge of God, His attributes and His creation of the world. A rigorously descriptive account of the world, such as the one found in the *Categories*, seems to be ultimately less useful and important than the study of principles and causes. In summary, like another illustrious proponent of a fully ontological reading of the *Categories*, Plotinus, Avicenna comes to a partial dismissal the doctrine of categories, on account of its being too rooted in the

### 3.1.5 Avicenna’s Attitude towards Aristotle.

Porphry and his followers often appealed to the allegedly introductory character of the *Categories*, in order to justify doctrines that were apparently irreconcilable with Platonic ontology<sup>201</sup>; in a different theoretical perspective, Avicenna ambivalently employs the same character as a weapon, both to defend Aristotle from the criticisms of previous commentators and to attack him, when necessary.

An interesting example of this ambivalent attitude is found in chapter VII.1, devoted to the classification of opposites. Avicenna holds the classification presented by Aristotle in *Cat.* 10 to be superficial, because (1) it presents one of the many possible senses of privation as “privation” *simpliciter*; (2) it regroups under the name “contraries” a number of attributes that bear different properties, which cannot be called “contraries” in the same manner. Furthermore, before engaging with Aristotle’s classification he presents a “scientific” division of opposites that is apparently aimed at providing a rigorous criterion for distinguishing between “logical” (contradiction) and “ontological” (contrariety, privation, etc.) kinds of opposition, something which Aristotle did not do explicitly<sup>202</sup>. In the end of the chapter, however, Avicenna addresses the opinion of an anonymous commentator, who charged the First Teacher with not having numbered motion/rest, substance/accident, form/matter as distinct species of opposition; in that second case, Avicenna argues that it is not necessary to reproach Aristotle, precisely for the reason that his classification of opposites is clearly non-scientific, and directed to students and beginners<sup>203</sup>.

Furthermore, Avicenna’s disagreement with Aristotle is particularly overt and evident in the case of predication “of a subject” (καθ’ ὑποκειμένου), which I will discuss in par. 3.2; with regard to the distinction between primary and secondary substance, which I will take up

<sup>200</sup> *Išārāt – Ilāhiyyāt, Namaṭ* IV, 7-54.

<sup>201</sup> The most evident example of this tendency is certainly the case of substance, which I will briefly expound below (par. 2.3).

<sup>202</sup> VII.1 [§1], 241.7 – 242.15.

<sup>203</sup> VII.1 [§4.1], 248.9-18.

in par. **3.3**; with regard to the nature of some species of quantity and quality, as I will argue below in pars. **3.4** and **3.6**.

## 3.2 Substance and accident: against “Porphyrian” onto-relativism

### 3.2.1 The Problem with Constitutive Properties

One of the most intriguing and difficult aporiae of Aristotelian ontology concerns the status of essential and constitutive attributes, most notably forms, specific differentiae and constitutive accidents. Although forms and differentiae are not exactly the same kind of properties, they may be conceptually equated to one another in so far as they are constitutive properties – i.e. properties that constitute things in their own true being, and partake in their essences. The issue stems from a number of key-Aristotelian texts. First of all, (1) the definition of substance that Aristotle provides in *Categories* 2 and 5, “that which is not in a subject”, where “being in subject” implies inhering in something not as a part, and without being capable of existing separately from that very substrate<sup>204</sup>; (2) secondly, Aristotle’s suggestion – in *Cat.* 5 – that specific differentiae are not (strictly speaking) substances<sup>205</sup>, and his parallel claim – in *Metaphysics* Δ 14 – that one of the possible meanings of quality is “the differentia of substance” (ἡ διαφορὰ τῆς οὐσίας)<sup>206</sup>.

Aristotle’s notion of substance was a crucial point of debate among the first Peripatetic interpreters, for different interpretations of Aristotle’s theory of substance gave rise to different, conflicting interpretations of Aristotle’s philosophy as a whole. Boethus of Sidon, a Peripatetic scholar of the first century b.c., is reported to have applied the definition of οὐσία found in the *Categories* so rigidly as to deny the substancehood of form, inasmuch as it exists in matter: this exclusive reduction of substance to what is not in a subject, namely matter and the concrete individual, resulted in a “materialistic” Aristotelian ontology<sup>207</sup>. Alexander of Aphrodisias, presumably against Boethus and his followers, attempted on the contrary to re-establish the substancehood of form, on account of the assumption – made by Aristotle himself in *Cat.* 5 – that the parts of substances are themselves substances<sup>208</sup>. Within the later Platonic tradition, on the contrary, Plotinus came to disqualify Aristotle’s forms and differentiae by understanding them mainly as sensible qualities, albeit constitutive and “internally” different from other sensible qualities; and by understanding the sensible substance of the *Categories* as a mere “conglomeration” (συμφορησις) of matter and qualities<sup>209</sup>.

A turning point in the debate was marked by Porphyry’s assessment of these issues, which undoubtedly set a standard for the following exegetical tradition. Porphyry, who was – unlike his master Plotinus – sensible to Alexander’s defense of the substancehood of form

---

<sup>204</sup> Arist. *Cat.* 2 a11-14.

<sup>205</sup> Arist. *Cat.* 3 a21-22.

<sup>206</sup> Arist. *Metaph.* Δ 14, 1020 a33 – b2; b13-17.

<sup>207</sup> Simpl. *In Cat.* 78.3-20. For a comprehensive analysis of this passage see M. RASHED 2013 (particularly pp. 54 ff.).

<sup>208</sup> Arist. *Cat.* 3 a29-32 (to be compared with *Metaph.* Δ 8, 1017 b17-21). On Boethus and Alexander see M. RASHED 2007, pp. 35-81; M. RASHED 2013, pp. 61-67.

<sup>209</sup> Plot. *Enn.* II.6, 2.20-26; VI.3, 8.20. On the ambiguities of Plotinus’ interpretation of constitutive properties see CHIARADONNA 2014a (in particular, pp. 51-60); CHIARADONNA 2014b (pp. 224-225).



and willing to preserve the essentiality of differentiae, proposed a somewhat ambiguous account of the difference between forms and accidents. In his short commentary on the *Categories*, he identified expressly the inherence of accidents in their subjects with the inherence of form in matter, and he famously defined differentia as a “substantial quality” (ποιότης οὐσιώδης)<sup>210</sup>. Furthermore, in a passage from his greater commentary *Ad Gedalium* reported *verbatim* by Simplicius and Dexippus, Porphyry presented a distinction between two kinds of subjects: a primary one, identical with prime matter, with regard to which a certain quality (heat) is a constitutive part, and another one – identical with the constituted subject, with respect to which heat is an accident<sup>211</sup>.

In his commentary on *Categories* 5, Simplicius attests to a peculiar schematization of the debate on constitutive properties which is also found in Dexippus, and which we shall find again in the Arabic tradition. Firstly, Simplicius argues for the fact that differentiae seem to be neither substances nor accidents; then, he presents three alternative interpretations of the ontological status of differentiae: [a] a substantial quality (ποιότης οὐσιώδης), or [b] something intermediate between substance and quality, or [c] substance exclusively, inasmuch as it is not only constitutive of substances, but also a part thereof<sup>212</sup>. According to C. Luna’s reconstruction, subsequent commentators (Ammonius’ school) tended to reject the idea of the intermediate status of differentiae, and to argue more decidedly for them being substances<sup>213</sup>.

The issue of constitutive properties triggered a lively debate in the Arabic tradition as well. We know a number of independent works, attested or extant, that deal with this problem. One of these is Yaḥyā Ibn ‘Adī’s still unpublished *Treatise on Fire and Heat*, devoted to the issue of the substantiality or accidentality of the form of fire<sup>214</sup>. According to F. Benevich’s reconstruction, Ibn ‘Adī is confronted with the problem whether heat is accidental or substantial with respect to fire. Yaḥyā argues that heat is both substantial and accidental for fire: inasmuch as it constitutes fire as a part, and fire is a substance, it is substantial; inasmuch as it inheres in a constitutive part of fire (i.e. its body) it is accidental<sup>215</sup>. However, he also seems to distinguish between “substantial/accidental” and “substance/accident”, for he claims that – according to the principle of non-contradiction – substance and accident are contradictories, and they cannot be true in the same time; therefore, nothing can be a substance and accident in itself in the same time<sup>216</sup>.

The problem was also tackled by al-Ḥasan ibn Suwār, in the *Glosses* on the *Categories* that accompany the Parisian *Organon* and also in a lost work, which reported a discussion between Yaḥyā Ibn ‘Adī and Abū Ibrāhīm ibn Bakkūs “on the form of fire” (*fī ṣūrat al-nār*)<sup>217</sup>. In the *Glosses*, Ibn Suwār defended Porphyry’s account of heat against his master

<sup>210</sup> Porph. *In Cat.* 78.6-7; 95.17 – 96.2.

<sup>211</sup> Simpl. *In Cat.* 48.11-33; Dex. *In Cat.* 23.25 ff.

<sup>212</sup> Simpl. *In Cat.* 97.24 – 99.18. On this aporia, see also DE HAAS 1997, pp. 165-250; LUNA 2001, pp. 237-242.

<sup>213</sup> Amm. *In Cat.* 45.7 – 46.19; Phil. *In Cat.* 64.9 – 68.9; Olymp. *In Cat.* 67.13-35; Elias/David, *In Cat.* 172.31 – 174.23 (for an analysis of these discussions see LUNA 2001, pp. 243-253).

<sup>214</sup> Cf. above, 2.1.4.

<sup>215</sup> BENEVICH 2017, pp. 246-248.

<sup>216</sup> BENEVICH 2017, pp. 249-250.

<sup>217</sup> The work is only mentioned by Ibn Abī Uṣaybi‘a (*‘Uyūn al-anbā* 323.17). According to ENDRESS 2012 (p. 338) a further unedited work by Ibn Suwār deals with this problem, contained in the manuscript

Ibn ‘Adī, by arguing that heat – inasmuch as it is a part of fire – is properly a substance, whereas inasmuch as it inheres in something it is an accident<sup>218</sup>. The position according to which something may well be an accident and a substance in two respects was also received by Ibn al-Ṭayyib, and explicitly put forward by him both in his commentary on the *Categories* and in his commentary on Porphyry’s *Isagoge*<sup>219</sup>.

We do not know for sure through which means the debate on forms and differentiae came down to Avicenna, but it certainly did; most likely, Avicenna read one or more independent Arabic works on this topic, but also had direct or indirect access to late ancient literature (presumably Porphyry and Simplicius). Be that as it may, in many a work of his – included the *Maqūlāt* – Avicenna deals with the question of constitutive properties and comes to counter very harshly a schematic version of Porphyry’s doctrine of differentia: according to this version, forms and differentiae may be substances and accidents “in different respects” (a position that I will call, henceforth, “onto-relativism”). Avicenna’s refutation of “Porphyrian” onto-relativists – or Porphyry himself, since Avicenna criticizes him expressly on many other occasions<sup>220</sup> – is especially interesting, inasmuch as it displays some of the most innovative aspects of his ontology. In the following paragraphs, I will firstly focus on Avicenna’s account of essential predication and the difference between forms and accidents, before focusing on the direct refutation conducted by him in *Maqūlāt* I.6 and the short treatise *Fī ḥaṭa’*.

### 3.2.2 *Maqūlāt* I.3-5: the Distinction between accident and accidental, and the status of form

One of the most original acquisitions of Avicenna’s interpretation of the *Categories* is certainly his account of predication of a subject, as expounded in *Maqūlāt* I.3. As is known, in the beginning of *Cat.* 2 Aristotle presents a division of beings (ὄντα) conducted according to two criteria, “being said of a subject” (καθ’ ὑποκειμένου λέγεσθαι) and “being in a subject” (ἐν ὑποκειμένῳ εἶναι), which gives rise to a celebrated ontological square comprising universal substances, particular substances, universal accidents and particular accidents<sup>221</sup>. One of the main problems of this division consists in the fact that one of the criteria is undoubtedly an ontological property (“being in a subject”), whereas “being said of a subject” seems to be a logical or predicative attribute. Most ancient interpreters agreed upon identifying “being said of a subject” with “being predicated essentially”, particularly on account of Aristotle’s examples, which present things “said of a subject” as essential,

---

Damascus, Zāhiriyya 4871 (entitled *Aḡwibat al-masā’il al-wārida min balad al-šayḥ al-fāḍil al-ḥakīm Abī l-Ḥayr al-Ḥasan ibn Suwār*).

<sup>218</sup> Ibn Suwār, *Glosses* 373-377; cf. BENEVICH 2017, pp. 251-253.

<sup>219</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 159.21-23 (referred to by BENEVICH 2017, p. 254); Ibn al-Ṭayyib, *Tafsīr Īsāgūḡī*, (tr. GYEKYE 1979, slightly modified, p. 79) 95.23 – 96.6: “[...] it is possible for that same thing to be a substance and accident in two different ways and in respect of two different things, like forms in matter, for they are accidents in matter because they are not part of matter, although it is impossible that their subsistence be devoid of matter. Moreover, they (forms) are substances in the composite thing because they are part of that composite thing, for when they disappear, the composite thing also disappears. Such were the views of John [Philoponus], Olympiodorus, Allīnūs, and all the Alexandrian scholars”.

<sup>220</sup> See for instance DI VINCENZO 2015, on the definition of differentia specifica; but also FINNEGAN 1956 and ADAMSON 2007, on Avicenna’s criticism of Porphyry’s noetics.

<sup>221</sup> Arist. *Cat.* 1 a20 – b9.

universal predicates; on the other hand, they tended to interpret “being in a subject” as referring to accidental predication, rather than the existence of accidents<sup>222</sup>.

Throughout his lengthy discussion of this Aristotelian chapter at *Maqūlāt* I.3-4, Avicenna seems to have two main goals in mind: (1) firstly, to distance himself from the standard interpretation of predication “of a subject” as essential predication; (2) secondly, to defend a purely ontological understanding of the qualification “being in a subject”, against those commentators who mistake this ontological accident for an accidental predicable (i.e. the “property” or “common accident” discussed by Porphyry in the *Isagoge*). This leads him to renounce, in a sense, any systematizing attitude towards Aristotle’s partition of beings, which he reads as inconsistently based on an ambiguous notion of “subject” (*mawḍūʿ*), employed in one case (“in” a subject) as a substrate of inherence, in the other case (“of” a subject) as a subject of predication. Nonetheless, he begins his discussion at *Maqūlāt* I.3 by presenting a five-fold classification of “attributes” (*ṣifāt*), which is aimed at defining a comprehensive notion of “subject” applicable to Aristotle’s usage of the word in *Cat.* 2, and he ends up identifying with “subject” every thing whose relation to its attribute is other than that of prime matter to form<sup>223</sup>.

The distinction between accident and form is a topic that returns in *Maqūlāt* I.4, a chapter devoted to Aristotle’s definition of accident and its properties. Avicenna devotes a long paragraph to the distinction between the inherence of accident “in-a-subject” and the inherence of form in matter. There, he firstly argues that the difference mainly lies in the thing’s relation to its substrate: accidents are constituted by their subjects, whereas forms are not constituted by matter<sup>224</sup>. He then mentions the onto-relativist opinion of some anonymous predecessor, who argues that insofar as form is a part of the form-matter compound it is a substance, and insofar as it inheres in matter it is an accident: against this doctrine, Avicenna argues that in order to state clearly whether forms are substances or accidents it is necessary to understand the actual way they exist in their substrates<sup>225</sup>. In the end of this refutation, he also claims that Aristotle’s definition of “accident” seems to apply to a notion that is more general than form and accident, which is “being in a receptacle” (*al-kawn fī l-maḥall*), i.e. in any sort of substrate with which the attribute (be it an accident or a form) has a certain existential relation<sup>226</sup>.

*Maqūlāt* I.5 is a chapter that inspects the possible “combinations” (*muzāwaḡāt*) of “said-of” and “being-in” predication, following a standard exegetical pattern. In the end of the chapter, Avicenna makes an apparently isolated remark that reprises the main issue at stake, by presenting an intuitive criterion for distinguishing between accidents and forms:

Let us go back to the main issue, and say: of two essences, one of which is realized in the other of a primary realization, in which neither thing may be distinguished from the other (unlike the peg

---

<sup>222</sup> I have presented a detailed account of the Greek and Arabic tradition in CAMINADA 2016, pp. 197-204; cf. also KALBARCZYK 2018, pp. 57-67.

<sup>223</sup> Cf. below, I.3 [§2] and the COMMENTARY *ad loc.* For an analysis of this passage, see CAMINADA 2016, pp. 204-207; an extensive assessment of this classification of attributes is found in KALBARCZYK 2018, pp. 74-115; A. Bäck) apparently reads this classification as a five-fold alternative to Aristotle’s square (BÄCK 1999, pp. 88-91).

<sup>224</sup> I.4 [§6.4], 33.16-18.

<sup>225</sup> I.4 [§6.4], 34.1 ff.

<sup>226</sup> I.4 [§6.4], 35.1-6.

in the wall, since the internal part of the peg is detached from the wall), and such that if someone happened to designate that essence his [designation] would comprise both [essences] together; whichever of [these] two [essences] provides its companion with a description, a configuration, an attribute is either an accident in its companion, or a form; this because if its companion described by itself is constituted in its essence, and this [first essence] is constituted by it, then it is an accident; and if its companion is only constituted later by [the first essence], and it has a role in the constitution of its companion, then it is a form. They both share the fact of being in a receptacle, but the receptacle of one of them is named matter, and the receptacle of the other is named subject<sup>227</sup>.

Forms in matter and accidents in their subjects have in common the fact of forming a compound whose constituents are indiscernible, or such that their union is a single τὸδε τι; moreover, they also have in common the fact of being, in such compounds, the element that plays the role of the attribute and provides the other element with an “attribute” (*ṣifa*), a “configuration” (*hay’a*) or a “description” (*na’t*). Accidents and forms only differ with regard to the relation that they have with their “companion” or receptacle: accidents are constituted by it, whereas forms take part in its constitution (along with the principle that produces both matter and form, i.e. the Giver of Forms)<sup>228</sup>. An identical distinction is found in the metaphysics of the *‘Uyūn al-ḥikma*, and in the metaphysical section of the *Naḡāt*<sup>229</sup>. In the *Ilāhiyyāt* of the *Šifā’* Avicenna defends the substancehood of form by means of the same distinction between “subject” (*mawḏū’*) and “receptacle” (*maḥall*): form is a substance because it does not inhere in a subject, but rather in a receptacle<sup>230</sup>.

This very subtle, “weak” manner of distinguishing between form and accident surely reveals an interesting aspect of Avicenna’s ontology. Having adopted completely (like Boethus of Sidon) the criterion of substancehood of *Cat.* 2 and 5, Avicenna attempts to avoid the materialistic consequences of such a choice by defending the substancehood of form. Nonetheless, his rigid separation between substancehood and essentiality deprives him of a strong criterion for characterizing form in itself, which becomes thus closely equated to accident insofar as they are both generic “attributes” or “configurations” of a certain substrate. Hence, the difference between accidents and forms is ultimately determined by the nature of their substrates, and by the relation that they have with it. All in all, if Avicenna does not consciously aim at weakening the ontological status of form, then his solution is brilliant but unsatisfactory: it presents us not only with a paradoxical “non-essentialist” essentialism, but also with a subtler form of onto-relativism.

The distinction between accident and accidental and the distinction between accident and form sketched in *Maqūlāt* I.3-5 serve the same implicit scopes: (1) firstly, to provide a clear distinction between the logical domain of essentiality and accidentality and the ontological domain of substances and accidents; (2) secondly, to provide a clear-cut distinction between what it is to be a substance and what it is to be an accident, in order to avoid any possible confusion between the two and to counter the onto-relativist thesis according to which something may be both a substance and an accident, in two different respects.

---

<sup>227</sup> I.5 [§6], 45.1-7.

<sup>228</sup> On the “Giver of Forms” (*wāhib al-ṣuwar*) see JANSSENS 2006.

<sup>229</sup> *‘Uyūn al-ḥikma* 47.15 – 48.6 (for a translation of which see the COMMENTARY *ad loc.*); *Naḡāt* 496.4 ff.

<sup>230</sup> *Ilāhiyyāt* II.1, 59.1 – 60.1.

### 3.2.3 *Maqūlāt* I.6 and the short treatise *Fī ḥaṭa'*

In his *Maqūlāt*, Avicenna devotes an entire chapter (I.6) to refuting the onto-relativist theory on substance and accidents. Besides taking into consideration the case of forms and differentiae, Avicenna adds a further ambiguous case: that of any accident assumed as a part of a substance-accident compound, which may be held a substance in so far as it is a part of the compound, and an accident in so far as it inheres in its subject. The discussion found in this chapter is not particularly meticulous as concerns forms and differentiae, whereas Avicenna devotes much space to the case of substance-accident compounds<sup>231</sup>.

In order to reconstruct in more detail Avicenna's arguments about forms and differentiae, it may be interesting to see one of the short treatises that he specifically devoted to refuting onto-relativist views on constitutive properties, entitled in some manuscripts *Fī ḥaṭa' man qāla inna kammiyya ḡawhariyya wa-inna šay'an wāḥidan ḡawhar wa-'araḍ* (*On the Error of Those who said that a Quantity is Substantial, and Those who said that a Single Thing is Substance and Accident Simultaneously*)<sup>232</sup>. This short treatise, whose attribution to Avicenna is in my view hardly disputable (both stylistically and doctrinally), contains a few references to further, unspecified works that might well suggest its chronological proximity to the *Šifā'*<sup>233</sup>. I am preparing a critical edition of this *opusculum*, based on three manuscripts: in the following pages, I will present a synopsis of it to the aim of summing up Avicenna's line of argumentation (numbers in round brackets at the beginning of each paragraph refer to the corresponding pages of manuscript Tehran, Maḡlis 599).

In the first part of the work, Avicenna presents a brief *status quaestionis* and expounds the doctrinal problem at stake. The initial discussion (pars. [§1-2]) is overtly reminiscent of Simplicius' treatment of specific differentiae, in his commentary on *Categories* 5<sup>234</sup>.

[§1] (p. 251,3-15). A group of unspecified predecessors raised a doubt, concerning the ontological status of constitutive properties like forms and specific differentiae. As a matter of fact, they argued that it is possible to demonstrate – by means of the distinct valid

---

<sup>231</sup> Cf. in particular below, I.6 [§5] (48.1 – 50.17) and the COMMENTARY *ad loc.*

<sup>232</sup> To this date, the known manuscripts that transmit this short treatise are the following (according to the bibliographies of Anawati, Mahdavi, Gutas): [1] Bursa, Huseyin Celebi 1194 (ff.143a-146b); [2] Istanbul, Süleymaniye Kütüphanesi, Ayasofya 4853<sub>15</sub> (ff. 52-58); [3] Yıldız Hususi 889 (ff. 283-285); [4] Princeton, ELS 308 (ff. 12b – 16a); [5] Tehran, Kitābhānah-i Maḡlis-i Shūrā-yi Millī (now: Maḡlis-i Shūrā-yi Islāmī Library = Parliament Library), 599<sub>11</sub> (pp. 251-265); [6] Kitābhānah-i Maḡlis-i Shūrā-yi Millī, Tangābunī 324<sub>5</sub>.

<sup>233</sup> At p. 257,15-16, Avicenna mentions a discussion of the difference between “being existent with something” and “having the quiddity spoken of with respect to something”, already carried out “in the books of logic” (*fī kutub al-mantiq*); the reference might be to *Maqūlāt* IV.3-5, where the issue of the definition of relatives is dealt with by Avicenna like nowhere else in his *corpus*. At p. 260,11-13, Avicenna refers to a distinction between genus and matter, which has been expounded “elsewhere” (*fī mawādi' uḥar*); as far as I know, the place where this issue is dealt with most comprehensively is once again the *Šifā'* (most notably the *Ilāhiyyāt*, chapter V.3). Finally, near the end of the treatise, Avicenna argues that form is a sort of intermediary between the separate causes and prime matter, “as it became clear in the divine sciences” (264,1: *kamā tabayyana fī l-'ulūm al-ilāhiyya*). I hold this to be a possible reference to the discussion of the form-matter relationship at *Ilāhiyyāt* II.3-4. Be that as it may, such references make the *opusculum* look like a sort of companion or appendix to a more comprehensive work on philosophy, which readers are supposed to have in mind.

<sup>234</sup> Cf. above, 3.2.1.

syllogisms [A] and [B] – that forms and differentiae are substances, and that forms and differentiae are accidents:

<p style="text-align: center;">[A]</p> <p>Forms and differentiae exist in a receptacle (<i>maḥall</i>)</p> <p>Everything that exists in a receptacle is an accident</p> <hr style="width: 50%; margin: 10px auto;"/> <p style="text-align: center;">—</p> <p>Forms and differentiae are <b>accidents</b>.</p>	<p style="text-align: center;">[B]</p> <p>Forms and differentiae are parts of substances</p> <p>Everything that is part of a substance is prior by nature to that substance</p> <p>No accident is prior by nature to a substance</p> <p>Forms and differentiae are not accidents</p> <p>Everything that is not an accident is a substance</p> <hr style="width: 50%; margin: 10px auto;"/> <p style="text-align: center;">—</p> <p>Forms and differentiae are <b>substances</b>.</p>
---	--

[§2] (p. 251,15 – 252,15). Avicenna expounds two solutions for this aporia, presented by previous commentators.

[§2.1] (p. 251,15 – 252,6) According to a first group of exegetes the two syllogisms are not opposed, since something may well be a substance and an accident in the same time, in two different respects. As a matter of fact, differentia and form are accidents since they exist in the nature of – respectively – genus and matter; but they are also substances since they are parts of, respectively, the nature of species and composite substances.

[§2.2] (p. 252,6-15). According to a second group of commentators one of the premises of syllogism [B] (“Everything that is not an accident is a substance”) is false, for there may exist something intermediate between substance and accident: a substantial accident (either a substantial quantity, such as the dimensions that constitute a natural body, or a substantial quality, like heat in fire).

Throughout the treatise, Avicenna will refute both the two primary syllogisms and the positions of the commentators, to the aim of affirming the absolute substancehood of form and differentiae. Paragraphs [§3-4] contain a general, comprehensive refutation of onto-relativist doctrines; paragraphs [§5-7] focus on the rival syllogisms more in particular.

[§3] (p. 252,16 – 254,6). In the first part of his comprehensive reply, Avicenna presents the various possible senses of the words “substance” (*ḡawhar*) and “accident” (*‘araḍ*) in order to disambiguate them and to establish what is the most adequate sense in this theoretical context.

[§3.1] (p. 252,16 - 253,14). The five meanings of “substance” listed by Avicenna are the following:

**S1** : A reality that subsists by itself, whose subsistence does not depend on anything attached to it<sup>235</sup>;

---

<sup>235</sup> It is unclear whether Avicenna is referring here to a specific interpretation of “substance” set forth by some predecessors (as he does for example with regard to meanings **S2-3**), or rather proposing a general notion of *ḡawhar* that somehow applies to all the others. In al-Aṣ‘arī’s classification of the senses of substance, a similar

**S2** : Every existing thing that is a primary principle, or the primary condition for the existence of something else to which it is attached (e.g. atoms, *al-ağzā 'u llatī lā tatağazza 'u*)<sup>236</sup>;  
**S3** : Something whose existence is certain, that subsists by itself absolutely<sup>237</sup>;  
**S4** : Any essence whose existence need not be in a receptacle (*fī maḥallin*)<sup>238</sup>;  
**S5** : Any essence whose existence need not be in a subject (*fī mawḍū 'in*). Although “subject” is also said in many ways, here it means “a receptacle that may exist by itself, without the things it contains”.

**[§3.2] (p. 253,14 – 254,6).** The three meanings of “accident” are the following:

**A1** : Any essence whose existence is only possible in a receptacle that exists in act (either by itself, or by virtue of something else);  
**A2** : Any essence existing in any receptacle;  
**A3** : Any non-constitutive predicate, even though it is – in itself – a substance (accidental, *'araḍī*).

**[§4] (p. 254,6 – 259,6).** Thereafter, Avicenna provides a general refutation of onto-relativists that is entirely based on highlighting their improper usage of the terms “substance” and “accident”.

**[§4.1] (p. 254,6 – 255,7).** The first issue that is tackled by Avicenna is: given the aforementioned exposition of the senses of “accident” and “substance”, according to what sense form and matter may actually be called an accident or a substance? Meanings **S1** and **S3** apply neither to matter, nor to form: neither form nor matter exist absolutely by themselves, but in a sense they work as reciprocal causes for their existences; **S4** does not apply to form, since it exists in matter as in a receptacle; **S2** and **S5** apply to both form and matter. Furthermore, form is an accident according to sense **A2** (since it exists in a receptacle) but not according to sense **A1**; it may also be an accident according to sense **A3**.

**[§4.2] (p. 255,7 – 256,13).** The sense of substance at stake in this discussion is **S5**, i.e. substance as it is defined in the *Categories* and by Avicenna himself in *Ilāhiyyāt* II.1; the corresponding, opposite sense of accident is **A1**. On the whole, there is no possible intermediary between this sort of substance and this kind of accident, and things that are substances or accidents in this sense are such absolutely, not with regard to something else: the principle of the excluded middle is applied very rigorously, since either a thing X needs to be inherent in a subject in order to exist, or it does not. On the contrary, what is a substance in itself cannot be mistaken for what is a substance in a particular state, for that which is X in a particular state ceases to be X when it has a different state.

**[§4.3] (p. 256,13 – 257,2).** The error of Avicenna’s predecessors consisted of imposing the names “substance” (*ğawhar*) and “accident” (*'araḍ*) not on the essences of substance and accident, but rather on a certain state (*ḥāl*), i.e. “being-substantial-for” and “being-

---

description (“self-subsistent”) is applied to the Christian conception of substance (cf. al-Aš‘arī, *Maqālāt* 306-307, cited in DHANANI 1994, p. 56).

<sup>236</sup> As is known, *ğawhar* is the technical term employed for “atom” by most *mutakallimūn*: cf. DHANANI 1994, pp. 55-62.

<sup>237</sup> Attributed to the “common usage” (*ta‘āruḥ*) of an anonymous group of people. This third meaning might identify the Platonic conception of *ğawhar*, applied to intelligible forms. On Avicenna’s rejection of Platonic ideas see ARNZEN 2011, pp. 86-99.

<sup>238</sup> On the distinction between “receptacle” and “subject” see above, 3.2.2.

accidental-for”. Such a mistake was plausible with the name ‘*araḍ*, but not with the name *ḡawhar*: as a matter of fact, ‘*araḍ* derives from the verbal name “belonging” (‘*urūd*), and it may be unnatural to refer it to the essence that belongs to something else – as philosophers do – rather than the very fact of belonging. However, for the term *ḡawhar* – which corresponds to no specific verb or verbal root – there is no excuse<sup>239</sup>.

[§4.4] (p. 257,2-12). In the light of these considerations, it is not possible to affirm and negate two opposite properties of something with regard to the thing’s essence, but it is possible to do so only with regard to the thing’s state with regard to something else. Therefore, the two doctrines expounded in paragraph [§2] are false: the first one because it negates the two attributes (substance and accident) of differentiae, the second one because it affirms both.

[§4.5] (p. 257,12 – 259,1). As a sort of corollary to the general refutation, Avicenna expounds a doubt involving the notion of ‘accident’. Someone might object that we cannot but consider something as an accident *with respect to* something else, for any accident needs by definition to be in a subject; if it is so, then it is in itself relative to its subject. If this were true, however, then “being-relative” would constitute somehow the essence of accident, and all accidents would be relative in themselves – not simply accompanied by accidental relations; but this is absurd.

[§4.6] (p. 259,1-6). The conclusion restates the main point of this general refutation: to be substance and accident absolutely must not be mistaken for being “substantial”/“accidental” with respect to something else.

[§5] (p. 259,6 – 260,10). Avicenna turns then to analysing the two syllogisms presented in par. [§1]. The major premise of syllogism [A] (“Everything that exists in a receptacle is an accident”) is false, if by “accident” sense A1 is meant. As for syllogism [B], if in the third premise (“No accident is prior by nature to a substance”) “accident” is understood according to senses A2-3, which may apply to form, then the premise may be interpreted in three ways:

1. Prior to a *substance* = prior to *the whole genus of substance*. In this case, the premise is true.
2. Prior to *substance* = prior to *a certain substance*, i.e. the compound in act. In this case, the syllogism does not hold.
3. Prior to *substance* = prior to *any substance whatsoever*. In this case, the syllogism is false.

If on the contrary “accident” is understood in sense A1, which does not apply to form but only to the accident of the *Categories*, then the premise is absurd.

[§6] (p. 260,10 – 261,21). Thereafter, Avicenna goes on to refute the views of the first “team” (*farīq*) of commentators, which argues that form and differentiae may be substances and accidents in different respects. Here, Avicenna presents a number of distinct arguments.

Against the commentators’ claim that differentiae inhere in genera as accidents, Avicenna recalls that – as it has already been shown “elsewhere” (*fī mawāḍi‘ uḡar*) – differentiae do not inhere in the natures of genera, as well as the difference between genus and prime matter. This might well be a reference to the metaphysics of the *Šifā’*, most

---

<sup>239</sup> Whereas the technical vocabulary of philosophers allows for the use of verbal forms like “becoming substance” or “substantiated” (*taḡawhara*), *ḡawhar* is a word whose primary sense is “jewel”, “precious stone”, and which is deprived of a verbal meaning (cf. Fārābī, *Hurūf* 97.20; ZONTA 2014, pp. 274-281).



notably to the chapter concerning the distinction between genus and matter<sup>240</sup>. However, even if genus and differentia were a single nature, the fact that differentia exists not as a part would not force it to be an accident: for celestial forms and matters display the same relationship, and form is not an accident therein. I do not report the following arguments since they are less interesting than the first one, and they display more difficult syllogistic technicalities.

[§7] (p. 261,21 – 265,5). Eventually, Avicenna focuses on the interpretation of the second group, which corresponds to the calling the differentia a “substantial quality” (*kayfiyya ḡawhariyya*). He expounds and rejects three possible interpretations of this obscure expression:

(a) If it was meant by this expression that differentia is “a quality that is a substance”, then – according to the general refutation of par. [§4] – such a quality must be in itself either a substance or an accident. If it is an accident, then it must be admitted that differentia is “an accident that is a substance”, which is absurd. If it is not an accident but a substance, then this is absurd as well, for it exists in a receptacle, and – according to the commentators’ initial assumption – all that exists in a receptacle is an accident.

(b) If it was meant, instead, that it is not a substance but it is merely *predicated of* a substance, well, this is a character of all qualities (not just of differentiae).

(c) If it was meant that it is a quality that constitutes substance, nothing else was done than giving another name to the doubtful attribute, without providing a sound solution about its ontological status.

The absurdity of this doctrine also lies in the fact that, if form is understood as an accident, we are confronted with the paradox of an accident being prior by nature to a substance; for form is prior by nature to the form-matter compound. However, this cannot be true, since form is worthier of substancehood than matter and the form-matter compound in many respects<sup>241</sup>. In the last section of the treatise, Avicenna explains lengthily for which reasons form is worthier of being substance than matter and the compound:

### 3.2.4 Inter-accidental distinctions

Avicenna openly rejects his forerunners’ relativism not only with regard to the substance/accident distinction, but also with respect to accident/accident distinctions, i.e. with regard to the issue whether or not certain beings may belong essentially to more than one accidental category. This becomes evident at least in three other places: in Avicenna’s discussion of extra-categorical beings at *Maqūlāt* II.4, in his treatment of the ambiguous status of knowledge at *Maqūlāt* VI.4 and finally in his discussion of quality at *Maqūlāt* V.1.

In the final section of *Categories* 8, where Aristotle presents an aporia concerning the categorial status of knowledge (ἐπιστήμη) and other beings, most notably states and conditions: these can rightly be deemed relatives, in a sense, but in a sense they also belong to the category of quality. Aristotle’s solution for this ambiguity consists of claiming that in such cases only genera are spoken of in relation to something else, but particulars are not: whereas knowledge is always called knowledge of something, grammar and music are not

---

<sup>240</sup> *Ilāhiyyāt* V.3, 213.1 – 219.14.

<sup>241</sup> Cf. Arist. *Metaph.* Z 3, 1029 a2-7.

called grammar and music of something else<sup>242</sup>. Hence, it seems that knowledge in general is relative, whereas special kinds of knowledges are qualities; in the end of the discussion, Aristotle himself explicitly argues for something possibly belonging to more than one genus<sup>243</sup>. Porphyry’s “relativist” device may allow us to say that in a certain respect knowledge belongs to relatives, in another respect it belongs to quality: this is exactly Porphyry’s position, as we read it in his short commentary on the *Categories*.

At *Maqūlāt* VI.4 – a chapter entitled “On solving a doubt that depends on the intrusion of certain species of quality and other categories in certain species of the relative” (*Fī ḥall šakk muta‘alliq bi-mudāḥalat anwā‘ min al-kayf wa-ḡayrihī li-anwā‘ min al-mudāf*) – Avicenna engages with a lengthy refutation of Aristotle’s claim, evidently reprised by some of his Arab followers: against them he argues in the main that knowledge in general is also in itself a quality, and it is only relative inasmuch as relation belongs by accident to it. In a passage of this chapter, he goes so far as to charge a group of anonymous predecessors with inconsistency: their own (erroneous) account of predication “of-a-subject” as essential predication should require that, if a certain species is in itself a quality, then its genus, being said of the species as of-a-subject, be a quality as well<sup>244</sup>.

In the beginning of *Maqūlāt* V.1, Avicenna inspects whether the two commonly accepted definitions of quality (i.e. “that which is said in response to the question ‘how?’” and “that which is similar and dissimilar”) are given properly, or in other words: whether or not they identify the category univocally. As he considers the first definition, he remarks that it is equivocal, since in Arabic and Persian the question *kayfa* (“how?”) may not only identify qualitative attributes, but also attributes belonging to the categories of position, where, acting and being acted upon. After this remark Avicenna presents a possible objection, which is very likely made up by himself and clearly modelled after a typical onto-relativistic argument. The objection runs: someone might say that one of these ambiguous entities, for example position, is a quality in a respect (i.e. inasmuch as it may be said in response to the question “how?”) and position in another respect (i.e. inasmuch as it is “a state of a substance whose parts are in such-and-such a way”). This possible objection is ascribed to some *mubarḥiṣūn*, a term which is attested by a few manuscripts only and which – if this is the correct reading – might be a Persianism<sup>245</sup>. Whatever the original reading was, we may be reasonably sure that it was an insulting epithet.

On the whole these attacks on onto-relativists reveal, besides Avicenna’s commitment with solving the hardest aporiae of Aristotelian ontology, the very rigid classificatory attitude that he sometimes shows in categorial matters. In spite of that, as I will show below in par. 3.6.3, the obvious existence of irreducible categorial compounds will force Avicenna to adhere to more nuanced interpretations, for example in the case of figures, angles and forms.

---

<sup>242</sup> Arist. *Cat.* 11 a20-36.

<sup>243</sup> Arist. *Cat.* 11 a37-38.

<sup>244</sup> VI.4 [§3.2], 226.1 ff.

<sup>245</sup> V.1 [§2.2], 168.6: see the notes *ad loc.* in Cairo and in the TRANSLATION.

### 3.3 The Synonymy of Substance

#### 3.3.1 The problem

Another major problem tackled, directly or indirectly, by several modern exegetes of Aristotle is the unity of the notion of substance (οὐσία). The various characterizations and accounts of οὐσία scattered throughout the philosopher's *corpus* make it quite difficult to ascribe to him a unitary and consistent theory of substance. What poses the most problems is, notably, the apparent incompatibility between the primary substancehood of individuals in the *Categories*, and the primacy of form (εἶδος) in the so-called *Substanzbücher* of the *Metaphysics* (ZH): the tension between the two horns of the alternative has rightly been labelled by H. Steinfath as the “core problem (*Kernproblem*) of Aristotelian ontology”,<sup>246</sup> and has already provided material for a huge number of conflicting interpretations and solutions – besides leading ancient and modern scholars to doubt about the authenticity of the *Categories*<sup>247</sup>.

The same problem was also of the utmost importance for the ancient exegetes of Aristotle, even more so because it did not stand as a mere matter of historiography, but as a question central to the lively philosophical debates they were engaged in. The theory of οὐσία proved to be a pivotal issue not only for the rival philosophers who committed themselves to point out its deficiencies, but also for those followers of Aristotle who sought to arrange and “systematize” their master's thought.

In the context of the exegesis of the *Categories*, a work containing a celebrated account of substance, the debate on the unity of οὐσία came to assume the form of a debate on its being one by the genus. Given Aristotle's claim that genera are predicated of their species in such a way as to give them their names and their definitions, the problem ultimately amounted to asking whether all the things that are said “substance” in some way share or not the same set of essential determinations, i.e. whether they have the same definition.

Early Platonists, for instance Nicostratus, formulated “dualist” objections against the theory of substance of Aristotle's *Categories*, arguing that Aristotle did not take intelligible beings into account, and for this reason his category of substance was fundamentally homonymous<sup>248</sup>. These objections were reprised and modified by the harshest ancient critic of the *Categories*, Plotinus, who argued – in the first chapters of his treatise *On the Kinds of Being* – that Aristotle has no unitary notion of substance; neither with respect to the “vertical” difference between intelligible and sensible substance, nor with respect to the “horizontal”

---

<sup>246</sup> STEINFATH 1991, p. 3.

<sup>247</sup> The account of universal and individual substance is a topic argument against the authenticity of the *Categories* in some late ancient and Arabic commentaries: see for instance Olymp. *In Cat.* 23.28 – 24.4; Areth. *In Cat.* 137.18-31; Ibn al-Ṭayyib, *Tafsīr al-maḥūlāt* 28.16-24 (Arethas and Ibn al-Ṭayyib are translated in M. RASHED 2016, respectively at pp. 821-822; pp. 825-827). The authenticity of the *Categories* was questioned for the same reason also in modern scholarship (cf. among others MANSION 1949; DUMOULIN 1980, 1981). Such claims for inauthenticity have been articulately dismissed by R. Bodéüs (BODÉÜS 2001, pp. XCIV-CII) for the reason that the two accounts of substance (*Cat.* and *Metaph. Z*) are not totally incompatible.

<sup>248</sup> Cf. Simpl. *In Cat.* 76.13 ff.

distinction between form, matter and compound<sup>249</sup>. R. Chiaradonna has shown that Plotinus' criticism as a whole should not be read as a weak re-statement of "Platonic" ontological doctrines, but as a subtle *reductio ad absurdum* that assumes the principles of Aristotle's ontology in order to highlight their intrinsic fallacy<sup>250</sup>. The cornerstone of Plotinus' argument consists in the fact that, for each category of the Aristotelian table, there is not a perfectly unitary notion common to all of its species. The underlying metaphysical assumption is that Aristotle's κατηγορία, being a class of rhapsodically collected sensible items, is not an actual genus of being, since a coherent division of beings may only be carried out starting from their intelligible causes.

In the beginning of VI.1 [42] 3, Plotinus also presents a potentially tenable solution, in Platonic terms, to the apparent equivocity of the notion of substance. This consists of understanding by "genus" (γένος) not an empty logical class, but a principle that produces a genealogy whose elements present a progressively diminished nature with respect to the ones they derive from<sup>251</sup>. According to this solution we are allowed to interpret the differences between substances in analogical terms: the notion of substance is unique, but some substances are "more" substances than others. The unity of substances, inasmuch as they belong to one and the same genus, would then be safeguarded by their common derivation from one and the same principle. Even though Plotinus did not personally accept this solution (as R. Chiaradonna has shown quite convincingly<sup>252</sup>), we must keep it in mind at least as a possible alternative to absolute homonymy.

The Neoplatonic philosophers who commented the *Categories* after Porphyry showed a completely different attitude towards Aristotle's table of categories, and his doctrine of substance. Porphyry himself, despite being a student of Plotinus and the editor of his philosophical works, distanced himself from his master's views on the *Categories* and laid out an interpretation which became something of a standard in the following exegetical tradition<sup>253</sup>. As is known, Porphyry developed a sort of concordist interpretation of Aristotle that allowed him to admit the *Categories* in the framework of Platonic philosophy. He read the Aristotelian booklet as an introductory work, suitable to introduce the reader both to

---

<sup>249</sup> Plot. *Enn.* VI.1, 2.1-19 (tr. ARMSTRONG 1987, pp. 15-17): "Again, then, are they really to be considered as genera? And how is substance one genus? For we must in any case begin with this. That there cannot be one common substantiality applying to both intelligible and sensible substance has been said already. And besides, there will [if this is so] be something else before both intelligible and sensible substance, which is something else and is predicated of both, and this could not be either body or bodiless: for otherwise body would be bodiless, or the bodiless body. Of course we must also investigate this point about the substance here below themselves, what there is common to matter and form and the composite of both. For they say that all these are substance, but that they are not equal in respect of substance, when it is said that form is more substance than matter – quite correctly; but there are those who would say that matter is more substance. But what could the substances which they call primary have in common with the secondary ones, when the secondary ones derive their name of substances from those prior to them? But in general it is impossible to say what substance is: for even if one gives it its 'proper characteristic', it does not yet have its 'what it is', and perhaps not even the definition 'that which is one and the same in number which is receptive of the opposites' will fit all cases".

<sup>250</sup> CHIARADONNA 2002, pp. 55-146.

<sup>251</sup> Plot. *Enn.* VI.1, 3.1-6 (tr. ARMSTRONG 1987, p. 17): "But ought we really to call substance one category, collecting together intelligible substance, matter, form and the composite of both? This would be like saying that the genus [or clan] of the Heraclids was a unity common to all its members, but because they all come from one ancestor: for the intelligible substance would be so primarily, and the others secondarily and less".

<sup>252</sup> CHIARADONNA 2002, pp. 238-240; 241 ff.

<sup>253</sup> On the disagreement between Plotinus and Porphyry concerning Aristotle's *Categories*, see EVANGELIOU 1988, pp. 164-181.

logic and natural philosophy, whose subject are simple utterances (φωναί) inasmuch as they refer to concrete things (πράγματα). The *Categories* being a text centred on sensible beings, it was quite easy for him to justify the primacy of sensible substance. See for instance the following text, taken from Porphyry's "shorter" commentary on Aristotle's *Categories*:

**A.** I reply that some object that on his own showing it is the intelligibles that are said most strictly and above all and primarily to be substances in the primary sense, i.e. the intelligible god and intellect and the Ideas, if there are Ideas, but he ignores these, and claims that the individuals in sensibles are primary substances.

**Q.** How will you solve this difficulty for him?

**A.** I shall say that since the subject of the work is significant expressions, and expressions are applied primarily to sensibles – for men first of all assign names to what they know and perceive, and only secondarily to those things that are primary by nature but secondary with respect to perception – it is reasonable for him to have called the things that are primarily signified by expressions, that is, sensibles and individuals, primary substances. Thus with respect to significant expressions sensible individuals are primary substances, but as regards nature, intelligible substances are primary. But his intention is to distinguish the genera of being according to the expressions that signify them, and these primarily signify individual sensible substances<sup>254</sup>.

Even though Aristotle, in accordance with Plato's doctrine, admits the existence of intelligible substances, in the *Categories* he identifies sensible compounds as primary substances, since they are "primary" with regard to our knowledge (and notably, our perception). This solution may certainly allow a Platonist to read the *Categories* in lesser hostility, but does not say anything about the intrinsic unity of the notion of substance. Now, in this regard Porphyry claims that substance is not definable, since it is a genus among the highest genera. Being such, it cannot be defined by dividing specifically a superior genus, but it only can be "described" by means of imperfect definitions: for instance, a property of its, such as its being "not-in-a-subject". This description applies also to form and matter, being components of the sensible compound, in virtue of Alexander of Aphrodisias' principle that "the parts of substances are substances"<sup>255</sup>. It must be recalled that Porphyry admitted Aristotelian hylomorphism, by identifying in Aristotle's εἶδος an enmattered product of the intelligible form, ontically inferior but nonetheless substantial.

Porphyry's acceptance of Aristotle's ontology of the sensible world, as outlined in the *Categories*, becomes a standard exegetical line in the following Neoplatonic commentaries. Besides showing the same conception of the subject-matter of the *Categories*, the posterior commentators adopt Porphyry's interpretation of substance; they also indirectly pose the problem of the unity between sensible and intelligible substances, and provide different answers.

In the introduction to his treatment of the category of substance, Simplicius provides an informative synthesis of the previous debates: Nicostratus' and Plotinus' objections, Boethus' criticisms, Porphyry's replies<sup>256</sup>. Whereas he clearly admits Porphyry's solutions for a unitary notion of sensible and "logical" substance (comprising matter, form, compound,

---

<sup>254</sup> Porph. *In Cat.* 91.14-27 (tr. STRANGE 1992, pp. 81-82).

<sup>255</sup> Porph. *In Cat.* On this principle, see the discussion above (3.2.1).

<sup>256</sup> Simpl. *In Cat.* 75.23 – 80.14.

genera and species under the description “not-in-a-subject”) he argues that there is effectively a superior, intelligible substance that is neither corporeal nor incorporeal<sup>257</sup>. In these pages, nonetheless, he gives no clues as to the relation subsisting between this substance and its inferior “products”.

On the other hand, there are commentators that explicitly adopted (or ascribed to Aristotle) a sort of “analogical” model. This is evident, for instance, in the *Categories*-commentary of Dexippus: in his discussion of Plotinus’ *aporiae*, Dexippus argues – with reference to the distinction between physical and incorporeal οὐσία in *Metaphysics* Λ – that Aristotle subsumed sensible and intelligible substance under the comprehensive notion of substance (εἰς τὴν ὅλην οὐσίαν), ordered them “into one system” (πρὸς μίαν σύνταξιν) and reconducted them to one and the same principle (πρὸς μίαν ἀρχὴν). Since the unity of substance cannot be denied (otherwise, given the primacy of substance, any other sort of being should be *a fortiori* devoid of unity), Aristotle employed for intelligible realities the name οὐσία “by metaphor and analogy, from things known by sense-perception” (κατὰ μεταφορὰν καὶ ἀναλογίαν ἀπὸ τῶν κατ’ αἴσθησιν γνωρίμων)<sup>258</sup>.

As for the remaining late ancient commentaries (Ammonius, Philoponus, Olympiodorus, David/Elias), they all present us with similar exegetical schemes, which should be analysed more in detail. Like Simplicius, before tackling the word-by-word analysis of chapter 5 of the *Categories*, they develop some preliminary remarks (very similar in structure). All these commentaries, after identifying the reasons for the priority of substance in the internal order of the *Categories*, present a “division” of substances which is almost identical in the four cases (see the graph in the *Appendix*). Substance is either simple, or composite; simple substance may be either “better” (κρείττων) than the composite, or “worse” (χείρων) than the composite. Simple substance which is “better” than the compound is evidently represented by incorporeal substances: “the substance of divine beings” (ἡ τῶν θείων οὐσία) according to Ammonius, “the angelic, the psychic [substance] and the like” (ἡ ἀγγελικὴ καὶ ἡ ψυχικὴ καὶ αἰ τοιαῦται) according to Philoponus, “the unique principle of all things” (ἡ μία τῶν πάντων ἀρχή) according to Olympiodorus, “God, intellect and soul” (θεὸς νοῦς ψυχή) according to Elias/David<sup>259</sup>. Simple substance that is “worse” than the compound is “prime matter and form” (ἡ ὕλη ἢ πρώτη καὶ τὸ εἶδος) according to Ammonius and Philoponus, “formless matter” (ἡ ἀνείδεος ὕλη) according to Olympiodorus, “matter and form” (ὕλη καὶ εἶδος) according to Elias/David<sup>260</sup>. The distinction between “better” and “worse” with regard to substances seems to have both an ontic and axiological value, at least in the case of worthier beings: separate substances are undoubtedly superior to the compound, sensible individual. As for the prevalence of the compound over form, affirmed by all commentators except Olympiodorus, it might hint at these authors’ belief in a diminished ontological status of form, but Ammonius and Elias/David explain it rather by means of a functional analogy: as the art of making bridles is necessary for horse-riding but

---

<sup>257</sup> Simpl. *In Cat.* 76.23 – 77.4.

<sup>258</sup> Dex. *In Cat.* 41.6 – 42.3. For a reading of Dexippus’ genealogical solution, see CHIARADONNA 2002, pp. 256 ff.

<sup>259</sup> Amm. *In Cat.* 35.20-21; Phil. *In Cat.* 49.26; Olymp. *In Cat.* 58.2; Elias/David, *In Cat.* 162.11-12.

<sup>260</sup> Amm. *In Cat.* 35.21-22; Phil. *In Cat.* 49.27; Olymp. *In Cat.* 58.2; Elias/David, *In Cat.* 162.12.

subordinated to it, since it is instrumental, so form and matter are necessary for the existence of concrete substance but subordinated to it (since they are equally instrumental)<sup>261</sup>.

Be as it may, all commentaries present this division, which classifies incorporeal and corporeal substances under one and the same notion of οὐσία. We might think, then, that these commentators presuppose at least a unitary definition or description of substance, susceptible of being said of all these species. At least as it appears in these commentaries, however, it is not so: they all deal with the unity of the notion of substance separately, and present different solutions to this problem. The division seems practically aimed to introduce the principal philosophical uses of the term *ousia*, in order to identify the *ousia* which will be subject of Aristotle's discussion (namely, the compound of form and matter).

In their introductions to the section on substance, the Alexandrian commentators deal with the suitability and correctness of the Aristotelian description ("that which is not-in-a-subject"), and its applicability to other sorts of beings.

In the commentaries by Ammonius and Philoponus, the question is double: (1) why is Aristotle's definition of such a worthy kind of being as substance negative? (2) Is it also suitable for (ἀρμόζει) divine or intelligible substances? In both commentaries, the answer to the second question is negative. Both commentators take Aristotle's expression "not-being-in-a-subject" to be adequate for divine beings, but in a different sense. In the case of sensible substance, "not-being-in-a-subject" is said in opposition (πρὸς ἀντιδιαστολήν) to "being-in-a-subject"; in the case of intelligible substances, "not-in-a-subject" is not said in opposition to anything else<sup>262</sup>. Philoponus provides the parallel example of light: light can be understood either in a "relative" sense, as opposed to dark, or in an "absolute" sense, for instance as sunlight, which does not have any opposite<sup>263</sup>.

The question is laid out in different terms in Olympiodorus' and Elias/David's commentaries: they rather ask whether Aristotle's definition is "correct" (ὀρθῆς), which however refers both to its being correctly formulated and to its being suitable for all kinds of substance. In response to this problem Elias/David claims that it may seem incorrect, since it is negative and it applies to what is absolutely nowhere (τῷ μηδαμῇ μηδαμῶς ὄντι); however, being negative is not necessarily a flaw, and inasmuch as "not-being in a subject" actually designates a "subject" the definition is fundamentally positive<sup>264</sup>. On the contrary, Olympiodorus claims that the definition applies to the First Principle of all things, but nonetheless it is understood in different ways when referred to that Principle and to sensible substances<sup>265</sup>.

Hence, in spite of the notional unity that is apparently presupposed by their preliminary division of substances, the Alexandrian commentators seem to opt ultimately for the relation between sensible and intelligible substances being homonymous.

---

<sup>261</sup> Amm. *In Cat.* 35.19-27; Elias/David *In Cat.* 162.12-16.

<sup>262</sup> Amm. *In Cat.* 36.23 – 37.20; Phil. *In Cat.* 51.4 – 53.16.

<sup>263</sup> Phil. *In Cat.* 52.17-21.

<sup>264</sup> Elias/David, *In Cat.* 164.20-38.

<sup>265</sup> Olymp. *In Cat.* 59.10-25.

### 3.3.2 Avicenna's Arabic predecessors

In early Arabic philosophy we may detect different solutions to the issue of the notional unity of substance, which Avicenna very likely had in mind as he wrote his *Categories*. This is particularly evident when analysing the thought of two authors, who present two different approaches: al-Fārābī, on the one hand, and Ibn al-Ṭayyib, a representative of the “scholastic” exegetical tradition, on the other hand.

Some fragments of Fārābī's account of substance in his lost Long Commentary are preserved in Yehudah Cohen's *Talḥiṣ al-maqūlāt*. In the first of these fragments, Fārābī seems to stick quite closely to the traditional exegetical account: he firstly presents some possible meanings of “substance” according to his predecessors' interpretations (body, matter, compound, incorporeal substance), and then he argues that in the *Categories* Aristotle only speaks about bodily substances<sup>266</sup>. In another fragment, Fārābī lengthily speaks about the reason why the universals of substance are themselves substances, and about Aristotle's distinction between synonymous and paronymous predication<sup>267</sup>. In the Epitome of the *Categories*, the discussion of substance is opened by a brief enumeration of substances: sensible individuals, such as the sky, the stars, the earth, plants, animals and their members. Thereafter, Fārābī posits “body” as the highest genus common to all these beings, and goes on to divide it into species<sup>268</sup>. This interpretation is perfectly consistent with the standard account of substance in the *Categories*, but does not say much about the way Fārābī actually conceives of substance in itself.

Fārābī's key analysis of substance is actually found in chapter I.13 of the *Kitāb al-Ḥurūf*, devoted precisely to the meanings of the utterance “substance” (*ḡawhar*)<sup>269</sup>. In the first half of the chapter, Fārābī inspects the common usage of the term among the mass, and identifies two standard significations: common people use *ḡawhar* either to signify a very precious stone, or to signify “the quiddity of something, or the cause for its quiddity and subsistence ([...] either its matter, or its form, or both together)” now, the first meaning is absolute, whereas the second is relative (“substance of something”)<sup>270</sup>.

Philosophers, instead, use *ḡawhar* in three senses: to signify (1) “the individual thing that is absolutely not in a subject” (*al-mušāru ilayhī llaḏī huwa lā fī mawḏū'in aṣlan*); (2) “every predicate that notifies what this individual is in respect of species, genus or differentia, what notifies the quiddity of every single species among the species of this individual, and the thing on which its quiddity and subsistence depends” (*kullu maḥmūlin 'arrafa mā huwa hādā l-mušāru ilayhī min naw'in aw ḡinsin aw faṣlin wa-'alā mā 'arrafa māhiyyatu naw'in naw'in min anwā'i hādā l-mušāri ilayhī wa-mā bihī māhiyyatuhū wa-qiwāmuḥū*); to signify (3) in general, “what notifies the quiddity of any species of all the categories, and the thing on which its subsistence depends” (*'alā l-'umūmi 'alā mā 'arrafa māhiyyat ayyi ṣay'in kāna min anwā'i ḡamī'i l-maqūlāti wa-'alā mā bihī qiwāmu ḏātiḥī*)<sup>271</sup>. The first two senses, corresponding respectively to the primary and secondary substance of

<sup>266</sup> ZONTA 2006, pp. 225-227.

<sup>267</sup> ZONTA 2006, pp. 227-231.

<sup>268</sup> Fārābī *Qāṭāḡūryās* (DUNLOP 1958), 170.6-13.

<sup>269</sup> Fārābī *Ḥurūf* I.13, 97.19 – 105.19.

<sup>270</sup> Fārābī *Ḥurūf* I.13, 100.13-17.

<sup>271</sup> Fārābī *Ḥurūf* I.13, 100.17-22.



the *Categories*, are substances “absolutely” (*‘alā l-iṭlāqi*); the second sense, referring to the essence of accidental categories, is substance “relatively”. As for the character that unifies meanings (1) and (2) under the same label of “absolute substance”, it is the fact that both need not be constituted, in their quiddities, by attributes belonging to other categories – whereas the quiddities of other beings inevitably contain an item from the category of substance<sup>272</sup>. The difference between primary and secondary substances does not lie in this common property, but in the fact that a secondary substance is “the intelligible” (*al-ma‘qūl*) of the sensible *tode ti*, i.e. the *tode ti* itself, inasmuch as it exists in the mind<sup>273</sup>. Furthermore, whereas primary substances are substances in a single respect, i.e. in themselves, secondary substances are substances in two respects: inasmuch as they are concrete individuals that exist in mind and inasmuch as they are “substances-of” (i.e. essences) of individuals. It is this latter relational aspect that provides them, in a sense, with a substancehood that is diminished with respect to that of individuals.

In philosophy, the notion of “absolute substance” also applies to form and matter, which were deemed substances in so far as they are constitutive parts of the concrete *tode ti* and, in a sense, notify what the *tode ti* is<sup>274</sup>; but it also may apply to another substance, namely a being that neither is said of a subject, nor is in a subject, nor is itself a subject for any other being (and for this reason belongs to no category). This latter being, whose existence has to be demonstrated, is arguably God (although Fārābī does not state it explicitly)<sup>275</sup>.

In summary, in the *Kitāb al-Ḥurūf* Fārābī presents a non-homogeneous notion of substance that comprises both a substrative and a quidditative aspect; he manages to unify primary, secondary and separate substances under the substrative description, but seems to keep form and matter aside – by making them substances exclusively inasmuch as they are parts of the “quiddity” (*māhiyya*) of primary substance.

Abū l-Farağ Ibn al-Ṭayyib devotes to substance four lessons (*ta‘ālīm*) of his Commentary – the first of which is entirely devoted to the introductory issues customarily discussed before the category of substance<sup>276</sup>. When discussing the third *maṭlūb*, Ibn al-Ṭayyib presents a division of substances that resembles closely that of his Alexandrian predecessors: substance is either simple or composite; if simple, it is either nobler or better than the compound (*ašraf min al-murakkab*) or worse, “below the compound” (*dūna l-murakkab*). The “inferior” simple substance comprises form and matter; the superior simple substance includes, on the contrary, divine substance<sup>277</sup>. Such a division probably does not presuppose a totally unitary notion of substance, as is suggested by the introduction to the fifth *maṭlūb* inspected by Ibn al-Ṭayyib: “the reason why primary substance became prior, with respect to substancehood, to secondary substances” (*al-sababu llaḍī lahū šāra l-*

<sup>272</sup> Fārābī *Ḥurūf* I.13 [68], 101.13-19.

<sup>273</sup> Fārābī, *Ḥurūf* I.13 [67], 101.9-12.

<sup>274</sup> Fārābī, *Ḥurūf* I.13 [71], 104.13-18; near the end of the chapter, when resuming the two or three main philosophical senses of “substance”, Fārābī seems to claim that form and matter are substances inasmuch as they take part in the quiddity (*māhiyya*) of the compound.

<sup>275</sup> Fārābī, *Ḥurūf* I.13 [72], 104.19 – 105.7. At 105.3 Fārābī states: “Demonstration proves that there is an essence with such a character” (*wa-l-burhān yūğibu an yakūna hunā dā<tan> huwa bi-hāḍihī l-šifa*).

<sup>276</sup> Ibn al-Ṭayyib, *Tafsīr kitāb al-maqūlāt* 125.5 – 191.23 (in particular, pp. 125.5 – 135.14). Ibn al-Ṭayyib’s preliminary researches are six, like Olympiodorus’ and Elias/David’s κεράλλαια: nonetheless, they also focus on questions that these late ancient commentaries did not take into account.

<sup>277</sup> Ibn al-Ṭayyib, *Tafsīr kitāb al-maqūlāt* 126.30 – 127.7.

*ḡawharu l-awwalu aqdama fī l-ḡawhariyyati min al-ḡawāhiri l-tawānī*). When discussing this *maṭlūb*, Ibn al-Ṭayyib makes a clear distinction between two possible considerations of the relation between primary and secondary substances: in respect of existence, and in respect of substantiality (i.e. in respect of essence). In respect of existence, secondary substances are naturally prior to individuals; in respect of substancehood, individuals are prior to their universals, since universals are not substances that subsist in themselves, but merely essential predicates of individuals<sup>278</sup>.

When discussing the sixth *maṭlūb*, Ibn al-Ṭayyib takes up directly Porphyry's view that individual substances are prior for us and not by nature, as well as the idea, ascribed to Alexander and Allīnūs, that individuals are prior by nature. The discussion deserves to be reported in full:

We say that a class [of people], whose leader is Porphyry, stated that individual substance is prior according to us, not by nature. They explained their statement in this way: they said that [Aristotle's] words in this book are only [said] in an introductory way, for the sake of teaching students; the things that students seek, not [those that] teachers [seek], have the characteristic of being evident and prior, with respect to their capabilities; so, there is no doubt that primary substance, of which it has been said that it is prior, is prior according to us, not according to nature. This interpretation is a mistake, since Aristotle's consideration here about primary and secondary substance is not related to existence, but is related to substantiality; for Aristotle has not said that primary substance is prior to secondary [substance] in the sense of existence, but it is prior to secondary [substance] in substantiality. Therefore, Porphyry's opinion regarding existential priority is not correct.

Another class [of people], whose leaders are Alexander and Allīnūs, stated that their priority is by nature. They explained this by means of a proof like this: they said that it is renowned that if universal substance exists, then the individual substance is undoubtedly existent; since the universal is derived/deduced (*ustunbiṭa*) from it. As to the case when the individual [substance] exists, then universal substance does not undoubtedly exist; therefore individual substance is prior by nature. They clarified their saying that from the existence of the individual it does not follow the existence of the universal by means of [the examples] of the sun, the earth, the world, and all the things which in existence are only one individual; and they said that these [things] are individual because they are numerically one. The universal needs to be predicated of more than one [thing], so they do not have any universal.

[...]

The true opinion is that Aristotle made a comparison between primary and secondary substances with regard to substantiality, not with regard to existence; so he said that [primary substance] is prior to [secondary substance] by nature in substantiality, and it is more excellent and more entitled<sup>279</sup>.

---

<sup>278</sup> Ibn al-Ṭayyib, *Tafsīr kitāb al-maqūlāt* 129.13-20: "You must know that primary substance is considered in two ways, with respect to secondary substances: insofar as they are both substances, and insofar as they are both existents. Thus, if primary substance is considered with regard to secondary [substance] in respect of existence, secondary substance is prior to it naturally and inasmuch as it is essence, and the individual is naturally posterior to it. [However,] insofar as [the secondary] is common, the individual [substance] is naturally prior to it, and the secondary is naturally posterior. If they are both considered inasmuch as they are substances, the first is prior in substantiality to the secondary, since the secondary are realised as substances because it is judged of them, with respect to primary substance, that their essence is its essence, not because they subsist by themselves".

<sup>279</sup> Ibn al-Ṭayyib, *Tafsīr kitāb al-maqūlāt* 130.5 – 131.11.

As for the problem of applying Aristotle's account of substance to separate substances, it is synthetically taken up by Ibn al-Ṭayyib when discussing the following doubt: "why describing sensible substance by means of a definition that also belongs to divine substance?" Ibn al-Ṭayyib's reply consists of saying that the two kinds of substance, despite sharing in definition and in the fact of being individual, differ in other respects: sensible substance is subject to motion, corporeal and caused, whereas God is unmoved, incorporeal and a cause. Therefore, the description applies to both types of substance, although there exist differences in other respects<sup>280</sup>.

The solution found in Ibn al-Ṭayyib's commentary appears to be relatively consistent, but poses a number of further problems: most notably, Ibn al-Ṭayyib expressly argues for a difference existing between the substantiality of primary substances, and that of secondary substances

### 3.3.3 Avicenna on the synonymy of substance: *Maqūlāt* II.4 and III.1

In his *Maqūlāt*, Avicenna deals with the unity of substance in two places: in chapter II.4 and in chapter III.1. The main focus of chapter II.4 is the special status of some beings that seem, according to some previous commentators, to fall outside Aristotle's ten categories. It is Avicenna's discussion of those objections that argue for the incompleteness of Aristotle's table of categories, widely discussed by the late ancient commentary tradition<sup>281</sup>. Avicenna considers firstly the views of three different schools of thought: (1) people who argue that these beings do not fall in any category since they are principles of other categorizable beings, and principles do not fall in the same category as the things they are principles of; (2) people who argue that they do fall in the same category as the things they are principles of; (3) people who argue that these beings seem to fall under a number of categories at once<sup>282</sup>. When refuting the first group, Avicenna argues that the fact of being a principle is irrelevant to something belonging in a certain category or not; what matters is only the thing sharing in the set of essential properties that characterizes that category. One and point, the examples made by these commentators, are not quantities not in so far as they are principles (if they actually are), but only in so far as they do not share in the definition of quantity<sup>283</sup>.

As a sort of corollary to this reply, Avicenna presents a further doubt about form and matter: if they are prior by nature to their compound, how is it that they fall in the same category as the body, i.e. substance<sup>284</sup>? In his lengthy answer to this question Avicenna fundamentally claims that a genus may well have prior and posterior species, if priority and posteriority occur in respect of the species' existence, not in respect of their common quiddity. For this reason, form and matter deserve to fall in the category of substance

---

<sup>280</sup> Ibn al-Ṭayyib, *Tafsīr kitāb al-maqūlāt* 133.12-19.

<sup>281</sup> LUNA 2001, pp. 651-696.

<sup>282</sup> II.4 [§4], 71.15 – 72.10.

<sup>283</sup> II.4 [§5.1.2], 73.10 ff.

<sup>284</sup> As it is expounded by Avicenna, the doubt also refers to numbers, which are undoubtedly prior and posterior (both in order and existentially) and nonetheless belong to the category of quantity (II.4 [§5.2.1], 74.7-16). This doubt resembles the last general κεφάλαιον on substance discussed in Olympiodorus' and Elias/David's commentaries: Olymp. *In Cat.* 58.35 – 59.10; Elias/David, *In Cat.* 163.29 – 164.17.

because they share in the definition of substance to the same degree as body; and they are only prior to body existentially, in so far as they necessarily exist before bodies<sup>285</sup>.

To see an extension of this principle to the relation between primary and secondary substances, corporeal and incorporeal substances we must turn to inspect III.1-3, namely the chapters that contain Avicenna's exegesis of *Categories* 5.

In the very first lines of chapter III.1, Avicenna presents two distinct arguments against the unity of the notion of substance (*ḡawhar*); both are attributed to a group of anonymous speakers. **(a)** The first opinion is, in fact, a reformulation of Nicostratus' and Plotinus' aporia on corporeal and incorporeal substance: if we try to extend the corporeal notion of substance to what is not a body, namely to "a meaning more common than body", we cannot but apply it by homonymy or by way of ambiguity (*bi-t-taškīk*)<sup>286</sup>. This argument seems to regroup, then, both the Platonic charge of homonymy and the analogical solution, which assigns some substances a higher degree of substantiality<sup>287</sup>. **(b)** The second argument displays once again an analogical conception of substantiality, since the anonymous philosophers argue for the analogical predication of the Aristotelian description of substance ("existent not-in-a-subject"), both in respect of existence and in respect of the negative determination that accompanies it. As a matter of fact, "existence" is said by priority and posteriority; "not-in-a-subject" does not, itself, posit substances as equal in rank<sup>288</sup>. This objection seems to reprise the point made by some Alexandrian commentators, namely that "not-in-a-subject" has a different meaning whether it is applied to sensible substances or intelligible substances<sup>289</sup>.

The way in which these arguments are presented does not say much about the source: Avicenna might be synthesizing and regrouping doctrines found in different places, or he might be reading a source-text that already arranges them this way. Be as it may, what is certainly interesting for our purposes is Avicenna's double series of responses to these doubts. The first response, directed against objection **(a)**, reads:

Let us say: first, from these aspects it does not follow that the category of substance is not a genus of what is a body, and what is not a body. As for the state of priority and posteriority, and the state of the sharing of principles and effects in one genus, it is something we have clarified to you before; moreover even bodies, whose common sharing in the genus of "body" is not questionable, are not equal in degree, but some bodies are prior to others<sup>290</sup>.

The "point made before" clearly refers to the discussion of principiality in *Maqūlāt* II.4: the thing's priority with respect to other things belonging to the same genus does not affect its being a part of the genus itself. Besides matter and form within substance, and numbers within quantity, Avicenna presents a further example concerning bodies: even among bodies there are some that are undoubtedly prior to others, for instance celestial bodies are prior

---

<sup>285</sup> II.4 [§5.2.2-3], 74.16 – 76.18.

<sup>286</sup> The main text for Avicenna's interpretation of *taškīk* is I.2 [§3.2] (see also the COMMENTARY *ad loc.*); TREIGER 2010.

<sup>287</sup> III.1 [§1], 91.7-12.

<sup>288</sup> III.1 [§1], 91.12-15.

<sup>289</sup> See above, par. 3.3.1.

<sup>290</sup> III.1 [§2.1], 91.16 – 92.3.

over terrestrial ones, and this does not prevent them from being a part of the same genus. Let us now turn to the second response, directed towards objection **(b)**:

As for the report of “existent” which is comprised in the description of substance, which undoubtedly falls upon some of them before others, it is a doubt that ought to be solved. We say that in our words “substance is what exists not in a subject” we do not mean by “what exists” the state of the existent inasmuch as it is existent, for the reason which we will explain soon. For if it were so, it would be impossible to posit universals as substances; since they absolutely have no existence among concrete beings, and their existence is only in the soul, [being such as] the existence of a thing in a subject. And if this was meant by “existent”, namely “existent among concrete beings”, things would actually be as they believe; and some of [these beings] would be before some others. But they mean, by “existent not-in-a-subject”, the notion and the quiddity that are accompanied, when they exist among concrete beings, by the fact that their existence is not-in-a-subject, just as when we say “laughing”, namely “it is in its nature to laugh, when surprised”.

If you want the difference between these two things to become evident, and also the fact that one of them is the meaning of substance, and the other is not, just consider either a certain individual [man], like Zayd, when he is hidden from you; or another species of substance, together with the possibility of its disappearing from the world, if in your opinion its being disappeared is possible; or another species whose existence is doubtful. [If you consider them], you will learn that this [second] meaning is what first truly constitutes them, and you will learn that it is substance; and you will not learn whether it is existent among concrete beings in act while not being in a subject, but it sometimes becomes non-existent later. For actual existence among concrete beings not-in-a-subject does not constitute the quiddity of Zayd, nor [the quiddity of] any other substances; but it only is something that accompanies [it], in the same way as “existent” accompanies the quiddity of things, as you learned; this is not a genus, not even the first [genus]<sup>291</sup>.

Avicenna’s response clearly tackles the point made by the second objection, with which he actually agrees: “existent” (*mawǧūd*), found in the Aristotelian description of substance, is said by priority and posteriority of the things to which it is attributed<sup>292</sup>. Avicenna’s strategy consists of interpreting Aristotle’s definition in a certain way: not in the sense that the primary essential determination of any substance, insofar as it is substance, is its “existing” in a certain way. If we hold, as a matter of fact, that any substance contains in its definition existence not-in-a-subject, then we are forced to admit, paradoxically, that some things commonly deemed to be substances are not such: for instance the universals of substance, which only exist intellectually, in the soul, as in a subject. So, how are we supposed to interpret the Aristotelian description? Avicenna introduces the answer by means of an obscure “they mean” (*ya nūna*): this is not to be seen as a further objection, since the reply actually corresponds to Avicenna’s opinion; there is the possibility, then, that it be either a reference to Aristotle himself (who is often referred to, in *Maqūlāt*, by means of third-person plural verbs and pronouns) or to a group of anonymous, unspecified predecessors. However, the solution consists of saying that substances exist not-in-a-subject, but only *sub condicione*: that is, substances are quiddities that are accompanied by the fact of existing not-in-a-subject, only on condition that they exist in extramental reality (*fī l-a’yān*). This is what happens in the parallel case of the “laughing” thing: a man who has the

---

<sup>291</sup> III.1 [§2.2.1], 92.4 – 93.3 .

<sup>292</sup> For Avicenna’s characterization of the predication of “existent”, see above 3.1.4.

property of “laughing” (*daḥḥāk*) is not such as to laugh all the time, but only when a certain condition is realized (namely, as he is amazed or surprised).<sup>293</sup>: rather than a definition, existing not-in-a-subject is a property of substances, and is listed as such in chapter 5 of the *Categories*<sup>294</sup>.

In the second part of his response, Avicenna proves this assumption to be true by means of an argument that resembles a mental experiment: if we consider any sort of substance as being non-existent in concrete reality, we can conceive of it as of a substance also when it only has mental existence. A substantial individual, or a species of his, once it is imagined as non-existent, does not lose its substancehood. The reason for this lies in the fact that existence as such does not take part constitutively in the substantiality of Zayd and his species, but – on the contrary – is a “concomitant” (*lāzim*) of their quiddities: an attribute that accompanies them inseparably. According to Avicenna, therefore, if there is among substances any sort of priority and posteriority, it does not regard their quiddities as such but rather the way quiddity is given in concrete reality. This position contradicts evidently the interpretation of Ibn al-Ṭayyib, who, as we saw, held that the difference between primary and secondary substances lies in their being prior and posterior with respect to their substancehood<sup>295</sup>.

The introduction of this “conditional” element in the conception of essence does not cancel the ontological difference between substances; rather, it articulates that difference in a subtler manner, and preserves – in the same time – the unity of the genus. It is clear that such a theory presupposes the main tenet of Avicenna’s ontology, being the distinction between essence and existence; and that it also bears, as a consequence, that a being whose essence coincides with existence (the Necessary Existent, i.e. God) cannot be a substance<sup>296</sup>. This is clearly stated by Avicenna in the prosecution of this text:

For this reason if the quiddity of something is existence, and it is free from the subject, it is not in a genus, and it shares nothing with substances, in the sense that these are things and notions which are only accompanied by existence, when [existence] accompanies [them] in this way. But there does not exist something which constitutes that thing and the specificities of substances in common, because the equivalent of what is essential for that thing is accidental for them; like the existence which is realised in such and such manner. [On the other hand,] what is essential for these

---

<sup>293</sup> The example of the thing capable of laughing is not casual, since “laughing” (γελαστικός) is the typical Porphyrian example for the predicable “property” (ἴδιον). Cf. Porph. *Isag.* 12.17-19.

<sup>294</sup> Arist. *Cat.* 3 a7 ff.; see also below, III.3 [§1].

<sup>295</sup> See above, par. 3.3.2.

<sup>296</sup> The same point about God is made by Avicenna more explicitly in the subsequent chapter, as he replies to the following objection concerning the notional status of intelligible substances (III.2 [§4.2], 100.8-13): “Someone might say: ‘You posited intellectual substances as posterior to sensibles; so the intellect and the Creator, be He praised, must be posterior to sensible individuals’. We say, as an answer to this: (1) first, as regards the Sublime Creator, you must know from what precedes that he does not fall under the genus of substances. (2) In second place, although species and genera are intellectual substances, not all intellectual [beings] are species and genera; but among intellectual [beings] there are single [beings], subsistent by themselves and not depending on a subject of which or in which they are said; and these intellectual singulars are worthier of substantiality than anything else’. On the idea that the quiddity of God is nothing but the fact of existing, see *Ilāhiyyāt* VIII.4, 344.10 – 347.10; on Avicenna’s proof for God not being a substance, see *Ilāhiyyāt* VIII.4, 348.6 – 349.6.

specificities, in the meaning of substantiality, is not predicated of that thing; because [in that thing] there is no quiddity other than existence which existence accompanies<sup>297</sup>.

Thus, after having refuted his predecessors' objections regarding the unity and synonymy of substance, Avicenna presents his own division of substances. As we can see, this division reflects precisely the scheme of the previous commentators, but in a different perspective:

But we say that substance is either **(a)** simple or **(b)** composite; I mean, [a composite] of the things by which substance is composed, namely matter and form. Simple substance can **(aa)** either not take part in the constitution of the composite, but be free and separate, or **(ab)** it can take part in its constitution; **(aba)** that which takes part in the constitution does it in the same way as wood does in the existence of the chair, and it is called matter; **(abb)** or it does it in the same way as the shape of the chair is in the chair, and it is called form. Matter is that thing according to whose consideration and definition the composite does not have existence in act, but [only has it] in potency. Form is that thing by whose existence only the composite becomes what it is in act<sup>298</sup>.

Avicenna's tripartition of substances does coincide, in a certain respect, with the one presented by the Alexandrian commentaries, but there are significative differences: the axiologic distinction between "nobler" and "better" substances has disappeared, and has been substituted by the distinction between simple substances taking part in the constitution of a compound, and simple substances that do not. The 'free' and 'separate' substance introduced here by Avicenna very likely includes intellect and soul, that will be qualified as 'separate' substances in the *Ilāhiyyāt* of the *Šifā'*<sup>299</sup>. The prosecution is particularly interesting:

All these [substances] either exist as universals or exist as particulars. If substance is substance, as I showed you, only by virtue of a quiddity which is followed by existence among concrete beings or [existence] among estimations, it is not [substance] insofar as it exists among concrete beings. If it were not so, the meaning of the expression "substance" would be ambiguous, not synonymous, as [those people] said; but we mean by "substance" only the thing the existence of whose proper quiddity ought to be not-in-a-subject; this quiddity, like for instance man, must be a substance in its essence. Therefore, man is a substance only because he is a man, not because he is existent among concrete beings according to a certain way of existence; and if he is substance because he is a man, the attribute which is attached to him, I mean individuality, being common, and also being realized among concrete beings or being established in mind, these are all things which are attached to substance<sup>300</sup>.

All species of substance are essences that manifest themselves as universal or particular: universal if they exist in the mind, particular if they exist in concrete, external reality. What remains identical is always the essence, in virtue of which any substance is properly said to be a substance. As we can see, this declaration might seem to remove Aristotle's distinction

---

<sup>297</sup> III.1 [§2.2.2], 93.4-9.

<sup>298</sup> III.1 [§3.1], 94.4-10.

<sup>299</sup> *Ilāhiyyāt* II.1, 60.12-14.

<sup>300</sup> III.1 [§3.2] 94.10-18.

between primary and secondary substances, and also the idea that some substances may be “more” substances than others. Does Avicenna, then, wish to keep these Aristotelian distinctions? Is he going to remove them completely?

Indeed, the answer is negative: it is here, as well as in other places of the *Maqūlāt*, that emerges the tension between Avicenna’s individual theory and the necessity of following Aristotle’s letter. Avicenna describes the difference in degree between primary and secondary substances on the basis of a certain interpretation of the three attributes that Aristotle referred to primary substance in the first line of *Cat. 5*: *κυριώτατα, πρώτως, μάλιστα*<sup>301</sup>. In the beginning of *Maqūlāt* III.2, Avicenna presents the primacy of individual substance with respect to universal substances, by arguing that it is not a primacy with respect to substancehood, but actually is a condition of higher worthiness: primary substance is not prior, but rather worthier (*awlā*) of substancehood than the universal. The superior dignity of primary substances may be observed with regard to four main characters (clearly depending on Aristotle’s three criteria of primacy):

Aristotle	Ishāq	Avicenna
κυριώτατα	<i>Awlā</i> <i>bi-l-tahqīq</i>	(1) <i>min ġihat al-wuġūd</i> (with respect to existence) (2) <i>min ġiha taqarrur al-amr allaḏī bi-‘tibārihī kāna l-ġawhar ġawharan</i> (with respect to the realization of the thing in consideration of which substance is substance)
πρώτως	<i>bi-l-taqdīm</i>	(4) <i>min ġihat al-sabq ilā l-tasmiya</i> (in respect of being named first)
μάλιστα	<i>bi-l-tafḏīl</i>	(3) <i>min ġihat al-kamāl wa-l-faḏīla</i> (with respect to perfection and excellence)

(1-2) Aristotle’s *κυριώτατα* is analysed by Avicenna into two distinct criteria: “existence” (*wuġūd*), on the one hand, and the “being realized” (*taqarrur*) of the thing in consideration of which substance is substance, on the other hand. Greater worthiness in respect of existence, explains Avicenna, is assured by the fact that universals or secondary substances, in terms of existence, have necessarily a certain relation to a multiplicity, since they are defined by the fact of being said of a number of individuals: their mental existence is thus dependent on other beings, whereas the concrete existence of primary substance is independent of anything<sup>302</sup>. As to the second criterion, it may be explained as follows: the thing (*amr*) in consideration of which substance is substance is nothing but the condition introduced above to define substances: being such as to exist in a subject, if it exists (among

<sup>301</sup> Arist. *Cat. 2* a11-14 (tr. ACKRILL 1963, p. 5): “A substance – that which is called a substance most strictly, primarily, and most of all – is that which is neither said of a subject nor in a subject, e.g. the individual man or the individual horse” (Οὐσία δὲ ἐστὶν ἢ κυριώτατά τε καὶ πρώτως καὶ μάλιστα λεγόμενη, ἢ μήτε καθ’ ὑποκειμένου τινὸς λέγεται μήτε ἐν ὑποκειμένῳ τινὶ ἐστὶν, οἷον ὁ τις ἄνθρωπος ἢ ὁ τις ἵππος). The discussion of the precise meanings of these attributes is actually a *topos* of the late ancient and medieval exegesis.

<sup>302</sup> III.2 [§2.2] (cf. in particular [§2.2.1], 96.8-13).



concrete beings). Now: in individual substance this condition is actually realized, since they have concrete existence; in universal substances it is only realized potentially<sup>303</sup>.

(3) The second Aristotelian criterion, concerning priority (πρώτως), is paraphrased by Avicenna as “coming first to denomination”, namely being named ‘substance’ in the first place<sup>304</sup>.

(4) Aristotle’s μάλιστα, understood by Ishāq in terms of distinction and superiority (*bi-l- tafḍīl*), is enigmatically interpreted by Avicenna in a somewhat ‘teleological’ fashion (nature tends, in a certain way, to individuals; all natural actions and states primarily pertain to individuals)<sup>305</sup>.

That primary substances are worthier of substancehood than universals is also restated by Avicenna in chapter III.3, concerning the properties of substance. When commenting on the fact that substances do not admit of more and less, Avicenna tackles the apparent paradox that derives from Aristotle’s claim that, in a sense, some substances are “more” substance than others (individuals with regard to species, species with regard to genera). As a reply to this doubt, Avicenna reminds the reader that primary substances are not “more” substances, but only worthier than secondary substances: it is so because “more” and “less” concern the quiddity of substance, or its essence, whereas greater and lesser dignity are relative to its existence<sup>306</sup>.

On the whole, Avicenna’s doctrine appears powerful and original: it presents a consistent resolution for the problems raised by ancient Platonic exegetes of Aristotle. This interpretation of substance allows Avicenna to provide, first of all, a common and unitary notion for all the kinds of substance accepted by Aristotelian common opinion, and to preserve the unity of the genus “substance”. Moreover, the distinction between the quiddity of substancehood and the existence of substancehood allows him to justify coherently the difference between the status of logical universals and that of separate substances, that in some late ancient commentaries came often to be quite indistinct.

---

<sup>303</sup> III.2 [§2.3], 97.19 – 98.3.

<sup>304</sup> III.2 [§2.5], 98.10-13.

<sup>305</sup> III.2 [§2.4], 98.4-9.

<sup>306</sup> III.3 [§4.2], 107.18 – 108.8: “Hence, no one among the individual men is, with respect to its being man, which is his substance, ‘more’ than another individual; in the same way as whiteness is, sometimes, in its being whiteness, ‘more’ than another whiteness. Nor an individual man can be, in its being an individual man<sup>306</sup>, ‘more’ than an individual horse, with respect to being a horse; in the same way as whiteness is imagined to be ‘more’, with respect to its being white, than blackness in its being black; and hotness [is imagined to be] ‘more’, with respect to its being hot, than coldness in its being cold. Likewise is the state of the species which are on the same level; for it is not [true] that one of them is ‘more’, as regards itself, than another, since we have supposed that the genera are predicated of them only equally; for this reason primary substances, despite being worthier than the secondary ones with respect to substantiality, are not ‘more’ with respect to substantiality. ‘Worthier’ is different from ‘more’: for ‘worthier’ depends on the existence of substantiality, while ‘more’ depends on the quiddity of substantiality”.

## 3.4 Quantity

### 3.4.1 Substantial and quantitative bodies

Avicenna's main original contributions to the discussion of quantity lie in his treatment of the quantitative nature of bodies, and in his exclusion of place and speech from, respectively, the number of continuous and discrete quantities.

In the beginning of *Maqūlāt* III.4 Avicenna claims that the ontological status of quantities is not an issue to be taken up in logic; nonetheless, he presents a lengthy argument to distinguish between physical and mathematical bodies<sup>307</sup>. The aim of this distinction is to explain the relation between substance and quantity, and also to clarify whether body is a substance or an accident, given Aristotle's ambiguity on this point: whereas in some works of his he clearly treats bodies as substances (e.g. in the *De anima*), in *Categories* 6 and *Metaphysics* Δ 14 he classifies body (σῶμα) among the species of continuous quantity<sup>308</sup>.

Avicenna's insistence on this point also in the exegesis of the *Categories* might not be casual: as far as we know, the question was the subject of a lively debate in earlier Arabic philosophy (and it would have been in subsequent times). This is testified, for instance, by the extant texts that report a dispute among Yaḥyā ibn 'Adī, his brother Ibrāhīm ibn 'Adī and an anonymous Opponent on this very topic<sup>309</sup>. The dispute in question attests to three different views. Ibrāhīm ibn 'Adī fundamentally argues that body is a quantitative accident attached to individual substance, i.e. the compound of matter and form: he does so on the basis of Aristotle's inclusion of body into quantity in the *Categories*, for this would imply that Aristotle holds the body to be identical with the dimensions that accompany it<sup>310</sup>. The Opponent and Yaḥyā, instead, argue for its being a substance, although with different nuances: the Opponent seems to claim that body is a sort of unchanging, incorruptible substance<sup>311</sup>.

Within this debate, Avicenna inherits and develops the doctrine – firstly mentioned by Porphyry – according to which the term “body” (*ḡism*) is equivocal: it may refer either to the physical or natural body, which is a kind of substance, or to the quantitative/mathematical body, which is the actual species of quantity<sup>312</sup>. In the *Ilāhiyyāt* of the *Šifā'* Avicenna describes the physical or natural body as identical with the so-called “form of corporeity”, i.e. a substantial form that exists in prime matter and is inseparable from it; the essence of corporeity consists of the body's being such that it is possible to suppose three dimensions in

---

<sup>307</sup> See below, III.4 [§2.1-4].

<sup>308</sup> Cf. Arist. *De an.* B 1, 412 a11-12 (οὐσίαι δὲ μάλιστ' εἶναι δοκοῦσι τὰ σώματα, καὶ τούτων τὰ φυσικά); *Metaph.* Z 1, 1028 b8-10; *Cat.* 4 b24, 5 a4-6; *Metaph.* Δ 13, 1020 a14.

<sup>309</sup> Cf. above, par. 2.1.4; for a reconstruction of the dispute and its participants see MENN, WISNOVSKY 2017, pp. 3-5.

<sup>310</sup> MENN, WISNOVSKY 2017, p. 73.

<sup>311</sup> MENN, WISNOVSKY 2017, pp. 70-71 (for the Opponent's opinion); pp. 64-65 for Yaḥyā's position.

<sup>312</sup> For Porphyry's mention of the distinction between τὸ φυσικόν and τὸ μαθηματικόν σῶμα, see *Simpl. In Cat.* 124.28 – 125.2.

it<sup>313</sup>. On the contrary, the mathematical body – being an accident of the physical body – is described in the two following ways:

As for our saying “mathematical body”, either one intends by it the form of [the above] inasmuch as it is determinate and measurable [when] taken in the soul, not in [external] existence, or one intends by it some extension having continuity that has this character (inasmuch as it has a determined, measurable continuity, whether in a soul or in matter)<sup>314</sup>.

The discussion of corporeity and mathematical bodies found in *Maqūlāt* III.4 is quite similar to the one found in *Ilāhiyyāt* II.2, and does not add many elements to it.

We might be tempted to include bodies among quantities because the bodies we see, touch, interact with in our experience of the world are finite and measurable. However, Avicenna argues, despite being finite the body is not characterized essentially by its finitude; for finitude is an accident that follows the true form of corporeity, which in turn is identical with the body’s potentiality of being supposed as three-dimensional. Body does not belong in the category of quantity in so far as it is a substantial form, but only in so far as its extension becomes actually measurable<sup>315</sup>. In order to explain intuitively the difference between the substantial and quantitative consideration of body, Avicenna offers a famous example concerning a piece of wax, which he presents in many other works: no matter how long, large, deep a piece of wax is, or how its size changes, it never ceases to be a body<sup>316</sup>.

This account of the difference between mathematical and physical bodies in *Maqūlāt* III.4 is interesting for many reasons. Firstly, it is another case where Avicenna tackles in a scientific manner (or at least at length) an issue that should be treated by mere “convention”, in the context of the *Categories*. Secondly, it bears witness of Avicenna’s continuing dialogue with his predecessors, as well as of the vitality that ontological debates stemming from Aristotle’s *Categories* had in early Arabic philosophy.

### 3.4.2 Physical *continua*: place and time

As is known, in the *Categories* Aristotle also numbers place (τόπος) among continuous quantities<sup>317</sup>. His only argument for the continuous nature of place is the following. Since a body or solid (σῶμα) is continuous, in that its parts join with one another at a common boundary; and since these continuous parts of a body or solid occupy a certain space (τόπον [...] τινα [...] κατέχει); then the parts of the place must join at the same common boundary as the parts of the body that occupies them. Hence, place is continuous<sup>318</sup>.

In modern scholarship it has been suggested that the conception of place underlying this argument differs from the one presented by Aristotle in the fourth book of the *Physics*. As a matter of fact, at *Physics* Δ 4 Aristotle identifies place with “the limit of the surrounding

---

<sup>313</sup> *Ilāhiyyāt* II.2, 64.6-7; *Samā’ tabī’ī* I.2, 13.4-7. On the form of corporeity see HYMAN 1965; LAMMER 2018, pp. 120 ff.

<sup>314</sup> *Ilāhiyyāt* II.2, 64.16 – 65.1 (tr. MARMURA 2005, p. 51, slightly modified).

<sup>315</sup> III.4 [§2.2], 113.2 – 114.4.

<sup>316</sup> III.4 [§2.3], 114.6-11. See also *Ilāhiyyāt* II.2, 64.1-15; *Samā’ tabī’ī* I.2, 13.8 ff.; *Hidāya* 135.4-6.

<sup>317</sup> Arist. *Cat.* 4 b25.

<sup>318</sup> Arist. *Cat.* 5 a8-14.

body, at which it is in contact with that which is surrounded” (τὸ πέρασ τοῦ περιέχοντος σώματος <καθ’ ὃ συνάπτει τῷ περιεχομένῳ>)<sup>319</sup>; it has been remarked that the argument of the *Categories* implies a conception of place as an interval co-extensive to the body, rather than a container<sup>320</sup>. Other recent commentators, instead, read the two accounts as similar (or at least not incompatible), and so did – as far as we know – all ancient interpreters<sup>321</sup>. Be that as it may, from Plotinus onwards many a commentator – old or new – suggested that place is not a quantum in so far as it is place, but rather in so far as it is some other extension (e.g. a surface or a body)<sup>322</sup>.

When listing the various kinds of continuous quantities in *Maqūlāt* III.4, Avicenna only mentions line, surface, body and time<sup>323</sup>; he then engages with a refutation of Aristotle’s inclusion of “place” (*al-makān*) as an independent extension. Firstly, he quotes the definition of *Physics* Δ 4 in Ishāq ibn Ḥunayn’s translation, i.e. “the limit of a containing body” (*nihāyatu ḡismin muḥīṭin*)<sup>324</sup>; then, he claims that although in this definition place is qualified as a “limit”, being the limit of a body it is a surface, and it is place only in so far as it contains another body. Now, in order to include place among continuous quantities as a quantity in its own right, and not as a simple surface, one should be able to prove that it is continuous in a specific way, and not as the simple surface is. However, it is not: for the fact of containing a body does not make a surface divisible in a different way, or endowed with a different number of dimensions. Hence, if the fact of being a limit and a container do not constitute the essence of place as a species of quantity, then it is a quantity only inasmuch as it is a surface. There are two possibilities, then: either place is a sub-species of surface, or a surface specified “improperly” by a certain accident of its. However, if one wants to enumerate the primary species of a genus – as Aristotle is doing with the category of quantity – mentioning possible sub-species, or even accidental states of theirs, is improper and misleading<sup>325</sup>.

Thus, Avicenna becomes the first commentator in the Peripatetic tradition – at least to my knowledge – who explicitly refuses to include place among the primary species of quantity. There is a possible precedent: in his epitome of the *Categories* Fārābī presents surface as subdivided into two quasi-species, the surface that characterizes body as a limit (*nihāya*), and the “extrinsic” (*ḡarīb*) surface that encompasses the surface of the body, which is what Aristotle calls “place”<sup>326</sup>. However, Fārābī does not go so far as to refute Aristotle on this point; furthermore, he describes another concurring account of place (i.e. Philoponus’ account of place as a three-dimensional extension) and argues that place is a quantity

---

<sup>319</sup> Arist. *Phys.* Δ 4, 212 a6-7 (tr. HUSSEY 1983, p. 28).

<sup>320</sup> See for instance KING 1950; MENDELL 1987, esp. pp. 208-212.

<sup>321</sup> Cf. ACKRILL 1963, p. 93; BODÉUS 2001, p. 108.

<sup>322</sup> E.g. Plot. *Enn.* VI.1 [42], 4.15-16; Simpl. *In Cat.* 125.26-27; ACKRILL 1963, p. 93 (“This raises the question whether place has a right to count as an independent primary quantity in addition to body”); BODÉUS 2001, p. 108.

<sup>323</sup> See below, III.4 [§5.1-3].

<sup>324</sup> Cf. *Ṭabī‘a* I, 312.7: *wa-huwa nihāyatu l-ḡismi l-muḥīṭi*. For Avicenna’s account of place, see *Samā‘ ṭabī‘ī* II.9; LAMMER 2018, pp. 327-367.

<sup>325</sup> Cf. the whole discussion at III.4 [§5.4.2].

<sup>326</sup> Fārābī, *Qāṭāḡūryās* (DUNLOP 1958, 175.5-7).

according to it as well<sup>327</sup>. Whether or not he did attack Aristotle in the lost *Šarḥ al-maḡūlāt*, we simply do not know.

Although in the *Metaphysics* Aristotle qualifies time as a quantity “by accident”, since its measurability is bound to the measurability of motion and the distance covered by mobiles, Avicenna treats it quite traditionally as a primary continuous quantity<sup>328</sup>. In *Maḡūlāt* IV.1, he also makes a distinction between time’s being continuous in itself and its being continuous by accident, i.e. with respect to the distance covered by a certain mobile<sup>329</sup>. For the rest, Avicenna’s treatment of time in chapters III.4-IV.1 is quite synthetic and not particularly original.

Furthermore, in line with many of his Greek and Arabic predecessors, Avicenna counters Andronicus’ and Plotinus’ claim that the categories of where and when are identical with place and time: he argues, in fact, that they consist of – respectively – a substance’s relation with place and a substance’s relation with time<sup>330</sup>. In this regard the discussion of when is particularly interesting, since at *Maḡūlāt* VI.5 Avicenna mentions and criticizes Fārābī’s description of the category. As a matter of fact, Fārābī describes “when” as the relation that a thing has either with a time whose ends correspond to the two ends of the thing’s existence, or with a time of which that specific time is a part. In other words, Fārābī describes the category of when by close analogy with the category of where, as comprising (1) a relation with a primary time that corresponds perfectly to the thing’s existence (analogous to the thing’s primary place, i.e. the surface that contains a body and in which no other body can share) and (2) a relation to a secondary time, of which the primary time is a part (analogous to the wider body of which the thing’s primary place is the surface). Avicenna firstly tries to disambiguate Fārābī’s claim that the two ends of primary time correspond to the two ends of the thing’s existence, by explaining what is meant by “two ends of the thing’s existence”. These must be understood neither as the ends of the thing’s extension, nor of its motion, nor of the time of its actual existence, but as the two ends of the thing’s relation to time (which correspond perfectly to the two ends of a certain time)<sup>331</sup>. Then, he argues that Fārābī’s account is inappropriate in any case, for this definition only applies to the existence of things in intervals of time that are comprised between two instants, but not to their being in simple instants (which can only be found in this category, according to Avicenna).

It is for this reason that Avicenna’s description of when significantly comprises a mention of an “extreme” of time, that is the instant; and that according to him the primary time of a thing is probably to be understood as a simple instant, rather than an interval of time<sup>332</sup>.

---

<sup>327</sup> Fārābī, *Qāṭāḡūryās* (DUNLOP 1958, 175.10-19). For Philoponus’ account of place see Phil. *In Phys.* 567.29 – 583.12; SEDLEY 1987 and GOLITSIS 2008, pp. 180-184; LAMMER 2018, pp. 369-382.

<sup>328</sup> Arist. *Metaph.* Δ 13, 1020 a 28-30.

<sup>329</sup> Cf. below, IV.1 [§5.2].

<sup>330</sup> *Simpl. In Cat.* 342.21-25; 347.6-17; Plot. *Enn.* VI.1, 13.1-7, 14.1-8.

<sup>331</sup> VI.5 [§3.2.1], 231.

<sup>332</sup> VI.5 [§3.1], 231.4-7.

### 3.4.3 Speech

Another interesting aspect of Avicenna's interpretation of quantity is his denial of the quantitative nature of audible speech (or spoken language), which Aristotle lists as a discrete quantity alongside number at *Cat.* 4 b23. Aristotle justifies this inclusion by arguing – quite obscurely – that it is obviously so, because speech (ὁ λόγος), at least spoken language, “is measured by the long and short syllable” (καταμετρεῖται [...] συλλαβῆ μακρᾷ καὶ βραχείᾳ). Now, since syllables are not continuous with one another, speech is a discrete quantity<sup>333</sup>. R. Bodéüs says that speech is a quantity by analogy with number, for each syllable has a fixed and measurable quantity in comparison with other syllables (e.g. a long syllable is to a short one as 2 is to 1); moreover, syllables are pronounced in time successively, which accounts for their being discrete<sup>334</sup>. I take Bodéüs' interpretation to be probably the correct one. Although Aristotle's claim is certainly far from being clear, and it gave rise to various objections and interpretations in ancient and modern times.

In his commentary, Simplicius discusses a number of objections raised against the quantitative nature of spoken speech. Among these, two kinds of arguments stand out as particularly interesting (or at least non-sophistical). (a) The first kind of objection consists of arguing that, in virtue of its nature, speech belongs to a category other than quantity; (b) the second kind of objection, not incompatible with the first, consists of arguing that speech is indeed quantitative, but is such only by accident – i.e. inasmuch as it is accompanied by another determination that is quantitative in itself.

(a) The first sort of objection was presented for instance by Plotinus, in the first treatise *On the Kinds of Being*. Against Aristotle, Plotinus recurred to the Stoic definition of sound and argued that speech in itself is the “impact” (πληγή) of the voice on the air: for this reason it should rather be classified in the category of action (in so far as it is an impact), in the category of affection (in so far as the air is affected by it) or in both categories<sup>335</sup>. To this objection, Iamblichus replied – we learn from Simplicius – that speech is quantitative inasmuch as an impact on the air has a certain measurable intensity, which ultimately amounts to its quantity<sup>336</sup>.

(b) The second kind of objection relies on Aristotle's claim that speech is measured by short and long syllables. If syllables are long and short in virtue of time, then speech is measurable because time is measurable, and then it is a quantity only by accident (κατὰ συμβεβηκός)<sup>337</sup>. An identical objection was made in recent times by Ackrill, who argued that the quantity of syllables depends on their temporal duration, and for this reason speech “is not a primary, non-derivative owner of quantitative properties”<sup>338</sup>. Simplicius also reports Porphyry's reply to this objection, surely derived from the lost commentary *Ad Gedalium*: according to this reply, syllables are not said to be “long” and “short” in virtue of time, but in their own nature. As a matter of fact, since a syllable is equivalent to a certain emission of breath, it is larger or smaller depending on how broad the wind-pipe is naturally

---

<sup>333</sup> Arist. *Cat.* 4 b32-37.

<sup>334</sup> BODÉÜS 2001, p. 105.

<sup>335</sup> Plot. *Enn.* VI.1 [42], 5.2-15; cf. also Simplicius. *In Cat.* 131.1-10, where Plotinus' argument is summarized.

<sup>336</sup> Simplicius. *In Cat.* 131.10-17.

<sup>337</sup> Simplicius. *In Cat.* 131.23-27.

<sup>338</sup> ACKRILL 1963, p. 93.

opened when it is pronounced. To prove that the length of syllables is natural to them, whereas time is accidental, Porphyry claims that it is also possible to pronounce long syllables in a short time and short syllables in a long time (as is done for instance in rhythmic or musical time)<sup>339</sup>.

Near the end of *Maqūlāt* III.4, Avicenna argues that there is no discrete quantity other than number. His argument goes by exclusion: a discrete quantity other than number does not exist, for it is not possible to find any non-continuous measurable attribute which is also not numerable<sup>340</sup>. In the end, he moves on to proving that the only other thing that was deemed a discrete quantity, i.e. audible speech (*al-qawl al-masmūʿ*), is not a quantity in itself. In order to do this, he cites and refutes three concurring arguments for the quantitative nature of speech.

(1) The first argument resembles Simplicius' anonymous objection (b), but is presented by Avicenna not as a counter-argument but rather as a positive explanation: syllables are measured by their time, so speech is measured by time. Like the anonymous proponent of the objection, Avicenna argues that if it is so, then speech is measurable not in itself but by accident<sup>341</sup>.

(2) The second argument resembles Iamblichus' reply to Plotinus' objection (a): speech is quantitative because its impact on the air is measurable. Avicenna claims that this explanation is wrong in many respects: first, it introduces a further unnecessary species of quantity (voice); secondly, it provides the voice with a quantitateness that is continuous rather than discrete, which is absurd; thirdly, the intensity of the impact of the voice on the air depends on characters of its (loudness/feebleness, heaviness and lightness) that belong to quality rather than quantity; finally, they end up positing further kinds of quantity by accident<sup>342</sup>.

(3) The third argument is almost certainly Farabian. Fārābī admits audible speech among quantities, since it suits the general description of quantity that he propounds. In his *Epitome of the Categories*, Fārābī defines quantity as “everything of which the totality can be measured by a part of it”<sup>343</sup>; he may well argue, on such a basis, that expressions (*al-alfāz*) belong to quantity in so far as they are totalities that have parts, most notably their syllables. When long or short syllables are combined, they form something greater than them, for which they may work as a standard of measurement. In this sense, syllables measure words exactly as cubits measure lengths: there are words whose measure is one syllable, words whose measure is two syllables, and so forth<sup>344</sup>.

At *Maqūlāt* III.4, despite presenting Fārābī's argument as more reasonable than the others, Avicenna ultimately rejects it – and also rejects, implicitly, Fārābī's definition of quantity. Against this doctrine, Avicenna argues that the fact of being a totality measured by the parts does not necessarily qualify something as a categorial quantity: in order to be such,

<sup>339</sup> Simpl. *In Cat.* 131.27 – 132.6.

<sup>340</sup> See below, III.4 [§6.1.2].

<sup>341</sup> III.4 [§6.2.2], 122.2-6.

<sup>342</sup> III.4 [§6.2.3], 122.7 ff.

<sup>343</sup> Fārābī, *Qāṭāgūryās* (DUNLOP 1958), 171.20 (tr. p. 186): *Wa-l-kammu huwa kullu šayʿin amkana an yuqaddara ġamīʿuhū bi-ġuzʿin minhu.*

<sup>344</sup> Fārābī, *Qāṭāgūryās* (DUNLOP 1958), 172.3-26.

the thing must be a quantity in itself<sup>345</sup>. Avicenna adds this detail to his own definition of quantity at *Ilāhiyyāt* III.4: “quantity, by definition, is that wherein it is possible to find something that is appropriately one [thing] that numbers – this being [so] in itself, regardless of whether the appropriateness is existential or suppositional”<sup>346</sup>. As Aristotle himself argues, quantities may be such by accident: most notably, continuous magnitudes can be numbered extrinsically, and thus become discrete.

The inclusion of speech among quantities is ultimately an Aristotelian mistake, which evidently depends on Aristotle’s adoption of commonly accepted notions (as is the case with other issues dealt with in the categories, such as relatives and motion)<sup>347</sup>.

---

<sup>345</sup> Cf. the discussion in III.4 [§6.2.5].

<sup>346</sup> *Ilāhiyyāt* III.4, 118.14-15 (tr. MARMURA 2005, slightly modified, p. 90).

<sup>347</sup> III.4 [§6.2.6], 123.17-19.



## 3.5 Relatives

### 3.5.1 Aristotle's four definitions of relatives

Aristotle provided two detailed, specific accounts of relatives (τὰ πρὸς τι): one of them is found in the seventh chapter of the *Categories*, whereas the other is offered in book Δ of the *Metaphysics*.

As is known, in the chapter devoted to the category of relatives (*Cat.* 7) Aristotle presents two distinct definitions of the category. The first one, found right in the beginning of the chapter, runs as follows:

**(AR1)** We call *relatives* all such things as are said to be just what they are, *of* or *than* other things, or in some other way *in relation to* something else.

[Πρὸς τι δὲ τὰ τοιαῦτα λέγεται, ὅσα αὐτὰ ἄπερ ἐστὶν ἐτέρων εἶναι λέγεται ἢ ὅπως οὖν ἄλλως πρὸς ἕτερον (...)]<sup>348</sup>.

After presenting this definition, Aristotle goes on to expound four properties of relatives R1: (1) some of them admit of contrariety, (2) some of them admit of more and less, (3) all of them are “spoken of in relation to correlatives that reciprocate” (πρὸς ἀντιστρέφοντα λέγεται), (4) all of them seem to be simultaneous by nature<sup>349</sup>. Aristotle then challenges definition R1, on account of the fact that it might include beings that belong to other categories, most notably some secondary substances: whereas no individual substance is spoken of with respect to something else, in some cases universal substances – e.g. “head”, “hand” – may be well spoken of with regard to something else – e.g. a head being called someone’s head, a hand being called someone’s hand. This leads Aristotle to reformulating the definition of relatives in the following way:

**(AR2)** But if [the first definition] was not adequate, and if those things are relatives for which *being is the same as being somehow related to something*, then perhaps some answer may be found

[ (...) εἰ δὲ μὴ ἰκανῶς, ἀλλ' ἔστι τὰ πρὸς τι οἷς τὸ εἶναι ταυτὸν ἐστι τῷ πρὸς τί πως ἔχειν, ἴσως ἂν ῥηθεῖν τι πρὸς αὐτά]<sup>350</sup>.

Relatives **AR2** have a further specific property, which D. Sedley has labelled the “Principle of Cognitive Symmetry”: whenever a thing that is relative in this sense is known *determinately* (ὀρισμένως), then its correlative is known determinately as well<sup>351</sup>.

At *Metaphysics* Δ 15, Aristotle presents a distinction between three sorts of relatives: [1] relatives “according to number” (κατ’ἀριθμὸν), which comprise such attributes as double/half and exceeding/exceeded; [2] relatives according to potency and act, such as what heats up/what is heated up (τὸ θερμαντικὸν πρὸς τὸ θερμαντόν); [3] relatives like

<sup>348</sup> Arist. *Cat.* 6 a36-37 (tr. ACKRILL 1963, p. 17).

<sup>349</sup> Aristotle’s discussion of the four properties of relatives **AR1** is found at *Cat.* 6 b15 – 8 a12.

<sup>350</sup> Arist. *Cat.* 8 a31-33 (tr. ACKRILL 1963, p. 22).

<sup>351</sup> Cf. SEDLEY 2002, p. 327.

knowable/knowledge, measurable/measure, and so on<sup>352</sup>. More in general, Aristotle distinguishes relatives [1-2] from relatives [3], on account of the fact that the former are relative according to a certain characterization of being-relative (**AR3**), whereas the latter are relative according to another characterization thereof (**AR4**):

(**AR3**) Things called numerical relatives or relatives in respect of capacity are all relatives from being said just what they are of something else, not from the other thing being relative to them.

[τὰ μὲν οὖν κατ'ἀριθμὸν καὶ δύναμιν λεγόμενα πρὸς τι πάντα ἐστὶ πρὸς τι τῷ ὅπερ ἐστὶν ἄλλου λέγεσθαι αὐτὸ ὃ ἐστίν, ἀλλὰ μὴ τῷ ἄλλο πρὸς ἐκεῖνο·]

(**AR4**) But the measurable and the knowable and the thinkable are called relatives from something else being called [what it is] relative to them. For 'thinkable' signifies that there exists thought of it, but the thought is not relative to that of which it is a thought (for then we should have said the same thing twice). And equally, sight is the sight of something, not of that of which it is the sight (although it is true to say that) but relative to colour or some other such thing. The other way we shall be saying the same thing twice: 'sight is of that of which sight is.'

[τὸ δὲ μετρητὸν καὶ τὸ ἐπιστητὸν καὶ τὸ διανοητὸν τῷ ἄλλο πρὸς αὐτὸ λέγεσθαι πρὸς τι λέγονται. τὸ τε γὰρ διανοητὸν σημαίνει ὅτι ἔστιν αὐτοῦ διάνοια, οὐκ ἔστι δ' ἡ διάνοια πρὸς τοῦτο οὗ ἔστι διάνοια (δις γὰρ ταῦτον εἰρημένον ἂν εἴη), ὁμοίως δὲ καὶ τινός ἐστιν ἡ ὄψις ὄψις, οὐχ οὗ ἔστιν ὄψις (καίτοι γ' ἀληθές τοῦτο εἰπεῖν) ἀλλὰ πρὸς χρῶμα ἢ πρὸς ἄλλο τι τοιοῦτον. ἐκείνως δὲ δις τὸ αὐτὸ λεχθήσεται, ὅτι ἐστίν οὗ ἔστιν ἡ ὄψις.]<sup>353</sup>.

A thorough examination of Aristotle's theory of relatives lies beyond the confines of this enquiry. Nonetheless, a quick comparison between the distinction presented in the *Categories* and the one found in the *Metaphysics* shows that Aristotle tries to distinguish in both cases between a “pure” and a “mixed” conception of relatives. According to the standard interpretation of *Cat.* 7 found in modern scholarship, since definition **AR1** may apply to beings that belong to other categories, definition **AR2** corrects it extensionally in such a way as to comprise a smaller number of beings, which may be labelled “actual” relatives<sup>354</sup>. In the *Metaphysics* as well, the distinction between **AR3** and **AR4** seemingly mirrors a distinction between – respectively – relatives that are such essentially (numerical relatives and relatives in respect of potency) and asymmetrical relatives, to which the property of reciprocation does not apply (knowable/knowledge, etc.). Yet, in a systematic perspective the two accounts may be seen as incompatible, if – as it seems – **AR1** and **AR3** are basically the same definition, while in the *Metaphysics* there is no trace of **AR2**, i.e. a specification that appears to be necessary in order to make **AR1** satisfactory. It is precisely to solve such problems that M. Duncombe has recently proposed to revise the standard “extensional” account and to regard **AR1** and **AR2** not as “different extensions”, but as “different ways of understanding each relative”: according to this interpretation, **AR1** would describe relatives understood as “schematic” or generic, and **AR2** would describe relatives understood as “specific” or individualized<sup>355</sup>.

<sup>352</sup> For type (1), see Arist. *Metaph.* Δ 15 1020 b32-14; for type (2), 1021 a15-26; for type (3), 1021 a26 – b3.

<sup>353</sup> Arist. *Metaph.* Δ 15, 1021 a26-30 (tr. KIRWAN 1993, slightly modified, p. 52).

<sup>354</sup> Cf. for instance CAUJOLLE-ZASLAWSKY 1980; MIGNUCCI 1986; SEDLEY 2002, pp. 332-333.

<sup>355</sup> Cf. DUNCOMBE 2015, p. 437.

### 3.5.2 Avicenna’s exegesis of *Cat.* 7

In *Maqūlāt* IV.3-5, Avicenna offers a complex synthesis of *Cat.* 7 that shows an effort to systematize Aristotle’s various accounts of relatives (most notably by harmonizing the account of the *Categories* with the account of the *Metaphysics*), but also to integrate Aristotle’s descriptions with Fārābī’s linguistic-grammatical analysis of relations.

Avicenna’s understanding of Aristotle’s two definitions is certainly influenced by Ishāq ibn Ḥunayn’s Arabic translation, where definition **AR1** reads as follows:

It is said of things that they are relative when their quiddities are spoken of with respect to something else, or [are spoken of] according to a certain other way of connection with something else, whatever it is.

[*yuqālu fī l-ašyā’i innahā min al-muḍāfi matā kānat māhiyyātuhā innamā tuqālu bi-l-qiyāsi ilā ḡayrihā aw ‘alā naḥwin āḡara min anḡa’i l-nisbati ilā ḡayrihā ayyi naḥwin kāna.*]<sup>356</sup>

This translation is slightly unfaithful and over-interpretative: as a matter of fact, in rendering the expression αὐτὰ ἄπὲρ ἕστῃν Ishāq introduces the non-neutral term *māhiyya* (“essence” or “quiddity”), which is certainly absent from Aristotle’s definition and makes **AR1** already resemble the “rectified” version of the definition (**AR2**). **AR2** itself, instead, is more faithfully translated by Ishāq as follows:

And if [this] is not sufficient, but the existence of relatives consists of their being relative in some manner, then it is possible to say something that cancels that [doubt].

[*wa-in lam yakun ‘alā l-kifāyati lākin kānat al-ašyā’u llatī min al-muḍāfi l-wuḡūdu lahā huwa annahā muḍāfatun ‘alā naḥwin min al-anḡa’i fa-la ‘allahū yutahayya’u an yuqāla šay’un fī fashḡ dālika*]<sup>357</sup>

An obvious interpretation of the difference between these two formulations of **AR1** and **AR2** would be that according to **AR1** relatives are relative in respect of their essence, whereas according to **AR2** they are relative in respect of their existence. As I shall argue Avicenna does not adopt this easier interpretation, but he takes definition **AR2** to refer to quiddities as well: as a matter of fact, “existence” is to be understood in the sense of “proper existence” (*wuḡūd ḡaṣṣ*), which in the *Ilāhiyyāt* is said to be a synonym for “essence”<sup>358</sup>. If both definitions claim that relatives are such in respect of their quiddities, we might wonder where the difference between them would lie. Well, according to Avicenna it does not lie in the fact that according to **AR1** the quiddity is “spoken of” as relative, whereas in the case of **AR2** it simply is; it lies in the fact that the **AR1** is wider, for it also comprises – according to a strong interpretation of Aristotle’s disjunction – things spoken of “according to another sort of connection with something else”.

As a matter of fact, in the beginning of *Maqūlāt* IV.3 Avicenna mentions Aristotle’s definition **AR1** and presents a distinction between relatives understood “absolutely” (*‘alā l-iḡlāqi*) and relatives said “according to another sort of connection” (*bi-naḥwin āḡara min*

<sup>356</sup> *Maṡṡiq Aristū* 48.7-8.

<sup>357</sup> *Maṡṡiq Aristū* 53.14-16.

<sup>358</sup> *Ilāhiyyāt* I.5, 61.5-7.

*anḥā' i l-nisbati*). Now Avicenna claims that relatives “absolutely” (**R<sub>a</sub>**) are those things whose names perfectly express their being relative (e.g. “brother”), whereas relatives according to another sort of connection are those that become relative only in so far as they are accidentally accompanied by a certain connection (**R<sub>b</sub>**). In other words, relatives **R<sub>a</sub>** are relative essentially and in themselves, whereas relatives **R<sub>b</sub>** are relative accidentally – because they happen to be accompanied by a certain property. The ontological difference between **R<sub>a</sub>** and **R<sub>b</sub>** is mirrored by a difference of expression: whereas “absolute” relatives are expressed by means of the Arabic *status constructus* (which by the way is called *idāfa*)<sup>359</sup>, improper relatives are introduced by particles and prepositions such as *li-*, *bi-* and so forth, as the following examples show:

<b>R<sub>a</sub></b>	<i>al-aḥu aḥū l-aḥi</i> ↔ <i>al-aḥu aḥū l-aḥi</i>	The brother is brother of the brother ↔ the brother is brother of the brother.
<b>R<sub>b</sub></b>	<i>al-‘ilmu ‘ilmun li-l-‘ālimi</i> ↔ <i>al-‘ālimu ‘ālimun li-l-‘ilmi</i> .	Knowledge is knowledge of him who knows ↔ He who knows is he who knows knowledge <sup>360</sup> .

In the follow-up, Avicenna presents a set of conditions that are common to both relatives **R<sub>a</sub>** and **R<sub>b</sub>**, and conditions that are specific of **R<sub>a</sub>** only<sup>361</sup>:

<b>R<sub>a</sub></b>	<b>R<sub>b</sub></b>
<b>C<sub>1</sub></b> : The conceptualization ( <i>taṣawwur</i> ) of X requires the conceptualization of Y.	<b>C<sub>1</sub></b> : The conceptualization ( <i>taṣawwur</i> ) of X requires the conceptualization of Y.
<b>C<sub>2</sub></b> : X has a certain intelligible meaning that is dependent on the existence of Y.	<b>C<sub>2</sub></b> : X has a certain intelligible meaning that is dependent on the existence of Y.
<b>C<sub>3</sub></b> : The relation holds both between X and Y and between Y and X ( <b>Convertibility/Repetition</b> )	
<b>C<sub>4</sub></b> : X is essentially X because of the existence of Y	

This distinction quite clearly mirrors the Aristotelian distinction between **AR3** and **AR4**, as is made clear by the fact that relatives **R<sub>b</sub>** do not share in the property of repetition, like Aristotle’s **AR4**. Thus, Avicenna seemingly tries to incorporate the analysis of relatives of the *Metaphysics* into the discussion of the *Categories*; in doing so, he also recurs – very likely – to Fārābī’s analysis of relation, by which he is evidently influenced in characterizing the distinction between relatives **R<sub>a</sub>** and relatives **R<sub>b</sub>**.

With regard to the difference between these two, Avicenna also presents a distinction between *nisba* (“connection”) and *idāfa* (“categorical” relation) that amounts to a sort of genus-species relation: all relations are connections but not all connections are relations. Although every concrete being has a sort of connection with the abstract notion of it that is present to our mind (i.e. knowledge has a connection with a certain object of knowledge),

<sup>359</sup> See below, IV.3 [§3] and the COMMENTARY *ad loc.*

<sup>360</sup> The example with knowledge is made by Avicenna himself at IV.3 [§3], pp. 144.18 – 145.4.

<sup>361</sup> See below, IV.3 [§4-5] and the COMMENTARY *ad loc.*

this connection is not a relation, for some supplementary conditions are necessary for a connection to become a relation<sup>362</sup>.

In Fārābī's *Kitāb al-Hurūf*, and – we may suppose – also in the lost *Šarḥ al-maqūlāt*, a distinction between *nisba* and *iḍāfa* is also proposed, most notably as he explains the difference between the first and the second definition of *Cat.* 7, but he qualifies it in linguistic terms. In the following text, he argues :

(43) A necessary condition for relatives is that each one of them is taken as expressed by a name, which expresses it in so far as it has that sort of relation. For this reason Aristotle said: “relatives are those two things whose existence consists of their being relative, according to some sort of relation”. Therefore, when we find something connected to something else by means of a connecting particle, or [two things] whose morphology, or the morphology of each one of which is a relative form in [another] language; then it does not behove to call them “relatives”, in such a way that their two names express them inasmuch as they have that species of relation. <If on the contrary their two names express them inasmuch as they do have that species of relation><sup>363</sup>, then it behoves to call them relatives.

(44) As for common people, rhetoricians and poets, they are indulgent with regard to the expression and approve it; therefore, they posit any two things of which one is said with respect to the other as relatives, regardless whether they exist with names that express them insofar as they have that species of relation; or they exist with names that express their essence; or one of them is taken along with its name, which expresses it insofar as it has the relation that both things have, whereas the other is taken along with its name, which expresses its essence. For this reason the relative is described a first time, since according to a first consideration its description was this one; hence, Aristotle described it – in the opening of the chapter on the relative, in the *Categories* – by saying: “It is said of things that they are relative when their quiddities are said with respect to something else, or [are spoken of] according to a certain other way of connection with something else, whatever it is”. He meant by “their quiddities” what the utterances [of relatives] express, “whatever it is” in general: [namely,] regardless whether those [utterances] express [relatives] in so far as they are the species of relation that they have, or what is expressed by their utterances is their essences<sup>364</sup>.

Avicenna is very likely indebted to Fārābī for this distinction, which we have seen at work above in the analysis of **R<sub>a</sub>** and **R<sub>b</sub>** relatives. However, Fārābī seems to go so far as to de-ontologize the discussion of relatives, by interpreting Aristotle's mention of “existence” (*wuḡūd*) and “quiddities” (*māhiyyāt*) as merely referring to different interpretations of what utterances express.

In the beginning of *Maqūlāt* IV.5 Avicenna tackles Aristotle's doubt about secondary substances and goes on to correct Aristotle's first definition, which comprises – according to the ‘strongly disjunctive’ interpretation – both relatives **R<sub>a</sub>** and **R<sub>b</sub>**. The example of the “universal” head is problematic inasmuch as it falls under relatives **R<sub>b</sub>**, i.e. relative attributes that – despite falling in other categories – are accompanied accidentally by the fact of having a relation. For this reason, Avicenna seems to understand Aristotle's definition **AR2** as a

---

<sup>362</sup> IV.3 [§5], 145.17 ff.

<sup>363</sup> Something is evidently missing here; I suppose an omission by *saut du même au même* after *al-iḍāfa* (line 87.12), and supply this sentence by conjecture.

<sup>364</sup> Fārābī *Hurūf* 87.7 – 88.1.

reformulation of **AR1** that maintains relatives **R<sub>a</sub>** and cuts off the second member of the disjunction, i.e. the description of relatives **R<sub>b</sub>**: in other words, **AR2** is a reformulation of the first part of **AR1**, being the description of “absolute” relatives. Thus, Avicenna adheres to the standard “extensional” interpretation of the difference between **AR1** and **AR2**. He also argues that the duplicity of meanings ascribed to the term “relative” (*muḍāf*), which may be applied to a more general meaning (**R<sub>a</sub>** + **R<sub>b</sub>**) and a more specific one (**R<sub>a</sub>** alone), resembles the duplicity of meanings of the term “possible” (*mumkin*), which may signify both the more general meaning of “non-impossible” and the more specific meaning of “non-necessary”<sup>365</sup>.

With regard to the second definition, Avicenna presents two further interesting puzzles – arguably made up by himself – that are centred around the notions of “thing” (*šay*) and “thingness” (*šay’iyya*). [1] Firstly, at *Maqūlāt* II.4 Avicenna has lengthily argued for the impossibility of positing separate categories for substance/accident compounds, such as “white thing”<sup>366</sup>; however, “relative” precisely denotes a “thing having relation” but not a relation in itself. [2] Secondly, it does not seem possible to distinguish clearly between **R<sub>a</sub>** and **R<sub>b</sub>** on account of the fact that **R<sub>b</sub>** are things accompanied by relation, whereas **R<sub>a</sub>** are not; the reason for this objection is that relatives **R<sub>a</sub>** are also characterized by Aristotle as bearers of properties, but not as properties in themselves<sup>367</sup>. In response to these doubts Avicenna clarifies that **R<sub>a</sub>** and **R<sub>b</sub>** do not differ in so far as **R<sub>b</sub>** is a “thing” and **R<sub>a</sub>** is not; it is so since they are both “things”, and they both have a “thingness”. However, they differ inasmuch as they have thingnesses that are characterized by different proper existences (i.e. essences)<sup>368</sup>: that of relatives **R<sub>a</sub>** is characterized by the fact of existing in relation to something else, whereas that of relatives **R<sub>b</sub>** is a certain non-relative proper existence (e.g. the proper existence of quality, quantity, etc.) which is accompanied accidentally by the fact of being relative.

In the last section of IV.5 Avicenna turns to Aristotle’s principle of cognitive symmetry, to which he devotes some of the most obscure pages of his *Maqūlāt*. The aim of the whole discussion is certainly to explain in further detail the distinction between proper and improper relatives, on the basis of the principle according to which the determinate knowledge of a ‘proper’ relative necessarily entails the determinate knowledge of its *correlatum*.

Avicenna approaches this issue by explaining firstly what is meant by “determinate knowledge” (*tahṣīl*) of relatives, a notion that he interprets as being closely related to that of specification. Given that relatives are entities that always exist as attached to something else, they may mostly be specified in two ways: either by specifying to what kind of being they are attached (e.g. a substance, a quantity, a quality, etc.) or by specifying something about how the relation is in itself. Now, as a consequence of this distinction there are mainly two manners of knowing relatives determinately: either by knowing determinately their subjects, or by knowing determinately the relatives in themselves. If a relative is known determinately with regard to its subject, this does not require its correlative to be immediately known in a determinate way: for example, even if Zayd’s head is accompanied by the relation “being-

<sup>365</sup> Cf. *Ilāhiyyāt* I.5, 35.2 – 36.3; See below, IV.5 [§3.2-3].

<sup>366</sup> Cf. *Maqūlāt* II.4 [§8] (78.6 - 81.16).

<sup>367</sup> As a matter of fact, also in definition **AR2** it is question of “things” (*ašyā*). Cf. IV.5 [§5.1].159.12-18.

<sup>368</sup> As Avicenna claims in the *Ilāhiyyāt*, the essence of something may also be named its “proper existence” (*al-wuḡūd al-ḥāṣṣ*):

head” it is known determinately as a substance, and this does not entail that we come to know Zayd’s body as the “headed” thing that is the correlative of Zayd’s head.

A result of this interpretation of Aristotle’s two definitions is that, when defining relatives elsewhere in the *corpus*, Avicenna employs quite indifferently the first part of the first definition (“things whose quiddity is spoken of with respect to something else”) and the second definition (“things whose existence consists of their being relative”, “things which have no existence other than their being relative”)<sup>369</sup>.

To sum up, the discussion of relatives found in the *Maqūlāt* mainly aims at offering a clear-cut distinction between proper and improper relatives, which is crucial to a scientific understanding of the category and – more in general – to an appropriate distinction between the essences of the ten categories. It is no question, instead, of the ontological status of relations, an issue that Avicenna will only take up expressly in *Ilāhiyyāt* III.10.

---

<sup>369</sup> “Having the quiddity spoken of with respect to something else” appears for instance in *Ilāhiyyāt* III.10, 157.4; the second definition, on the contrary, is found in *Nağāt* 154.16-17 and *Hidāya* 74.1-2. The definition found in the *Dānešnāme* (ACHENA-MASSÉ 1958, vol. 1, p. 109) can apparently be reduced to neither of the two models.

## 3.6 Quality

### 3.6.1 Defining and dividing quality

At *Cat.* 8, Aristotle regroups into his category of quality heterogeneous kinds of attributes under the rather vague description “that in virtue of which people are said to be qualified somehow” (καθ’ ἕν ποιοί τινες λέγονται)<sup>370</sup>. Such a linguistic-empirical description provides the genus at least with nominal unity (as suggested by Bodéüs<sup>371</sup>), but proves rather unsatisfactory in logical and ontological terms: it remains unclear, in fact, whether or not there is an essential feature common to disparate attributes like virtue, health, the natural capacity of boxing and the shape of a body, and what this common character is.

The issue is taken up by some of Aristotle’s ancient critics, most notably by Plotinus in the first treatise *On the Kinds of Being*. Plotinus challenges the essential unity of the genus “quality” by arguing that however the notion common to all species is understood, there is no way to unite it on safe ontological grounds. In VI.1 10, he tests Aristotle’s category of quality by trying to apply to all of its species the notions of “power” (δύναμις), “rational forming principle” (λόγος), “being disposed in a certain way” (διακεῖσθαι πως) and “non-substantial character” (χαρακτήρ [...] οὐκ οὐσιώδης): none of these tests seems to work, since Aristotle’s species of quality by no means display the sort of intrinsic unity that is required for a real genus of being<sup>372</sup>.

Later Platonic commentators (from Porphyry onwards) accept Aristotle’s generic description of quality: since it defines something unfamiliar (quality) by means of something familiar (qualified things), it is well appropriate for the introductory context of the *Categories*. As for the ontological interpretation, Simplicius opposes Aristotle’s “admirable doctrine” (δόξαν [...] θαυμασίαν) to the Stoics’ doctrine of corporeal qualities, in that Aristotle would hold explicitly that (a) qualities are incorporeal, (b) that they are λόγοι that “give form to the qualified” (εἰδοποιούντας τὰ ποιὰ) and exist with matter, despite having “autonomous subsistence” (καθ’ ἑαυτοῦς ὑπόστασιν)<sup>373</sup>. In other words, Aristotle’s qualities are the forming principles that derive from the separate forms of qualities, which are participated in by sensible things<sup>374</sup>. As for the intrinsic distinctive mark of qualities, Simplicius attempts like Plotinus to reconduct Aristotle’s four species to the notion of δύναμις (“power” or “capacity”), which however is in itself equivocal and difficult to apply to all sorts of quality: nonetheless, Simplicius seems to argue that such an operation is possible, and lengthily argues for it<sup>375</sup>.

---

<sup>370</sup> Arist. *Cat.* 8 b25-26. I modify Ackrill’s translation (ACKRILL 1963, p. 24), which seems to understand τινες as “things” rather than “people” (cf. also BODÉÜS 2001, p. 39: “ce en vertu de quoi les gens sont expressément qualifiés d’une certaine manière”).

<sup>371</sup> BODÉÜS 2001, p. 39 n2.

<sup>372</sup> Plot. *Enn.* VI.1 [42], 10.

<sup>373</sup> Simpl. *In Cat.* 218.5-11.

<sup>374</sup> Simpl. *In Cat.* 218.22 – 219.35.

<sup>375</sup> Simpl. *In Cat.* 223.12 – 228.2.



As far as we know, Avicenna's immediate predecessors and contemporaries seem not to express a coherent, systematic view about what qualities are. Al-Fārābī and Ibn al-Ṭayyib both insist on the fact that in the beginning of *Cat.* 8 Aristotle defines quality in such a way as to distinguish between substantial qualities (i.e. differentiae) and accidental qualities: that would explain why Aristotle refers qualities to “individuals”, (*al-aṣḥāṣ*), which is how Ishāq translates into Arabic the τινεὶς of the Aristotelian definition<sup>376</sup>. In particular, in the Epitome of the *Categories* Fārābī argues that accidental qualities are “dispositions” (*hay'āt*) that qualify individuals, whereas differentiae are dispositions that qualify the species; a similar argument is found in Ibn al-Ṭayyib's *Tafsīr al-maqūlāt*<sup>377</sup>. Whereas Fārābī refers to qualities and differentiae by means of the generic term *hay'a*, Ibn al-Ṭayyib argues that quality comprises two main species, form (*al-ṣūra*) and the potentiality of form (*al-quwwa 'alā l-ṣūra*): in other words, he understands qualities as non-substantial forms that exist either in potency or in act<sup>378</sup>. He then gives a further clue about his understanding of the ontological status of qualities, when he argues that substance, quantity and quality are intellected in things themselves, but all other categories are “relations that the intellect produces in between the thing and external reality” (*nisabun yaf' aluhā l-'aqlu bayna l-ṣay'i wa-mā ḥāriḡun*)<sup>379</sup>.

Given Avicenna's understanding of the substance/accident distinction, he obviously cannot be satisfied with his predecessors' distinctions between substantial and accidental qualities. As we have seen above, there exist absolutely no such things as “substantial” qualities, and every being is such as to share either in the description of substance or in the description of accident<sup>380</sup>. Both in his division of the categories (*Maqūlāt* II.5) and his introduction to the discussion of quality (V.1) Avicenna certainly tries to define the essence of quality more rigorously, but his descriptions positively establish only the manner of existence proper to it, whereas the actual essential content is always defined by negation.

At *Maqūlāt* II.5 Avicenna divides accidents into two main groups: accidents whose conceptualization needs some extrinsic thing to be conceptualized as well, and accidents that are not such. Within the second group, which I have labelled below “non-relational accidents”, Avicenna lists three categories: quantity, quality and position. Although all three categories share in this character, there is a further inner differentiation among them: whereas two of them (quantity and position) present some degree of intrinsic relationality, quality is the only one that is purely, exclusively conceptualized in itself. I quote the whole passage where Avicenna defines quality by contrast with quantity:

As to the case where the conceptualization of that [accident] does not need a relation to occur in them, [(ba)] either [the accident] is a reality that, in itself, makes substance such that it is possible, in this respect, to number it by a “one” supposed in it, either continuously or discretely, and this is quantity; [(bb)] or it is not so, and [the accident] is a disposition (*hay'a*) realized in the body, whose

<sup>376</sup> Cf. *Mantiq Aristū* 55.2: “I call quality that because of which it is said, of individuals, how they are” (*wa-usammī bi-l-kayfiyyati tilka llatī lahā yuqālu fī l-aṣḥāṣi kayfa hiya*). Another reference for this distinction is certainly Aristotle's discussion of quality at *Metaph.* Δ 14, which I have also recalled above (3.2.1).

<sup>377</sup> Fārābī *Qāṭāḡūryās* 176.8-11 (DUNLOP 1958); Ibn al-Ṭayyib *Tafsīr al-maqūlāt* 302.30 – 303.15.

<sup>378</sup> Ibn al-Ṭayyib *Tafsīr al-maqūlāt* 303.17-22.

<sup>379</sup> Ibn al-Ṭayyib *Tafsīr al-maqūlāt* 301.27-29.

<sup>380</sup> See the discussion above, par. 3.2.

conceptualization does not absolutely need a relation with something to be posited for the body, in potency or in act, in order for it to be possibly conceptualized; and this is called quality<sup>381</sup>.

In this passage, Avicenna does not provide qualities with a positive essential determination, but only as a *hay'a* that does not make the subject measurable and is conceptualized absolutely in itself. Thus, besides the fact of not having relational existence quality is characterized by not having the same essential character as quantity. In the division of categories found in the *Dānešnāme* Avicenna presents exactly the same definition<sup>382</sup>.

In *Maqūlāt* V.1, Avicenna begins his introduction to quality by mentioning two current descriptions of the category. The first one is Aristotle's first definition, as understood by Ishāq ibn Ḥunayn: quality is that in virtue of which it is said of individuals how they are, i.e. what is said in reply to the question: "how is the individual X (e.g. Zayd)?" The second definition is based on the only property that Aristotle actually holds to be "proper" or "distinctive" (ἴδιον) of quality, i.e. its being an attribute by virtue of which things are called 'similar' or 'dissimilar'<sup>383</sup>. Now, Avicenna dismisses both definitions on account of the fact that they are based on the conventions of ordinary language and equivocal. In Persian and Arabic, he argues, it is possible to answer the question "how?" (*kayfa*) by mentioning attributes that belong to categories other than quality, for instance acting, being-affected, where and position; the same can be said for "similar" and "dissimilar"<sup>384</sup>.

Against these improper characterizations Avicenna proposes the following definition, which is identical with the one found in chapter II.5:

Let us establish now that "quality" is every disposition stable in the thing described by it (*kullu hay'atin qārratin fī l-mawṣūfi bihā*), which does not require or necessitate it to be measurable, whose conceptualization may occur without the need to consider any relation subsisting with something other than that disposition<sup>385</sup>.

This characterization of quality as absolutely non-relational obliges Avicenna to insist on the qualitative nature of those beings whose ontological status is ambiguous: most notably knowledge, which Aristotle classifies as a quality but also as a relative, and which he apparently allows to fall in both categories<sup>386</sup>. As Avicenna is committed to avoiding not only category mistakes, but also situations of categorial overlapping, in *Maqūlāt* VI.4 he argues for the fact that knowledge in itself is a quality, which is accidentally accompanied

---

<sup>381</sup> II.5 [§4.2.2], 84.18 – 85.3.

<sup>382</sup> *Dānešnāme – Elāhiyāt* 28.13-15 (Tr. ACHENA-MASSÉ 1955, pp. 108-109): "ce qui n'est pas de même, mais au contraire est un caractère dans la substance dont la conception ne met pas dans le besoin de considérer quelque chose extérieure [à la substance] – [caractère] par la cause duquel il ne survient point de divisibilité dans la substance – ce qu'on nomme *qualité* (en arabe *kayfiyya*)".

<sup>383</sup> Cf. below, V.1 [§1]; Arist. *Cat.* 11 a15-19.

<sup>384</sup> Cf. below, V.1 [§2.1]; [§3.1].

<sup>385</sup> V.1 [§5.1], 171.17-19.

<sup>386</sup> Cf. Arist. *Cat.* 6 b2-6, for his mention of knowledge among relatives; 8 b29-32, for his mention of it among qualities; 11 a24-38, for his discussion of the ambiguous status of knowledge in between the categories of quality and relatives.

by the fact of being related to something else<sup>387</sup>; and in the chapters on relatives he classifies knowledge among improper, non-essential relatives<sup>388</sup>.

At *Maqūlāt* V.1 Avicenna proposes three tentative divisions of quality; none of them works perfectly well, but Avicenna seems not particularly interested in dividing the category rigorously (as is known, he proves equally hesitant as regards in general the division of accidental categories)<sup>389</sup>. He rather focuses on two “commonly accepted” divisions: the first one literally corresponds to a division presented by Simplicius in his commentary on the *Categories*, the second one seems to retrace and rework the tentative division of qualities presented by Plotinus in the treatises *On the Kinds of Being* and expounded again by Simplicius<sup>390</sup>. Avicenna then devotes an entire chapter (V.2) to refuting these two alternative divisions, because they contain a number of mistakes that can prove dangerously misleading for students: one of these is Simplicius’ claim that “natural” qualities (contrasted to “acquired” ones) are divided into qualities in potency and qualities in act, a claim that is also echoed by Ibn al-Ṭayyib’s aforementioned division of qualities into “potencies of forms” and “forms”.

### 3.6.2 Active capacities

Besides the aspects of detail, one of Avicenna’s most striking innovations with regard to Aristotle’s classification of qualities is the exclusion of active capacities from the second species of the category: δύναμις and ἀδυναμία (*quwwa* / *lā-quwwa* in Arabic). As is known, Aristotle expressly includes three kinds of attributes into this species:

- [1] “A natural capacity for doing something easily” (δύναμιν [...] φυσικὴν τοῦ ποιῆσαι τι ῥαδίως), famously exemplified by that natural predisposition in virtue of which we are called “boxers or runners” (πυκτικοὶ ἢ δρομικοὶ);
- [2] A natural capacity for “not being affected by anything” (μηδὲν πάσχειν), exemplified by healthiness (an aptitude for not being affected easily by illnesses) and hardness (an aptitude for not being divided easily);
- [3] A “incapacity to be unaffected” (ἀδυναμίαν [...] τοῦ μηδὲν πάσχειν), exemplified by sickness (an aptitude for being easily affected by illnesses) and softness (an aptitude for being divided easily)<sup>391</sup>.

As it stands in Aristotle’s text, this species of quality raises many doubts and problems, many of which have been recalled by J.L. Ackrill in his commentary to this section: Aristotle gives no general account of capacities, he seems not to distinguish between easiness in being affected and the simple aptitude for being affected, and so forth<sup>392</sup>. The example concerning the capacity for boxing is particularly odd: Aristotle argues that a boxer

---

<sup>387</sup> See VI.4 [§2].

<sup>388</sup> Cf. above, 3.5.2; below, IV.3 [§6].

<sup>389</sup> See below, II.5 [§4.4], 86.13-17; KALBARCZYK 2018, pp. 163-164.

<sup>390</sup> Cf. below, V.1 [§7] and the COMMENTARY *ad loc.*

<sup>391</sup> Arist. *Cat.* 9 a14-27.

<sup>392</sup> Cf. ACKRILL 1963, p. 105 (“Aristotle’s mapping of this territory [i.e. capacities and abilities] is not very thorough”).

who has the capacity of boxing easily is other than the boxer who has the “disposition” (διακείσθαι) of boxing; i.e. the quality of a man having a natural aptitude for boxing is other than the quality of a man who knows how to box, but he does not clarify why<sup>393</sup>.

At *Maqūlāt* V.2, Avicenna firstly defines the species of natural *quwwa* and *lā-quwwa* in the following terms:

As for the other genus, among the genera of qualities that are the common species of quality, it must be conceptualized as a perfect corporeal aptitude [oriented] somehow towards an external thing (neither as the potency that is found in matter, nor as the potency of being-possible). For every man is in potency healthy or sick, but he is perfected by an aptitude; so that this potency (which has the sense of natural possibility) becomes fulfilled according to one of the two extremes of the contradiction<sup>394</sup> [...].

In other words, every man is naturally capable of acting and being acted upon on/by something else (the “external thing”, *amrun ḥārīḡun*, alluded to here), but he also has a “perfect corporeal aptitude” (*isti’dād ḡismānī kāmil*) that makes him more or less susceptible of acting/being acted upon by it. This aptitude, which is a character of the body, is the “capacity” that Aristotle classifies in the second species of the category of quality, and it differs from both the “potency that is found in matter” (*al-quwwatu llatī fī l-māddati*) and the “potency of being-possible” (*quwwatu l-ḡawāzi*). These are two of the various senses of “potency” (*quwwa*) that Avicenna identifies in *Ilāhiyyāt* IV.2, on the basis of Aristotle’s analysis of δύναμις in *Metaphysics* Θ: potency as possibility of existence (which is proper of matter), potency as possibility (*imkān*) of acting and non-acting<sup>395</sup>. However, although the capacities understood in the sense of the *Categories* are distinct from the two mentioned senses of potency, they are closely related with the second sense: they are characters of the body that help accomplish perfectly one of the two outcomes of the possibility of acting/non-acting, being affected/not being affected.

In the follow-up, Avicenna presents a general doubt concerning the species of capacity and incapacity: according to Aristotle it comprises the capacity of acting, of being acted upon and of not being acted upon, and for this reason it seems to be homonymous. He then turns to discussing the doubtful example of boxing, whose ambiguous nature displays once again the more general doubt: does it belong in this species because it is an aptitude for hitting well the adversary, or because it is a good aptitude for being hit by him? If it is a passive aptitude, then the doubt is solved: the species only comprises aptitudes that help accomplish perfectly “passive” capacities; if it is active, the general doubt remains<sup>396</sup>.

In order to solve the doubt, Avicenna firstly distinguishes the capacity of wrestling from the substantial principle of motion that depends on the soul:

<sup>393</sup> Arist. *Cat.* 9 a19-21; Plot. *Enn.* VI.1 [42], 11.13 ff.; ACKRILL 1963, pp. 105-106.

<sup>394</sup> V.3 [§2.1], 183.12-15.

<sup>395</sup> Cf. Arist. *Metaph.* Θ 1-2; Θ 6-7, 1048 a25 – 1049 b3. *Ilāhiyyāt* IV.2, 171.13-16; 182.16-17 (tr. MARMURA 2005, p. 140): “We call the possibility of existence the potency of existence. And we term the bearer of the potentiality of existence, which has the potentiality of a thing’s existence, subject, prime matter, matter and other [names] according to various ways of considering [things]” (*wa-naḥnu nusammī imkāna l-wuḡūdi quwwata l-wuḡūdi; wa-nusammī ḥāmila quwwati l-wuḡūdi llatī fīhi quwwatu wuḡūdi l-ṣay’i mawḏū’an wa-ḥāyūlā wa-māddatan wa-ḡayra dālika bi-ḥasabi ‘tibārāti muḥtalifatin*).

<sup>396</sup> V.3 [§2.2-3].

We do not mean here by “capacity of wrestling” the first moving potency of the soul, which is a substance and does not admit of the more and less; but we mean this [capacity] as a perfection of that potency, in the respect of the suitability of the limbs. Its relation to the [primary potency] is the [same] relation held by the strength of acumen and comprehension (*šaddatu l-dakā’i wa-l-fahmi*) with the rational soul<sup>397</sup>.

At the end of *Burhān* III.9 Avicenna defines “acumen” (*al-dakā’*) and “comprehension” (*al-fahm*) as different aspects of the good functioning of mind (*al-dihn*), a potency of the soul that is apt for acquiring the terms of syllogisms (*al-ḥudūd*) and “ideas” (*arā’*), which in turn is a macro-category that comprises both science (*ilm*) and opinion (*ẓann*)<sup>398</sup>. The aptitude for boxing is thus a sort of extrinsic strengthening of the moving potency of the soul, which does not participate in its substancehood<sup>399</sup>.

Then, Avicenna further specifies this characterization, by presenting the art of boxing as a complex attribute that depends on three factors: the “moving faculty” (*al-quwwatu l-muḥarrikatu*) of the soul, the “apprehending faculty” (*al-quwwatu l-dirākatu*) of the soul, and body. The two potencies in question are nothing but the two faculties of the animal soul (*nafs ḥayawāniyya*) that Avicenna distinguishes at *Nafs* I.5, which he also discusses more accurately in *Nafs* IV.4<sup>400</sup>. Now, boxing depends firstly on the apprehending soul, inasmuch as it is a certain knowledge of the art of boxing, a sort of purely practical knowledge of acts related with motion (which resembles, Avicenna argues, the art of writing and architecture); secondly, it depends on the motive faculty of the soul inasmuch as it is a certain capacity (*malaka*) of moving the body and muscles, in such a way as to attain the goal of the art (known by means of the apprehending faculty)<sup>401</sup>; thirdly, it depends on the body inasmuch as the parts of the body are more or less susceptible of being moved by the motive faculty. Since Avicenna has rigorously defined states and habits as qualities of the soul, the qualities that belong to the motive and apprehending soul belong to the first species of quality; the quality belonging to the body is the “capacity” which constitutes the second species<sup>402</sup>. Since however this capacity is a passive aptitude, it is clear that boxing belongs to the second species of quality not inasmuch as it is active, but only inasmuch as it is passive.

A whole chapter of the fifth treatise (*Maqūlāt* V.4) is devoted to the problematic aspects of the second species of quality: there, Avicenna lengthily argues – again – for ruling active capacities out of this species. The active aspects of exclusively human capacities (i.e. boxing) or animal capacities (running, etc.) either derive from the substantial activity of the soul (human or animal), or are associated with qualities of the soul; thus they belong to the

<sup>397</sup> V.3 [§2.4], 184.11-13.

<sup>398</sup> *Burhān* III.9, 259.14-18 (corresponding to Arist. *An. Post.* 89 b7-20). In particular, *dakā’* is understood as the quick functioning of “intuition” (*ḥads*), which in turn is the capacity that the mind has of finding the middle term in demonstrations. For a detailed discussion of *ḥads*, *fahm*, *dakā’* and the related notions, as well as English translations of all the relevant Avicennan texts, see GUTAS 2001 (the *Burhān*-text is translated at pp. 4-5); GUTAS 2014, pp. 179-201.

<sup>399</sup> On the substantiality of the soul, see Arist. *De an.* B 1, 412 a19 ff.; *Nafs* I.3.

<sup>400</sup> *Nafs* I.5, 33.9 ff; IV.4, 172.3 ff.

<sup>401</sup> At *Nafs* I.5, 33.9-10. Avicenna distinguishes between the motive faculty that motivates motion and the motive faculty that enacts, or produces motion; the sort of motive faculty that is at stake here is clearly the second one.

<sup>402</sup> For Avicenna’s analysis of the art of boxing see below, V.3 [§2.4].

first species of quality. As for those active qualities of inanimate beings that may be associated with this species, for instance hotness, they actually belong to the third species of quality (e.g. affective qualities and affections).

It is not easy to explain Avicenna's emphasis on this fact, and his evident difficulties in understanding Aristotle's second species of quality: his concern might be a matter of categorial coherence, depending on the fact that acting and being-affected are classified by Aristotle himself as separate categories, and for the same reason active and passive potencies cannot be included into the same species<sup>403</sup>.

Although Avicenna's analysis of active and passive capacities does not stand out as a major philosophical contribution, it highlights very clearly the subtlety and the effort towards a coherent systematization that characterize his exegesis of the *Categories*.

### 3.6.3 Categorial complexes: figures, angles, external forms

As the aforementioned example with the capacity of wrestling shows, there are beings that Avicenna conceives of as items consisting of several categorial determinations. One of the main non-Aristotelian contributions of Avicennan ontology in the *Maqūlāt* is certainly the analysis of categorial complexes, which becomes particularly interesting in Avicenna's treatment of the fourth species of quality ("quantitative" qualities, i.e. figures, external forms, and geometrical qualities such as straightness, crookedness, and so forth).

Aristotle's inclusion of "figure" (σχήμα) in the category of quality may seem quite surprising, given that figures and shapes are subject to the quantitative study of geometers<sup>404</sup>. It is less surprising that ancient exegetes questioned this attribution, and discussed the categorial status not only of figures, but also of another impalpable geometrical entity – i.e. the angle. For instance, in his commentary on the first book of Euclid's *Elements* Proclus offers a lengthy discussion of the ontological status of angles (and secondarily of figures)<sup>405</sup>. There, he mentions three ancient schools of thought: scholars who argued that angles are quantities (Plutarch, Apollonius, Carpus of Antioch), scholars who argued for them being qualities (Eudemus of Pergamus) and scholars who claimed that they belong to the category of relation (among them Euclid himself, who defined the angle as an inclination, κλίσις)<sup>406</sup>. Proclus rejects all the three theories singularly, before stating that the angle – like figure itself – is in fact a "combination" (συνδρομή) of categories: it has quantity inasmuch as it has a size, it is part of quality inasmuch as "it has [...] a special shape and character of existence" (μορφήν οἰκειᾶν ἔχει καὶ χαρακτηῖρα τῆς ὑπάρξεως), and it is relative in so far as the lines that enclose it are related to one another<sup>407</sup>.

The debate came down – directly or indirectly – to Arab commentators and philosophers, most notably to Avicenna, who tackled the issue extensively in an extant work called *Risāla fī l-zāwiya* (*Epistle on the Angle*; henceforth *Zāwiya*). This work dates, according to R. Rashed, from right before the composition of the *Šifā'* (more or less around

---

<sup>403</sup> Arist. *Cat.* 2 a3-4; cf. also Avicenna's definitions and exegesis at VI.6 [§3].

<sup>404</sup> Arist. *Cat.* 10 a11-16.

<sup>405</sup> Procl. *In Eucl. Elem.* 121.12 – 126.6 (summarized in R. RASHED 2015, pp. 16-18).

<sup>406</sup> Procl. *In Eucl. Elem.* 125.4 – 126.6. For Euclid's definition of the plane angle, see Eucl. *Elem.* I, def. 8.1.

<sup>407</sup> Procl. *In Eucl. Elem.* 124.2-7 (tr. MORROW 1970, p. 100). This position is attributed by Proclus to his "head" or "master", i.e. Syrianus (123.19-20).

411/1020)<sup>408</sup>: it contains an enumeration of doctrines about the categorial status of angles, a critical examination of them and a “truthful” clarification of the nature of the angle. Five accounts of the ontological status of the angle are discussed there by Avicenna: three of them (quantity, quality, relative) are also found in Proclus’s “traditional” account, whereas two of them are not mentioned by Proclus, and Avicenna expressly attributes them to Arabic forerunners. According to the first of these two doctrines, angles belong to the category of position: Avicenna ascribes this doctrine to Tābit ibn Qurra and an unspecified “group of ancient [scholars]” (*qawmun min al-awwalīna*), according to whom the angle consists ultimately in the position that the parts that constitute its boundaries have with regard to one another<sup>409</sup>. The other doctrine, attributed among others to Abū Ḥāmid al-Isfīzārī, consists of arguing that the angle is a quantity that is generated as an intermediate between two other species, either between line and surface (plane angle) or between surface and body (solid angle), which derives from an incomplete motion of the simpler extension (line in the case of plane angles, surface in the case of solid angles)<sup>410</sup>. Within this debate, Avicenna criticizes his predecessors’ account and argues for angles being complex natures that comprise a surface, two lines that enclose the surface according to a certain “configuration” (*hay’a*), the configuration itself and the whole constituted by the lines and the surface: three of these determinations (lines, surface, the whole) are quantitative, whereas one of them (the configuration) is qualitative<sup>411</sup>.

The *Zāwiya* turns out to be particularly helpful for understanding the sections of *Maqūlāt* VI.1-2 where Avicenna deals with the ontological status of figures and angles. At *Maqūlāt* VI.1, Avicenna defends Aristotle’s qualitative account of figure from the attacks of those who conceive it as a quantity and those who conceive it as belonging to the category of position.

Against quantitativists, who appeal to Euclid’s definition of figure as an extension enclosed by one or more boundaries, Avicenna states that the qualitative figure is actually a “configuration” (*hay’a*) that structures the extension by supervening upon it. In other words, a figure is a complex where several categorial determinations co-exist, which can be ultimately reduced to a qualitative structural principle<sup>412</sup>.

The argument against positionalists are similar to the ones presented in the second section of the *Zāwiya*, and this makes it very likely that Avicenna’s target is represented by the same philosophers who argued for the positional nature of the angle (Tābit ibn Qurra and his anonymous “ancient” predecessors)<sup>413</sup>. According to Avicenna, to refute the claim that figures and angles belong to position it is necessary to disambiguate the term *wad’*, which is said in many ways. At *Maqūlāt* VI.1, Avicenna says that it may be used to qualify either something’s being in its place, or the spatial proximity of one thing with respect to another

---

<sup>408</sup> R. RASHED 2015, pp. 149-150.

<sup>409</sup> *Zāwiya* 189.4-7.

<sup>410</sup> *Zāwiya* 189.8-17. For a detailed summary of the doxographic section of the *Zāwiya* see LUTHER 2004, pp. 118-121.

<sup>411</sup> *Zāwiya* 217.7-8; 217.12. For a summary of this second part see R. RASHED 2015, pp. 152-154.

<sup>412</sup> VI.1 [§5]

<sup>413</sup> VI.1 [§6.2-4]. As R. Rashed has remarked, this “topological” conception of angles (and figures) is consistent with Tābit’s method in geometry, for in infinitesimal geometry he made use of geometrical transformations, both affine and homothetic (cf. R. RASHED 2012, p. 8; see also R. RASHED 2009, p. 9).

(which is a relation), or the category, which designates a “configuration” (*hay’a*) resulting from the mutual relations of the parts of the body, not only with one another but also with respect to one or more external landmarks<sup>414</sup>. The configuration displayed by the parts of angles and figures is not a “categorical” position, but a quality (according to the account of the *Zāwiya*) or a relative attribute (according to the account of *Maqūlāt* VI.1)<sup>415</sup>.

In *Maqūlāt* VI.2, Avicenna presents a characterization of the angle that resembles the one found in the *Zāwiya*: the angle is described – by means of an analogy with figure – as a categorial complex that comprises an extension (i.e. a quantity), a configuration that structures the extension and its boundaries (i.e. a quality), and a sort of mutual relation among its boundaries and the extension (i.e. a position or a relation)<sup>416</sup>.

On the whole, Avicenna’s categorial description of angles seems reminiscent of Proclus’ συνδρομή, but there are some evident differences. First of all, Avicenna’s starting point is a definition of angles that does not rest on Euclid’s ambiguous notion of “inclination”<sup>417</sup>. Secondly, Avicenna also takes into consideration the category of position, in a sort of polemical interplay with his predecessor Tābit ibn Qurra. Thirdly, Avicenna seems to suggest the prevalence of one of these accidental determinations over the others: for example, the emphasis that in VI.1 he puts on the qualitative aspect of figures – their structure or “configuration” – seems to point implicitly to a predominance of that aspect.

Nonetheless, towards the end of chapter VI.2 Avicenna ultimately argues for the prevalent aspect being the quantitative one (at least in the case of figures, which nonetheless is reflected on angles). As a matter of fact, as he is trying to determine in a general way to what aspect a compound of two things is more inclined to belong to, he argues that in cases where one of the two things plays the role of the substrate (or the “described thing”, *mawṣūf*) and the other plays the role of the “attribute” (*ṣifa*), then the compound is more inclined to belong to the same category as the substrate. The example he makes is precisely that of the square, where the extension plays the role of the substrate and the qualitative configuration plays the role of the attribute: according to the general rule, in this case the compound is more inclined to belong to the category of the substrate (quantity) than the category of the attribute (quality)<sup>418</sup>.

---

<sup>414</sup> VI.1 [§6.2], 210.14 – 211.5; the classification of the senses of “position” found in *Zāwiya* 195.12 – 199.2 is slightly different, and more similar to the one found in *Maqūlāt* IV.1 [§2.1], 127.10-16 (for it also comprises the “position” employed by Aristotle as a differentia of quantity).

<sup>415</sup> Cf. *Zāwiya* 197.7-14; VI.1 [§6.3], 212.1-3.

<sup>416</sup> VI.2 [§1.1.2], 214.

<sup>417</sup> For Avicenna’s definitions of the angle see VI.2 [§1.2], 215.3-4; *Handasa* I, 17.3-4.

<sup>418</sup> VI.2 [§3], 217.8-11.



## 4. THE TRANSLATION: INTRODUCTORY REMARKS

### The Cairo Edition

The basis for my English translation is the only existing printed edition of the Arabic text: published in Cairo in 1959, it is authored by A.F. Ahwani, G.C. Anawati, M. Khudayri and S. Zayid and based on eleven manuscripts<sup>419</sup>. The text of this edition is unluckily defective in many respects. Notably, it presents the same problems highlighted by A. Bertolacci with respect to the Cairo edition of the *Ilāhiyyāt*: [a] the lack of a *stemma codicum*, as well as of an account of the ecdotic method employed by the editors; [b] an imperfect *apparatus criticus*, often omitting relevant readings or displaying wrongly recorded variants; [c] often unreliable choices in terms of vocalization and punctuation<sup>420</sup>. I add a further point to these, namely [d] a number of evident misreadings, typos or printing problems that affect the clarity of the text.

### The Collation

The huge amount of known manuscripts containing Avicenna's *Maqūlāt* (to this date, more than one hundred and fifty)<sup>421</sup>, the length of the text and the scarcity of time have dissuaded me from undertaking an actual critical edition of the treatise; I have chosen, instead, to emend the Cairo text on the basis of a systematic collation, using the edition itself as an exemplar and comparing it with a limited number of witnesses. The aim of the collation was not to establish a critically acceptable text in all respects, but to correct the Cairo edition in all those passages where it diverged from the totality or the great majority of the consulted manuscripts, and where the reading attested by the witnesses was very likely the correct one.

When confronted with passages that presented conspicuous variations in the tradition, I have mostly kept the reading chosen by the Cairo editors; only in cases that concerned minor issues, such as punctuation differences in names and verbs, I have made the choice of adopting and translating the reading that seemed to me the most correct, among those found in the manuscripts (e.g. أنية > أنية III.2, 104.16-17, 105.1-3; الكنز > الكير V.6, 197.6).

In a few cases only, I have been confronted with situations where the reading printed by Cairo, attested either in one manuscript only, or in no manuscript at all, was very likely the result of contamination between the main concurrent versions of the text. In such situations I decided to correct Cairo by choosing one among the versions I found in manuscripts; since I could not decide on the basis of a *stemma codicum*, I did exclusively on the basis of sense and philological sensibility. These “contaminated” readings are found for example at I.1, 4.2

---

<sup>419</sup> *Maqūlāt*.

<sup>420</sup> BERTOLACCI 2006, p. 484.

<sup>421</sup> A complete list has not yet been published. A provisional inventory compiled by the research team of the ERC project *PhiBor* (Tommaso Alpina, Alessia Astesiano, Amos Bertolacci, Gaia Celli, Silvia Di Vincenzo, Ivana Panzeca) numbers in total 205 manuscripts containing the Logic of the *Šifā'*, of which 154 certainly or probably comprise the *Maqūlāt* (all or in part).

(*wa-anna* > *id*); I.5, 41.7 (*fī* 'alā > *fī*); II.1, 61.12 (*li-dālika* > om.), and in a few other passages.

The results of this collation and emendation are regrouped into the table in the APPENDIX, which lists 333 plausible corrections. A real critical edition of Avicenna's *Maqūlāt* remains for the time being a *desideratum* (as for most of the *Šifā'*): I hope that this provisional collation will at least help readers and scholars understand better this difficult text in its uncontroversial sections, before this gap is filled in.

The manuscripts I collated are sixteen in total: I had access to digital reproductions of these witnesses thanks to the research conducted in Pisa within the ERC project *PhiBor*<sup>422</sup>. Ten of these sixteen manuscripts were already used in making the Cairo edition (in bold, the siglum adopted in my collation and in the notes to the translation; in round brackets, the corresponding Arabic siglum)<sup>423</sup>:

<b>A</b>	Istanbul, Süleymaniye Kütüphanesi, Asir Efendi 207 (680H/1281) (ع);
<b>B</b>	Cairo, Maktabat al-Azhar al-Šarīf, Beḥīt 44988, 331 falsafa (VII/XIII c.) (ب);
<b>D</b>	Istanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 822 (before 886H/1481) (سا) <sup>424</sup> ;
<b>Da</b>	Istanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 824 (824H/1421) (س);
<b>E</b>	Istanbul, Millet Kütüphanesi (now: Il Halk Kütüphanesi), Ali Emiri 1504 (26 Ša 'bān 674H/13 <sup>th</sup> February 1276) (ع);
<b>I</b>	London, British Museum (now: British Library, Oriental and India Office Collections), India Office Ar. 1420 (= India Office 4752 in Cairo ed. and Mahdavi's bibliography) (Kashmir, 1148H/1735-6, from an exemplar completed in 891H/1486-7) (•);
<b>J</b>	Istanbul, Süleymaniye Kütüphanesi, Yeni Cāmi 772 (628H/1231) (ج);
<b>M</b>	London, British Museum, Or. 7500 (XI-XVII c.) (م);
<b>N</b>	Istanbul, Nuruosmaniye Kütüphanesi 2708 (X-XVI sec.) (ن);
<b>R</b>	Cairo, Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā'iq al-Qawmiyya), 894 <i>falsafa</i> (X-XI/XVI-XVII c.) (ر).

Besides these, I compared six more codices that the Cairo editors did not take into account. The choice of these witnesses was not casual: they were suggested to me by S. Di Vincenzo, whom I thank, on the basis of her provisional stemmatic results for a critical edition of Avicenna's *Madḥal*. They are:

<b>A</b>	Istanbul, Süleymaniye Kütüphanesi, Ayasofya 2442 (671H/1273 in Marāġa - 674H/1276 in Ḥarbart) [with extensive lacunae in treatises III-IV] <sup>425</sup> ;
----------	---

<sup>422</sup> I thank Amos Bertolacci for his kindness in sharing with me these manuscripts.

<sup>423</sup> The only witness used in the edition that I was not able to consult is Cairo, Dār al-kutub al-miṣriyya 262 *ḥikma wa-falsafa* (1337H/1918) (ا). For the list and sigla of the manuscripts used by Cairo editors see *Maqūlāt, Introduction*, p. 27. In the following list, all information about libraries, dates and places of copy is taken from *PhiBor*'s provisional inventory.

<sup>424</sup> See BERTOLACCI 2018, pp. 300-303 for a transcription and translation of the explicit, the colophon and the collation note of this manuscript.

<b>Di</b>	Istanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 823 (697H/1297-8);
<b>G</b>	Leiden, Universiteitsbibliotheek, Or. 4, Golius Collection (before X/XVI c.);
<b>Mk</b>	Tehran, Kitābhānah-i Millī Malik 4276 (536H/1141-1142); [up to <i>Maqūlāt</i> III.4]
<b>Nk</b>	Istanbul, Nuruosmaniye Kütüphanesi 2710 (25 Rabī‘ al-Awwal-25 Şawwāl 666H/13 December 1267-8 July 1268; copyist: ‘Abd al-Kāfī Ibn ‘Abd al-Mağīd Ibn ‘Abd Allāh al-Tabrīzī);
<b>Y</b>	Istanbul, Süleymaniye Kütüphanesi, Yeni Cāmi 770 (18 Rabī‘ al-Ṭānī 888H/25 May 1483)

As for the indirect tradition, ‘Allāma al-Ḥillī’s commentary is often too paraphrastic to provide a reliable text for comparison; therefore, I did not use it systematically. Instead, I collated the Cairo edition with R. Rashed’s critical edition of Kamāl al-Dīn al-Fārisī’s *Risāla fī l-zāwiya*, a 13th-century text that contains an extensive, continuous quotation of a passage of *Maqūlāt* VI.2<sup>426</sup>. Rashed’s edition, already compared with the Cairo text, is based on two manuscripts of Fārisī’s work (mentioned in the philological notes of my translation):

<b>F1</b>	Ankara 3252 [A / ʾ]
<b>F2</b>	Tehran, Mağlis Şūrā 6584 [B / ب].

## The Translation

The translation is meant to be as faithful as possible to the original Arabic and easily readable in the same time: I have tried to be respectful of Avicenna’s terminological choices and of his technical vocabulary, but also to render into comprehensible English the most convoluted structures of his difficult prose. For this reason the rendering of technical terms is mostly consistent, and eventual deviations are explained in the notes to the text. For the technical terms common to Avicenna and Aristotle I have often adopted – when not incompatible with the corresponding Arabic terms – the renderings of J. Ackrill’s English version of Aristotle’s *Categories*<sup>427</sup>, to the aim of making Avicenna’s text more easily comparable with the reference-translation of the Greek original.

The translation is structured according to a rigorous *divisio textus*, which follows the development of Avicenna’s reasoning, and it is accompanied by an apparatus of notes. In the notes to the text I mainly provide four sorts of information: [a] synthetic explanations for difficult passages or unclear expressions, designed to help the reader understand better the text; [b] discussion of textual problems that emerge from the collation; [c] lexical observations, mostly related with free or interpretative translations; [d] proposed changes in

---

<sup>425</sup> A first lacuna ranges from III.3 (103.8) to III.4 (117.18); the text then goes on up to 121.8, and after another lacuna it restarts in the middle of ch. IV.2 [138.5]. Chapters IV.3 and IV.4 are missing integrally. On this manuscript, see CELLI 2018.

<sup>426</sup> R. RASHED 2015, in particular pp. 276-283.

<sup>427</sup> ACKRILL 1963.

the punctuation of the Cairo edition, only when they modify sensibly the understanding of the text. For the rest, in the translation I mostly follow the punctuation of the Cairo edition, and leave some minor changes undiscussed (e.g. substitution of commas or semicolons with dots, or vice versa).

### **Sigla used in philological notes**

a.c. = *ante correctionem*

add. = *addidit*

corr. = *correxit*

del. = *delevit*

fort. = *fortasse*

in mg. = *in margine*

om. = *omisit*

p.c. = *post correctionem*

transp. = *transposuit*

**APPENDIX**  
LIST OF CORRECTIONS<sup>428</sup>

<i>Locus</i>	<i>Legitur</i>	<i>Legendum</i>
I.1, 4.2	wa-anna	<b>id</b>
I.1, 6.12	‘ilma	<b>‘amma</b>
I.1, 8.2	iḥrāḡun	<b>iḥrāḡun</b>
I.1, 8.10	aw bayyannā	<b>am abaynā</b>
I.1, 8.13	sabīla	sabīla <b>lahū</b>
I.2, 9.11	wa-ḥadduhū	<b>waḡadahū</b>
I.2, 9.11	wāḥidun	<b>wāḥidan</b>
I.2, 12.13	min ḥurūfin	<b>‘an ḥurūfin</b>
I.2, 12.17	tunaffīru	<b>yunaffīru</b>
I.2, 13.5	min ḡihati mā	min <b>ḥaytu</b> mā
I.2, 14.8	bal yakūnu	<b>an yakūna</b>
I.2, 15.2	raḡulayni	raḡulayni <b>aswadayni</b>
I.2, 15.10	illā	<b>lā</b>
I.3, 19.14	min al-ḥāriḡ	min <b>ḥāriḡ</b>
I.3, 20.7	wa-an yaḥtāḡa	wa-an <b>lā</b> yaḥtāḡa
I.3, 21.13	al-i‘tibārāni mutabāyināni	al-i‘tibārāni <b>muḥtalifāni</b> mutabāyināni
I.3, 21.17	sūri l-ḡuz’iyyi	<b>al-sūri</b> l-ḡuz’iyyi
I.3, 23.2	bi-l-mawḡūdi	<b>bi-l-wuḡūdi</b>
I.3, 23.12	min ṭarīqi	<b>‘an</b> ṭarīqi
I.3, 24.7	aw tatabayyanu	aw <b>‘alā annahā</b> tatabayyanu
I.3, 26.13	wa-huwa ṣay’un	wa-huwa <b>annahū</b> ṣay’un
I.3, 27.14	maqūlatun <b>lahū</b>	maqūlatun
I.4, 29.18	min ḥaytu huwa	min ḥaytu <b>hiya</b>
I.4, 30.5	al-kulla fī	al-kulla <b>huwa</b> fī
I.4, 32.18	fīhi anna	fīhi <b>huwa</b> anna
I.4, 33.10	wuḡūdi l-qamari	wuḡūdi <b>ṭabi‘ati</b> l-qamari
I.4, 34.6	an yakūna	an <b>lā</b> yakūna
I.4, 35.2	bi-‘araḡin	<b>bi-l-‘araḡi</b>
I.4, 35.5	am mawḡū‘an	<b>aw</b> mawḡū‘an
I.4, 35.8	wa-l-‘araḡi	wa- <b>li-l-‘araḡi</b>
I.5, 38.9	مزاجات	<b>muzāwaḡāt</b>
I.5, 40.14	wa-l-nusammihū	<b>wa-l-yusamma</b>
I.5, 41.7	fī <b>‘alā</b>	fī

<sup>428</sup> Every correction is also reported and discussed, when necessary, in the notes to the corresponding passages of the Translation.

I.5, 43.13	‘alā šay’in	fī šay’in
I.6, 45.11	naba‘at	<b>nabağat</b>
I.6, 46.5	naḥw	‘alā naḥw
I.6, 47.6	laysat	<b>lastu</b>
II.1, 55.7	ḥāriğa	<b>ḥāriğan</b>
II.1, 55.9	ahammu	<b>a‘ammu</b>
II.1, 58.10	dalālata <sub>1</sub>	<b>lā dalālata</b>
II.1, 58.17	tastanidu	<b>tusnadu/tusnidu</b>
II.1, 59.2	iṭnatayni	<b>iṭnayni</b>
II.1, 60.17	wa-l-mawğūdu	wa-l-wuğūdu
II.1, 61.10	tuqawwamu	<b>tataqawwamu</b>
II.1, 61.12	li-ḍālika	<b>om.</b>
II.2, 63.5	bi-as’ilatin	<b>bi-amṭilatin</b>
II.2, 64.8	huwa	<b>om.</b>
II.2, 64.12	qālū	<b>wa-qālū</b>
II.2, 66.4	yūğadu	<b>yu’ḥadu</b>
II.3, 67.18	māhiyyatuhū <sup>2</sup>	<b>māhiyyatu</b>
II.3, 68.16	lahumā	<b>lahā</b>
II.4, 71.5	wa-anwā‘un	<b>aw anwā‘un</b>
II.4, 71.8	wa-anwā‘un	<b>aw anwā‘un</b>
II.4, 73.13	ya‘uddhumā	<b>ba‘dahumā</b>
II.4, 73.19	mabda’an <b>mā</b>	mabda’an
II.4, 74.5	wa-li-ḍālika	<b>wa-ka-ḍālika</b>
II.4, 76.6	al-māhiyyatu <sup>2</sup>	<b>māhiyyatu</b>
II.4, 78.2	tuqawwama	<b>tataqawwama</b>
II.4, 78.13	aḥaduhumā	<b>aḥaduhā</b>
II.4, 78.14	al-wuqū‘	<b>li-wuqū‘i</b>
II.4, 81.9	yūğibu <sup>2</sup>	<b>yūğibuhū</b>
II.5, 82.6	yaḥruğu	<b>yuḥwiğu</b>
II.5, 82.8	taḥta	<b>taḥtahū</b>
II.5, 83.4	min	<b>‘an</b>
II.5, 83.18	al-māddati	<b>al-‘ādati</b>
II.5, 84.15	‘araḍiyyan	<b>ğaraḍunā</b>
II.5, 84.18	aṭaran	<b>amran</b>
II.5, 85.4	bi-l-fi‘li	<b>al-fi‘li</b>
II.5, 85.13	fa-iḍ	<b>fa-iḍan</b>
II.5, 85.20	āḥara	āḥara <b>wa-innamā</b>
II.5, 86.6	abadan	<b>om.</b>
III.1, 92.9	wa-laka (?)	<b>ḍālika</b>
III.1, 93.7	‘araḍ	<b>‘araḍī</b>
III.1, 95.1	fa-inna	<b>fa-iḍan</b>
III.2, 97.2	kulliyatihī	<b>kulliyatin</b>
III.2, 98.9	fa-inna mā	<b>fa-innamā</b>
III.2, 99.4	fa-yūğadu	<b>fa-tūğadu</b>
III.2, 99.14	waşfuhū	<b>waḍ‘uhū</b>

III.2, 100.1	fa-naḥuddu	<b>fa-nağiduhā</b>
III.2, 101.12	wa-ammā	<b>ammā</b>
III.2, 102.17	al-ğawhar	<b>al-ğawāhir</b>
III.3, 103.4	ğayra l-mantiqiyiyati	<b>al-ğayra l-mantiqiyiyati</b>
III.3, 103.5	wa-innamā	<b>wa-innahā</b>
III.3, 104.16	anniyyatın	<b>ayyiyatın</b>
III.3, 104.17	أنية	<b>ayyiyatan</b>
III.3, 105.1	anniywatan <sup>1</sup>	<b>ayyiyatan</b>
III.3, 105.1	anniywatan <sup>2</sup>	<b>ayyiyatan</b>
III.3, 105.2	tilka l-anniyyatı	<b>tilka l-ayyiyatu</b>
III.3, 105.2	anniyyatun	<b>ayyiyatun</b>
III.3, 105.3	anniyyati	<b>ayyiyati</b>
III.3, 108.2	insānin	<b>insānin fī annahū šaḥşu insānin</b>
III.3, 109.2	wa-la-kānā	<b>wa-la-kāna</b>
III.3, 109.15	wa-l-kulliyyata	<b>al-kulliyya</b>
III.4, 112.14	li-l-kammiyyati	<b>li-l-kayfiyyati</b>
III.4, 112.14	‘alā l-kayfiyyati	<b>al-kammiyyatu</b>
III.4, 113.4	ḥaddu	<b>bi-ḥaddi</b>
III.4, 114.16	al-muqaddar	<b>al-muqaddir</b>
III.4, 114.17	al-muqaddir	<b>al-miqdār</b>
III.4, 115.7	wa-ka-dālika sa-tağidu	<b>wa-ka-dālika aydan sa-tağidu</b>
III.4, 116.18	bi-l-faşli	<b>bi-l-fi‘li</b>
III.4, 118.11	li-yakūna	<b>fa-yakūnu</b>
III.4, 119.5	al-‘ilmu l-ṭabī‘iyyu	<b>fī l-‘ilmi l-ṭabī‘iyyi</b>
IV.1, 129.14	wa-huwa nihāya	<b>huwa nihāya</b>
IV.1, 131.4	markazu l-‘ālamı	<b>min markazi l-‘ālamı</b>
IV.1, 131.12	awwalan wa-yuqālu	<b>awwalan la-kāna ṭūlan wa-yuqālu</b>
IV.1, 133.9	fī ‘lahū	<b>faşlahū</b>
IV.2, 135.11	mutawassiṭun	<b>mutawassiṭan</b>
IV.2, 135.12	wa-ğayru	<b>ğayru</b>
IV.2, 135.12	munfarid	<b>mutaqarrir</b>
IV.2, 136.4	yufraḍu	<b>ya‘riḍu</b>
IV.2, 136.9	ilā l-‘adad al-zawğ	<b>ilā l-zawğ</b>
IV.2, 137.13	wa-l-muḥaşşalatāni	<b>al-muḥaşşalatāni</b>
IV.2, 137.15	ilā şay’in āḥar fa-yakūnu	<b>ilā şay’in āḥar wa-şağīrun bi-l-qiyāsi</b>
		<b>ilā şay’in āḥara fa-yakūnu</b>
IV.2, 138.8	ḥaytu huwa	<b>min ḥaytu huwa</b>
IV.2, 139.8	al-musā‘adatu	<b>al-musāhalatı</b>
IV.2, 139.12	lahā fa-kamā	<b>lahā wa-l-‘inādu fī l-kubrā i‘rāḍun</b>
		<b>‘ani l-şuğrā ilā an yufrağa lahā fa-</b>
		<b>kamā</b>
IV.2, 142.15	yumnaḥu	<b>yumna‘u</b>
IV.3, 143.16	yatakallafu	<b>takallafa</b>
IV.3, 143.16	yastaqillu	<b>yaştağilu</b>
IV.3, 145.7	li-l-şay’	<b>al-şay’</b>

IV.3, 145.15	fī l-iḍāfāti	fī <b>ba'ḍi</b> l-iḍāfāti
IV.3, 149.7	fa-anta	<b>fa-innaka</b>
IV.3, 149.8	al-dallu	<b>al-dāllu</b>
IV.4, 150.17	wa-mā	<b>wa-mimmā</b>
IV.4, 151.6	wa-anna ḍātahū	<b>fa-inna</b> ḍātahū
IV.4, 153.15	anna	<b>bi-anna</b>
IV.4, 154.3	bi-taqaddumin	bi-taqaddumin <b>wa-ta'aḥḥurin</b>
IV.5, 156.16	ġayra	<b>'an</b>
IV.5, 156.16	mastūratin	<b>mastūrin</b>
IV.5, 157.18	fa-huwa immā	fa-huwa <b>immā mumtani' wa-immā</b>
IV.5, 157.20	wāġib ba'ḍuhū	wāġib <b>al-wuġūd</b> ba'ḍuhū
IV.5, 157.20 – 158.1	annahū mumkin	annahū <b>ġayru mumtani'in wa-fi</b> <b>annahū</b> mumkin
IV.5, 158.13	aw šay'ayni	aw <b>'alā</b> šay'ayni
IV.5, 159.2	al-taġribati	<b>al-taġrīdi</b>
IV.5, 159.6	al-ḥaqīqayni	<b>al-ḥaqīqiyyayni</b>
IV.5, 159.8	bal wuġūd	bal <b>lahū</b> wuġūd
IV.5, 159.15	kāna ḥāḍā	kāna <b>'alā</b> ḥāḍā
IV.5, 160.11	faqaṭ qad	faqaṭ <b>bal</b> qad
IV.5, 161.4	mufrad	<b>munfarid</b>
IV.5, 162.16	yataḥaṣṣalu	<b>yataḥaṣṣaṣu</b>
IV.5, 164.1	ka-ḍālika. wa-l-āḥaru	ka-ḍālika <b>lā bi-annahā fihi wa-ka-</b> <b>ḍālika l-āḥaru</b>
V.1, 167.10	taġrī	<b>ġarā</b>
V.1, 168.9	نواخذة	<b>nu'aḥaḍahū</b>
V.1, 169.6	lam	<b>wa-lam</b>
V.1, 170.1	wa-yaġibu	<b>fa-yaġibu</b>
V.1, 171.14	mā yataḥayyalu	mā <b>yataḥaṣṣalu</b>
V.1, 171.18	aw-lā taqtaḍī-hu	<b>wa-lā</b> taqtaḍī-hu
V.1, 172.4	muḥayyalun	<b>muḥīlun</b>
V.1, 172.6	kayfun	<b>kayfa</b>
V.1, 172.6	yanqasimu	<b>tanqasimu</b>
V.1, 172.7	al-iḥālāti	<b>al-iḥālāti</b>
V.1, 172.8	al-iḥālāti	<b>al-iḥālāti</b>
V.1, 172.21	taqassama	<b>nuqassimu</b>
V.2, 177.11	fa-inna-nā	<b>fa-innamā</b>
V.2, 177.15	al-ḥudūd	<b>al-maḥḍūd</b>
V.2, 178.11	wuġūd anniyati-hā	<b>wuġūdan baynahumā</b>
V.2, 178.13	mawḍū'atun	<b>mawḍū'uhū</b>
V.2, 178.14	mawḍū'atun	<b>mawḍū'uhū</b>
V.2, 179.1	ġumlatan	<b>ġumlatihī</b>
V.2, 179.12	al-'udūlu minhu	al-'udūlu <b>'anhu</b>
V.2, 180.6	aw ġayri l-nāṭiqati, <b>aw ġayri l-</b> <b>nāṭiqati</b> al-battata	aw ġayri l-nāṭiqati al-battata
V.3, 182.14	lam yatabarram	lam <b>yanbarim</b>



V.3, 183.6	mimmā	<b>mā</b>
V.3, 183.14	quwwatu l-ğawāri	quwwatu <b>l-ğawāzi</b>
V.3, 183.14	lākinnahū	<b>lākin</b>
V.3, 183.15	bi-ḥukmi l-ğawāri	bi-ḥukmi <b>l-ğawāzi</b>
V.4, 187.10	wa-laysa	<b>aw</b> laysa
V.4, 187.11	mutaḥālifatyni	mutaḥālifatyni <b>bi-l-naw‘i</b>
V.4, 187.15	wa-‘adamu l-quwwati ‘ala an lā taf‘ala bi-suhūlatin	<b>om.</b>
V.4, 187.16	natasāhala	<b>nusāhila</b>
V.4, 188.15	دل...	<b>badala</b>
V.4, 189.9	yağūzu	<b>tuğuwwiza</b>
V.4, 189.9	al-tağwīzi	<b>al-tağawwuzi</b>
V.4, 189.13	al-bābi	<b>al-kitābi</b>
V.4, 189.15	<b>lā</b> yanfa‘ila	yanfa‘ila
V.4, 190.16	wa-takallafnā	<b>wa-takallafnāhu</b>
V.4, 191.5	fīhi nafsu	fīhi <b>nafsihī</b>
V.4, 191.7	quwwatun ‘ <b>alā</b> an	quwwatun an
V.5, 191.15	al-anwā‘i	<b>li-anwā‘i</b>
V.5, 192.4	al-ḥādda	<b>al-ḥārra</b>
V.5, 192.6	ammā	<b>wa-ammā</b>
V.5, 192.9	yafnī	<b>fa-yafnī</b>
V.5, 193.7	wa-annahā	<b>wa-huwa</b> annahā
V.5, 195.11	yuqāribuhū	<b>yuqārinuhū</b>
V.5, 196.3	اسوسات	<b>al-maḥsūsāti</b>
V.6, 197.4	ba‘duhā	<b>bi-lafzihimā</b>
V.6, 197.5	fa-tatabā‘adu <b>minhā</b>	fa-tatabā‘adu
V.6, 197.6	al-kīri	<b>al-kanizi</b>
V.6, 198.10	ammā	<b>immā</b>
V.6, 199.7	al-ṣaḥīḥati	<b>al-ṣiḥḥiyyati</b>
V.6, 199.7	ḥālatin	<b>ḥālatihī</b>
V.6, 200.4	wa-infī‘ālātin wa-ilā aškālin	wa-infī‘ālātin <b>wa-ilā quwwatin wa-lā-quwwatin</b> wa-ilā aškālin
V.6, 200.9	min ištibāhi	min <b>ḥāli</b> štibāhi
VI.1, 206.2	aw yuṣābihuhū	aw <b>taṣābihihī</b>
VI.1, 206.5	fa-ammā	<b>fa-inna</b>
VI.1, 207.1	al-muḍakkarāt	<b>al-maḍkūrāt</b>
VI.1, 207.8	minhā	<b>minhumā</b>
VI.1, 207.16	yatawassaṭuhā	<b>bi-tawassuṭihā</b>
VI.1, 207.20	al-kammiyyatu	<b>li-l-kammiyyati</b>
VI.1, 208.4	innamā	<b>om.</b>
VI.1, 208.5	yakūnu	<b>takūnu</b>
VI.1, 208.12	wa-yuqālu	<b>yuqālu</b>
VI.1, 212.14	bi-annahā	<b>fa-innahā</b>
VI.2, 213.12	āsā	<b>aṭnī</b>
VI.2, 214.7	al-miqdāri	al-miqdāri <b>l-miqdāru</b>

VI.2, 214.19	šaklu	<b>bi-šaklin</b>
VI.2, 214.19	al-ğismi	<b>al-muğassamu</b>
VI.2, 215.2	min ḥattayni	<b>‘an ḥattayni</b>
VI.2, 215.4	wa-lam	<b>lam</b>
VI.2, 215.5	li-annahā	<b>lā li-annahā</b>
VI.2, 215.15	tahawwaša	<b>tahawwasa</b>
VI.2, 216.1	al-ḥāṣṣu	<b>al-ḥāmisu</b>
VI.2, 216.8	yu‘nā	<b>na‘nī</b>
VI.2, 217.3	الحسنين	<b>al-ḥusnayni</b>
VI.2, 217.10	bi-anna	<b>fa-inna</b>
VI.2, 217.13	wa-lā yakūnu	<b>fa-lā yakūnu</b>
VI.2, 217.18	tuqawwamu	<b>tataqawwamu</b>
VI.2, 218.5	naquṣṣu	<b>faqs?</b>
VI.3, 219.12	al-‘aqdi	<b>li-l-‘aqdi</b>
VI.3, 219.14	wa-l-burūdatu	<b>li-l-burūdati</b>
VI.3, 220.1	al-ibyiḍāda	<b>al-lā-bayāda</b>
VI.3, 220.8	yuğāmi‘u	<b>bi-ğāmi‘in</b>
VI.3, 220.18	al-mutaḍāddatayni	<b>al-muḍāddatayni</b>
VI.3, 221.1	wa-yatabayyanu	<b>wa-yubayyanu</b>
VI.3, 221.5	kāna	<b>kullahā</b>
VI.3, 221.8	min	<b>‘an</b>
VI.3, 221.9	al-wasaṭi	<b>al-tawassuṭi</b>
VI.3, 221.9	wa-l-ṣifatu	<b>wa-l-‘iffatu</b>
VI.3, 222.2	qurbuhū	<b>qarnuhū</b>
VI.4, 223.3	yata‘allaqu	<b>muta‘alliqin</b>
VI.4, 223.12-13	maṭalan fī ḍālika	<b>miṭla ḍālika</b>
VI.4, 223.15	huwiyyati	<b>huwa bihī</b>
VI.4, 224.7	wa-ka-ḍālika	<b>fa-ka-ḍālika</b>
VI.4, 224.8	ğuz’an	<b>ğuz’iyyan</b>
VI.4, 224.15	fa-innahū	<b>fa-lahū</b>
VI.4, 225.9	al-mawḍū‘a	<b>al-mawḍi‘a</b>
VI.4, 226.4	min	<b>‘an</b>
VI.4, 226.4	kayfi	<b>kanafi</b>
VI.4, 226.10	wa-hādā	<b>hādā</b>
VI.4, 227.1	ma‘lūman <b>mā</b>	<b>ma‘lūman</b>
VI.4, 227.19	fa-tuḥallu	<b>fa-tanḥallu</b>
VI.5, 228.13	mawṣūfāni	<b>mawṣūfayni</b>
VI.5, 230.2	bi-buṭlāni	<b>om.</b>
VI.5, 230.4	fa-humā	<b>wa-humā</b>
VI.5, 230.8	ğihatihī	<b>ğihatīn</b>
VI.5, 231.3	minhumā	<b>mubhaman</b>
VI.5, 231.4	fī kawnihī	<b>kawnuhū</b>
VI.5, 231.4	fī nafsihī	<b>fīhi nafsuhū</b>
VI.5, 231.11	nisbatan	<b>nisbatahū</b>

VI.5, 232.12	allāhumma	<b>al-fahimu</b>
VI.5, 232.16	hīna	<b>hiya</b>
VI.5, 232.17	fa-inna	<b>wa-anna</b>
VI.5, 233.2	taḥṣīlu	<b>taḥṣalu</b>
VI.6, 233.11	بجزئیة	<b>bi-ğuz'ıyyatihī</b>
VI.6, 234.5	li-dālika	<b>li-dālika l-waḍ'ı</b>
VI.6, 234.16	wa-ḥudūdun	<b>wa-ḥudūduhā</b>
VI.6, 234.18	al-amsi	<b>al-amsiyyu</b>
VI.6, 235.7	wa-lā aḥada	<b>wa-lā ağidu</b>
VI.6, 235.16	al-muhimmu	<b>al-mubhamu</b>
VI.6, 235.17	fa-yatawahhamu	<b>fa-tuwahhamu</b>
VI.6, 235.19	aşyā'an	<b>şay'an</b>
VI.6, 237.7	al-sawādi	<b>al-sawādi bal</b>
VII.1, 241.14	lazimahū	<b>yalzamuhū</b>
VII.1, 242.1	wa-immā	<b>aw</b>
VII.1, 242.4	al-mā'u	<b>al-samā'u</b>
VII.1, 242.16	uḥrā	om.
VII.1, 243.5	tata'arraḍu	<b>ta'riḍu</b>
VII.1, 243.9	yataqābulā	<b>tataqābalu</b>
VII.1, 243.10	iḍā	<b>iḍ</b>
VII.1, 244.17	fīhi 'āmmun	fīhi <b>fī</b> 'āmmun
VII.1, 244.17	fīhi ḥāşşun	fīhi <b>fī</b> ḥāşşin
VII.1, 245.6	tağţamu	<b>tağaşşama</b>
VII.1, 245.11	ḥāşşun	<b>ḥāşşıyyun</b>
VII.1, 245.20	bal	<b>bal dālika</b>
VII.1, 246.3	al-mawḍū'i	<b>al-mawḍi'i</b>
VII.1, 246.4	min	<b>'an</b>
VII.1, 247.1	al-wuqūri	<b>al-wufūri</b>
VII.1, 247.9	in	om.
VII.1, 248.11-12	wa-l-ḥarakatu, iḍ lā taḍādda bayna-humā, wa-lā l-sukūnu	om.
VII.1, 248.15	yakuffu	<b>yukallifu</b>
VII.2, 249.16	muḍāfan	<b>muḍāfatan</b>
VII.2, 250.5	wa-mā	<b>wa-mimmā</b>
VII.2, 250.8-9	ḥarāratun ḍiddan li-l-burūdati tumma tūğadu min ḥaytu hiya	om.
VII.2, 250.14	maqūlatu	<b>maqūlu</b>
VII.2, 250.14	al-uḥrā	<b>al-āḥara</b>
VII.2, 250.16	al-uḥrā	<b>al-āḥara</b>
VII.2, 250.17	al-maḥşūli <sub>1</sub>	<b>al-maḥmūli</b>
VII.2, 250.17	al-maḥşūli <sub>2</sub>	<b>al-maḥmūli</b>
VII.2, 251.10	inna <sub>2</sub>	om.
VII.2, 251.12	huwa	om.
VII.2, 252.14	muḍāyiqan	<b>muḍāyifan</b>
VII.2, 253.3	wa-qad	<b>aw qad</b>

VII.2, 253.9	fa-ka- <b>d</b> ālīka	<b>wa-ka-d</b> ālīka
VII.2, 253.19	wa-qa <b>d</b>	<b>qa<b>d</b></b>
VII.2, 254.3	muḥallun	<b>muḥaṣṣalun</b>
VII.2, 254.14	ḥāna	<b>ḡāza</b>
VII.2, 255.6	wāḥid	<b>wāḥidan</b>
VII.2, 256.13	wa-yusabbibu	<b>wa-bi-sababi</b>
VII.2, 257.3	māhiyyātuhā	<b>māhiyyatuhā</b>
VII.2, 257.20	al-ridāti	<b>al-ridā'ati</b>
VII.2, 258.4	wa-yanmaḥī	<b>wa-yunaḥḥā</b>
VII.2, 258.9	šarā'itī	<b>al-šarā'itī</b>
VII.2, 258.15	mawḍi'in	<b>mawḍū'in</b>
VII.2, 259.3	yutawassaṭu	<b>mutawassiṭa</b>
VII.2, 259.7	lahū	<b>om.</b>
VII.3, 260.10	al-radā'ilu	<b>al-radā'ilu aw takūnu hiya l-radā'ila</b>
VII.3, 261.11	ilayhī	<b>wa-ilayhī</b>
VII.3, 261.11	al-ṭarafayni	<b>ṭarafayni</b>
VII.3, 261.14	yudādduhū	<b>rubbamā dāddahū</b>
VII.3, 262.1	muḥissatun	<b>muḥassisatun</b>
VII.3, 262.18	ءنا	<b>binā'u</b>
VII.3, 263.2	ṭarafan	<b>ṭarafāhumā</b>
VII.3, 263.12	wa-mā	<b>wa-mimmā</b>
VII.3, 264.8	an takūna	<b>anna kawna</b>
VII.3, 264.10	'alā mutaḍāddayni	<b>'alā muḍāddatayni</b>
VII.3, 264.14	al-ḥāṣṣu	<b>al-ḥāṣṣiyyu</b>
VII.3, 265.4	ahammu	<b>a'ammu</b>
VII.4, 267.15	bi-l-uḥrā	<b>bi-l-āḥari</b>
VII.4, 268.14	al-sababi	<b>al-musabbabi</b>
VII.4, 269.3	wa-ḥarraka	<b>aw ḥarraka</b>
VII.4, 269.7	yakūnāni	<b>takūnu</b>
VII.4, 270.1	min	<b>'an</b>
VII.4, 270.4	fa-yakūnā	<b>fa-takūnu</b>
VII.4, 271.2	'asīrun	<b>asīrun</b>
VII.4, 271.5	نحقة	<b>nuḥaqqiquhū</b>
VII.4, 272.4	al-qalamu	<b>al-'alamu</b>
VII.4, 272.12	fa-li-kawnin	<b>fa-li-l-kawni</b>
VII.4, 273.8	al-muwāḍiḥi	<b>al-mawāḍi'i</b>
VII.4, 273.11	ta'qību	<b>ta'qību dālīka</b>
VII.4, 273.12	mawḍū'in	<b>mawḍū'in wa-mā fī mawḍū'in</b>

## BIBLIOGRAPHY

### 1. Primary literature

#### 1.1 Works by Avicenna (editions):

*Af'āl wa-infi'ālāt* = Ibn Sīnā, *Al-Šifā'*, *al-Ṭabī'īyyāt*, *al-Af'āl wa-l-infi'ālāt*, ed. M. Qassem, Cairo 1969.

*Aqsām* = *Risāla fī aqsām al-'ulūm*, in *Tis' rasā'il fī l-ḥikma wa-l-ṭabī'īyyāt, ta'līf al-Šayḥ al-Ra'īs Abī 'Alī al-Ḥusayn Ibn 'Abdallāh Ibn Sīnā*, Maṭba'a hindiyya, Cairo 1326/1908.

*Burhān* = Ibn Sīnā, *Al-Šifā'*, *al-Manṭiq*, *al-Burhān*, ed. A.E. Afīfī, al-Hay'a al-'amma li-šu'un al-maṭābi' al-amīriyya, Cairo 1956.

*Dānešnāme, Manṭeq* = *Dānešnāme-ye 'Alā'ī, Resāle-ye Manṭeq* ed. M. Mo'in, M. Meškāt, Tehran 1952.

*Dānešnāme, Elāhiyyāt* = *Dānešnāme-ye 'Alā'ī, Elāhiyyāt*, ed. M. Mo'in, M. Meškāt, Tehran 1952.

*Ġadal* = Ibn Sīnā, *Al-Šifā'*, *al-Manṭiq*, *al-Ġadal*, ed. Al-Ahwānī, al-Hay'a al-'amma li-šu'un al-maṭābi' al-amīriyya Cairo 1965.

*Handasa* = Ibn Sīnā, *Al-Šifā'*, *al-Riyāḍiyyāt*, *Uṣūl al-handasa*, ed. 'A. Sabra, 'A. Luṭfī, al-Hay'a al-'amma li-šu'un al-maṭābi' al-amīriyya, Cairo 1976.

*Hidāya* = Ibn Sīnā, *Kitāb al-Hidāya*, ed. M. 'Abduh, Maktabat al-Qāhira al-ḥadīṭa, Cairo 1974.

*Ḥikma 'Arūḍiyya* = Ibn Sīnā, *Kitāb al-mağmū' aw al-ḥikma l-'arūḍiyya*, Beirut, Dār al-Hādī 1428/2007.

*Ḥisāb* = Ibn Sīnā, *Al-Šifā'*, *al-Riyāḍiyyāt*, *al-Ḥisāb*, ed. A.L. Mazhar, al-Hay'a al-Miṣriyya al-'amma li-l-kitāb, Cairo 1975.

*Ḥiṭāba* = Ibn Sīnā, *Al-Šifā'*, *al-Manṭiq*, *al-Ḥiṭāba*, ed. M.S. Sālem, al-Maṭba'a al-'amīriyya, Cairo 1954.

*'Ibāra* = Ibn Sīnā, *Al-Šifā'*, *al-Manṭiq*, *al-'Ibāra*, ed. M. Al-Ḥuḍayrī, I. Madkūr, Dār al-Kitāb al-'arabī li-ṭibā'a wa-l-naṣr, al-Hay'a li-Miṣr al-'amma li-l-kitāb, Cairo 1970.

*Ilāhiyyāt* = Ibn Sīnā, *Al-Šifā'*, *al-Ilāhiyyāt (1)*, ed. Ğ. Š. Qanawātī, S. Zāyid, al-Hay'a al-'amma li-šu'un al-maṭābi' al-amīriyya, Cairo 1960; *Al-Šifā'*, *al-Ilāhiyyāt (2)*, ed. M. Y. Mūsā, S. Dunyā, S. Zāyid, al-Hay'a al-'amma li-šu'un al-maṭābi' al-amīriyya, Cairo 1960.

*Iṣārāt, Manṭiq* = Ibn Sīnā, *Al-Iṣārāt Wa-l-Tanbīhāt – al-Manṭiq*. Ed. by S. Dunya, Dār Al-Ma'ārif, Cairo 1960.

*Iṣārāt, Ilāhiyyāt* = Ibn Sīnā, *Al-Iṣārāt Wa-l-Tanbīhāt – al-Ilāhiyyāt*. Ed. by S. Dunya, Dār Al-Ma'ārif, Cairo 1960.

*Kawn wa-fasād* = Ibn Sīnā, *Al-Šifāʾ*, *al-Ṭabīʿiyyāt*, *al-Kawn wa-l-fasād*, ed. M. Qassem, Cairo 1969.

*Madḥal* = Ibn Sīnā, *Al-Šifāʾ*, *al-Mantiq*, *al-Madḥal*, ed. H. Bāšā, I Madkūr, G.C. Qanawātī, M. Al Ḥuḍayrī, al-Maṭbaʿa al-amīriyya, Cairo 1953.

*Maqāla fī l-nafs* = S. Landauer, *Die Psychologie des Ibn Sīnā*, in «Zeitschrift der Deutschen Morgenlandischen Gesellschaft» 29 (1875), pp. 339-372.

*Maqūlāt* = Ibn Sīnā, *Al-Šifāʾ*, *al-Mantiq*, *al-Maqūlāt*, ed. G.C. Anawati, M. Al-Ḥuḍayrī, A. F. Al Ahwānī, S. Zāyid, al-Hayʾa al-ʿamma li-šūʿun al-maṭābiʿ al-amīriyya, Cairo 1959.

*Mantiq al-mašriqiyyīna* = *Mantiq al-mašriqiyyīna wa-l-qašīda l-muzdawīga fī l-mantiq*, *tašnīf al-Raʾīs Abī ʿAlī ibn Sīnā*, al-Maktaba l-salafiyya, Cairo 1910.

*Mubāḥaṭāt* = Ibn Sīnā, *Mubāḥaṭāt*, ed. M. Bidārfār, Entešārāt-e Bidār, Qum 1992.

*Muḥtaṣar al-awsaṭ* = A. Kalbarczyk, *The Kitāb al-Maqūlāt of the Muḥtaṣar al-awsaṭ fī l-mantiq: A hitherto unknown source for studying Ibn Sīnā's reception of Aristotle's Categories*, in «Oriens» 40.2 (2012), pp. 305-54.

*Nafs* = Ibn Sīnā, *Al-Šifāʾ*, *al-Ṭabīʿiyyāt*, *al-Nafs*, ed. G.C. Anawati, S. Zāyid, I. Madkour, Cairo 1975.

*Nağāt* = Ibn Sīnā, *Kitāb al-Nağāt min al-ğaraq fī baḥr al-ḍalālāt*, ed. M. Danišpazūh, Danešgah-e Tehrān 1985.

*Qiyās* = Ibn Sīnā, *al-Šifāʾ*, *al-Mantiq*, *al-Qiyās*, ed. S. Zāyid, al-Hayʾa al-Miṣriyya al-ʿamma li-l-kitāb, Cairo 1964.

*Samāʿ ṭabīʿī* = Ibn Sīnā, *al-Šifāʾ*, *al-Ṭabīʿiyyāt*, *al-Samāʿ al-ṭabīʿī*, ed. S. Zāyed, al-Hayʾa al-Miṣriyya al-ʿamma li-l-kitāb, Cairo 1983.

*Samāʾ wa-ʿālam* = Ibn Sīnā, *al-Šifāʾ*, *al-Ṭabīʿiyyāt*, *al-Samāʾ wa-l-ʿālam*, ed. M. Qassem, Cairo 1969.

*Taʿlīqāt* = Ibn Sīnā, *Taʿlīqāt*, ed. ʿA. Badawī, Al-hayʾat al-miṣriyya al-ʿamma li-l-kitāb, Cairo 1973.

*ʿUyūn al-ḥikma* = *Avicennae fontes sapientiae*, ed. ʿA. Badawī, Institut français d'archéologie orientale, Cairo 1954.

*Zāwiya* = R. RASHED 2015, pp. 182-223.

## 1.2 Other ancient sources (editions):

Amm. *In Cat.* = *Ammonius in Aristotelis Categoriae commentarium*, ed. A. Busse, Berlin 1895 (C.A.G. IV.4).

Amm. *In Isag.* = *Ammonius in Porphyrii Isagogen sive Quinque voces commentarium*, ed. A. Busse, Berlin 1895 (C.A.G. IV.3).

Arethas *In Cat.* = *Arethas of Caesarea's Scholia on Porphyry's Isagoge and Aristotle's Categories (Codex Vaticanus Urbinas Graecus 35)*, a Critical Edition by M. Share. *Corpus philosophorum medii aevi, Commentaria in Aristotelem Byzantina* 1, The Academy of Athens, Librairie J. Vrin, Éditions Ousia, Athens – Paris – Bruxelles 1994.

Arist. *An. pr.*, Arist. *An. post.* = *Aristotelis Analytica priora et posteriora*, ed. W.D. Ross et L. Minio-Paluello, Oxford University Press 1964.

Arist. *Cael.* = Aristotle, *De caelo*, ed. with an introduction by D.J. Allan, Clarendon Press, Oxford 1936.

Arist. *Cat.*, Arist. *De int.* = *Aristotelis Categoriae et Liber De Interpretatione*, ed. L. Minio-Paluello, Oxford, Clarendon Press 1949.

Arist. *De an.* = Aristotle, *De anima*, edited and commented by W.D. Ross, Clarendon Press, Oxford 1961.

Arist. *El. Soph.*; Arist. *Top.* = Aristotle, *Topica et Sophistici Elenchi*, ed. by W.D. Ross, Clarendon Press, Oxford 1970.

Arist. *Eth. Nic.* = Aristotle, *Ethica Nicomachea*, ed. R. Walzer, J. Mingay, Clarendon Press, Oxford 1991.

Arist. *Gen. Corr.* = Aristote, *De la génération et la corruption*. Texte établi et traduit par Marwan Rashed, Les Belles Lettres, Paris 2005.

Arist. *Metaph.* = Aristotle, *Metaphysics. A revised text with introduction and commentary*, by W. D. Ross (2 voll.), Clarendon Press, Oxford 1924 (Commentary: ROSS 1924).

Arist. *Phys.* = Aristotle, *Physics*, ed. and commented with an introduction by W.D. Ross, Clarendon Press, Oxford 1936.

Averr. *Talhīṣ al-maḳūlāt* = Averroès, *Talhīṣ kitāb al-maḳūlāt*, ed. M. Bouyges, Beirut 1932.

David *In Isag.* = Davidis *In Porphyrii Isagogen Commentarium*, ed. A. Busse, Berlin 1904 (C.A.G. XVIII.1).

Dex. *In Cat.* = Dexippi philosophi platonici *in Aristotelis Categoriae dubitationes et solutiones*, ed. A. Busse, Berlin 1888 (C.A.G. IV.2).

Elias *In Isag.* = Elias/David *In Cat.* : Eliae *In Porphyrii Isagogen et Aristotelis Categoriae commentaria*, ed. A. Busse, Berlin 1900 (C.A.G. XVIII.1).

Eucl. *Elem.* = *Euclidis Elementa*, post I.L. Heiberg edidit E.S. Stamatis, B.G. Teubner, Leipzig 1972.

Fārābī *Alfāz* = *Alfarabi's Utterances Employed in Logic (al-Alfāz al-musta'malah fī al-mantiq)*, Arabic text, Edited with Introduction and Notes, by M. Mahdi, Dar el-Mashreq Publishers, Beirut 1968.

Fārābī *Bārī Armīniyās* = *Al-mantiq 'inda l-Fārābī*, ed. R. al-'Aḡam, Bairūt 1985-1986, vol. I, pp. 133-163.

Fārābī *Fī aḡrād* = *Fī aḡrād al-ḥakīm fī kull maḳāla min al-kitāb al-mawsūm bi-l-ḥurūf*, in F. Dieterici, *Alfarabis philosophische Abhandlungen*, Brill, Leiden 1890, pp. 34-38.

Fārābī *Iḥṣā' al-'ulūm* = *Al-Farabi, La statistique des sciences*. Texte établi, annoté et présenté par Osman Amine, Librairie Anglo-Égyptienne, Le Caire 1968.

Fārābī *Ḥurūf* = *Alfarabi's Book of Letters (Kitāb al-Ḥurūf), Commentary on Aristotle's Metaphysics*. Arabic text, Edited with Introduction and Notes by Muhsin Mahdi, Dar el-Mashreq Publishers, Beirut 1959.

Fārābī *Qaṭāgūryās* = DUNLOP 1958: D. M. Dunlop, *Al-Fārābī's paraphrase of the Categories of Aristotle 1*, «The Islamic Quarterly» 4 (1958), pp. 168-197; DUNLOP 1959: D. M. Dunlop, *Al-Fārābī's paraphrase of the Categories of Aristotle 2*, «The Islamic Quarterly» 5 (1959), pp. 20-54.

Fārābī *Šarḥ al-Ibāra* = *Alfarabi's Commentary on Aristotle's ΠΕΡΙ ΕΡΜΗΝΕΙΑΣ (De Interpretatione)*, Edited with an Introduction by W. Kutsch and S. Marrow, Imprimerie Catholique, Beyrouth 1960.

Ibn 'Adī *Fī anna l-'araḍ* = *Fī anna l-'araḍ laysa huwa ġinsan li-l-tis' al-maḡlāt al-'araḍiyya*, in *Maḡlāt Yahyā ibn 'Adī al-falsafīyya*. Edited and annotated, with an Introduction, by S. Ḥalīfāt. Manšūrāt al-Gāmi'a al-urduniyya, Amman 1988, pp. 144-147.

Ibn 'Adī *Tabyīn al-faṣl* = *Fī tabyīn al-faṣl bayna šinā'atay al-mantiq al-falsafi wa-l-naḥw al-'arabi*, in *Maḡlāt Yahyā ibn 'Adī al-falsafīyya*. Edited and annotated, with an Introduction, by S. Ḥalīfāt. Manšūrāt al-Gāmi'a al-urduniyya, Amman 1988, pp. 414-424.

Ibn al-Nadīm *Fihrist* = *Kitāb al-Fihrist, mit Anmerkungen herausgegeben von Gustav Flügel*, 2 voll., Leipzig 1871.

Ibn al-Ṭayyib *Tafsīr al-maḡlāt* = C. Ferrari, *Der Kategorienkommentar von Abū l-Farağ Ibn al-Ṭayyib. Text und Untersuchungen*, Brill, Leiden-Boston 2006 (O: See below, FERRARI 2006 ?)

Ibn al-Ṭayyib *Tafsīr Īsāgūḡī* = *Ibn al-Ṭayyib's Commentary on Porphyry's Eisagoge*, ed. by K. Gyekye, coll. «Recherches, Nouvelle Série, B. Orient Chrétien» 2, Beyrouth 1975.

*Mantiq Aristū* = *Mantiq Aristū*. Edited, with an Introduction, by 'A. Badawī (3 vols.), Wikālat al-Maṭbū'āt and Dār al-Qalam 1980.

Ibn al-Muqaffa' *Mantiq* = M.T. Danišpažūh (*Mantiq li-Ibn al-Muqaffa'*); *Ḥudūd al-mantiq li-Ibn Bihriž*, Tehran 1978, pp. 9-24.

Olymp. *In Cat.* = Olympiodori *Prolegomena et in Categorias commentarium*, ed. A. Busse, Berlin 1902 (C.A.G. XII.1).

Phil. *In Cat.* = Philoponi (olim Ammonii) *in Aristotelis Categorias commentarium*, ed. A. Busse, Berlin 1898 (C.A.G. XIII.1).

Phil. *In Phys.* = Philoponi *in Aristotelis Physicorum libros quinque posteriores commentaria*, ed. G. Vitelli, Berlin 1888 (C.A.G. XVII).

Plot. *Enn.* = *Plotini opera*, ed. by P. Henry and H.-R. Schwyzer (3 vols.), Desclée de Brouwer/Brill, Paris-Brussels-Leuven 1951-1973.

Porph. *Fragm.* = *Porphyrii philosophi fragmenta*, ed. A. Smith, in collaboration with D. Wasserstein. Bibliotheca scriptorum Graecorum et Romanorum Teubneriana, Stuttgart-Leipzig 1993.

Porph. *In Cat.* = *Porphyrii Isagoge et in Aristotelis Categorias Commentarium*, ed. A. Busse, Berlin 1887 (C.A.G. IV.1).

Procl. *In Eucl. Elem.* = *Procli Diadochi in primum Euclidis Elementorum librum ex recognitione G. Friedlein*, Lipsiae 1873.



Rāzī *Šarḥ 'uyūn al-ḥikma* = al-Rāzī, *Šarḥ 'Uyūn al-ḥikma* (3 vols.), ed. A. Ḥiğāzī as-Saqqā. Maktabat al-Anğlū al-Miṣriyya, Cairo 1979–80.

Simpl. *In Cat.* = *Simplicii in Aristotelis Categorias Commentarium*, ed. C. Kalbfleisch, Berlin 1907 (C.A.G. VIII).

*Ṭabī'a* = *Aristūṭālīs, al-Ṭabī'a. Tarğama Ishāq ibn Hunayn, ma'a šurūḥ Ibn al-Samḥ wa-Ibn 'Adī wa-Mattā Ibn Yūnus wa Abī l-Farağ Ibn al-Ṭayyib* (2 voll.), ed. A. Badawi, Cairo 1964 (vol. I); 1965 (vol. II).

Ṭābit Ibn Qurra, *Masā'il* = M. RASHED 2009, pp. 627-645.

*Ta'rīḥ al-ḥukamā'* = Ibn al-Qifṭī, *Ta'rīḥ al-ḥukamā'*, hrsg. von J. Lippert, Dieterich'sche Verlagsbuchhandlung, Leipzig 1903.

### 1.3 Translations and commentaries:

ACHENA-MASSÉ 1958: *Avicenne, Livre de science (2 voll.)*, traduit par M. Achena, H. Massé, Les belles lettres, Paris 1955-1958.

ACKRILL 1963: *Aristotle's Categories and De Interpretatione*. Translated with notes by J.L. Ackrill, Clarendon Press, Oxford 1963.

ADAMSON, PORMANN 2012: *The Philosophical Works of al-Kindī*, translated and annotated, with an Introduction, by P. Adamson and P.E. Pormann, Oxford University Press, Oxford-New York 2012.

AHMED 2011: *Avicenna's Deliverance: Logic*. Translation and Notes by A. Q. Ahmed, Oxford University Press 2011.

ARMSTRONG 1988: *Plotinus, with an English Translation by A.H. Armstrong*, vol. VI: *Enneads VI.1-5*, Loeb Classical Library, Cambridge MS – London 1988.

BÄCK 2013: *Avicenna/Ibn Sīnā, al-'Ibāra. Avicenna's Commentary on Aristotle's De interpretatione*, translated and introduced by A. Bäck, Philosophia Verlag, München 2013.

BÄCK 2016: *Avicenna/Ibn Sīnā, al-Maqūlāt. Commentary on Aristotle's Categories*, translated and introduced by A. Bäck, Philosophia Verlag, München 2016.

BARNES 1993: *Aristotle, Posterior Analytics*. Translated with notes by J. Barnes, Clarendon Press, Oxford 1993.

BARNES 2003: *Porphyry, Introduction*. Translated and commented, with an Introduction, by J. Barnes, Clarendon Press, Oxford 2003.

BODÉÜS 2001: *Aristote, Catégories. Texte établi et traduit par R. Bodéüs*, Les Belles Lettres, Paris 2001.

BODÉÜS 2008: *Porphyre. Commentaire aux Catégories d'Aristote*, introduit, édité et traduit par R. Bodéüs, Vrin, Paris 2008.

BERTOLACCI 2007: *Avicenna, Libro della Guarigione. Le cose divine*, a cura di A. Bertolacci, Torino, Utet 2007.

CHASE 2003: *Simplicius, On Aristotle Categories 1-4*. Translated by M. Chase, Duckworth, London 2003.

DE HAAS-FLEET 2001 : *Simplicius, On Aristotle Categories 5-6*. Translated by F. J. De Haas and B. Fleet, Duckworth, London 2001.

FLEET 2005: *Simplicius, On Aristotle Categories 7-8*. Translated by B. Fleet, Duckworth, London 2005.

GASKIN 2000: *Simplicius, On Aristotle Categories 9-15*, Translated by R. Gaskin, Duckworth, London 2000.

GOICHON 1951: *Avicenne, Livre des directives et des remarques*, tr. A.-M. Goichon, Vrin, Paris 1951.

GUIDI, WALZER 1940: *Studi su al-Kindī I: Uno scritto introduttivo allo studio di Aristotele*, in «Memorie della R. Accademia Nazionale dei Lincei, Classe di Scienze Morali, Storiche e Filosofiche», ser. VI, vol. VI, fasc. V, Roma 1940, pp. 375-419.

GYEKYE 1979: K. Gyekye, *Arabic Logic. Ibn al-Tayyib's Commentary on Porphyry's Eisagoge*, State University of New York Press, Albany 1979.

HUSSEY 1983: *Aristotle's Physics, Books III and IV*. Translated with notes by E. Hussey, Clarendon Press, Oxford-New York 1983.

INATI 1984a: *Ibn Sīnā, Remarks and Admonitions. Part One: Logic*, translated from the original Arabic with an Introduction and Notes by S.C. Inati, Pontifical Institute of Mediaeval Studies, Toronto 1984.

INATI 2014: *Ibn Sīnā's Remarks and Admonitions: Physics and Metaphysics*. An analysis and annotated translation, by S. Inati, Columbia University Press, New York 2014.

KIRWAN 1993: *Aristotle, Metaphysics. Books Γ, Δ and E*. Translated with notes by C. Kirwan, Second Edition, Clarendon Press, Oxford 1993.

LIZZINI 1995: O. Lizzini, *La Metafisica del Libro della Guida. Presentazione e traduzione della terza parte (bāb) del Kitāb al-Hidāya di Avicenna*, in «Le Muséon» 108 (1995), pp. 367-424.

LIZZINI, PORRO 2006: *Avicenna (Ibn Sīnā), Metafisica. La Scienza delle cose divine (al-Ilāhiyyāt) dal libro della Guarigione (Kitāb al-Šifā')*, Bompiani Milano 2006.

LUNA 1990: C. Luna, *Commentaire*, in *Simplicius, Commentaire sur les Catégories d'Aristote Fascicule III: Préambule aux Catégories, Commentaire au premier chapitre des Catégories (p. 21-40, 13 Kalbfleisch)*. Traduction de P. Hoffmann (avec la collaboration d'I. Hadot, P. Hadot et C. Luna), Brill, Leiden-New York-København-Köln 1990.

LUNA 2001: C. Luna, *Commentaire*, in *Simplicius, Commentaire aux Catégories d'Aristote 2-4*, Traduction par P. Hoffmann, avec la collaboration de I. Hadot et C. Luna. Les Belles Lettres, Paris 2001.

MAKIN 2006: *Aristotle, Metaphysics Book Θ*. Translated with an Introduction and Commentary by S. Makin, Clarendon Press, Oxford 2006.

MENN, WISNOVSKY 2017: S. Menn, R. Wisnovsky, *Yahyā Ibn 'Adī and Ibrāhīm Ibn 'Adī: On whether Body is a Substance or a Quantity. Introduction, Editio princeps and Translation*, «Arabic Sciences and Philosophy» 27 (2017), pp. 1-74.

MORROW 1970: *Proclus. A Commentary on the First Book of Euclid's Elements*, Translated with Introduction and Notes by G.R. Morrow, Princeton University Press, Princeton (NJ) 1970.

MARDONI, NAZARYEV 2010: Абу Али Ибн Сина (Авиценна), Сочинения, Т. 5, аш-Шифа, Введение, пер. Т.Н. Мардони и Р.З. Назарьев, Душанбе 2010 (Abu Ali Ibn Sina [Avitsenna], *Sochineniia*, V. 5, *ash-Shifa*, Vvedenie, trans. T.N. Mardoni and R.Z. Nazaryev, Dushanbe 2010).

MARMURA 2005: *The Metaphysics of the Healing*, a parallel English-Arabic text translated, introduced and annotated by M. E. Marmura, Brigham Young University Press, Provo (Utah) 2005.

MCGINNIS 2009: *Avicenna, The Physics of the Healing*. A parallel English-Arabic text in two volumes; translated, annotated and with an introduction by J. McGinnis, Brigham Young University, 2009.

OEHLEK 1984: *Aristoteles, Kategorien*. Übersetzt und erläutert von K. Oehler, Berlin, Akademie-Verlag 1984.

RAHMAN 1952: F. Rahman, *Avicenna's Psychology. An English Translation of Kitāb al-Najāt, Book II, Chapter VI, with historico-philosophical notes and textual improvements on the Cairo edition*, Hyperion Press, Westport (Connecticut) 1952.

STRANGE 1992: *Porphyry, On Aristotle's Categories*, Translated by S.K. Strange, Duckworth, London 1992.

ZIMMERMANN 1981: *Al-Farabi's Commentary and Short Treatise on Aristotle's De Interpretatione*, Translated with an Introduction and Notes by F. W. Zimmermann, Oxford University Press, Oxford 1981.

## 2. Secondary literature

ADAMSON 2007: P. Adamson, *Porphyrius Arabus on Nature and Art: 463F Smith in context*, in G. Karamanolis, A. Sheppard (ed.), *Studies on Porphyry*, London 2007, pp. 141-163.

ADAMSON, KEY 2015: P. Adamson, A. Key, *Philosophy of Language in the Medieval Arabic Tradition*, in M. Cameron, R.J. Stainton (eds.), *Linguistic Meaning: New Essays in the History of the Philosophy of Language*, Oxford University Press, Oxford 2015, pp. 74-99.

AERTSEN 2012: J. A. Aertsen, *Medieval Philosophy as Transcendental Thought, from Philip the Chancellor (ca. 1225) to Francisco Suárez*, Brill, Leiden-Boston 2012.

ANAWATI 1950: G. C. Anawati, *Essai de bibliographie avicennienne*, Dār al-Ma'ārif, Cairo 1950.

ANAWATI 1957: G. C. Anawati, *La Hikma 'Arūdiyya d'Ibn Sīnā*, in Z.V. Togan (ed.), *Proceedings of the Twenty-Second Congress of Orientalists*, Brill, Leiden 1957, vol. II, pp. 171-176.

ALONSO ALONSO 1963: M. Alonso Alonso, *Accidente, accidental y número según Avicena*, in «Al-Andalus» 28 (1963), pp. 117-154.

ANTON 1968: J. P. Anton, *The Aristotelian Doctrine of Homonyma in the Categories and its Platonic Antecedents*, «Journal of the History of Philosophy» VI (1968), pp. 315-326.

- ANTON 1969: J. P. Anton, *Ancient Interpretations of Aristotle's Doctrine of Homonymy*, «Journal of the History of Philosophy» VII (1969), pp. 1-18.
- ARAZI 1998: A. Arazi, *Ta'abbata Šarran* (entry), *The Encyclopedia of Islam, New Edition*, vol. X, 1998-2000, pp. 2-3.
- ARNZEN 2011: R. Arnzen, *Platonische Ideen in der arabischen Philosophie*, De Gruyter, Berlin-Boston 2011.
- BÄCK 1999: A. Bäck, *The Ontological Pentagon of Avicenna*, in «The Journal of Neoplatonic Studies» VII.2 (1999), pp. 87-109.
- BÄCK 2008: A. Bäck, *Avicenna the Commentator*, in L.P. Newton (ed.), *Medieval Commentaries on Aristotle's Categories*, Brill, Leiden-Boston 2008, pp. 31-71.
- BÄCK 2013: A. Bäck, *Avicenna's Theory of Supposition*, in E. P. Bos (ed.), *Medieval Supposition Theory Revisited*, Brill, Leiden-Boston 2013, pp. 79-115.
- BARNES 1971: J. Barnes, *Homonymy in Aristotle and Speusippus*, «Classical Quarterly» 65 (1971), pp. 65-80.
- BÄRTHLEIN 1968: K. Bärthlein, *Zur Entstehung der aristotelischen Substanz-Akzidenz-Lehre*, in «Archiv für Geschichte der Philosophie» 50 (1968), pp. 196-253.
- BENEVICH 2017: F. Benevich, *Fire and Heat. Yahyā ibn 'Adī and Avicenna on the Essentiality of Being Substance or Accident*, in «Arabic Sciences and Philosophy» 27 (2017), pp. 237-267.
- BERTOLACCI 2004: A. Bertolacci, *The Reception of Book B (Beta) of Aristotle's Metaphysics in the Ilāhiyyāt of Avicenna's Kitāb al-Šifā'*, in J. McGinnis, D.C. Reisman (eds.), *Interpreting Avicenna: Science and Philosophy in Medieval Islam. Proceedings of the Second Conference of the Avicenna Study Group*, Brill, Leiden 2004, pp. 157-174.
- BERTOLACCI 2006: A. Bertolacci, *The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Šifā'. A Milestone of Western Philosophical Thought*, Brill, Leiden-Boston 2006.
- BERTOLACCI 2011a: A. Bertolacci, *A Community of Translators: the Latin Medieval Versions of Avicenna's Book of the Cure*, in J.N. Crossley, C.J. Mews (eds.), *Communities of Learning: Networks and the Shaping of Intellectual Identity in Europe 1100-1500*, Brepols, Turnhout 2011, pp. 37-54.
- BERTOLACCI 2011b: A. Bertolacci, *The "Ontologization" of Logic. Metaphysical Themes in Avicenna's Reworking of the Organon*, in *Methods and Methodologies. Aristotelian Logic East and West 500-1500*, ed. M. Cameron, J. Marenbon, Brill Leiden-Boston 2011, pp. 27-51.
- BERTOLACCI 2012a: A. Bertolacci, *A Hidden Hapax Legomenon in Avicenna's Metaphysics: Considerations on the Use of Anniyya and Ayyiyya in the Ilāhiyyāt of the Kitāb al-Šifā'*, in A.M.I. Van Oppenraay, R. Fontaine (ed.), *The Letter before the Spirit. The Importance of Text Editions for the Study of the Reception of Aristotle*, Brill, Leiden-Boston 2012, pp. 289-309.
- BERTOLACCI 2012b: A. Bertolacci, *The Distinction of Essence and Existence in Avicenna's Metaphysics: The Text and Its Context*, in F. Opwis, D.C. Reisman (ed.), *Islamic Philosophy, Science, Culture, and Religion: Studies in Honor of Dimitri Gutas*, Brill, Leiden 2012, pp. 257-288.
- BERTOLACCI 2012c: A. Bertolacci, *How Many Recensions of Avicenna's Kitāb al-Šifā'?* in «Oriens» 40.2 (2012), pp. 275-303.

BERTOLACCI 2017: A. Bertolacci, *The Latin Translation and the Original Version of the Ilāhiyyāt (Science of Divine Things) of Avicenna's Kitāb al-Šifā'*, in «Documenti e studi sulla tradizione filosofica medievale» 28 (2017), pp. 481-514.

BERTOLACCI 2018: A. Bertolacci, *Avicenna's Kitāb al-Šifā' (Book of the Cure/Healing): The Manuscripts preserved in Turkey and their Significance*, in J. Jabbour (ed.), *The Reception of the Classical Arabic Philosophy in the Ottoman Empire*, «Mélanges de l'Université Saint-Joseph» 67 (2017-2018), pp. 265-304.

BLACK 1997: D. Black, *Avicenna on the ontological and epistemic status of fictional beings*, «Documenti e studi sulla tradizione filosofica medievale» 8 (1997), pp. 425-453.

BODÉÛS 1993: R. Bodéüs, *Ibn Sīnā et les Catégories d'Aristote*, «Revue tunisienne des études philosophiques» 13-14 (1993), pp. 193-198.

BRAGUE 1980: R. Brague, *De la disposition. A propos de diathesis chez Aristote*, in P. Aubenque (ed.), *Concepts et catégories dans la pensée antique*, Vrin, Paris 1980, pp. 285-307.

CAMINADA 2016: N. Caminada, *A quotation of an anonymous 'logician' in Avicenna's Categories*, «Documenti e studi sulla tradizione filosofica medievale» 27 (2016), pp. 195-237.

CAMINADA 2017: N. Caminada, *A Latin Translation? The Reception of Avicenna in Albert the Great's De praedicamentis*, «Documenti e studi sulla tradizione filosofica medievale» 28 (2017), pp. 71-104.

CAUJOLLE-ZASLAWSKY 1980: F. Caujolle-Zaslowsky, *Les relatifs dans les Catégories*, in P. Aubenque (ed.), *Concepts et catégories dans la pensée antique*, Vrin, Paris 1980, pp. 167-195.

CELLI 2018: G. Celli, *The Manuscript Istanbul, Süleymaniye Kütüphanesi, Ayasofya 2442: A Thirteenth Century Copy of the Kitāb al-Šifā' with Syriac and Greek Marginalia*, in J. Jabbour (ed.), *The Reception of the Classical Arabic Philosophy in the Ottoman Empire*, «Mélanges de l'Université Saint-Joseph» 67 (2017-2018), pp. 305-326.

CERAMI 2017: C. Cerami, *The Caelo et mundo of Avicenna's Šifā': an overview of its goal, its structure and its polemical background*, in «Documenti e studi sulla tradizione filosofica medievale» 28 (2017), pp. 273-329.

CHASE 2012: M. Chase, *Porphyre de Tyr. Commentaires à Platon et à Aristote* (entry), in R. Goulet (ed.), *Dictionnaire des philosophes antiques*, vol. Vb, CNRS Éditions, Paris 2012, pp. 1349 – 1376.

CHATTI 2016: S. Chatti, *Existential Import in Avicenna's Modal Logic*, «Arabic Sciences and Philosophy» 26 (2016), pp. 45-71.

CHEN 1957: C.-H. Chen, *On Aristotle's Two Expressions: καθ'ὑποκειμένου λέγεσθαι and ἐν ὑποκειμένῳ εἶναι*, «Phronesis» 2.2, 1957, pp. 148-159.

CHIARADONNA 2002: R. Chiaradonna, *Sostanza movimento analogia. Plotino critico di Aristotele*, Bibliopolis, Napoli 2002.

CHIARADONNA 2005: R. Chiaradonna, *I contrari e i termini intermedi* (Metaphysica Iota 7), in B. Centrone (ed.), *Il libro Iota (X) della Metafisica di Aristotele*, Academia Verlag, Sankt Augustin 2005, pp. 157-169.

CHIARADONNA 2007a: R. Chiaradonna, *Porphyry and Iamblichus on Universals and Synonymous Predication*, «Documenti e studi sulla tradizione filosofica medievale» 18 (2007), pp. 123-140.

CHIARADONNA 2007b: R. Chiaradonna, *Porphyry's Views on the Immanent Incorporeals*, in G. Karamanolis, A. Sheppard (eds.), *Studies on Porphyry*, «Bulletin of the Institute of Classical Studies», supplement 98, Institute of Classical Studies, London 2007, pp. 35-49.

CHIARADONNA 2008: R. Chiaradonna, *What is Porphyry's Isagoge?*, in «Documenti e studi sulla tradizione filosofica medievale» 19 (2008), pp. 1-30.

CHIARADONNA 2014a: R. Chiaradonna, *Plotinus on Sensible Particulars and Individual Essences*, in A. Torrance, J. Zachhuber (eds.), *Individuality in Late Antiquity*, Routledge 2014, pp. 47-61.

CHIARADONNA 2014b: R. Chiaradonna, *Substance*, in P. Remes, S. Slaveva-Griffin (eds.), *The Routledge Handbook of Neoplatonism*, Routledge, London-New York 2014, pp. 216-227.

CHIARADONNA 2016: R. Chiaradonna, *Porphyry and the Aristotelian tradition*, in A. Falcon (ed.), *Brill's companion to the Reception of Aristotle in Antiquity*, Brill, Leiden-Boston 2016, pp. 321-340.

CHIARADONNA, RASHED, SEDLEY 2013: R. Chiaradonna, M. Rashed, D. Sedley, *A Rediscovered Categories Commentary*, «Oxford Studies in Ancient Philosophy» 44 (2013), pp. 129-194.

CODA, GOULET 2016: E. Coda, R. Goulet, *Simplicius de Cilicie* (entry), in R. Goulet (ed.), R. Goulet (ed.), *Dictionnaire des philosophes antiques*, vol. VI, CNRS Éditions, Paris 2016, pp. 341-394.

D'ANCONA 2005: C. D'Ancona, *Le traduzioni di opere greche e la formazione del corpus filosofico arabo*, in *Storia della filosofia nell'Islam medievale*, a cura di C. D'Ancona, Einaudi, Torino 2005, Vol. 1, pp. 180-258.

D'ANCONA 2011: C. D'Ancona, *Porphyry, Arabic* (entry), in F. Lagerlund (ed.), EMP [Encyclopedia of Medieval Philosophy], Springer, Dordrecht-Heidelberg-London-New York 2011, pp. 1056-1062.

DE HAAS 1997: F.A.J. De Haas, *John Philoponus' New Definition of Prime Matter*, Brill, Leiden-New York-Köln 1997.

DE RIJK 2002: L.M. De Rijk, *Aristotle. Semantics and Ontology, vol. I: General Introduction. The Works on Logic*, Brill, Leiden-Boston-Köln 2002.

DHANANI 1994: A. Dhanani, *The Physical Theory of Kalām*, Brill, Leiden-New York-Köln 1994.

DIEBLER 2005: S. Diebler, *Catégories, conversation et philosophie chez al-Fārābī*, in O. Bruun, L. Corti (eds.), *Les Catégories et leur histoire*, Vrin, Paris 2005, pp. 275-305.

DI VINCENZO 2015: S. Di Vincenzo, *Avicenna against Porphyry's definition of 'differentia specifica'*, in «Documenti e studi sulla tradizione filosofica medievale» 26 (2015), pp. 163-194.

DI VINCENZO 2016: S. Di Vincenzo, *Avicenna's reworking of Porphyry's 'common accident' in the light of Aristotle's Categories*, «Documenti e studi sulla tradizione filosofica medievale» 27 (2016), pp. 163-194.

DI VINCENZO 2017: S. Di Vincenzo, *Is there a Versio Vulgata of Avicenna's Kitāb al-Šifā'? On the Hypothesis of a Double Recension of Kitāb al-Madḥal*, «Documenti e Studi sulla Tradizione Filosofica Medievale» 28 (2017), pp. 29-70.

DI VINCENZO 2018: S. Di Vincenzo, *Early Exegetical Practice on Avicenna's Šifā': Faḥr al-Dīn al-Rāzī's Marginalia to Logic*, «Arabic Sciences and Philosophy» 28 (2018), pp. 31-66.

- DRUART 2001: T.A. Druart, “*Shay*” or “*Res*” as Concomitant of “*Being*” in Avicenna, «*Documenti e Studi sulla Tradizione Filosofica Medievale*» 12 (2001), pp. 125-142.
- DRUART 2012: T.A. Druart, *Avicennan Troubles: The Mysteries of the Heptagonal House and of the Phoenix*, «*Tópicos*» 42 (2012), pp. 51-73.
- DUMOULIN 1980: B. Dumoulin, *Sur l’authenticité des Catégories d’Aristote*, in P. Aubenque (ed.), *Concepts et catégories dans la pensée antique*, Vrin, Paris 1980, pp. 23-32.
- DUMOULIN 1981: B. Dumoulin, *L’ousia dans les Catégories et dans la Métaphysique*, in P. Moraux, J. Wiesner (eds.), *Zweifelhaftes im Corpus Aristotelicum. Studien zu einigen Dubia, Akten des 9. Symposium Aristotelicum (Berlin, 7. – 16. september 1981)*, De Gruyter, Berlin-New York 1981, pp. 57-72.
- DUNCOMBE 2015: M.B. Duncombe, *Aristotle’s Two Account of Relatives in Categories 7*, «*Phronesis*» 60 (2015), pp. 436-461.
- EBBESSEN 1990: S. Ebbesen, *Porphyry’s Legacy to Logic: a Reconstruction*, in R. Sorabji (ed.), *Aristotle Transformed: the Ancient Commentators and their Influence*, Duckworth, London 1990, pp. 141-171.
- EICHNER 2013: H. Eichner, *The Categories in Avicenna: Material for developing a developmental Account?* In: *The Reception of Aristotle’s Categories in the Byzantine, Arabic and Latin Traditions*, ed. Sten Ebbesen, John Marenbon, Paul Thom. Copenhagen (Royal Danish Academy) 2013, pp. 57-84.
- ELAMRANI-JAMAL 1983: A. Elamrani-Jamal, *Logique aristotélicienne et grammaire arabe. Étude et documents*, Vrin, Paris 1983.
- ELAMRANI-JAMAL 1988 : A. Elamrani-Jamal, *Aristote de Stagire, Les Catégories. Tradition arabe*, in DPhA,
- ELAMRANI-JAMAL 1989: A. Elamrani-Jamal, entry *Alīnūs (Allīnūs)*, in DPhA I (1989), pp. 151-152.
- ELLIS 1990: J. Ellis, *The Trouble with Fragrance*, in «*Phronesis*» XXXV, 1990, pp. 290-302.
- ENDRESS, ADAMSON 2012: G. Endress, P. Adamson, *Abū Yūsuf al-Kindī*, in Ueberweg, F., *Grundriss der Geschichte der Philosophie: Philosophie in der islamischen Welt* (bd. 1), hrsg. von U. Rudolph u.M. von R. Würsch, Basel 2012, pp. 92-147.
- ENDRESS 1977a: G. Endress, *La controverse entre la logique philosophique et la grammaire arabe au temps des khalifs*, «*Journal for the History of Arabic Science*», 1 (1977), pp. 339–51.
- ENDRESS 1977b: G. Endress, *The works of Yaḥyā Ibn ‘Adī: an Analytical Inventory*, L. Reichert Verlag, Wiesbaden 1977.
- ENDRESS 1986: G. Endress, *Grammatik und Logik: Arabische Philologie und griechische Philosophie im Widerstreit*, in B. Mojsisch (ed.), *Sprachphilosophie in Antike und Mittelalter*, Grüner, Amsterdam 1986, pp. 163–299.
- ENDRESS 1987: G. Endress, *Die wissenschaftliche Literatur*, in H. Gätje (ed.), *Grundriss der Arabischen Philologie II*. Ludwig Reichert, Wiesbaden 1987, pp. 400-506.
- ENDRESS 1992: G. Endress, *Die wissenschaftliche Literatur*, H. Gätje (ed.), *Grundriss der Arabischen Philologie, Supplement* Ludwig Reichert, Wiesbaden 1992, pp. 3-152.

ENDRESS 2012: *Ibn al-Hammār*, in Ueberweg, F., *Grundriss der Geschichte der Philosophie: Philosophie in der islamischen Welt* (bd. 1), hrsg. von U. Rudolph u.M. von R. Würsch, Basel 2012, pp. 335-341.

VAN ESS 1986: J. van Ess, *Kumūn* (entry), in *The Encyclopedia of Islam, New Edition*, vol. V, Brill, Leiden 1986, pp. 384-385.

EVANGELIOU 1988: C. Evangeliou, *Aristotle's Categories and Porphyry*, Brill, Leiden – New York – København – Köln 1988.

FERRARI 2004: C. Ferrari, *Der Duft des Apfels. Abū l-Faraġ 'Abdallāh Ibn aṭ-Ṭayyib und sein Kommentar zu den Kategorien des Aristoteles*, in V. Celluprica, C. D'Ancona (eds.), *Aristotele e i suoi esegeti neoplatonici. Logica e ontologia nelle interpretazioni greche e arabe*, atti del convegno internazionale (Roma, 19-20 ottobre 2001), Bibliopolis, Napoli 2004, pp. 85-106.

FERRARI 2005: C. Ferrari, *La scuola aristotelica di Bagdad*, in C. D'Ancona (ed.), *Storia della filosofia nell'Islam medievale*, a cura di C. D'Ancona, Einaudi, Torino 2005, Vol. 1, pp. 352-379.

FINNEGAN 1956: J. Finnegan, *Avicenna's Refutation of Porphyrius*, in *Avicenna Commemoration Volume*, The Iran Society, Calcutta 1956, pp. 187-203.

FRANK 1999: R. Frank, *The Aš'arite Ontology: I. Primary Entities*, «Arabic Sciences and Philosophy» 9 (1999), pp. 163-231.

FREDE 1981: M. Frede, *Titel, Einheit und Echtheit der aristotelischen Kategorienschrift*, in P. Moraux, J. Wiesner (eds.), *Zweifelhaftes im Corpus Aristotelicum. Studien zu einigen Dubia, Akten des 9. Symposium Aristotelicum (Berlin, 7. – 16. september 1981)*, De Gruyter, Berlin-New York 1981, pp. 1-29.

GABRIELI 1971: F. Gabrieli, *Ibn al-Mukaffa'* (entry), in EI [Encyclopaedia of Islam] III (1971), pp. 883-885.

GACEK 2009: A. Gacek, *Arabic Manuscripts. A Vademecum for Readers*, Brill, Leiden-Boston 2009.

GÄTJE 1982: H. Gätje, *Simplikios in der arabischen Überlieferung*, in «Der Islam» 59 (1982), pp. 6-31.

GEORR 1948: Kh. Georr, *Les Catégories d'Aristote dans leurs versions syro-arabes*, Beyrouth, Institut Français de Damas, 1948.

GILLESPIE 1925: C.M. Gillespie, *The Aristotelian Categories*, «Classical Quarterly» 19 (1925), pp. 75-84.

GOLITSIS 2008: P. Golitsis, *Les Commentaires de Simplicius et de Jean Philopon à la Physique d'Aristote*, De Gruyter, Berlin-New York 2008.

GRIFFIN 2012: M. J. Griffin, *What Does Aristotle Categorize? Semantics and the Early Peripatetic Reading of the Categories*, «Bulletin of the Institute of Classical Studies» 55 (2012), pp. 69-108.

GRIFFIN 2013: M. J. Griffin, *Universals, Education, and Philosophical Methodology in Later Neoplatonism*, in R. Chiaradonna, G. Galluzzo (eds.), *Universals in Ancient Philosophy*, Edizioni della Normale, Pisa 2013, pp. 353-380.

GRIFFIN 2015: M. J. Griffin, *Aristotle's Categories in the Early Roman Empire*, Oxford University Press 2015.



- GRIFFIN 2016: M. J. Griffin, *Why Philosophy Begins with the Categories: Perspectives from the 1st-century Greek Commentators*, «Documenti e studi sulla tradizione filosofica medievale» 27 (2016), pp. 19-42.
- GRIGNASCHI 1972: M. Grignaschi, *Les traductions latines des ouvrages de la logique arabe et l'abrégé d'Alfarabii*, «Archives d'histoire doctrinale et littéraire du Moyen Âge» 39 (1972), pp. 41-107.
- GUTAS 1988: D. Gutas, *Avicenna and the Aristotelian Tradition*, Brill, Leiden – New York – København – Köln 1988.
- GUTAS 1993: D. Gutas, *Aspects of Literary Form and Genre in Arabic Logical Works*, in C. Burnett (ed.), *Glosses and Commentaries on Aristotelian Logical Texts. The Syriac, Arabic and Medieval Latin Traditions*, Warburg Institute, London 1993, pp. 29-76.
- GUTAS 1998: D. Gutas, *Greek Thought and Arabic Culture. The Graeco-Arabic translation movement in Baghdad and early 'Abbāsid society (2nd - 4th/8th - 10th centuries)* London, Routledge 1998.
- GUTAS 2001: D. Gutas, *Intuition and Thinking: The Evolving Structure of Avicenna's Epistemology*, in R. Wisnovsky (ed.), *Aspects of Avicenna*, Markus Wiener Publishers, Princeton 2001, pp. 1-38.
- GUTAS 2012: D. Gutas, *Die Wiedergeburt der Philosophie und die Übersetzungen ins Arabische*, in Ueberweg, F., *Grundriss der Geschichte der Philosophie: Philosophie in der islamischen Welt* (bd. 1), hrsg. von U. Rudolph u.M. von R. Würsch, Basel 2012, pp. 72-74.
- GUTAS 2014: D. Gutas, *Avicenna and the Aristotelian Tradition. Second, Revised and Enlarged Edition, Including an Inventory of Avicenna's Authentic Works*, Brill, Leiden-Boston 2014.
- HADOT 1990: I. Hadot (ed.), *Simplicius, Commentaire sur les Catégories. Traduction commentée sous la direction de Ilsetraut Hadot*, fascicule I (Introduction, première partie). Traduction de Ph. Hoffmann (avec la collaboration de I. et P. Hadot), commentaire et notes par I. Hadot (avec des appendices de P. Hadot et J.-P. Mahé), Brill, Leiden – New York – København – Köln 1990.
- HADOT 2015: I. Hadot, *Athenian and Alexandrian Neoplatonism and the Harmonization of Plato and Aristotle*, translated by M. Chase, Brill, Leiden – Boston 2015.
- HASNAWI 2004: A. Hasnawi, *Le statut catégoriel du mouvement chez Avicenne: contexte grec et postérité médiévale latine*, in R. Morelon e A. Hasnawi (ed.), *De Zénon d'Élée à Poincaré*, Recueil d'études en hommage à Roshdi Rashed, Peeters, Leuven/Paris, 2004, pp. 607-622.
- HASSE 2012: D. N. Hasse, *Avicenna's 'Giver of Forms' in Latin Philosophy, Especially in the Works of Albertus Magnus*, in D.N. Hasse, A. Bertolacci, (eds.), *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics*, De Gruyter, Berlin/Boston 2012, pp. 225-249.
- HEIN 1985: C. Hein, *Definition und Einteilung der Philosophie. Von der spätantiken Einleitungsliteratur zur arabischen Enzyklopädie*, Peter Lang, Frankfurt a.M.-Bern-New York 1985.
- HERMANS 2018: E. Hermans, *A Persian Origin of the Arabic Aristotle? The Debate on the Circumstantial Evidence of the Manteq Revisited*, «Journal of Persianate Studies» 11 (2018), pp. 72-88.
- HINTIKKA 1959: J. Hintikka, *Aristotle and the Ambiguity of Ambiguity*, «Inquiry» 2 (1959), pp. 137-151.

HOFFMANN 1980: P. Hoffmann, *Les catégories ΠΟΥ et ΠΟΤΕ chez Aristote et Simplicius*, in P. Aubenque (ed.), *Concepts et catégories dans la pensée antique*, Vrin, Paris 1980, pp. 217-245.

HOFFMANN 1987: P. Hoffmann, *Catégories et langage selon Simplicius. La question du "skopos" du traité aristotélicien des "Catégories"*, in *Simplicius: sa vie, son oeuvre, sa survie. Actes du colloque international de Paris (28 sept. – 1er oct. 1985)*, De Gruyter, Berlin-New York 1987, pp. 61-90.

HOFFMANN 1999: P. Hoffmann, *Les analyses de l'énoncé. Catégories et partie du discours selon les commentateurs néoplatoniciens*, in Ph. Büttgen, S. Diebler, M. Rashed (ed.), *Théories de la phrase et de la proposition de Platon à Averroès*, Éditions Rue d'Ulm, Paris 1999, pp. 209-248.

HOFFMANN 2000: P. Hoffmann, *Les catégories aristotéliciennes ποτὲ et ποὺ d'après le commentaire de Simplicius. Méthode d'exégèse et aspects doctrinaux*, in M.-O. Goulet-Cazé et al. (eds.), *Le commentaire entre tradition et innovation*, Vrin, Paris 2000, pp. 355-376.

HOOD 2004: P. Hood, *Aristotle on the Category of Relation*, University Press of America, Lanham-Boulder-New York-Toronto-Oxford 2004.

HORTEN 1909: M. Horten, *Die Lehre vom Kumūn bei Nazzām*, «Zeitung der Deutschen Morgenländischen Gesellschaft» 63 (1909), pp. 774-792.

HUGONNARD-ROCHE 2012: H. Hugonnard-Roche, *Porphyre de Tyr. Survie orientale*, in R. Goulet (ed.), *Dictionnaire des Philosophes Antiques*, vol. Vb, CNRS Éditions, Paris 2012, pp. 1447-1468.

HYMAN 1965: A. Hyman, *Aristotle's 'First Matter' and Avicenna's and Averroes' 'Corporeal Form'*, in *Harry Austryn Wolfson Jubilee Volume (3 vols.)*, American Academy for Jewish Research, Jerusalem 1965, pp. 385 – 406.

INATI 1984B: S.C. Inati, *An Examination of Ibn Sīnā's Theodicy: Dissolving the Problem of Evil*, «The New Scholasticism» 58 (1984), pp. 170-186.

IRWIN 1981: T. Irwin, *Homonymy in Aristotle*, in «Review of Metaphysics», 34 (1981), pp. 523-544.

JANSSENS 2006: *The Notions of «Wāhib al-ṣuwar» (Giver of Forms) and «Wāhib al-'aql» (Bestower of Intelligence) in Ibn Sīnā*, in M.C. Pacheco, J.F. Meirinhos (ed.), *Intellect et imagination dans la philosophie médiévale. Proceedings of the 11th International Congress of the SIEPM, Porto 26-31 August 2002*, Brepols, Turnhout 2006 (vol. i), pp. 551-562.

JANSSENS 2011: J. Janssens, *Ibn Sīnā (Avicenna), The Latin Translations of*, in H. Lagerlund (ed.), *Encyclopedia of Medieval Philosophy*, Springer 2011.

JANSSENS 2012: J. Janssens, *Ibn Sīnā's Ta'liqāt: The presence of paraphrases of and super-commentaries on the Ilāhiyyāt of the Šifā'*, in F. Opwis, D.C. Reisman (eds.), *Islamic Philosophy, Science, Culture and Religion. Studies in honor of Dimitri Gutas*, Brill, Leiden 2012, pp. 201-222.

JANSSENS 2013a: J. Janssens, *Albert le Grand et sa connaissance des écrits logiques arabes: une réévaluation du dossier Grignaschi*, in J. Brumberg-Chaumont (ed.), *L'Organon dans la translatio studiorum à l'époque d'Albert le Grand*, Brepols, Turnhout 2013, pp. 225-257.

JANSSENS 2013b: J. Janssens, *Ibn Sīnā on Substance in Chapter Two of the Maqūlāt (Categories) of the Šifā'*, in P. Fodor et al. (ed.), *More modoque, Festschrift für Miklós Maróth zum siebzigsten Geburtstag*, Forschungszentrum für Humanwissenschaften der Ungarischen Akademie der Wissenschaften, Budapest 2013, pp. 353-360.

JONES 1972: B. Jones, *Individuals in Aristotle's Categories*, «Phronesis» 17 (1972), pp. 107-123.

JONES 1975: B. Jones, *An Introduction to the First Five Chapters of Aristotle's Categories*, «Phronesis» 20 (1975), pp. 146-172.

KALBARCZYK 2012: A. Kalbarczyk, *The Kitāb al-Maḡūlāt of the Muḡtaṣar al-awsaṭ fī l-manṭiq: A hitherto unknown source for studying Ibn Sīnā's reception of Aristotle's Categories*, in «Oriens» 40.2 (2012), pp. 305-54.

KALBARCZYK 2018: A. Kalbarczyk, *Predication and Ontology*, De Gruyter, Berlin-New York 2018.

KARAMANOLIS 2004: G. Karamanolis, *Porphyry: The First Platonist Commentator on Aristotle*, in P. Adamson, H. Baltussen, M.W.F. Stone (eds.), *Philosophy, science and exegesis in Greek, Arabic and Latin commentaries*, BICS Supplement 83.1, 2 vols., I, pp. 97-120.

KOUTZAROVA 2009: T. Koutzarova, *Das Transzendente bei Ibn Sīnā. Zur Metaphysik als Wissenschaft erster Begriffs und Urteilsprinzipien*, Brill, Leiden/Boston 2009.

LAMEER 1994: J. Lameer, *Al-Fārābī and Aristotelian Syllogistics. Greek Theory and Islamic Practice*, Brill, Leiden-New York-Köln 1994.

LAMMER 2018: A. Lammer, *The Elements of Avicenna's Physics*, De Gruyter, Berlin-New York 2018.

LEGENHAUSEN 2007: M. Legenhausen, *Ibn Sina's Arguments against God's Being a Substance*, in C. Kanzian, M. Legenhausen (eds.), *Substance and Attribute. Western and Islamic Traditions in Dialogue*, Ontos Verlag, Frankfurt-Paris 2007, pp. 117-143.

LIZZINI 2004: O. Lizzini, *The Relation between Form and Matter: Some Brief Observations on the 'Homology Argument' (Ilāhīyāt, II.4) and the Deduction of Fluxus*, in J. McGinnis, D. Reisman (ed.), *Interpreting Avicenna. Science and Philosophy in Medieval Islam*, Brill, Leiden-Boston 2004, pp. 175-185.

LIZZINI 2012: O. Lizzini, *Avicenna*, Carocci, Roma 2012.

LLOYD 1990: A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford University Press 1990.

LOUX 1973: M.J. Loux, *Aristotle on the Transcendentals*, «Phronesis» 18 (1973), pp. 225-239.

LUNA 1987: C. Luna, *La relation chez Simplicius*, in I. Hadot (ed.), *Simplicius: sa vie, son oeuvre, sa survie. Actes du colloque international de Paris (28 sept. – 1er oct. 1985)*, De Gruyter, Berlin-New York 1987, pp. 113-147.

LUNA 2013: C. Luna, *Boéthos de Sidon sur les relatifs*, in «Studia Graeco-Arabica» 3 (2013), pp. 1-35.

LUTHER 2004: I. Luther, *The Conception of the Angle in the Works of Ibn Sīnā and aš-Širāzī*, in J. McGinnis, D. Reisman (ed.), *Interpreting Avicenna. Science and Philosophy in Medieval Islam*, Brill, Leiden-Boston 2004, pp. 112-125.

MAHDAVI 1954: *Fihrist-i Nuṣṣahā-Yi Muṣannaḡāt-i Ibn-i Sīnā. Intiṣārāt-i Dāniṣḡāh-yi Tihrān*, Tihrān 1954.

MARGOLIOUTH 1905: D. S. Margoliouth, *The Discussion between Abū Bishr Mattā and Abū Sa'īd al-Širāfī on the Merits of Logic and Grammar*, «Journal of the Royal Asiatic Society of Great Britain and Ireland», 1905, pp. 79-129.

MARMURA 1975: M. E. Marmura, *Avicenna's Chapter "On the Relative" in the Metaphysics of the*

Shifā', in G. F. HOURANI, ed., *Essays on Islamic Philosophy and Science*, State University of New York Press, Albany 1975, pp. 83-99.

MARMURA 1981: M. E. Marmura, *Avicenna on Causal Priority*, in P. Morewedge (ed.), *Islamic Philosophy and Mysticism*, Caravan Books, Delmar (New York) 1981, pp. 65-83.

MARMURA 1984: M. E. Marmura, *Avicenna on Primary Concepts in the Metaphysics of his al-Shifā'*, in R.M. Savory, D. A. Agius, *Logos Islamikos. Studia Islamica in Honorem Georgii Michaelis Wichens*, Pontifical Institute of Medieval Studies, Toronto 1984, pp. 219-239.

MCGINNIS 2006: J. McGinnis, *Positioning Heaven: The Infidelity of a Faithful Aristotelian*, «Phronesis» 51, 2006, pp. 140–161.

MCGINNIS 2010: J. McGinnis, *Avicenna*, Great Medieval Thinkers, Oxford University Press, New York 2010.

MENDELL 1987: H. Mendell, *Topoi on topos: the development of Aristotle's concept of place*, «Phronesis» 32 (1987), pp. 206-231.

MENN 2012: S. Menn, *Fārābī in the Reception of Avicenna's Metaphysics: Averroes against Avicenna on Being and Unity*, in D.N. Hasse, A. Bertolacci, (eds.), *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics*, De Gruyter, Berlin/Boston 2012, pp. 51-96.

MICHOT 1997: J. Michot, *La réponse d'Avicenne à Bahmanyar et al-Kirmānī. Présentation, traduction critique et lexique arabe-français de la Mubāḥaṭa III*, «Le Muséon» 110 (1997), pp. 143-221.

MIGNUCCI 1986: M. Mignucci, *Aristotle's Definitions of Relatives in Cat. 7*, «Phronesis» 31 (1986), pp. 101-127.

MORALES 1994: F. Morales, *Relational Attributes in Aristotle*, «Phronesis» 39 (1994), pp. 255-274.

MORAUX 1973: P. Moraux, *Der Aristotelismus bei den Griechen, von Andronikos bis Alexander von Aphrodisias. Erster Band: die Renaissance des Aristotelismus im I. Jh. v. Chr.*, De Gruyter, Berlin-New York 1973.

MORAUX 1984: P. Moraux, *Der Aristotelismus bei den Griechen, von Andronikos bis Alexander von Aphrodisias. Zweiter Band: der Aristotelismus im I. und II. Jh. n. Chr.*, De Gruyter, Berlin-New York 1984.

MORAUX 2001: P. Moraux, *Der Aristotelismus bei den Griechen, von Andronikos bis Alexander von Aphrodisias. Dritter Band: Alexander von Aphrodisias*, De Gruyter, Berlin-New York 2001.

MORAVCSIK 1967: J.C.S. Moravcsik, *Aristotle on Predication*, «Philosophical Review» 76, 1967, pp. 80-96.

NARCY 1980: M. Narcy, *Qu'est-ce qu'une figure? Une difficulté de la doctrine aristotélicienne de la qualité (Aristote Catégories 8, 10 b26 – 11 a14)*, in P. Aubenque (ed.), *Concepts et catégories dans la pensée antique*, Vrin, Paris 1980, pp. 197-216.

O'BRIEN 1978: D. O'Brien, *Aristote et la catégorie de la quantité, division de la quantité*, «Les Études Philosophiques» 1 (1978), pp. 25-40.

O'BRIEN 1980: D. O'Brien, *Aristote: quantité et contrariété. Une critique de l'école d'Oxford*, in P. Aubenque (ed.), *Concepts et catégories dans la pensée antique*, Vrin, Paris 1980, pp. 89-165.

OWEN 1960: G.E.L. Owen, *Logic and Metaphysics in some earlier works of Aristotle*, in I. Düring, G.E.L. Owen (eds.), *Aristotle and Plato in the Mid-fourth Century. Papers of the Symposium Aristotelicum held at Oxford in August, 1957*, Göteborg 1960, pp. 163-190.

PETERS 1968: F. Peters, *Aristoteles Arabus. The oriental translations and commentaries on the aristotelian Corpus*, Brill, Leiden 1968.

QUARTUCCI 2017: A. Quartucci, *Avicenna's notion of al-mawḍū' al-awwal ('first subject') in Ilāhiyyāt I,1-2 and its Latin reception*, «Documenti e Studi sulla Tradizione Filosofica Medievale» 28 (2017), pp. 441-479.

M. RASHED 2004a: M. Rashed, *Ibn 'Adī et Avicenne sur les types d'existants*, in V. Celluprica, C. D'Ancona (eds.), *Aristotele e i suoi esegeti neoplatonici. Logica e ontologia nelle interpretazioni greche e arabe*, atti del convegno internazionale (Roma, 19-20 ottobre 2001), Bibliopolis, Napoli 2004, pp. 107-172.

M. RASHED 2004b: M. Rashed, *Les marginalia d'Aréthas, Ibn al-Ṭayyib et les dernières gloses alexandrines à l'Organon*, in C. Burnett, D. Jacquart (eds.), *Actes du Colloque international Writing in the Margins*, Paris 2004, pp. 57-73 (repr. in M. RASHED 2016, pp. 819-839).

M. RASHED 2004c: M. Rashed, *Priorité de l'εἶδος ou du γένος entre Andronicos et Alexandre. Vestiges arabes et grecs inédits*, «Arabic Sciences and Philosophy» 14 (2004), pp. 9-63 (repr. in M. RASHED 2016, pp. 257-323).

M. RASHED 2007: M. Rashed, *Essentialisme. Alexandre d'Aphrodise entre logique, physique et cosmologie*, De Gruyter, Berlin – New York 2007.

M. RASHED 2009: M. Rashed, *Thābit ibn Qurra sur l'existence et l'infini : les Réponses aux questions posées par Ibn Usayyid*, in R. Rashed (ed.), *Thābit ibn Qurra. Science and Philosophy in Ninth-Century Baghdad*, De Gruyter, Berlin-New York 2009, pp. 619-674.

M. RASHED 2013: M. Rashed, *Boethus' Aristotelian Ontology*, in M. Schofield (ed.), *Plato, Aristotle and Pythagoras in the first century BC*, Cambridge University Press, Cambridge 2013, pp. 53-77.

M. RASHED 2015: M. Rashed, *Al-Ḥasan ibn Mūsā al-Nawbaḥtī, Commentary on Aristotle «De generatione et corruptione»*. Edition, Translation and Commentary, De Gruyter, Berlin - New York 2015.

M. RASHED 2016: M. Rashed, *L'héritage aristotélicien. Nouvelle édition revue et augmentée*, Les Belles Lettres, Paris 2016.

R. RASHED 2012: R. Rashed, *L'angle de contingence: un problème de philosophie des mathématiques*, in «Arabic Sciences and Philosophy» 22 (2012), pp. 1-50.

R. RASHED 2015: R. Rashed, *Angles et grandeur. D'Euclide à Kamāl al-Dīn al-Fārisī*, De Gruyter, Berlin/New York 2015.

REISMAN 2002: D. Reisman, *The Making of the Avicennan Tradition. The Transmission, Contents, and Structure of Ibn Sīnā's al-Mubāḥaṭāt (The Discussions)*, Brill, Leiden 2002.

ROSENTHAL 1943: F. Rosenthal, *Aḥmad b. al-Ṭayyib al-Saraḥsī*, American Oriental Society, New Haven 1943.

ROSENTHAL 1972: F. Rosenthal, *A Commentator of Aristotle*, in S.M. Stern, A. Hourani e V. Brown, ed., *Islamic Philosophy and the Classical Tradition*, coll. «Oriental Studies» 5, Oxford 1972, pp. 737-749.

RYLE 1949: G. Ryle, *The Concept of Mind*, Hutchinsons's University Library, London-New York-Melbourne-Sydney-Cape Town 1949.

SABRA 1980: A. Sabra, *Avicenna on the subject matter of logic*, «Journal of Philosophy» 77 (1980), pp. 746–764.

SEBTI 2000: M. Sebtî, *Avicenne. L'âme humaine*, Presses Universitaires de France, Paris 2000.

SCHMIDT 1966: E.G. Schmidt, *Alexander von Aphrodisias in einem altarmenischen Kategorien-Kommentar*, in «Philologus» 110 (1966), pp. 277-286.

SCHÖCK 2008: C. Schöck, *Name (ism), Derived Name (ism mushtaq) and Description (wasf) in Arabic Grammar, Muslim Dialectical Theology and Arabic Logic*, in S. Rahman et al. (eds.), *The Unity of Science in the Arabic Tradition. Science, Logic, Epistemology and their Interactions*, Springer 2008, pp. 329-360.

SEDLEY 1987: D. Sedley, *Philoponus' Conception of Space*, in R. Sorabji (ed.), *Philoponus and the Rejection of Aristotelian Science*, London 1987, pp. 140-153.

SEDLEY 2002: D. Sedley, *Aristotelian Relativities*, in J. Brunschwig et al. (eds.), *Le style de la pensée: Recueil des textes en hommage à Jacques Brunschwig*, Paris 2002, pp. 324-352.

SHARPLES 1985: R.W. Sharples, *Theophrastus on Taste and Smell*, in W. Fortenbaugh, P. Huby, A.A. Long (eds.), *Theophrastus of Eresus. On his Life and Works*, Transaction Works, New Brunswick 1985, pp. 185 – 204.

SORABJI 1983: R. Sorabji, *Matter, Space and Motion*, Duckworth, London 1988.

SORABJI 2004: R. Sorabji, *The Philosophy of the Commentators 200-600 AD. A Sourcebook. Vol. 3: Logic and Metaphysics*, London, Duckworth 2004.

STEEL 2002: C. Steel, *Avicenna and Thomas Aquinas on Evil*, in J. Janssens, D. De Smet (eds.), *Proceedings of the International Colloquium "Avicenna and his Heritage"*, Leuven-Louvain-la-Neuve, 8-11 September 1999, Leuven University Press, Leuven 2002, pp. 171-196.

STEINFATH 1991: H. Steinfath, *Selbständigkeit und Einfachheit. Zur Substanztheorie des Aristoteles*, Verlag Anton Hain, Frankfurt am Main 1991.

STONE 2001: A. Stone, *Simplicius and Avicenna on the Essential Corporeity of Material Substance*, in R. Wisnovsky (ed.), *Aspects of Avicenna*, Markus Wiener Publishers, Princeton 2001, pp. 73-130.

STONE 2008: A. Stone, *Avicenna's Theory of Primary Mixture*, in «Arabic Sciences and Philosophy» 18 (2008), pp. 99-119.

STREET 2001: T. Street, *The 'Eminent Later Scholar' in Avicenna's Book of the Syllogism*, «Arabic Sciences and Philosophy» 11 (2001), pp. 205–218.

TARÁN 1978: L. Tarán, *Speusippus and Aristotle on homonymy and synonymy*, «Hermes» 106 (1978), pp. 73-99.

THOM 2015: P. Thom, *The Division of the Categories according to Avicenna*, in A. Alwishah, J. Hayes (ed.), *Aristotle and the Arabic Tradition*, Cambridge University Press, Cambridge 2015, pp. 30-49.

TREIGER 2010: A. Treiger, *Avicenna's Notion of Transcendental Modulation of Existence (taškīk al-wuġūd, analogia entis) and Its Greek and Arabic Sources*, in *Documenti e Studi sulla Tradizione*

*Filosofica Medievale*, 21, 2010, pp. 165-198, repr. 2011 in *Islamic Philosophy, Science, Culture and Religion. Studies in honor of Dimitri Gutas*, cit., pp. 327-363.

TÜRKER 1965: M. Türker, *El-‘Amiri ve Kategoriler in serhleriyle ilgili parçalar*, in «Araştırma» 3 (1965), pp. 65-122.

VALLAT 2004: P. Vallat, *Fārābī et l'école d'Alexandrie*, Vrin, Paris 2004.

VALLAT 2013 P. Vallat, *Alexandrian Tradition into Arabic: Philosophy*, in H. Lagerlund (ed.), *The Encyclopaedia of Medieval Philosophy*, pp. 66-73.

VAMVOUKAKIS 1980: N. Vamvoukakis, *Les catégories aristotéliennes d'action et de passion vues par Simplicius*, in P. Aubenque (ed.), *Concepts et catégories dans la pensée antique*, Vrin, Paris 1980, pp. 253-269.

WALZER 1965: R. Walzer, *Porphyry in the Arabic Tradition*, in *Porphyre. Entretiens de la Fondation Hardt XII*. Fondation Hardt, Vandoeuvres/Genève 1965, pp. 275-299.

WISNOVSKY 2000: R. Wisnovsky, *Notes on Avicenna's Concept of Thingness (Šay'iyya)*, «Arabic Sciences and Philosophy» 10 (2000), pp. 181-221.

WISNOVSKY 2003: R. Wisnovsky, *Avicenna's Metaphysics in Context*, Cornell University Press 2003.

WISNOVSKY 2012: R. Wisnovsky, *New philosophical texts of Yaḥyā Ibn ‘Adī: a Supplement to Endress' Analytical Inventory*. In: F. Opwis, D. Reisman (eds.), *Islamic Philosophy, Science, Culture, Religion. Studies in honor of Dimitri Gutas*, Brill, Leiden-Boston 2012, pp. 307-326.

WISNOVSKY 2013: R. Wisnovsky, *Avicenna's Islamic Reception*, in P. Adamson (ed.), *Interpreting Avicenna*, Cambridge University Press, Cambridge 2013, pp. 190-213.

WOLFSON 1973a: H.A. Wolfson, *The Terms Taṣawwur and Taṣdīq in Arabic Philosophy and Their Greek, Latin and Hebrew Equivalents*, in H. A. Wolfson, *Studies in the History of Philosophy and Religion*, eds. I. Twersky and G. H. Williams, 2 vols, Harvard University Press, Cambridge, MA, 1973, vol. 1, pp. 478–92.

WOLFSON 1973b: H.A. Wolfson, *The Amphibolous Terms in Aristotle, Arabic Philosophy and Maimonides*, in H. A. Wolfson, *Studies in the History of Philosophy and Religion*, eds. I. Twersky and G. H. Williams, 2 vols, Harvard University Press, Cambridge, MA, 1973, vol. 1, pp. 455–77 [originally published in 1938].

ZGHAL 2006: H. Zghal, *La relation chez Avicenne*, «Arabic Sciences and Philosophy» 16 (2006), pp. 237-286.

ZONTA 2006: M. Zonta, *Al-Fārābī's Long Commentary on Aristotle's Categoriae in Hebrew and Arabic. A Critical Edition and English Translation of the Newly-found Extant Fragments*, in B. Abrahamov (ed.), *Studies in Arabic and Islamic Culture II*, Bar-Ilan University Press, Ramat-Gan 2006, pp. 185-254.

ZONTA 2014: M. Zonta, *Saggio di lessicografia filosofica araba*, Paideia Editrice, Brescia 2014.





## TRANSLATION



In the Name of God, the Compassionate, the Merciful

---

SECOND SECTION

of the First Part, Logic

ON THE CATEGORIES

In Seven Treatises

**FIRST TREATISE**

In Six Chapters

[C3]



[I.1]  
On the goal of the *Categories*<sup>429</sup>

[§1 *The previous treatment of universals is useful for the study of logic*]

You have already learned, before<sup>430</sup>, the quiddity of the simple utterance, and the quiddity of the complex utterance; you have learned that the complex utterance is only composed by the simple utterance, and you have learned that simple utterances, inasmuch as they are universal and particular, essential and accidental, are divided into five types<sup>431</sup>. Now it is necessary for you to learn that the knowledge of these five states of simple utterances aids the knowledge of complex utterances, inasmuch as knowledge aims at these; and you must hold that there are other states of simple utterance of which there is no need for the knowledge of complex utterances: thus, there is no need for every state of simple utterances, in order to use them in knowing the states [C4] of complex utterances, [built] according to the composition aimed at in logic. As to these, they are among those things whose comprehension is useful in the discipline of logic: since<sup>432</sup> complex utterances are composed, according to the discipline of logic, so as to understand the useful way to acquire assent and conceptualization. This [useful] way of acquiring [them] is accomplished by means of syllogisms, definitions and descriptions.

Syllogisms are composed of premises, as you shall learn<sup>433</sup>; the subjects [of these premises] must be universal, for them to belong to the sciences; and their subjects and predicates must be [composed] according to some of the relations mentioned regarding essentiality and accidentality, so as to belong to demonstration.

Division is also one of the ways which lead to acquiring knowledge of the unknown. The [most] excellent<sup>434</sup> division is that which [divides] genera into species by means of differentiae, given that a ranking is maintained in them, such that there occurs no leap from a certain degree to one which does not follow it immediately<sup>435</sup>. [Division] may also occur by means of properties and accidents.

Thus, the knowledge of these five simple [utterances] is useful in syllogisms, and its usefulness in definitions and descriptions is even more patent: for definitions are made of genera and differentiae, whilst descriptions are made of genera and properties and accidents, and in most cases these belong to the species. Thus, to posit the study of these

---

<sup>429</sup> This chapter has no correspondence with the text of the *Categories*, being a general introduction to the treatise.

<sup>430</sup> I.e. in the *Madḥal*, especially in the chapters introducing the treatment of the five universals (I.5-8).

<sup>431</sup> The five Porphyrian predicables, namely genus, species, *differentia*, property and common accident.

<sup>432</sup> Reading *iq̄* with mss. **AsDiGIJY** (*wa-iq̄ BDDaEMMkNNkR*, *fa-iq̄an A*), instead of *wa-anna* (Cairo).

<sup>433</sup> A reference to the paraphrase of the *Prior Analytics*, especially the chapters devoted to the general theory of the syllogism (*Qiyās I.*)

<sup>434</sup> Reading *al-fāḍila* (cf. e.g. **NkYEIBA**) instead of *al-fāṣila* (Cairo).

<sup>435</sup> A division done properly is complete and does provide all the steps, without leaving aside a certain genus or species.

states attached to simple utterances before starting with the knowledge of complex [utterances] is necessary, or quasi-necessary.

[§2 *Simple utterances may be also considered insofar as they express existing beings*]  
[§2.1 *The knowledge of these states is totally irrelevant in logic*]

Simple utterances have other states, namely their expressing things which exist according to one of the two existences which we clarified as we notified the subject-matter of logic<sup>436</sup>. It is absolutely unnecessary to get acquaintance with these, I mean in apprehending the discipline of logic, nor even quasi-necessary; neither under the respect of their state of expressing particular individuals, for this belongs to what is absolutely useless in any science, not to speak of logic; nor under the respect of their state of expressing the species, since this is something by which no one is helped in the discipline of logic, and the discipline of logic is complete without that; nor under the respect of their state of expressing the high genera, which it is of use to call “categories”, and to which it is of use to devote a book in the beginning of the science of logic, named *Qāṭigūryās*. [C5] For if the student of logic, after his knowledge of the states of simple utterances that we taught, moves further and learns the noun and the verb<sup>437</sup>, he can already move on to the learning of propositions (and their subdivisions), syllogisms, definitions (and their types), the matters of syllogisms, demonstrative and non-demonstrative definitions (and their genera and species), even if he has no idea of the fact that there are ten categories, and that they are those [things] which simple utterances express (either themselves, or the things belonging to them<sup>438</sup>).

[§2.2 *These things should rather be examined by other sciences*]

No significant shortcoming occurs, because of the omission of this; nor, if one holds that these categories are more in number, or less in number, does he get for this reason any weakness in logic. Moreover, his knowledge of whether these things are described by genericity does not oblige him to know whether other things are described by specificity<sup>439</sup>. Rather, the knowledge of these [things]: as to the respect of the manner of existence, it [belongs] to first philosophy; knowledge of them under the respect of their being conceptualized by the soul [belongs] to a border-line section of natural science adjacent to first philosophy<sup>440</sup>; whereas the knowledge of the fact that they require utterances falling upon them, [belongs] to the discipline of linguists. The knowledge of the fact that simple utterances fall upon a thing among them, without that the utterances that

---

<sup>436</sup> Intellectual existence and extra-mental existence (distinguished in *Madḥal* I.4).

<sup>437</sup> “Name and verb”: *al-ism wa-l-kalima*, corresponding respectively to the Aristotelian ὄνομα and ῥῆμα (discussed in the first chapters of the *De interpretatione*, ).

<sup>438</sup> I.e., simple expressions may of course express either the ten categories themselves, or the things which belong to them.

<sup>439</sup> This means that the logician, once he has learned that the ten categories are genera, does not need to inquire whether other things may be deemed to be highest genera, or simply species of the actual highest genera.

<sup>440</sup> I.e., psychology (the science of the soul). *Ḥadd* (“border-line section”), printed by Cairo and attested by the majority of manuscripts, seems preferable to the alternative reading *ḡuz*’ (MkGJAsNA).

fall upon them be determined, is like the knowledge of the fact that existing things have simple utterances, imposed actually or potentially. For the logician, inasmuch as he is a logician, it is not worthier to know this about them, than knowing this about other [things]; since it is not incumbent upon him, insofar as he is a logician, to occupy himself with knowing that simple utterances are imposed to one sort of things, namely common universals, rather than knowing that with regard to [another] sort of things, such as proper<sup>441</sup> universals.

[§3 *The Categories may be useful only to solve cases of controversial definitions*]

Of course there is one thing [to say]: that is, the student may benefit from this instruction in a certain way, namely there results, for him, a certain comprehensive knowledge of things, and he is able to mention the paradigms<sup>442</sup>. [C6] When a disagreement concerning definitions occurs, due to the fact that the defined things fall divergently in various categories, for instance as it is for the thing belonging to the category of the relative, to define it [the logician] needs certain states which do not belong to what falls in the category of substance; and the species of quantity are maybe characterized, in definition, by properties which they have, and the species of quality have not. If these things are understood with regard to them, it is simple to learn this<sup>443</sup>; still leaving aside the fact that the need to single this teaching out is not urgent, regarding this notion; for you may know the discipline of defining in its completeness without needing to single out this [other] art, and without saying: “if things belong to the relative, then their character is this”; “if they are powers and qualities, then their character is this”.

[§4 *The Categories is a work treating non-demonstratively issues tackled by other disciplines*]

So, you must not exceed this measure of ambition for this art, be certain that it is alien to the discipline of logic, and know something else: namely, that the author of this book did not write it as a teaching, but according to the way of convention and uncritical acceptance; for there is no way to know by verification, by means of the way of explanation related to logic, what is known in it. Know that what [people] attempt<sup>444</sup> to do, is to establish the number of these ten [categories]; [to establish] that there is no thing common<sup>445</sup> to them and that in them there is no intrusion; that each one of them has such and such property; that nine of them differ from one and the first, inasmuch as this latter is substance, and the former are accidents. Things like these are certainly explanations procured by other disciplines, and absolutely confined to them: for there is no way to know

---

<sup>441</sup> “Proper” in the sense of “more specific”, with respect to “common”.

<sup>442</sup> Ar. *al-amṭila*: “paradigms”, in a sense close to that of “paradeigmatic argument”: see the COMMENTARY *ad loc.*

<sup>443</sup> I.e. if things such as the properties belonging to each category are understood, it is easier to learn in which category a thing actually falls.

<sup>444</sup> The subject of the plural verb in Arabic is undetermined; I take it to refer to the previous commentators, who actually discuss all the following issues.

<sup>445</sup> Reading *’amma* with all manuscripts, instead of *’ilma* (Cairo). This means, in plain terms, that there is no genus higher than them, of which they are subdivisions or species. On this point, see below, II.1, [§1].

these but by rigorous examination, and there is no way to examine rigorously [anything] but after reaching the degree of science which is called first philosophy.

So, you must confirm that the goal of this book is that you believe, by convention and concession, that ten things are high genera which contain beings, and upon which simple utterances fall; and that you know that one of them is substance, and the other nine are accidents, without that the nine's being accidents be demonstrated to you; but you just must accept it. [C7] So, there is no way that we demonstrate to you, now, that qualities and quantities are accidents, without demonstrating to you the necessity of this number (but you just accept it), and without demonstrating to you that each one of them is truly a genus, not an ambiguous utterance<sup>446</sup>, nor [a name] expressing a concomitant, non-constitutive [thing]. Thus, there is no way for you to know, in the beginning of the teaching, that quality falls upon the species below it as a genus, and it is not a homonym, or an ambiguous name, or a synonym, but [the genus] is constitutive of the quiddity of what is below it; and likewise for quantity. He who occupied himself with this in this book undertook something inadequate for his power. Likewise is for the properties which are mentioned [here], since they are just object of mention. The sign that the truth is what I say to you, is that these enquiries were left aside in the original book<sup>447</sup>.

[§5 *Refutation of the common opinion of the previous logicians on the goal of the Categories*]

Moreover, the totality of validating logicians<sup>448</sup> denied that this book is an examination of the natures of beings, but they said that it is an examination of them, insofar as they are expressed by simple utterances. [However,] the demonstrations which certify that these nine [things] are accidents are not other than the demonstrations which prove the states of their existence; nor there exists, regarding them, a demonstration of this insofar as they are expressed by simple utterances; and it is the same as regards those other enquiries. Thus, if the explanation of these states regarding them depends on the examination insofar as they are existent, the denial they firmly hold<sup>449</sup> is meaningless. Rather, this examination of them is an examination insofar as they are existent, then insofar as they are expressed by the utterance; so, two ways of examination have been gathered in it, as for everything whose states are examined insofar as it is existent, one may also understand intuitively its state insofar as it is expressed (since for every essence there exists, there is a correspondence in utterances). Of course, if the [categories'] being-expressed had properties which do not admit of convertibility with existence, and the enquiry in this book were confined to these [properties], and diverted to them, then it would be convenient to think that what they understood about the goal of this book, so as to abstract it as a logical examination which is

---

<sup>446</sup> Ar. *lafz mušakkik*, i.e. a name whose meaning is said analogically of the things which share it. For the definition of *mušakkik* names, see below, I.2 [§3.2].

<sup>447</sup> I.e., in Aristotle's *Categories*, where for instance no attempt to justify rigorously the number of the categories is made.

<sup>448</sup> Ar. *Kāffatu l-manṭiqiyyīna l-muḥaṣṣilīna*. For the meaning of "validating" (*muḥaṣṣil*), see below the COMMENTARY.

<sup>449</sup> I.e., the commentators' refusal to admit that the *Categories* is simply about beings.



neither first philosophy nor natural philosophy, is a thing too subtle, a witty complication<sup>450</sup> and an abstruse judgment.

If they were positing all these things<sup>451</sup> by way of concession, and they were saying that these are collections of the things upon which simple utterances fall, and from which complex utterances are composed; but they are the things whose notions in the soul are matters of the parts of complex notions in the soul, [composed] according to the composition by means of which one gets to acquire unknown things, even though there is absolutely no utterance; then, they would be saying something [meaningful]. [However,] as to their insistence on the fact that this is a logical enquiry, and that this depends of the fact that [yes,] there are undoubtedly utterances, this is a mere artifice, and for this reason they became obtuse and bewildered.

[§6 *Conclusion*]

As to us, we say what we said; then, we follow the path of the majority and their custom, whether we like it or not<sup>452</sup>. We say that, besides the fact that this book and its being placed at the head [of logic] are not very useful, it is maybe [even] harmful at the start: for moreover, the soul of those whom I saw was befuddled, as they read this book, to the point that they figured out, from it, things they had no way<sup>453</sup> to ascertain: thus, they became convinced of fantasies averted from the truth, upon which they built doctrines and opinions that – for this reason - polluted their soul; and in the tablet of their intellect something was drawn, which another drawing cannot delete, and when [another drawing] fuses with [the first] it confuses it.

---

<sup>450</sup> Reading *iḥrāḡun* instead of *iḥrāḡun* (Cairo).

<sup>451</sup> I.e., the ten categories.

<sup>452</sup> Reading *ša`nā am abaynā* with all mss. ([...] *aw abaynā NR*) instead of *ša`nā aw bayyannā* (Cairo).

<sup>453</sup> Reading *lā sabīla lahū* with most manuscripts, instead of *lā sabīla* (Cairo, **AGJ**).

## [I.2]

### On the utterances of homonyms, synonyms, heteronyms, paronyms, and the like<sup>454</sup>

[§1 *Things sharing the same name are either synonymous or non-synonymous*]

[C9] Among the things which differ [from one another], and diverge in number, there are those that share the same name, and this occurs in two ways: for either they do in the way of synonymy, or they do in a way other than synonymy.

[§2 *Synonymy*]

The way of synonymy is such that the name [things] have is one, and the essential account<sup>455</sup> – I mean, the definition of the essence or its description - corresponding to what is signified by that name is one under every respect; for instance, when we say “animal” of man, horse and ox, but also of Zayd, ‘Amr, this horse and this ox: for all of them are called “animal”. If one wants to define or describe [them], and in general to provide the essential account (namely, the specific utterance expressing the notion of the essence for all of them, be it a definition or a description, for “account” is more universal than each one of them), he finds<sup>456</sup> it is one<sup>457</sup> under every respect: namely, it is one in meaning and deservingness, and it does not differ in them according to greater or lesser worthiness, priority and posteriority, intensity and weakness. This synonymous agreement must concern the account “corresponding to this name”, for if there exists another formula in which [these

---

<sup>454</sup> This chapter corresponds to Arist. *Cat.* 1 a1-15. The translation slightly modifies the original Arabic. In Ishāq b. Ḥunayn’s translation of the *Categories*, ὁμόνομα, συνόνομα and παρόνομα are literally rendered, respectively, as “the [things] whose names are concordant” (*al-muttafiqa asmā’uhā*), “the [things] whose names are in mutual agreement” (*al-mutawāfi’a asmā’uhā*), “the [things] whose names are derived” (*al-muštaqqa asmā’uhā*): in the first two cases, Ishāq employed two quasi-synonymous words (*muttafiq* and *mutawāfi’*) to express two different meanings. The Arabic translators of late ancient commentaries apparently followed the same pattern for the notions of heteronymy and polyonymy, absent from Aristotle’s text but supplemented by the later exegetical tradition: ἑτερόνομα and πολυόνομα were rendered respectively as “the [things] whose names are mutually different” (*al-mutabāyina asmā’uhā*) and “the [things] whose names are synonymous” (*al-mutarādifa asmā’uhā*). In these Arabic expressions, however, the word conveying the specific meaning is an attribute of names and words, whereas “homonymous”, “synonymous” and the like are attributes of things. Thus, the Arabic title of this Avicennan chapter, reading *Fī l-alfāz al-muttafiqa, al-mutawāfi’a, al-mutabāyina, al-muštaqqa wa-mā yağrī mağrāhā*, should not be translated “On homonyms, synonyms, [...]” but rather “On concordant (equivocal), mutually agreeing (univocal), mutually different and derived utterances [...]”. The solution I chose aims to maintain both a precise reference to the corresponding Greek words and the literal sense of the original Arabic. In his English version of Fārābī’s *Epitome of the De Interpretatione*, F.W. Zimmermann adopts “univocal” and “homonymous” for – respectively – *tawāfu’* and *ištirāk*, but “distinct” and “synonymous” for – respectively – *mutabāyina* and *mutarādifa* (ZIMMERMANN 1981, pp. 228-230).

<sup>455</sup> Ar. *qawl al-ğawhar*, literally “speech of the substance”. The expression, derived from Ishāq’s Arabic version of the *Categories*, translates quite literally the Greek formula λόγος τῆς οὐσίας (famously employed by Aristotle to designate the “notion” or “definition” of something).

<sup>456</sup> Reading *wağadahū* instead of *wa-ħadduhū* (Cairo).

<sup>457</sup> Reading *wāhidan* with most manuscripts, instead of *wāhidun* (Cairo, **Da**).

things] are united, which they mutually share, and does not correspond to this name, then the name is not said by synonymy.

[C10] We mean here by “name” (*ism*) every significant utterance, whether it is characterized by the name of “noun” (*ism*), or it is characterized by the name of “verb” (*kalima*), or it is a third thing which only signifies by conjunction, as will be clarified to you later<sup>458</sup>. Hence, this is what is said by way of synonymy.

### [§3 Homonymy]

#### [§3.1 *There are three main types of homonymy*]

As to what is not [said] according to synonymy, it is all said to be “by homonymy”, and it is subdivided into three types: this because either the notion, in it, is one in itself, although it is different under another respect; or it is not one, but between the two [different things] there is a certain resemblance; or it is not one, nor there is a resemblance between the two [different things].

#### [§3.2 *Ambiguity (taškīk)*]

Things where the notion is one [by itself], but differs after that, are like the notion of existence. As a matter of fact, [existence] is one in many things, but is different in them, as it is not found in them in the same way, in every respect; for it is found in some of them before and some of them after; for the existence belonging to substance is prior to the existence belonging to all that follows it; also, for the existence belonging to some substances comes before [the existence] belonging to some other substances (and likewise, the existence belonging to some accidents comes before the existence belonging to some accidents). This is the way of priority and posteriority.

Similarly, they may differ according to greater worthiness and deservingness (*bi-l-awlā wa-l-aḥrā*); for existence belongs to some things by themselves, to some other by virtue of something else. The existent by itself is worthier of existence than the existent by virtue of something else, and every thing prior with respect to a notion is also worthier of it, but not *vice versa*. Then, two things may share a certain notion while this does not belong to one of them before, but they share it simultaneously; but one of them may be worthier of it, since it is more perfect and more stable in it.

As to what differs because of intensity and weakness, this only occurs in those notions which admit of intensity and weakness, such as whiteness<sup>459</sup>; for this reason whiteness is not said of the whiteness of snow and the whiteness of ivory according to absolute synonymy; [C11] nor philosophy is said of the philosophy of Peripatetics and that of the Stoics according to absolute synonymy (we only provide you with commonly accepted examples that you must forgive, once you have understood [their] goal).

The thing in which the meaning signified by the utterance is one when abstracted, but not one in all respects, nor similar in all of the things which share it, is called “ambiguous

---

<sup>458</sup> A reference to the distinction between name and verb, expounded by Avicenna at *Ibāra* I.1-2.

<sup>459</sup> Whiteness is a quality, and it is proper of some qualities to admit of a more and a less (as will be made clear later, VI.3, [§3]).

name”; but sometimes it is called by another name<sup>460</sup>. The ambiguous name can be either absolute, as we said; or it can be corresponding to the relation with a same principle, like when we say “medical” of a book, a dissecting-knife and an ointment; or [to the relation] with the same goal, like when we call “healthy” an ointment, physical exercise and venesection<sup>461</sup>; sometimes, it corresponds to the relation with the same principle and goal, like when we say, of all things, that they are “divine”.

### [§3.3 *Homonymy by resemblance* (tašābuh)]

As for what does not have pure homonymy concerning the essential account and the explanation of the name, but homonymy with regard to a certain meaning which resembles it, like when we say “animal” of a horse and “animal” of a drawing; “leg” of the foot of men and [“leg”] of what sustains the bed; this is called “homonymy by resemblance”, and it belongs to homonymy: for what is called by this name only shares the name, but not the essential account corresponding to the name. This means that, if you provide the essential formula, when “animal” is said of the horse, you say that it is an “animate, sensitive body capable of voluntary motion”; and you do not find this account to be the same account you give when you explain the name “animal”, when it is said of the drawing on the wall, for then you say “artificial figure by means of which the external form of the sensitive body, capable of voluntary motion is imitated”.

Likewise, when you explain the name “leg” with regard to the animal you say “natural organ on which the animal leans, and by means of which it walks”; you do not find this description for the leg of the bed, but you say: “artificial, thin body stemming from the bed, which sustains the bed”. Despite this, you certainly find between the two things [C12] a certain resemblance, either in figure or in the remaining states; thus this resemblance is what appeals to give one of the things the name of the other (the name being imposed in one of the two things according to a primary imposition, in the other according to a secondary imposition). Thus, if that name is related to the two things together, it is called “resembling name” (*ism mutašābih*); if it is related to the second one of them, it is called “transferred name” (*ism manqūl*).

Sometimes the resembling notion is a certain meaning subsisting by itself, as that belonging to the drawn animal and the natural animal; sometimes it is a certain analogy, like when we say “principle” of the extremity of the line, and “principle” of the cause. Sometimes the resemblance is a real resemblance, and sometimes it is a metaphorical, remote resemblance, for instance our saying “dog” of the star and of the dog-animal: this because there is no resemblance between them for real, but metaphorically; for the star appears to be following an image which was posited as looking like a man; then, it was found that the dog is the animal that most follows man, so [the star] was called by its name<sup>462</sup>. So, the way in which the name was transferred was not this one, thus it is not convenient that it be posited in this subdivision, but rather it belongs to the third

<sup>460</sup> This alternative name is uncertain; it might be a reference to Aristotle’s  $\pi\rho\delta\ \acute{\epsilon}\nu$  predication, but I take it to be quite unlikely.

<sup>461</sup> In this section, Avicenna clearly recalls Aristotle’s examples for  $\pi\rho\delta\ \acute{\epsilon}\nu$  homonymy at *Metaph.* Γ 1 (1003 a33 ff.).

<sup>462</sup> The Dog Star is Sirius ( $\alpha$  Canis Majoris), the main star in the constellation of Canis Major.

subdivision, in which there is no real agreement nor resemblance, like our saying ‘*ayn* of the eye and ‘*ayn* of the *dīnār*<sup>463</sup>.

[§3.4 *Absolute homonymy (ištirāk) and its causes*]

[§3.4.1 *The opinion of a previous commentator concerning the cause of homonymy*]

The reason for this name falling [in that manner upon its meanings] is not what was held by him who said that since realities are infinite, and utterances are finite (inasmuch as they are composed out of<sup>464</sup> finite letters), it is necessary that a number of things that accompany a single name share in it<sup>465</sup>.

[§3.4.2 *Two insufficient objections*]

(a) It is not so. Not inasmuch as infinite combinations may be composed out of finite letters, because this possibility depends on the augmentation of the extensions of what is composed by letters. Then, language and usage do not accept any prolongation of letter-compositions, but there is a limit [such that] nature discourages<sup>466</sup> from using what is longer of it. If it is so, then there exists already a definite limit for the legitimate composition [of words], because of which what is composed of letters must be finite.

(b) [It is not so], not even for the reason that infinity only occurs in individuals and not in the species, as [some people] hold. They say: if [C13] homonymy were only caused by infinity, then it would be necessary that there occur no homonymy in the names of the species. Well, this explanation is certainly defective, because the species may not be finite in a certain respect, as you have learned<sup>467</sup>, and because if individuals are infinite, and they are taken as things in which species share, then things become infinite (and the species among them); and the species belong to the things which are not finite and the denomination falls upon realities inasmuch as<sup>468</sup> they are realities, not inasmuch as they are individuals.

Hence, these two objections do not reveal what is wrong with that [view]<sup>469</sup>.

[§3.4.3 *Things named are finite, inasmuch as their denomination is sought for*]

However, a way of explaining the error (with regard to the effort of him who posited as a cause for this the fact that things are infinite) is that things, although they are, insofar as they are things, infinite, insofar as those who impose names aim at them by the denomination they are finite. As a matter of fact, those who imposed names did not begin

---

<sup>463</sup> The word ‘*ayn* is polysemous, in Arabic, and besides the letter of the alphabet it may signify “eye”, “source”, “money”, “self” (in expressions such as *bi-‘aynihī*, “himself”, “itself”).

<sup>464</sup> Reading ‘*an* with most manuscripts, instead of *min* (Cairo, **As**).

<sup>465</sup> For the identity of these commentators, cf. the COMMENTARY *ad loc.*

<sup>466</sup> “Avoids”: reading *yunaffīru* (e.g. **GY**) instead of *tunaffīru* (Cairo).

<sup>467</sup> *Madḥal* I.12: see the COMMENTARY.

<sup>468</sup> Reading *min ḥaytu* with most manuscripts, instead of *min ḡihati* (Cairo, **AASEM**).

<sup>469</sup> Objections (a) and (b) do not really provide a refutation of the opponent’s argument, but rather correct some aspects of its formulation.

to name each one of the infinite things [that there are], for this did not certainly go through their mind; how could they have intended to name them? Rather, everything whose naming is sought for is finite, and it was possible for each one of those [things] to have a single name. The proof for that is that now, if you wanted, you might well isolate a singular name for all things that happen to have a shared name, because they are all finite.

This discourse<sup>470</sup> is false only in this respect, although it is possible to express it in a different formulation, in another possible sophisticated manner.

[§3.4.4 *The causes of pure homonymy*]

The cunning continues, but is reduced to some of the things we want to present as a cause for this. We say that the cause for the fact that this sharing [in name] occurs is one of two things:

**[a]** Metaphorical, figurative resemblances, as in the case of the word *‘ayn*. For since [*‘ayn*] is the name of the eye, and one operation of the eye is sight, and sight points, in a certain sense, to physical presence, and physical presence points to cash money, and the real cash money is the *dīnār*, for that reason the *dīnār* was called, in our opinion, *‘ayn*, or because it is as precious as the *‘ayn*-eye, or something similar. **[C14]** Sometimes that occurs by way of remembrance and blessing, or by way of hope. This is mostly found in particular cases, for instance he who wants to be named by the name of a prophet, or calls his son by the name of his father (in his memory).

**[b]** As for casual, occasional homonymies, they [occur] because of a disagreement among those who gave the first denomination; as if one of them happened to impose the name *‘ayn* to one thing, and someone else happened to impose it to another thing; therefore, it is possible that the reason for homonymy be the different state of two name-imposers. Alternatively, they depend the disagreement of one imposer of names in two different times, in which he was like two [different] persons.

This subdivision, in which there occur the causes we have numbered, is characterized by the name “pure homonymy”<sup>471</sup>; it has in common with resemblance the fact that the name is the same, and the meaning is different<sup>472</sup>.

[§4 *Homonyms with respect to a name may be synonym with respect to another name.*

*Cases of simultaneous homonymy and synonymy*]

Pure homonymy, and homonymy in general, do not remove the fact that<sup>473</sup> there [may] be an account that is shared, and a name shared integrally; for this does not forbid from there being a shared account which does not correspond to this name. For instance, the fact that the leg of the bed and the leg of the animal share in the name “leg”, and share in the fact that each one of them is a substance having length, breadth and depth; this does not prevent the name “leg” from being said of them by homonymy or resemblance, for [the

<sup>470</sup> I.e. the commentator’s opinion.

<sup>471</sup> “Pure homonymy”: ar. *ištirāk al-ism*.

<sup>472</sup> On homonymy by resemblance, see above [§3.3].

<sup>473</sup> Reading *an* with most manuscripts, instead of *bal* (Cairo, **M**): I change the punctuation accordingly.

other notion] is not corresponding to the name “leg” but to another utterance, which is “body”; nor does it forbid from another name being imposed for this account; nor, if it does not have another imposed name, does it signify that it is corresponding to this name which is “leg”.

It may happen that one name is said of two things by homonymy and synonymy simultaneously; for instance “black” (*aswad*), when it is said of a man who is called Aswad and is also coloured in black, and of pitch; for when this name is taken as the name of the person, it is said of it and of pitch by homonymy; when it is taken as the name of the coloured, it is said of them by synonymy.

A single utterance may also be said of a single thing, with respect to two things, by homonymy and synonymy, like ‘*ayn* said of the eye with respect to [another] eye and with respect to the source of water<sup>474</sup>. [C15]

[The same utterance] may be said of things by themselves under two different respects by synonymy and homonymy; as if it happened to call “black” two black<sup>475</sup> men named Aswad.

A single name may be also said of a single thing, in two respects, by homonymy, for instance “black” of the man called Aswad and black in colour.

[§5 *A same name can be applied to more universal and more particular instances of the same meaning*]

Sometimes the difference between different meanings of a same thing depends on universality and particularity<sup>476</sup>; then, one name is said of them, so it is said by homonymy (and this inasmuch as it expresses different meanings). A big mistake occurs because of this, e.g. when “possible” is said of what is not impossible and what is not necessary<sup>477</sup>.

[§6 *When the names of “resembling” homonyms are well established, they become like the names of pure homonyms*]

When transferred and metaphorical names are established, so that they signify the meaning, then they become like [the names of] pure homonyms; unless they are such according to him who understands their meaning, and then they belong to resembling, transferred names. As they were metaphorical, before this<sup>478</sup>, in their signification, so their being homonymous, before this, is only by metaphor.

[§7 *All universals are predicated of their particulars synonymously*]

---

<sup>474</sup> ‘*Ayn* is said of two eyes by synonymy; on the contrary, it is said of an eye and a source of water by homonymy.

<sup>475</sup> Reading *rağulayni aswadayni* with all manuscripts, instead of *rağulayni* (Cairo).

<sup>476</sup> “Universality and particularity”: ar. *al-‘umūmu wa-l-ḥuṣūṣu*, terms that could also be translated as “commonality” and “specificity”, and which qualify “universality” and “particularity” in a weaker sense.

<sup>477</sup> On the homonymy of “possible” see below, IV.5 [§3.2].

<sup>478</sup> I.e., before becoming similar to pure homonyms, in that the resemblance that caused the name to be moved is no more visible.

All universals, not<sup>479</sup> [only] the genus, the species and the *differentia*, fall upon their particulars which share them equally, according to synonymy. What was thought, namely that only genus, species and *differentia* are those that fall [upon their particulars] by synonymy, is worth nothing; this because synonymy is not synonymy in virtue of the meaning being essential, but in virtue of its being unitary in signification, not differentiated. This unity may exist in what is essential, or it may exist in what is accidental, such as properties and common accidents.

[§8 *Things that differ by the name*]

[§8.1 *Things with different names are either heteronyms or polyonyms*]

As things diverging in number may be considered according to their concordance in name, so they may be considered according to the difference in name. For if things have a multiplicity of names, then either their multiplicity is associated with the multiplicity of their meanings, and these are called heteronyms, for instance stone, man, [C16] ox: these are things that differ by the names and in the essential formula corresponding to those names; or the multiplicity is found in names, and their meanings are the same, as when it is said: ‘*asal*, *ary*, *šahd*, for the meanings of all of them are the same<sup>480</sup>. These are called polyonyms.

Heteronymy may occur in various ways: it may occur in things whose subjects are different, for instance stone and horse; it may occur in one thing concordant in subject, but according to different considerations. For example, the case where one of the two names is given with respect to the thing’s subject, and the other in so far as it has an attribute, for instance: *sayf* and *šārim*, for *sayf* signifies the essence of the instrument, whereas *šārim* signifies its sharpness<sup>481</sup>. Among these there is also the case where each one of the names signifies a specific attribute, such as *šārim* and *muhannad*; for *šārim* signifies [the sword’s] sharpness, and *muhannad* signifies its origin<sup>482</sup>. Among these there is also the case where one of them [is given] because of an attribute, and the other because of an attribute of the attribute, for instance “capable of speaking” (*nāṭiq*) and “eloquent” (*faṣīḥ*): for “capable of speaking” signifies an attribute, while “eloquent” signifies an attribute of the attribute<sup>483</sup>.

[§8.2 *Paronyms and related names*]

Among heteronyms there are those which are called “paronyms” (*muštaqqa*) and “related names” (*mansūba*). These are those whose name is not the same, nor the meaning is the same, in a certain respect; and so they are heteronyms; but insofar as between the two names and the two meanings there is a certain resemblance, which still does not manage to make them the same name and the same meaning, they are paronymous. This is

---

<sup>479</sup> Reading *lā* with most manuscripts, instead of *illā* (Cairo, M). The same correction is proposed by S. Di Vincenzo for her translation of this brief passage (DI VINCENZO 2016, p. 172).

<sup>480</sup> The meaning of all these Arabic words is the same, i.e. “honey”.

<sup>481</sup> *Sayf* normally means “sword”; *šārim* is a name of action meaning “cutting”, “sharp” (LANE), though in Persian it is used in the sense of “sharp sword” (STEINGASS).

<sup>482</sup> *Muhannad*, meaning “made of Indian steel”, gives information about the material origin of the sword.

<sup>483</sup> “Eloquent” denotes an attribute of speech (*nuṭq*), from which *nāṭiq* derives.



not a fifth subdivision that makes it necessary to posit, for heteronyms, that they are those that differ in all respects, so that there is no agreement in them with respect to the word, nor the meaning; for this is stretched, and makes an augmentation of subdivisions necessary; but paronyms belong to the class of heteronyms.

A paronym is that thing which, since it has a certain relation, be it any relation with any notion (whether the notion be existent in it, for instance eloquence [*faṣāḥa*], or it be a possession of its, for instance wealth [*māl*], or it be a subject for a certain operation of its, for instance iron [*ḥadīd*]), then, [since it has this relation], one wants to signify the existence of this relation of its by means of an utterance which points at the utterance [C17] of the first notion, but is not in itself [that utterance], in order to point at the difference between the meaning of the relation and the meaning of the thing with which the relation subsists, though it is not different from the other in all respects, so that it is not susceptible of being pointed to; and [under these conditions] a certain difference between the two utterances is established, in morphology and inflection, that expresses – according to linguistic conventions – the way of dependence subsisting between them. So, it is said “eloquent” (*faṣīḥ*), “wealthy” (*mutamawwīl*), “blacksmith” (*ḥaddād*)<sup>484</sup>; or an addition is made [to the word], expressing the relation, and it is said: “grammarian” (*naḥwī*), “Quraṣī”<sup>485</sup>; or something else is done, required by the usage of a certain language (instead of another). It is in the nature of this utterance given to the second [thing] that it is said “derived” from the first, or “related” to it; if [the first utterance] were taken by itself, then it would be said to be “transferred by similarity” (*manqūl bi-l-iṣtibāḥ*); and if he who has justice (*‘adl*) were not called *‘ādil*, but *‘adl* as well<sup>486</sup>, this would not belong to what was called “paronyms” and “related names”, but to what is said by similarity of name, and homonymy, and [the name] would be “transferred” (*manqūl*) from the first to the second: it would not be derived.

A paronym needs **(a)** a certain name to be imposed to a thing, **(b)** another thing to have a relation with that thing, **(c)** a conformity of the name of the other with the name of the first, and **(d)** a certain alteration to accompany it.

Someone might distinguish between paronym and related, and posit “related” as what signifies by the addition of a “relative” utterance to the utterance of the thing, for instance “Indian” (*hindī*); and posit “paronym” as what signifies by an alteration attached to the utterance, for instance “made of Indian steel” (*muḥannad*)<sup>487</sup>. However, the Greek [language] has another convention for both things. [C18]

<sup>484</sup> Being derived forms of, respectively, *faṣāḥa* (eloquence), *māl* (money) and *ḥadīd* (iron).

<sup>485</sup> Namely, a member of the tribe of the Banū Qurayš.

<sup>486</sup> In Arabic, the word *‘adl* may signify both “justice” and “just” (WEHR, LANE).

<sup>487</sup> *Hindī* and *muḥannad* derive from the same word and root (*Hind*, India); the first, however, is built by the addition of the *nisbī* suffix *-īyyun*, whereas the second is a passive participle of the second verb-form.

### [I.3]

#### On the explanation of the meaning of what is said of a subject or is not said [of a subject], and [what] exists in a subject or does not exist [in a subject]<sup>488</sup>

[§1 *In scientific enquiries it may be necessary to overlook common opinion*]

First of all, I say that attaining the utmost in theoretical speculation could make it necessary to turn away from what is commonly accepted; thus, when that<sup>489</sup> comes to your ear, ponder [it] well, and do not feel ill at ease because something unfamiliar has come to you. Know also that a clever man does not abandon the commonly accepted, as long as it is avoidable.

[§2 *The notion of “subject” (mawḏū’)*]

[§2.1 *The attributes of things (ṣifāt al-umūr)*]

Besides this, know that the attributes of things have certain subdivisions. Since **[a]** either the essence of the thing described [by the attribute] is established as a subsistent notion, and then the attribute by which [the thing] is described is attached to it extrinsically, as an accident or an inseparable concomitant; **[b]** or the described thing is taken in such a way that its essence has already been established, but the attribute by which it is described is not attached to it as an external thing, but it is a part of its subsistence; **[c]** or [the described thing] is taken in such a way that its essence has not yet established, and the attribute is attached to it in order to establish its essence (though not being a part of its essence); **[d]** or [the described thing] is taken in such a way that its essence has not yet established, and the attribute is not attached to it extrinsically, but it is a part of [the thing’s] existence; **[e]** or the essence [of the described thing] has not [yet] established, and the attribute is attached to it not in its very essence, but as an inseparable concomitant of what establishes [the thing], or of a primary accident of its.

**[a]** An example of the first is when you say: “man is white”, or “risible”. **[b]** An example of the second is when you say: “man is an animal”: for “man” is a realized nature, which does not need something to constitute it besides the fact of being “man” (if this is doubtful to you, take “Zayd” instead of [“man”]<sup>490</sup>); despite this, “animal” is a part of its quiddity. **[C19] [c]** An example of the third is prime matter and form; for form is an attribute of prime matter, extrinsic to its essence, because of which the essence [of matter] is established as subsistent in act; and were it not for [form], the existence of [matter] would be impossible; not in so far as form is concomitant after the constitution [of prime matter], but [insofar as] it is constitutive of prime matter and establishes it, and it is not –

---

<sup>488</sup> This chapter and the following correspond with Arist. *Cat.* 1 a20 – 1 b9.

<sup>489</sup> Namely the necessity of refraining, at times, from common opinion.

<sup>490</sup> Being an individual, Zayd is undoubtedly existent as Zayd in concrete reality, and it is not brought into existence by its being an animal.

despite this – a part of prime matter. [d] An example of the fourth is “substance”, with regard to the “body” predicated of “animal”. For body – absolutely – is such that no determinate existence followed exclusively by extrinsic accidents and concomitants is established for it; but it needs external, specifying things that are attached to it and constitute it. Substance, despite this, is a part of its quiddity, namely a part of its definition. [e] An example of the fifth is prime matter, when described by whiteness, blackness, separation and the like, and likewise the absolute body, when described by its being apt to local motion and rest, and so forth; for prime matter has no stable existence by itself, and likewise the absolute body has no stable existence by itself. These states do not belong to what constitutes this or that, although they inseparably belong to [everything] which makes [that subsist] insofar as it does; or they follow it, and are attached to it.

[§2.2 “Subject” is what does not have extrinsic, constitutive attributes]

Among these things, what is such that its attribute is not attached extrinsically in order to constitute it, but the described thing is either constituted in its essence or not, that is called a “subject” to that attribute. Thus, prime matter is not subject to the thing which is called “form”, since form is an extrinsic attribute which constitutes prime matter as a thing in act; man is a subject for “animal”, since “animal” is not attached to [man] extrinsically<sup>491</sup>, although it constitutes it, but it is a part of its existence; body is a subject to whiteness, because although it is not constituted later, it is not constituted when constituted by whiteness, but it is only constituted by other things: thus, when taken in relation with whiteness, it is constituted without it; “whiteness” is a subject to colour, because it is not constituted by it insofar as [colour] is extrinsic. Everything whose relation to the attribute is not according to the relation of a thing to something extrinsic and constitutive [C20] is a subject, whether the attribute is constitutive and not extrinsic, or it is extrinsic and not constitutive. Thus, here you must understand this from “subject”, although it is used in other places in other ways.

In this distinction there are advantages: one of them is the awareness of this difference; the second is that the subject employed in the two relations “in” and “of” mentioned later is a sort of comprehensive notion, and then the relation [with a “subject”] is subdivided into these two, I mean into the relation “in” and the relation “of”; also, that there is a difference between accident and form, and that there is no<sup>492</sup> need to say that a single thing may be substance and accident. These are things you shall learn soon, and you shall learn what is wrong with neglecting this principle which we presented to you<sup>493</sup>.

[§3 Being said of a subject and being in a subject]

Thus, we say that the relation of the thing related to a subject is of two sorts: for either it is such that it is possible to say that the subject is [the thing], for instance “animal”, of

---

<sup>491</sup> Reading *min ḥārīḡ* with all manuscripts, instead of *min al-ḥārīḡ* (Cairo).

<sup>492</sup> Reading *wa-an lā yaḥtāḡa* with all manuscripts, instead of *wa-an yaḥtāḡa* (Cairo).

<sup>493</sup> This sentence refers especially to the discussion of simultaneous substantiality and accidentality carried out later, in chapter I.6.

which it is possible to say that man is it (when it is said that man is an animal, and the like); thus, [the thing] is predicated of the thing and predicated of the subject; or it is not such that it is possible to say that [the subject] is [the thing], but it is said that [the thing] is in [the subject]; like “whiteness”, of whose subject (when this is supposed to be a dress or a piece of wood) one cannot say that it is [whiteness]: so, it is absolutely not said “the dress is whiteness”, or “the piece of wood is whiteness”. Since [“whiteness”] exists in the subject, either it is said: “the dress has whiteness”, or it is said: “the dress is whitened” or “white”. [Whiteness] is not really predicated with its notion of the subject as it is, but what is predicated with a notion is a paronym from its utterance, or a compound of its utterance and a relative utterance<sup>494</sup>, or its predication occurs by homonymy, not in the notion. Something like this, although it is not predicated of the subject, is undoubtedly existent in it.

[§4 “Said of a subject” corresponds to “universal”, “existent in a subject” corresponds to “accident”]

[§4.1 What is said of a subject is necessarily accompanied by the fact of being universal: a proof]

The subject of what is predicated of it, when it is considered as taken by itself, without attaching any quantifier to it, one of the two: it is either **[a]** universal or **[b]** particular. **[C21]** If it is particular, then the predicate of it is either **[ba]** universal or **[bb]** particular.

**[bb]** If it is particular, that particular does not differ from [the subject]: for of two mutually different particulars, none of them is said of the other. If it is so, then they are not really subject and predicate by themselves according to nature, but according to speech and language, like when you say: “Zayd is father of Qāsim” or “is son of ‘Amr”, unless one means by “son of ‘Amr” a notion which can be shared by someone else, and so it is universal. Thus, if you restrict this to him<sup>495</sup>, there is no son of ‘Amr other than this one, and this one is Zayd. Likewise, if you said: “this white is this writer”, you would be pointing to one subject only; and [the subject’s] being “this white” is not worthier of being a subject or being a predicate than the other, although the nature of “man”, in him, is worthier of being a predicate than the nature of “writer”, I mean the absolute [“man” and “writer”]<sup>496</sup>: and as to this writer, he is by himself this man. If you take one of them inasmuch as it is “this man”, without any condition beyond “this being-man”, and also take the other in front of it in the same way, none of them is said of the other. For a certain man is not, insofar as he is “this man”, “this writer”; nor “this writer”, insofar as he is “this writer”, is “this man” (I mean: according to the two different considerations, when you move your consideration regarding each one of them to its single consideration in abstract, under the condition of not considering anything else). Then, the two considerations are different and remote<sup>497</sup>: for this reason “this writer” is not, insofar as he is “this writer”,

<sup>494</sup> Namely, the utterance of the attribute with a suffix of relation (-ī/īyy). See above, the discussion of paronyms and related names above (I.2, [§6.2]).

<sup>495</sup> Namely, if you restrict “being son of ‘Amr” to Zayd only.

<sup>496</sup> I.e. “man” and “writer” understood neither as particulars nor as universals, but as “absolute” notions.

<sup>497</sup> Reading *al-i‘tibārāni muḥtalifāni mutabāyināni* with most manuscripts (om. *muḥtalifāni* Cairo, **M**; *al-i‘tibārāni l-muḥtalifāni mutabāyināni* **N**; *al-i‘tibārāni mutabāyināni muḥtalifāni* **D**). After having discussed

“this tall”, insofar as he is “this tall”; but one of them is negated of the other, and it is neither a predicate nor a subject, none of them is a subject to the other, nor it is said of it, namely by affirmation.

[aa] As to the case where the subject is universal, what is predicated of it is actually nothing but universal; for [ab] the nature of the universal is not a subject by itself to individuality, without that the particular quantifier<sup>498</sup> is attached to it; if not, the nature of universality would deserve, in its nature, to be this individual thing.

If things are this way, then what is said of a subject is accompanied necessarily by the fact of being universal; this, if its being [said] of a subject is understood as we said. If it is not posited this way, but [C22] its being [said] of a subject is posited as meaning that it is “said of many things”, then this [way of] saying is a synonym of this name, and in leaving aside the commonly accepted utterance, namely the utterance “universal” and the utterance “said of many things”, and inventing this utterance is a useless, excessive occupation; and things which are related to other things which are subjects for them would become of two types: things which are said of their subjects, and things which exist in their subjects, according to a strained interpretation in which the utterance “subject” has been used in the same place with two meanings which are neither concordant, nor even similar or proximate. This is a mistake and an exaggeration; but it is convenient, for us, to follow the way that we took. It is not true, also, that there is a necessity in any of the two ways; if one said “universal” and “particular”, it would be sufficient. Thus, since this stretch was adopted, it is convenient that we bring it in a direction useful for what we mentioned.

#### [§4.2 “Said of a subject” corresponds to “universal”]

We say, now, that every thing that is “of a subject” is actually universal, and every universal is by necessity said of a subject, because it has particulars in act or in potency of which the universal is said in this way; and every existent in a subject is that of which it is said “accident”. If so, then every accident is existent in a subject; for “accident” is a name imposed to this notion, and it does not follow for us, in this respect, the monstrosity depending on polyonymy<sup>499</sup> which followed in the other respect, that of the universal. This because if in the latter respect it is possible to say what it was said, and it is not by polyonymy, the former respect remains by polyonymy, and [in the former] those things do not follow, which followed [in the latter]; this because the usefulness in employing the term “existent in a subject” as a synonym for “accident”, or as a synonymous formula for its name, occurs because of the subdivision which is useful to mention as not synonymous.

However, this is not actually a synonym for “accident”, but a formula which explains its name, since it addresses the explanation of every single part of it. As to “universal”, what explains its name is your saying: “what is said of many things”; “said of a subject” is a name with a meaning, which is necessarily accompanied by the fact of being “said of

---

the case of different considerations of the same things (“this man” and “this writer”), Avicenna takes into account the case of considerations of different things, which give rise to negations of identity (“this white is not this long thing”).

<sup>498</sup> Reading *al-sūri l-ḡuz`īyyi* with most manuscripts, instead of *sūri l-ḡuz`īyyi* (Cairo, **BDa**).

<sup>499</sup> Here meant in the “basic” sense of synonymy, i.e. that of a same thing that has different names. On polyonymy, see above I.2 [§8.1].

many things” because of the proof that we pointed to. As for “existent in a subject”, [C23] it is a synonymous formula for the name “accident”, for accidentality has no other meaning than [that of] a thing having existence in a subject, and the meaning of “existence<sup>500</sup> in a subject” is what we shall establish later<sup>501</sup>.

Since this has been established, we say that among things, what is not said of a subject is particular, and *vice versa*; and what is not existent in a subject is what we call “substance”.

[§5 *Two wrong opinions about “being said of a subject”*]

Furthermore, a group [of people] has required as a condition, about what is said of the subject, that it be essential and constitutive of the quiddity, and, about the existent in the subject, that it be accidental, so accident and accidental for them are the same thing, although the [respects in] which they differ are many; so they have no clue, in this place, of the greatness of the difference between these two things. They judged that “white”, when it is said of “this white thing”, is not said of a subject, but it is existent in a subject, because they thought that “white” is existent in a subject, for they thought that “white” is an accident; but they even went beyond this, to say that the universal is what constitutes the essence of the thing; as if what is not [essential] were not universal. Let us cite, then, what one of their predecessors uttered in confirmation of this meaning, and let us point out the disgrace which is in them, so that it becomes clear that the right is what we believe. He said:

«But I said that the universal is what is predicated of its particulars according to the way<sup>502</sup> of “what [is] the thing?”, and that it is what is said of a subject, because sometimes some things are predicated of their subject in a way [which is] different from this; an example of that is the fact that we say of Zayd that he walks, and so we say: “Zayd walks”; but the meaning of “walks” is not predicated of Zayd according to [the fact] that it is a universal thing, and Zayd a particular of its; because it is not said of Zayd when [one] asks, about him, “what is it?”. Because if someone asked: “What is Zayd?”, and the receiver of the question answered: “he walks”, his answer to him would be a mistake, and a lie; because the meaning of “walks” does not express Zayd's essence, but is only a certain action of his.»

[§6 *“Formal” refutation*]

[§6.1 *The problem follows immediately from the premise; the predicate “walks” makes the commentator’s mistake less evident*]

Well, now consider this logician: he posited his problem, being the claim that the universal is what is predicated of its particulars according to the way of “what [is] the thing?”; then he wanted to clarify this statement, so he posited as a clarification for this the fact that what is not predicated according to the way of “what [is] the thing?” is not

<sup>500</sup> Reading *bi-l-wuḡūdi* with most manuscripts, instead of *bi-l-mawḡūdi* (Cairo, **AASe**).

<sup>501</sup> I.e. in the following chapter (I.4).

<sup>502</sup> Reading *min tarīqi* with all manuscripts, instead of *‘an tarīqi* (Cairo).

universal; but this is the contradictory converse of the problem. If this were clear, or conceded, then the first<sup>503</sup> would follow at a short distance. Moreover, he posited the question regarding a particular, namely “walks”, and he left aside [the predicate] “walking”, since this error<sup>504</sup> becomes more evident in the case of “walking” (for “walking” is a name, while “walks” is a verb).

[§6.2 *The inconsistency of the commentator’s argument*]

[C24] We must not be bothered about this as well, but we must say: since he wanted to clarify that “walks” is not universal, he took the first problem, which is object of doubt, as the major premise in the clarification of the fact that it is not universal, so he said: “[walks is not universal] because ‘walks’ does not express [Zayd’s] quiddity, and everything which is not said in the quiddity of the thing is not universal”; but this [statement] is the thing which returned [directly] from the problem to its clarification, since itself and the problem are equal with respect to the judgment<sup>505</sup>. So, if he thought that this is not the problem, but the problem follows from it, and it is in the nature of syllogisms to take things which make the problem follow, for they are better knowledgeable, then it is said to him: “you take this premise, in this place, **(a)** either because it is clear, or **(b)** because it<sup>506</sup> results clear first, and then the problem results clear from it”. **(a)** Thus, if it is clear by itself, then there is no need for the deception of these syllogisms, but it is necessary to assume this, and to say: “since what is not said in the quiddity of the thing is not universal, then every universal is said as an answer to ‘what is it?’”. **(b)** Furthermore, the claim that [this premise] is clear and that it is clearer than the fact that every universal is said as an answer to ‘what is it?’ is a claim far from being understandable. For he who says: “it is not true that every universal is said as an answer to ‘what is it?’”, also says together with this: “it is not true that everything which is not said as an answer to ‘what is it?’ is not universal”; and if it is necessary that this become clear in order that the problem become clear from it, why was it itself taken as a part of the syllogism which proves it, in order that the problem become clear by means of it?

[§6.3 *The choice of the predicate*]

Moreover, has the introduction of “walks”, here, a utility other than positing this instead of “the predicates of the thing which are not universal”? For it became clear that the predicates which are not according to the ‘what is it?’ are not universal, so how can this be the case by assuming that the predicates which are not according to the “what is it?” are not universal?

---

<sup>503</sup> I.e. the problem itself.

<sup>504</sup> I.e. the commentator’s error of overlapping ontological accident and accidental.

<sup>505</sup> Avicenna’s formulation here is rather unclear. I take this to be a restatement of the fact that the premise, being a “disguised” version of the problem, goes straight from the problem to its clarification; the commentator is thus assuming the problem itself as a premise for its own clarification.

<sup>506</sup> Supplying *aw* < *alá annahā* > *tatabayyanu* (*tubayyanu* **ADiEGJmK**) with all consulted manuscripts.

[§7 “Doctrinal” refutation]

[§7.1 *Universals need not be predicated essentially of their particulars*]

Something has been already pointed to in this chapter, but it has not been said clearly; and it resembled what he said, as to what he fancies, namely that “walks” is not universal since Zayd is not a particular of “walks”<sup>507</sup>. For his saying: “because Zayd [C25] is not a particular of ‘walks’” belongs to those things whose acceptance comes first to the mind, since it came first to the mind that Zayd is an individual of the species ‘man’, and the individual is a particular of the species; so, it came first to the opinion that he is a particular for the species, not a particular for something else; as if the thing might not be a particular of two things.

But it is necessary that the meaning of our saying “X is a particular of Y” be acquired, hence we say: the meaning of our saying “X is a particular of Y” is that for one of the things which are described by Y, so that it is Y, it does not follow necessarily that the particular [X] be described exclusively by [Y]; thus, Y is an attribute for it and something else, in act or in potency. So, if the attribute belongs to what is predicated of it exclusively, in act and potency together, if it is so, then it cannot be a particular of that attribute. As to the case where this particular and other things are described according to a description with a unitary meaning, and a unitary definition, and according to a description which is such as to be without paronymy, then [the predicate] is more common, as concerns its falling [upon a meaning], than [the particular], and [the particular] is more specific than [the predicate]. For Zayd is more specific than “walks”, and “walks” is more common than Zayd; for Zayd is not said but of one [thing], while “walks” is said of what Zayd is said of, and of other [particulars]; hence Zayd is one of the particular things of which “walks” is predicated. By “particular” we only mean this.

As to the fact that the common predicate of Zayd and others must be a thing predicated of it in its essence, it is an additional condition; [additional] for Zayd as regards his particularity, [additional] for the attribute as regards his universality. [These] people already agreed upon the fact that properties and [common] accidents are universals, and that inasmuch as they are properties and accidents they have particulars extraneous to them; for “risible”, with respect to “this risible”, inasmuch as it is “this risible”, is not a property, but a species and a constitutive [part] of its quiddity, as you learned<sup>508</sup>; but it is a property for “man”. The particulars of “risible”, insofar as it is a property, are the individuals of man; the individuals of men, insofar as they are men, are not constituted by the “risible”; for [“risible”] does not take part in their quiddity; this because it does not constitute its quiddity. Nonetheless, it is a universal said of many things (which are its particulars), inasmuch as it is a property.

---

<sup>507</sup> Avicenna is very likely referring to his statement that “said of a subject” means “universal” and “said of many” particulars; if understood incorrectly, it may give rise to a doctrine such as that of the commentator, who holds that something cannot be a particular of more than one universal.

<sup>508</sup> See Avicenna’s discussion of property, *Madhāl* I.14, 83.1-85.6.



[§7.2 *Distinction between accident and accidental*]

[C26] Furthermore, if “white” with respect to “man” (and “walks” with respect to Zayd) does not belong to what is said of a subject, but it is an accident, it must be either **(a)** that the name “accident” is said of the accidental and of the actual accident by pure homonymy, and there is neither ambiguity<sup>509</sup> nor synonymy in it, or **(b)** that it is not said by homonymy.

**(a)** If it is said by homonymy, it is necessary that the subdivisions corresponding to the notions be more than the subdivisions they mentioned; for then the principles of the subdivisions would be six: (1) universal and (2) particular, the (3) substance and the (4) accident which are [taken] in one of the two meanings, and the (5) substance and the (6) accident which are [taken] in the sense of accidental and substantial. Each of these two accidents has been employed in the examples they have in that regard; I mean, these have been employed by those who introduce these false conditions; I do not mean that the first who taught us this<sup>510</sup> ever introduced any of these things.

**(b)** As to [the event] where “accident” fell upon them by synonymy, then let it express this meaning<sup>511</sup>; but they agreed that what is in a subject is not such that the subject shares with it the definition and the name together; but it sometimes shares the name only, and the definition is not predicated of it. Then, if we say of Zayd that he walks, and he is white, and we search for the definition of “walks” (namely, “is a thing which moves from a place to another by putting a leg forward and hinging on the other”), and we search for the definition of “white” (namely that it is<sup>512</sup> “a thing coloured with a colour which divides the sight”), we find both these definitions to belong to that which is said of Zayd; for as it is said of Zayd that he walks, so it is said that he moves from a place to another by putting a leg forward and hinging on the other; and as it is said of him that he is white, it is said that he is a body coloured with a colour which divides the sight. It is thus clear that this discourse belongs to what must not be taken into account<sup>513</sup>.

[§7.3 *The correct way of interpreting synonymous predication*]

It is necessary that you recall, here, what was said concerning the common and different features<sup>514</sup>, on whose acceptance they all agreed, namely that the five [predicables] are predicated synonymously, and property is predicated synonymously as

---

<sup>509</sup> Ar. *taškīk*. For the notion of *taškīk* see above, I.2 [§3.2].

<sup>510</sup> “The first who taught us this”: Aristotle. This formula recalls the epithet most often attributed to Aristotle, by Avicenna as well, i.e. “the first teacher” (*al-mu‘allimu l-awwalu*).

<sup>511</sup> I.e. they would both be “in a subject”.

<sup>512</sup> “That it is”: supplying *wa-huwa <annahū> šay’un* with all manuscripts.

<sup>513</sup> Namely, this second hypothesis regarding the coincidence of accident and accidental.

<sup>514</sup> Ar. *fī l-mušāarakāti wa-l-mubāyanāti*. These expressions might be taken either as referring to the “common” and “different features” of the five predicables, as discussed in the second treatise of the *Madhal* (II.1-3, 91-109), or to “sharing” and “not sharing” the definition in predication (as suggested by the reference to “sharing the definition”, *mušāraka fī l-ḥaddi*, a few lines below). I opt for the first alternative, since Avicenna will explicitly refer to the second part of Porphyry’s *Isagoge*, devoted to the similarities and dissimilarities of the five predicables.

well; thus, you will learn how quickly they forget. Unless they said, of course, that “sharing the definition” means that the definition is not predicated simply, but it is [C27] a definition [for the subject as well], so that natural genera would not share their definitions with their species, but only their names; for the definitions of genera are not definitions for the species; moreover, the individuals certainly do not have any definition; how then could they share their definitions with the genera? Thus, if they charge themselves with another excess, and say that sharing the definition means that what is a definition for one of the two [things] is either a definition for the other, or a part of the definition of the other; [if they say so], then they are themselves disproved by their statement that the genus has in common with the property the fact that they are both predicated of what is below them by synonymy, by the name and the definition; [in fact], they all granted this.

The meaning of “sharing the definition” is not this, but the fact that what is signified by the name, and its definition or description, is predicated of the thing of which the name is predicated; so, the thing is described by the meaning of the name, as it is named by means of its expression, although that is not its definition.

[§8 *Conclusion. Division of beings*]

Hence, by means of these things it became clear that they were highly neglectful. It has become clear that the reason for this is their belief that the accident which is one of the five [predicables] is the accident we speak of in this book. But it has already become clear, by this, that every common meaning which is said of more than one thing, in whatsoever way it is said, is a universal; that the proper meaning is a particular; that the accident which is the opposite of substance is the one we shall define<sup>515</sup>. And [it has become clear] that things are either [1] said<sup>516</sup> of a subject, and not existent in a subject, and they are the universals of things which are substances, since they are universal, and said “of”; for they are universal, and thus are said “of”; and they are substances, so they do not exist “in”; or [2] existent in a subject and not said of a subject, and these are particular accidents, for they, since they are accidents, are existent in a subject, and since they are particular, are not [said] “of”; or [3] they are said of a subject and existent in a subject, and these are universal accidents, because they, with regard to their particulars, like the universal whiteness with regard to a certain white, are said of a subject; and because they are accidents, so they are existent in a subject; or [4] they are neither said of a subject nor existent in a subject, and these are particular substances, like Zayd, ‘Amr, this [particular] matter, this [particular] form, this [particular] soul; since they are substances, they are not existent in a subject, and since they are particular they are not said of a subject.

---

<sup>515</sup> Namely, the “accident” in the ontological sense, whose definition will be provided and discussed in the following chapter (*Maqūlāt* I 4).

<sup>516</sup> Expunging *lahū* (Cairo), probably resulting from a partial dittography of the preceding word (*maqūla*), with all manuscripts.

#### [I.4]

### On explaining the definition of the accident, that is “existent in a subject”<sup>517</sup>

#### [§1 Aristotle’s description of “existent in a subject”]

[C28] Let us explain now the meaning of our words “existent in a subject”. It has been described as “what exists in a thing not as a part of it, and cannot subsist without what it is in”<sup>518</sup>.

#### [§2 First part of the description: “existent in something”]

Our saying that it is “existent in something” falls upon many things: upon some of them by synonymy, upon others by ambiguity, upon others by resemblance. Its falling upon all those things is not that of the utterance shared by synonyms, nor that of an ambiguous name, but that of the utterance shared by homonyms, I mean, when related to all of them<sup>519</sup>; and this basic explanation is neither a definitional explanation, nor an actual description, but a sort of explanation assigned to the name, like when one explains a name by means of a more familiar and usual noun. This is the way [the explanation] works: common people know things of which it is said that they are “in something”; thus, the one who gives this explanation wants to say that this accident is that which is “in the subject”, and that its being “in a subject” is not such and such kind of being in something, until the homonymy ceases to be; and then there remains a single meaning to which he points by means of an example, after the doubt deriving from homonymy has been eliminated. For the elimination of the doubt due to homonymy can occur in two ways: one of them consists of giving the definition meant by the name, or giving the description; the second consists of negating the meanings which fall under homonymy, in order to point to the remaining one not by itself, but by negation of what it does not have.

Thus, his saying “existent in something” distinguishes between the state of the accident and the state of the whole [C29] in the parts; for the whole has a complete form which does not exist as subsistent by itself, but [exists] in the sum of its parts, not in each one of them; for ten is a certain whole, and does not exist as realized in each unit, but in all of the parts; for if these are complete and collected, then the form of ten is realized. This will be clarified to you in its nature by first philosophy<sup>520</sup>. Then, when it is said “existent in something”, the similarity of accident and whole has already ceased to be.

---

<sup>517</sup> See above, the note to the title of ch. I.3.

<sup>518</sup> This is Aristotle’s definition of the accident, as found in *Cat.* 1 a24-25 (ἐν ὑποκειμένῳ δὲ λέγω ὃ ἐν τινι μὴ ὡς μέρος ὑπάρχον ἀδύνατον χωρὶς εἶναι τοῦ ἐν ᾧ ἐστίν): Avicenna is quoting literally Ishāq ibn Hunayn’s translation.

<sup>519</sup> For synonymy, homonymy by ambiguity and by resemblance see above, I.2 [§2-3]. This means that there are many different types of inherence which are – as a whole – homonymous, though some of them are, singularly speaking, synonymous with others, or just similar to them, or related to others by “ambiguity” (*taškīk*), that is by modulated synonymy.

<sup>520</sup> Reference to the treatment of unity and numbers at *Ilāhiyyāt* III.3.

[§3 *Doubts concerning inherence “in something”*]

[§3.1 *Relatives, time, place*]

Someone might object that relations, such as contact, brotherhood and the like, only exist in two things, not just in one. The answer to him is what we shall say, in this regard, in our notification of the relative<sup>521</sup>.

Someone might say: “Time, according to you, is an accident, and it is not in a thing”. The answer to him is: it is in something. The explanation of this [matter] is found in natural science<sup>522</sup>. Someone might say that place as well is an accident, and it is not in the located thing; the answer to him is that [place] is in something else. The explanation of this [point] as well is given in natural science, for the logician does not suffice to explain it<sup>523</sup>; however this must be pointed out, so that it is not assumed that this premise, namely “time is not in anything”, is conceded; and similarly for other premises.

[§3.2 *Wholeness and the whole*]

Someone might object: “Although the whole may be a substance, wholeness is ‘in’ many things, and it is an accident; since wholeness, being like ‘ten’ and others, does not number substances, according to you, but it [consists of] accidents, and its existence is not in a single thing”.

So, [as a reply] it is said that it is not impossible that the first subject of the accident be composed by multiple things, whose sum has become a subject to the accident; [it is not impossible] that that sum be the subject of that accident insofar as it<sup>524</sup> is a sum, and that it be, insofar as it is a sum, a single thing. Hence, if wholeness is an accident, and it has a subject, then the subject which bears it [C30] is not a subject for it insofar as it is “many things”, in such a way that each of these things bears that accident, but [it is a subject] insofar as there is a sum resulting from the collection of [those things]; and this prevents the accident from being in many things, in the sense that [the accident], one and itself, is an accident in each one of them.

If someone objected: “Why don’t you give the same reply about the existence of the whole in its parts? Why do you need to distinguish accident from whole, by arguing that the whole is<sup>525</sup> in many things, since the whole is not in each one of them, but in the sum, whereas that sum is one, insofar as it is a sum?”, we should answer: it is possible to say, of the whole, that it is “in the sum of its parts”, because it is itself a sum of the parts; thus, the collection of parts is not something other than the whole; so, how will the whole [exist] in itself? As to wholeness, it is that of which this is said, namely the *state* of this sum, inasmuch as it is a sum. The truth is that what the opponent says, “the whole is in the parts”, is a metaphorical formula, and it means that the existence of the wholeness in virtue of

---

<sup>521</sup> This issue is not discussed openly in the section on the relative (chapters IV.3-5), but rather in metaphysics (*Ilāhiyyāt* III.10).

<sup>522</sup> The discussion of time is carried out by Avicenna at *Samā‘ tabī‘ī* II.10-13.

<sup>523</sup> See the previous footnote.

<sup>524</sup> Reading *hiya* with most manuscripts, instead of *huwa* (Cairo, **DEM**; *desunt NR*).

<sup>525</sup> Reading *al-kulla huwa fī* with all manuscripts, instead of *al-kulla fī* (Cairo).

which the whole is in the parts; as if the parts were things, to which a certain configuration occurs, from which the whole derives. That configuration is totality, that configuration is a collective accident, and the whole is composed by that configuration and by the singular [elements]. Thus, it is by accident that it is said, of the whole, that it is “in the parts”: namely, its totality is in the parts, and its subsistence is in the parts.

It behoves that you do not need to fully occupy yourself with this difference, except for the ambiguity which occurs, at first glance, between what is employed properly and metaphorically. In cases like this, it might be good for you also to know the difference between the proper, [on the one hand], and the metaphorical of which you do not know, at first glance, that it is metaphorical. It seems, [however], that we have no compelling need for [explaining] this difference. I think that the mind of the first descriptor [of the accident]<sup>526</sup> did not mean anything about this distinction, but it was invented by sophists<sup>527</sup>. Thus, the sophistic way of [treating] this difference is that, if it is said of the whole that it is in a thing, it is said that it is in many things (although it is neither in one thing, nor in many things!). [C31] As to the accident, it is accident because it is in a thing; so, if it happens to be in a certain sense in many things, it is not an accident by virtue of that, but rather by virtue of its being in a thing, either a collection [of things] or something else. As to the whole, its being “a whole” is only related to what is said by metaphor, namely that it is in many things and not in one thing.

This is a way of explaining this difference; what I mean, however, is necessary; and if that other [explanation] is necessary, there is a difference as well between the existence of the accident in the subject, and the existence of the genus in the species, under the respect of universality, and the existence of the species in individuals; in general, between it<sup>528</sup> and the existence of the universal in its particulars, insofar as it is universal.

[§3.3 *Form is not an accident, with respect to matter*]

If we mean, by saying “existent in a thing”: i.e., in a thing whose subsistence is realized in itself, whose thingness is achieved independently of what inheres in it or is perfected without it, so that what contains it does not constitute it, then there is a difference between the state of the accident in the subject and the state of form in matter; for form is the thing which renders its receptacle existent in act, and its receptacle is not, by itself, a thing in act but by virtue of form.

[§4 *Second part of the description: “not as a part of it”*]

His words “not as a part of it” distinguish between that [existence]<sup>529</sup> and the existence of the part in the whole, the existence of the nature of the genus in the nature of the single species, inasmuch as they are two natures, and the existence of the universality of the

---

<sup>526</sup> I.e., Aristotle.

<sup>527</sup> Ar. *al-mutakallifūna*. The word does not exactly translate the Greek “sophist”, but describes the supporters or inventors of sophisticated, artificial interpretations; it is sometimes, then, semantically similar. The *mutakallifūn* referred to here by Avicenna are the commentators who discussed the aporia

<sup>528</sup> I.e., the existence of accidents in the subject.

<sup>529</sup> I.e., the existence of accidents in their subjects.

species in the universality of the genus, in so far as they are two universal [things]. In general, it distinguishes the state of the accident in the subject from a state of the particular in the universal, in respect of which it is said that the particular is “in” the universal. Likewise, it distinguishes [that existence] from the existence of matter in the compound, and [the existence of] form in the compound.

[§5 *Third part of the description: inseparability*]

His words: “it cannot subsist separately from it” make a distinction between the accident’s being in its subject from the thing’s being in time; for in any time you isolate the thing, you can posit it as separate from [the first time] in another time, and the state of the accident in its subject is not such. [C32] Likewise the thing in place: for its being in place does not require it to be such that it does not subsist without place. As a matter of fact, neither insofar as it has a place, nor insofar as that is a place, it follows necessarily that the thing having place be inseparable from place; and if it were the case, inescapably, it would be so for another reason. [On the contrary,] the accident’s being in a subject requires this, insofar as this is a subject, and that is an accident. Similarly, the thing’s being “in” the goal; for the thing’s being in the goal is separable from the goal, like a man “in” happiness, a body “in” health, a politician “in” politics. Likewise, substance’s being in the accident, for substance is separable from the accident and may subsist without it. Likewise for matter, insofar as it has the notion of matter, it is not impossible to separate from form [and to conjoin] to another [form]. Even the nature of the genus may exist as separate from the nature of the species, [to be] in another species. However, in matters like this there is a sort of speculation for which the logician is inadequate.

[§6 *First group of doubts concerning inseparability*]

[§6.1 *List of doubts*]

But the doubts regarding this [aspect] are numerous: let us mention them, and let us provide a solution for them.

Among these: “It is said of the thing that is in absolute time, and is inseparable from absolute time; it is said, of it, that it is in absolute place, and is inseparable from absolute place; of substance, it is said that it is in the absolute accident similarly, and it is inseparable from the absolute accident. Some bodies cannot exist but in the place where they are, and they are not accidents (for instance, the moon in its sphere); some matters cannot separate from the form they have [to conjoin with] another [form] (for instance the matter of the sphere), and they are not accidents; no form can be separate from matter, whereas you said: ‘a form’s being in matter is not a thing’s being in a subject’”.

[§6.2 *Inherence in absolute accidents*]

We say, firstly, that the meaning of our saying “it is impossible that it be separate from what it is in” is<sup>530</sup> that, for any determinate existent you take in the determinate thing [C33]

---

<sup>530</sup> Reading *fīhi huwa anna* with most manuscripts, instead of *fīhi anna* (Cairo; deest **Di**).

in which it is existent, it is impossible to separate it from that determinate thing<sup>531</sup>; rather, the cause of its subsistence is the fact that it is found therein, not the fact that that [other] thing is something that accompanies it necessarily, after that it has been constituted in act. For this reason the accident was characterized by the name “existent in a subject”, for it is an existential consideration, whereas the other was characterized by the utterance “being said of a subject”; since universal is only existent in utterance or in conceptualization, and both of them are “being said”.

This is the goal of what we say: hence, the doubt concerning absolute place, time and accidents ceases to be by virtue of the determination that we have put as a condition<sup>532</sup>, and in respect of the fact that the thing is only found in absolutes according to thought, whereas our discourse regards existence. In existence there are, as you know, only concrete beings existing in concrete beings, all of them universal; but we speak about the way of their existence which they have, not of the way of thought. If we considered the way of imagination, it would not be unlikely that we posit many accidents as separable from their subjects, in thought.

[§6.3 *Celestial bodies in their natural place*]

As for the moon in its sphere, this is something which accompanies necessarily [the moon] extrinsically, and it is not that the cause for the existence of the nature<sup>533</sup> of moon, insofar as it is the nature of lunarity, is its being in its place. For this reason it is licit to suppose parts, for the moon, in a certain way (since for every body it is possible to suppose parts, in a certain way); and the parts of it which are supposed are not described by the fact of being in the place of the whole, or of being in any place at all. You shall learn this in natural science; nonetheless, this is not because [moon] is in a place, in such a way that its being in place requires it to be inseparable from place; but that is only required by something different than its being in place. As to the accident, [on the contrary,] it has that [property] only because it is in a subject.

[§6.4 *Form in matter*]

As to the form that is in matter, matter is not the cause of its subsistence, according to the well-discerning philosophers; rather, the cause of form is some thing that is also the cause of matter<sup>534</sup>, but [matter] is such by the intermediation of form; and form is necessarily accompanied by the fact of being itself conjoined with what it constitutes as existent in act.

**[C34]** Some people said that the difference between the existence of form in matter and the existence of the accident in the subject is that form is a part of the compound; as to the accident, it is neither a part of the subject, nor of the compound. They went from this to the words of [another] group, who said: “If you do not put form in relation to the

<sup>531</sup> I.e. the second determinate thing, in which the first determinate thing exists.

<sup>532</sup> The paragraph in Cairo ends here with *min al-ta'yīni*; I read *wa-min ḡihati* at line 33.6 as a prosecution of the preceding sentence.

<sup>533</sup> Supplying *wuḡūdi <tabī'ati> l-qamari (al-qamariyyati GIJY)* with all manuscripts (deest **Di**).

<sup>534</sup> Namely the Active Intellect, also known as “the Giver of Forms” (*wāhib al-ṣuwar*).

compound, but to the receiver, it is an accident; if you put the accident in relation to the thing resulting from itself and the subject, it is a form". This is a wicked and confusing statement. This because in the aforementioned description it is not posited as a condition that the accident be not a part of anything at all, nor [is it required] in it that it be not<sup>535</sup> a part of the compound. Rather [it is posited], in it, that it is not a part of the subject, where it was said "not as a part of it", namely of the subject, namely of the thing in which [the accident] is an accident. Thus, let this be a difference between the existence of the accident in the subject, and the existence of form in the compound. However, what is sought is not that; rather, what is sought is the difference between the existence of the accident in the subject and the existence of the form in matter, which is a consideration different from the consideration of the existence of form in the compound [resulting] from itself and matter. Thus, if it was said, in the description, that the accident is existent in a thing not as a part of any thing at all, then it would be as they say; and if the accident were not a part of any thing at all, neither of the subject nor of the compound, and the form is a part of one of them, namely of the compound, not a part of matter, then this statement would probably mark a distinction [between them]. However, we do not understand this from our words: "existent in a thing not as a part of it"; we only understand, from these words, that it is not a part of the thing in which it is existent, according to the existence of the thing in its receptacle; since that is not said, nor even true, what they held is absurd. That is not true because accidents may be parts of compounds [resulting] from themselves and substances; thus, there may derive, from the composition of a substance and an accident, a thing composed by them two, each one of which is a part of them; as the chair [is composed] by wood and something accidentally belonging to it, and wood is a subject for it truly, not a matter. For instance concavity, since from itself and the nose there derives a thing, namely the snub. Therefore, this consideration is wicked and false.

[C35] There is something you must totally incline [to believe], that is: it seems that by this description, by which the accident was described, it was not meant by "accident"<sup>536</sup> what [that] man<sup>537</sup> became aware of when he progressed in philosophy, and of the difference between it and form; but it was meant a notion more general than the meaning of this accident, namely the notion that comprises accident and form, i.e. being in a receptacle, and [being] what provides it with a configuration, whether that receptacle be a matter or<sup>538</sup> a subject. For it is not unlikely that the name "accident" be said of the two things in such a way that they share it, and share somehow its meaning; but this confusion is not absolutely unescapable.

#### [§6.5 *The matter of celestial bodies "in" its form*]

As to the question of that matter which is "in" a form, and matter does not separate from that form to [conjoin with] other [forms], it is problematic. It is as if he<sup>539</sup> made this

---

<sup>535</sup> Supplying *lā* with most manuscripts, except **J** (deest **Di**).

<sup>536</sup> Reading *bi-l- 'araḍi* with all manuscripts, instead of *bi- 'araḍin* (Cairo).

<sup>537</sup> Namely, Aristotle.

<sup>538</sup> Reading *aw* with all manuscripts, instead of *am* (Cairo, deest **Di**).

<sup>539</sup> Namely, Aristotle.



description faulty, and made it defective, because he posited it as common to this matter and to the accident<sup>540</sup>. Moreover, it is said of matter that it is “in” this form according to those other conditions<sup>541</sup>.

So, it seems that among the ways in which it is possible to answer this, being also a possible answer for other issues, there is the fact that by means of this book only common people are addressed; for the beginner is counted in the rank of common people, this description is built upon a commonly used utterance, and its states are explainable only with regard to the utterance. Then, common usage in employing the utterance “in” does not comprise the relation of form to matter, nor of matter to form; but it comprises the relation of substances to accidents, for instance “Zayd is in rest”; the relation of accidents to substances, for instance: “whiteness is in a body”, together with other things currently employed, for instance the thing in place, in time, in a container, the part in the whole, and the like. If the distinction results by the exclusion of these commonly accepted ways [of inherence], there does not remain in common opinion anything said to be in something other than the accident; so that the first thing that comes to the student’s mind is that that existence<sup>542</sup> is the existence of the accident in substance, whereas it is not.

Thus, we have already said that this description is made with regard to the utterance, not with respect to a common notion, posited as general and then completed with differentiae<sup>543</sup>. If it is with regard to the utterance and its distinctions, according to what we said, it is not unlikely [C36] that with respect to that the usage of common people was taken into account, not according to conventions, existing beyond common usage, which may occur with a careful study of the sciences. So, it is not possible to grasp a scope for that<sup>544</sup>, for the imposition of a name to things by homonymy or resemblance does not belong to things done precisely and definitely; that [imposition] only is precise and definite, where one wants the meaning to be taken into account, either by synonymy, or by the “ambiguity” that we mentioned<sup>545</sup>. It is as if common people did not impose the utterance because one among matter and form, if they have the character mentioned for them, is in the other, but [because it is] with the other, especially in the case of matter “in” form. Thus, if someone wants the confusion occurring now to cease with the existence of the conventions that have become current after the convention of common people, he must add, to “existent in a thing”, “in such a way as to provide it with an attribute and a qualification”, for this is not more ambiguous, nor homonymous, of “existent in a thing”. Thus, matter does not provide form with an attribute and a qualification, I mean, the matter about which there are doubts; but form is what qualifies it and describes it.

If someone objects that the difference [between this matter and the accident] is that it is natural for matter to change the form by which it is constituted, like this form, but the

---

<sup>540</sup> “And to the accident”: reading *wa-li-l-‘araḍi* with all manuscripts, instead of *wa-l-‘araḍi* (Cairo, deest **Di**).

<sup>541</sup> What is meant here is probably that the matter of celestial bodies satisfies all the conditions listed by Aristotle for the inherence of accidents in substances, such as “being in something”, inhering not as a part of it and inhering inseparably.

<sup>542</sup> Namely, the existence of form in matter, and that of matter in form.

<sup>543</sup> See above, paragraph [§2].

<sup>544</sup> Here I change the punctuation of Cairo edition, supposing a comma instead of dot.

<sup>545</sup> It is certainly odd to define or describe something by means of an equivocal expression, such as “existent in a subject”; the most correct way to define something is obviously to provide it with a univocal formula, or quasi-univocal, susceptible at least of being predicated “by ambiguity” (*bi-l-taškīk*).

form does not abandon it, [and] this is a defect which occurs to [matter] accidentally, because of this form; while, as far as the accident is concerned, it is natural for it to be constituted by the subject, and moving away from it is not natural; [well,] this argument cannot be accepted. For concerning the matter which is subject of doubt here, it is established in the sciences that it is not constituted without form, and that it is not natural for it to accept another form; its nature, therefore, is fixed on this form. However, we ensured our interpretation of this distinction according to a way [of explaining] that is not far from reaching a safe criterion for the difference<sup>546</sup>, namely our saying: matter, in its being matter, is not accompanied necessarily by the fact of being dependent on, and associated with a form by itself, but this is necessary for it because of a certain specificity or nature, be as it may, posterior to its being matter. As to the accident, its being dependent on the subject comes by virtue of the most common of its notions, namely its being an accident; and this is also sufficient.

[§7 *Second group of doubts on inseparability: inseparable and separable accidents*]

[§7.1 *Inseparable accidents*]

[C37] Among doubtful things, there is also the question of inseparable accidents, without which substance does not subsist. However, they are not inseparable because substance is constituted by the accidents being in it, so that its subsistence without them is not possible; rather, that is a necessary concomitant of [substance], and it is [substance] that constitutes them. As to the accident, the meaning of its being “inseparable” is that it is not licit for it to subsist separately by itself, but its subsistence benefits from what it does not separate from; as for the differentiation made by estimation, there is no difference in it between substance and accident, for estimation may distinguish the accident from the substance.

[§7.2 *Separable accidents*]

Among the doubts concerning this description, there is the fact that “among accidents, there are those which separate from substance because of their corruption, while you said that the accident is inseparable from substance”. So, it is said: we mean by this that it does not separate as subsistent without [substance]; as to the case where it separates in the sense that substance remains, whereas the accident is destroyed, this we certainly don’t deny. Don’t you see that we said “and it is not possible that it has subsistence without the thing it is in?”.

Among the doubts about this, one might say: “scent, according to you, is an accident; it is necessary, then, that it do not subsist separately from the apple, but we see scent subsist separately from the apple in another subject”. It is said, as a reply, that it is not true that, when the scent exists in the air because of an apple, it has moved away from the apple, and left the apple; nor, when heat exists in the air because of fire, it has moved away from fire, and left fire. Rather, this [occurs] either through the generation of another heat and another scent, in the air, or through the spreading of disintegrated particles of [apple and

---

<sup>546</sup> I.e. the difference between form and accident.

fire] in the air. Natural science will ascertain the truth, in this regard<sup>547</sup>. Thus, if it were right to say that if the air becomes scented or heated then the quality of the apple and of fire disappeared from them, so that they would exist without that quality; and [if] it were right, moreover, that the two qualities do not cease to be in fire and the apple without having moved away; and they did not exist [C38] in the air in the beginning, but what was in fire and the apple moved by itself, without its perishing nor the generation of something similar; this would be true. But natural science clarifies that it is not the case<sup>548</sup>. Thus, if this premise is not conceded, this objection does not follow<sup>549</sup>. The most the logician can do, is knowing that this does not follow; as for the logician's commitment to explaining and clarifying how the thing is, it is a departure from his discipline, without an accomplishment such that it may result, from it, what he desires.

---

<sup>547</sup> Namely, in the discussion of sense-perception (notably of the sense of smell).

<sup>548</sup> In the discussion of the sense of smell in *Nafs* II.4, Avicenna clarifies that the smell or fragrance of an odorous body do not separate from the body, but that the propagation of smell occurs by the "evaporation" of some particles of its.

<sup>549</sup> The premise is not conceded, since natural science ascertains that smell does not separate from the body; therefore, the "objection" (*munāqaḍa*) raised against Aristotle's account of accidents does not hold.

## [I.5]

On the combinations<sup>550</sup> occurring between “to say of” and “to exist in”, and what they lead to<sup>551</sup>

[§1 *First combination: said-of + said-of*]

[§1.1 *The transitivity of “being-said-of”*]

We now say that when one thing is predicated of [another] thing according to the predication of the “said-of-a-subject”, and then that thing is predicated of another thing<sup>552</sup> according to the predication of the “said-of-a-subject”, so that there are two extremes and a middle, then this [thing] which was said of the [thing] said of the subject is said of the thing of which the first thing said was predicated. An example for this is “animal”, when it is said of “man” according to the predication of the “said-of-a-subject”, and “man” is said of Zayd and ‘Amr according to this very predication, then “animal” is also said of Zayd and ‘Amr according to this very predication, because Zayd is an animal, and shares with animal its definition: namely, the definition of animal is said of it, because animal is said of the nature of man; so, every thing of which is said to be “man” is also said to be “animal”, and Zayd is said to be “man”.

[§1.2 *Doubt: the rule of transitivity may give rise to absurd predications*]

[§1.2.1 *The doubt*]

One may doubt about this, and say that “genus” is predicated of “animal”, “animal” is predicated of “man”, but “genus” is not predicated of “man”<sup>553</sup>.

[§1.2.2 *“Genus” is not predicated of the nature of animal in itself, but of its nature, understood according to the condition of abstraction*]

We say that “genus” is not predicated of the nature of animal according to predication “of”, [C39] for the nature of animal is not a genus. If the genus were predicated of the nature of animal as a universal, then it would follow what they require, and every animal would be a genus, like in the case where “body” is said of the nature of animal, so that every animal is a body, and man is undoubtedly a body.

However, the thing of which generality is predicated is the nature of animal, when it has been subjected to a [certain] consideration in act: that consideration is its being-

---

<sup>550</sup> Reading *muzāwaḡāt* with all manuscripts, instead of مزاجات (Cairo).

<sup>551</sup> This chapter corresponds to Arist. *Cat.* 1 b10 – 15.

<sup>552</sup> Most manuscripts (ABDDaEIMkNNkRY + G a.c.) transpose the first *‘alā* at line 38.11 after *humila* at line 38.10, and read *ṭumma humila ‘alā dālīka l-šay’i šay’un āḡaru* (“then another thing is predicated of that thing”). This latter reading is probably more correct, but the sense of the text does not change.

<sup>553</sup> Man is a species, rather than a genus. This doubt is a canonical issue tackled by the previous commentators of Aristotle’s *Categories*: for a reconstruction of the debate, see the COMMENTARY below.

abstracted in mind in such a way that it is appropriate to make the participation [of multiple things] occur in it. Supposing this abstraction in it is a consideration more specific than the consideration of animal in so far as it is simply animal, which is the nature of animality; for animal, in so far as it is simply animal, without the condition of its abstraction or non-abstraction, is more general in consideration than the animal considered on the condition of abstraction. This because it is appropriate to associate with animal, understood unconditionally, the condition of abstraction, and so to suppose an animal deprived of the specifying and individualizing properties, and it is appropriate to associate with it the condition of mixture, and to associate it with the specifying and individualizing properties; as to the case where it is taken on the condition of abstraction, [on the contrary], it is inappropriate to associate with it any of the two conditions: as to one of them, it is because it has already been realized in existence, so it is *a priori* inappropriate to make it exist and associate it [with that condition]; as for the second [condition], it is because it cannot be conjoint with the condition of abstraction. Therefore the nature of animal, neither on the condition of abstraction, nor on the condition of mixture, has a more general consideration; and the nature of animal, on the condition of abstraction, has a more specific consideration.

Generality is only said of it<sup>554</sup> if it is considered in mind on the condition of a non-mixture in act, and of the potential reception of mixture, because of the absence of an associated impediment (like a specifying differentia, or individualizing, particular accidents). If the nature of animal is considered neither on the condition of mixture, nor on the condition of non-mixture, since the subject of generality is an animal [understood] on the condition of non-mixture and abstraction, and “animal”, on the condition of non-mixture and the condition of abstraction, is not said of man, but only [the animal] without the condition of mixture [is said of man], then “genus” is not said of the thing which is said of man.

Furthermore, generality is an accident in this nature, existing in it as the thing exists in a subject. As for “genus”, its being said of what it is said of, namely this nature, I mean [its being said] of what is characterized by the mentioned condition, is not [C40] the accident’s being-said of the thing of which it is an accident, but the substrate-accident compound’s being said of its subject: namely, it is not whiteness’ being said of “man”, but white’s being said of “Zayd”<sup>555</sup>.

[§1.2.3 “Genus” may be predicated of “man” if the propositions are quantified as particulars, not as universals]

If the thing of which “genus” is said were also among the things that are said of “man”, the fact that “genus” [is said] in such a way would not prevent it from being said of “man”; this you shall learn from what follows.

Actually, this is ascribable to the fact that the major extreme is predicated of some [instances] of the middle, and of the parts that are not predicated of the minor extreme. You must consider “said of” and “existent in”, in these examples, as universal, for if you

---

<sup>554</sup> I.e. of animality.

<sup>555</sup> The predicate “white” does not denote a simple property, but rather a compound of an accident and its substrate (= “white thing”). Likewise, “genus” is predicated of “animal” (understood according to this particular consideration) paronymously.

allow the particular, so that the major extreme [is said] of some [instances] of the middle, it is not necessary, in the fact that both predications share [their being-said] “of”, that the major extreme be said of the minor; for “rational” is predicated of some animals [by predication] “of”, “animal” is predicated of every horse [by predication] “of”, and it does not follow that “rational” is predicated of “horse” [by predication] “of”. If there happened to be, instead of “genus”, something else that is however similar to “genus” and equivalent to it in respect of generality, and if it were predicated of the middle as a whole, then its being non-essential would not prevent it from being predicated of what stands below the middle.

[§2 *Second combination: said-of + being-in*]

[§2.1 *The previous commentators envisaged two possible solutions*]

If the relation of the extreme that is in the place of “animal” – let us call it “major extreme” – with the middle, which is “man”, and the relation of the middle with the other extreme, which is in the place of “Zayd” – let it be called<sup>556</sup> “minor extreme”; [if these relations] change, and the major extreme is said of the middle and the middle is existent in the minor, then the commonly accepted answer of the commentators consists of two answers.

[§2.2 *First solution*]

(1) According to the first, [the first predicate] is neither said of the last one nor in the last one: the example they make is that “colour” is predicated of “white” so as the predicate of the subject, and “white” is predicated of the bird named *quqnus*<sup>557</sup> as the predicate in the subject. They said: “colour is not predicated of *quqnus* [by predication] “of”, since it is not [said] according to the ‘what is it?’, but also not predicated ‘in’, according to what they say. One of them said what follows: “It is neither said of it by the predication of what is predicated of a subject, I mean that *quqnus* is not called by its name”.

This is a gross confusion, induced in his thought [C41] by their saying that what is said “of” gives its name and its definition [to the subject], and what exists “in” does not give its definition to it, but its name, and that it must give its name in any place; not that its meaning is that it may happen that the subject shares in its name, so that if a certain accident, like philosophy, is existent in a subject (namely in the soul), and the soul is not called “philosophy”; or another accident to another subject, so that for instance the stone is not called “hardness”, or the apple “scent”, then that thing is not an accident; or the natures of things change so that it becomes of use to give them their name only, without their notion, to other things; or this does not become of use, so that if a convention is not established of<sup>558</sup> naming realities by the names of [other] realities which do not have the

<sup>556</sup> “Let it be called”: reading *wa-l-yusamma* with most manuscripts, instead of *wa-l-nusammihū* (Cairo, **BDaNk**).

<sup>557</sup> *Quqnus* is the Arabic transliteration of the Greek κόκκος (“swan”); cf. the note *ad loc.* in Cairo.

<sup>558</sup> Reading *iṣṭilāḥun fī* instead of *iṣṭilāḥun “fī” ‘alā* (Cairo). *Iṣṭilāḥun fī* is the reading attested by the majority of manuscripts, whereas mss. **GIJY** write *iṣṭilāḥun ‘alā*. The reading adopted by Cairo is only found in manuscript **Da**, and is very likely the result of contamination: manuscript **B**, of which **Da** is possibly a

definition of these, without that this makes it necessary [for these realities] to share in the definitions [of those realities], then they become other things.

[§2.3 *Second solution*]

(2) As to the other answer, it consists of what was meant by someone willing to confirm what this person said, so he said: the truth, in some cases, is what this person said; in some other cases, as he says, “white” may be said of a certain white because it is essential [for it], and “a certain white” is existent in a certain white man<sup>559</sup>; then, it is said of the white man that he is white.

If only this man knew, himself, whether he means by “white” whiteness or a thing having whiteness! For if he means thereby whiteness, it is as if he said “whiteness is said of a certain whiteness, a certain whiteness is existent in the white man, then whiteness is also existent in the white man. This is not different from that [other] example, for “colour” is also existent in the white man. If he means by “white” a thing having whiteness, “white” is existent in the white man in his view, since he holds it to be an accidental attribute. Hence he did not absolutely mention an example differing from the conclusion of what was mentioned by him who doubts about his words.

[§2.4 *Avicenna’s solution*]

As for us, we say that the first is in any case existent in the third; for if in the thing there is colour white, there are in it all the things that [C42] are said of “white” universally, and by which “white” is described in a general way. If not, in that thing there would be whiteness but there would be no colour in it, and that whiteness would not be a colour, so predicating “colour” of “whiteness” would not be a universal [predication]. However, in any thing in which there exists the nature of a certain accident, there exist the natures of the things by which that accident is described universally.

Nonetheless, if that notion<sup>560</sup> belongs to the things said of the accident and of its subject, if it is possible for that notion to be something common to a certain subject and to an accident in it, then it is possible for that [thing] to be said of its subject, not in respect of the accident; but what is in respect of the accident is not said of it. For instance: if “one” is said of the accident by predication “of”, so that it is said that “whiteness is one”, and “one” belongs to the things said of the accident and of the subject, then it will not be impossible for “one” to be said of the subject by predication “of”; not in respect of whiteness, since the “one” that has been said of whiteness is the same thing as whiteness (for whiteness is that “one”); thus, since whiteness is in its subject, that one is in that subject not as being

---

*descriptus*, reads *fī tasmiyati* but reports ‘*alā* in the right margin as a collational variant. I adopt *fī tasmiyati* because it is *lectio difficilior* and more widely attested; ‘*alā* is more common as a preposition depending on *iṣṭilāh*, but for this very reason it might be an easier correction for *fī*, and it is only found within a small group of stemmatically related manuscripts.

<sup>559</sup> “White man”: ar. *al-bīḍāniyyu*. This term is quite scarcely attested in Avicenna’s *corpus*: it derives from the collective name *al-bīḍān* (“white men”), on the model of *sūdānī* (black man, from *al-sūdān*). For another attestation, see for instance *Ḥiṭāba* II.5, 97.11 : “[...] for instance the division of men into white (*bīḍānī*) and black (*sūdānī*), thin and fat”.

<sup>560</sup> I.e. the universal accident.

said of it, so that [the subject] under the respect [of whiteness] is “one”, but in its own respect it “has one”, it is not “one”. If it is “one” in itself, then it is another one. Hence, “one” is said of the subject in itself, and exists therein in respect of [the subject’s] whiteness, since that one, which is whiteness, is not the one that the subject is, but is “in” [the subject]. This is like substance, when said of man and said of itself; the substance which is itself [substance] is not said of [man], but is existent in [man], although it is such by the existence of the part [in the whole], not by the existence of the accident [in the subject].

It is clear, therefore, that it is not impossible for one thing to be described by an attribute, and for another thing [existing] in it to be also described by that attribute; the attribute, then, is said “of” [the first thing] in a respect, and said “in” [the first thing] in another respect. If there exists no such thing, what prevents from this is the absence of this type [of predication], not [the absence] of the aforementioned relation in itself<sup>561</sup>.

As to the case where the attribute said of the accident is proper of it, such that that [other] nature does not share it, then [the attribute] is existent in the subject, not otherwise.

[§3 *Third combination: being-in + said-of*]

As for the case where we change the relation, and posit the major extreme as existent [C43] “in” and the middle extreme as predicated “of”, the commonly accepted answer is that at times [the major extreme] is predicated [of the minor] by predication “in”, like whiteness in *quqnu*, *quqnu* of a certain *quqnu*, whiteness in a certain *quqnu*; other times it is not predicated, like genus in animal, animal of man, and genus is not predicated of man.

You must remember what we said, namely that “genus” is not predicated of the animal that is, by itself, said of “man”; so, the middle is not one in itself; and you must preserve the unity of the middle. The truth is that if the middle is one, then if what exists in the middle has a total existence in it, it is existent in the minor extreme. If it is in some [instances], then the middle is split; so, that is not necessary, neither in this case nor in others. The example mentioned with regard to “genus” is no exception to those cases where the predication is made “of” some [instances] of the middle. The two things must only be taken as universal, in these examples; for if you consider existence or being-said with regard to some instances, or with regard to the whole, you change all the questions.

[§4 *Predication “of” is transitive even when non-essential*]

Know that if the major extreme is said of the middle, and the middle is said of the minor, and the predication [occurs] in<sup>562</sup> none of them essentially, then as well the major extreme is said of the minor; for instance “risible” is said of “every man”, “capable of walking” is said of every “risible”, then “capable of walking” [is said] of every man.

---

<sup>561</sup> “Absence” is *fuqdān*, more properly translatable as “loss”. What Avicenna means here is probably: if this kind of predication seems impossible, it is not because there may be no such relation (*nisba*) between the genus of an accident, the particular accident itself and the subject where the particular accident exists; but only because this sort of predication does not correspond to a valid syllogism.

<sup>562</sup> Reading *fī* with all manuscripts, instead of *‘alā* (Cairo).



[§5 *Being-in + being-in*]  
[§5.1 *The standard solution of the commentators*]

If the major extreme is existent in the middle, and the middle is existent in the minor, the commonly accepted answer regarding this is that this is impossible; this because an accident is not predicated of an accident; thus, if the middle is an accident, it is impossible that the major extreme be an accident in the middle, in such a way as to be an accident in an accident.

[§5.2 *Avicenna's refutation: nothing prevents accidents from inhering in other accidents*]

**[C44]** What they say is something which is not necessary, according to the definition of “accident”, and [something] of which there is no demonstration. As to the fact that it is not necessary according to the definition of “accident”, it is because it was said of the accident that it is the existent in something in such-and-such way, and it was not clarified whether that thing is undoubtedly a substance, or an accident. As to the demonstration, those did not attempt to provide it neither in their logic, nor in their [treatment of the] other sciences; and it is not, in itself, something which is demonstrable, for the truth is the contradictory of this claim, and they cannot even say that this is clear by itself.

As for the fact that the truth is the contradictory of this claim, it is because many accidents only exist in substances by the mediation of other accidents, as will be explained to you in the appropriate place<sup>563</sup>; since [for instance] smoothness exists in the body because it exists in the surface, triangularity exists in the body because it is in the surface, and its being visible exists in the body because it is in colour. It is not [true] that, if the existent in the surface does not exist but in the body in which the surface is, then its being existent in the body also prevents it from being existent in the surface; like the fact that “animal” is said of the individual men does not prevent it from being said of the “man” said of the individual men; but the two predications and the two existences can be regrouped together, even though one of them is prior, and the second is secondary; for smoothness exists firstly in the surface, and then in the body; and time belongs accidentally to motion first, and to the mobile in the second place. These things will be clarified to you in other places<sup>564</sup>.

Rather, what belongs accidentally to an accident, itself and the accident are both in the subject of the accident as something is in something, not as a part of it, in such a way that it cannot subsist separately from it; thus, the existent in a subject which exists in a second subject is existent in the second subject. Therefore, neither of the subject [of predication] “of” and the subject [of existence] “in” requires the subject to be the subject that is substance: for “colour”, [for instance], is said of certain subjects like blackness and whiteness, which are accidents; and time is existent in motion, which is also an accident. As for the subjects that are substances, the examples concerning them are patent.

---

<sup>563</sup> Many accidents share this character, most notably some qualities that inhere in quantities, such as geometrical shapes (see the examples right below and Avicenna's discussion in VI.1-2) and time, which is a quantitative accident of a passion (motion).

<sup>564</sup> Cf. the previous note.

[§6 *Recapitulation: the distinction between accident and form*]

Let us go back to the main issue, and say: of two essences, one of which is realized in the other by means of a primary realization, in which neither thing may be distinguished from the other (unlike the peg in the wall, since the internal part of the peg is detached from the wall), and such that if someone happened to point at that essence his [designation] would comprise both [essences] together; whichever of [these] two [essences] provides its companion with a description, a configuration, an attribute is either an accident in its companion, or a form; this because if its companion described by itself is constituted in its essence, and this [first essence] is constituted by it, then it is an accident; and if its companion is not constituted later but by [the first essence], and it has a role in the constitution of its companion, then it is a form. They both share the fact of being in a receptacle, but the receptacle of one of them is named matter, and the receptacle of the other is named subject. [C45]

[I.6]

On destroying<sup>565</sup> the claim of those who said that one thing may be an accident and a substance in two respects<sup>566</sup>

[§1 According to certain predecessors, differentiae, forms and accidents in substantial compounds may be deemed substance and accident under two different points of view]

Some odd doctrines concerning accident and substance have arisen<sup>567</sup>, which were induced by the ambiguity occurring in the distinction between accident and form.

[a] Their supporters held that form is also in a subject, since “subject” is said homonymously of what we said and of matter, but also of the notion which embraces subject and matter, which we should call “substrate”, but also of the subject which we should call *mubtadi*, in the verbal sentence; and they heard that form deserves to be a substance, in a certain state and inasmuch as the name “quality” is shared homonymously (as its differentiation in First Philosophy will make known<sup>568</sup>).

Then, they certainly heard that the *differentiae* of substance are substances, and they heard that the *differentiae* of substances are qualities, without knowing that the *differentiae* of substances are only called by that name by homonymy; so they thought that quality, which is the category that we shall mention later, includes the *differentiae* of substances; and this quality according to them is an accident, [so] the *differentiae* of substances become accidents, [C46] in their view; and the *differentiae* of substances are also substances, in their view; so, it is as if the thing were accident and substance.

Moreover, the form is in the substrate of form, not as a part of it, and so it is an accident; whereas it is in composite substance as a part of it, and so it is a substance, for the part of a substance is a substance; so, a single thing is a substance and an accident.

[b] Furthermore, whiteness is a part of the “white”, since the white is composed of a substance and whiteness: thus, whiteness exists in the white that is substance as a part, and so it is not therein in the same way<sup>569</sup> as the accident exists in something. Hence, [whiteness] is a substance in [the white]; and in itself, in its subject, it is an accident, since it is in it not as a part of it, and so on.

In sum, a class of people lost their mind and held that one thing may be substance and accident [in the same time].

---

<sup>565</sup> Ar. *ifsād* (*fasād* NR). The term may also be interpreted as a negative attribute of the opponents’ thesis, if the verb *afsada* is understood in the intransitive sense of “acting evilly” (cf. Bäck’s rendering “perverseness”, BÄCK 2016, p. 97; “falsehood”, BENEVICH 2017, p. 254). I translate it here according to the more intuitive transitive sense of “destroying”, since the terms *ifsād* and *afsada* are very scarcely attested in Avicenna’s *corpus*, and mostly found in the active sense of “corrupting” (see for instance *Ġadal* V.2, 262.6).

<sup>566</sup> This chapter does not comment on any specific passage of Aristotle’s *Categories*. It is a digression centred around the topic of substantiality and accidentality.

<sup>567</sup> Reading *nabaġat* (AsDDiNR have a partially or totally undotted *rasm*) instead of *naba’at* (Cairo).

<sup>568</sup> “First Philosophy”: here, Aristotle’s *Metaphysics* (see the COMMENTARY *ad loc.*)

<sup>569</sup> Reading *’alā nahwi* with all mss., instead of *nahwa* (Cairo).

[§2 *General refutation: given the definitions of substance and accident, nothing can be substance and accident in the same time*]

As for us, we say that this is impossible and perverse, for all these criteria of judgment are perverse.

We firstly say that we mean by “substance” the thing whose own true essence exists without it absolutely being in a subject: i.e., its own true essence does not absolutely exist in anything, not as a part of it, by an existence such that it be impossible for it to be separate from [the thing]; and it is subsistent alone<sup>570</sup>.

[We say] that “accident” is the thing whose existence is inescapably in a certain thing in that way, so that its quiddity is not realized as existent unless it has some thing such that it inheres in that thing, in that way<sup>571</sup>.

Since things are of two sorts: something whose essence and true being need not be in some other thing as a thing exists in its subject, and something which is inescapably [existent] in a certain thing in this way; then everything is either a substance, or an accident. Since it is impossible that the quiddity of one thing be in need, in its existence, for the [existence] of a certain thing in which to inhere as something in-a-subject, and that in the same time its quiddity need not absolutely the [existence] of a certain thing in which to inhere as something in-a-subject; [since this is impossible], then nothing is accident and substance [simultaneously].

### [§3 *Form*]

Let us go back to the doubts of those people, and say: form does not absolutely have a subject to inhere in, since either it is in matter, or in the compound; but it is in the compound as a part of it, so it is not in it [C47] as the thing in the subject.

As to [its being] in matter, we have already clarified that it is not in it as the thing in the subject<sup>572</sup>.

If there is nothing besides these two things<sup>573</sup> where it may be imagined to exist as the thing in a subject, and you know that it is found in none of these two things as the thing in the subject, then the essence of form does not need to be in a certain thing as the thing in a subject. Therefore, form is definitely not an accident, but it is absolutely a substance; for the nature which is form in fire – I do not<sup>574</sup> mean this sensible quality – exists in fire as a part in the compound, and it is in the matter of fire not as something in a subject, but as something in matter.

---

<sup>570</sup> Cf. the definition of substance at III.1 [§2.2] (Arist. *Cat.* 2 a11-12).

<sup>571</sup> Cf. the definition of accident given above, I.4 [§1] (Arist. *Cat.* 1 a24-25).

<sup>572</sup> I.4 [§6.4].

<sup>573</sup> I.e., matter and the form-matter compound.

<sup>574</sup> Reading *lastu* with most manuscripts, instead of *laysat* (Cairo, **NkR**). If we maintained the text of the Cairo edition, Avicenna would be identifying the “nature which is the form of fire” with “this sensible quality”, i.e. heat, and argue that heat is not inherent in fire as a part in the compound. However, this would be incompatible with the previous account of form: form is definitely a part of the compound, as Avicenna just contended in this very paragraph.

[§4 Differentia specifica]

The *differentiae* of substances – I mean, the simple *differentiae* that are not predicated of substances, that are like “reason” and others – also do not [exist] in anything as an accident is in a subject: neither in the species, for they are a part of it; nor in the genus, for the nature of the genus actually is not a subject and has no matter, as you shall learn in the appropriate place<sup>575</sup>. Furthermore, even if the genus had a determinate, realized nature conceived with *differentia* as extrinsic, then the genus would be like that matter which is only constituted in act by form, and *differentia* would be like form, so it would not be an accident at all, nor would it belong to the category which is quality.

Rather, if one says that it is a quality, it is by homonymy; for quality is said by homonymy of things that fall in different categories. Thus, every capacity, every principle of action and everything that adorns something and characterizes it is called “quality”, even if it is quantity or anything else; and this is by homonymy. The category is nothing but one of the meanings of the name shared by homonymy, of which we shall clarify that that meaning has the condition of being constituted by its subject<sup>576</sup>; for the name shared by homonymy is absolutely not a genus.

[§5 Accident in a substantial compound]

[§5.1 The opponents’ argument may be analyzed into two syllogisms]

[C48] Their saying that the accident, in the compound in which it is, is not-not as a part of it; and everything that is in something not-not as a part of it is not an accident in it; and everything that is not an accident in something is a substance in it; these are two syllogisms composed as one single syllogism, in which there are three premises (if you hide the conclusions)<sup>577</sup>.

[§5.2 Examination of the opponents’ premises]

(P1) Their claim “the accident in the compound is not-not as a part of it” is conceded and correct.

(P2) [As to] their claim “everything which is in something not-not as a part of it is not an accident in it”, [well]:

(P2.1) if by this one means that everything that is in the compound not-not as a part of it is not in itself an accident, and inheres in it, then this is not conceded. For if it is in [the compound] not-not as a part of it, then one of the two: either it is a thing whose quiddity needs a certain subject, and therefore it is in it not-not as a part of it, but nonetheless it is an accident, and it is in [the compound]; but if its quiddity is not such, then it is a substance, and it is in [the compound].

(P2.2) If one does not mean that, but rather means that [the accident] is not in [the compound] inasmuch as [the compound] is its subject, and [the accident] inheres in it as in

---

<sup>575</sup> Cf. *Ilāhiyyāt* V.3, where Avicenna will expound the difference between matter and genus.

<sup>576</sup> “We shall clarify”: below, in chapter V.1.

<sup>577</sup> For a schematization of the syllogism, see the COMMENTARY *ad loc.*

a subject, then this is correct: thus, the conclusion is that the accident is not in the compound inasmuch as the compound is its subject, and it inheres in [the compound] as in a subject.

**(P3)** As for the third premise, being that “everything which is in something and is not an accident in it is a substance in it”, one may understand two things from it:

**(P3.1)** First, that everything that is in something, and is not in itself an accident, and is also in something, [that thing] is a substance and is in something; so, this can be conceded.

**(P3.2)** Second, that everything that is in something, and is not therein in such a way that that [second] thing is a subject in which [the first thing] is as the accident is in a subject, this thing must be a substance with regard to the fact of being therein; and this is not correct. As a matter of fact, it is not [true] that if the thing is an accident in some random thing, in which it [exists] as a part, it must become a substance in it; for it is not true that what is not an accident in something in which it inheres is a substance in it, **[C49]** but rather what is not an accident in itself is a substance in itself; for substance is not what does not exist in a subject, that is that compound or another determinate thing; rather, [substance] is what does not exist in a subject at all. [Furthermore], the fact that [substance] is not in a thing X as in a subject, does not establish that it is not in anything as in a subject.

If it were [so], if the thing is not in the thing it inheres in as being like the thing in a subject, and this provides it with substantiality with regard to that thing, then this would suffice to make it a substance therein; but the meaning of substantiality only consists of not-being in anything absolutely as in a subject, not of not-being in the thing Y as in a subject.

Hence, it is clear that if the thing [X] is not in the thing Y as in a subject, it is necessary to think further: then, if it is not in any other thing as in a subject, then it is a substance; if there is another thing in which it is as in a subject, and then it is not in this [other thing] not in one thousand other things as a thing in a subject, but as something in the compound, or in the genus, or in something else, then the thing is an accident<sup>578</sup>.

#### *[§5.3 Substancehood and the difference between accident and accidental]*

Just as substancehood does not depend on the fact that something, with respect to a certain thing, is not in-a-subject, but [only occurs] because it is such in itself; so, accidentality does not [occur] because something, with regard to a [certain] thing in itself, is in a subject or not, but rather because it needs, itself, a certain subject, however and whatever it is. If [something] has this [property], then it is an accident; and if that thing is not this thing, and [the first thing] is in this thing not as in a subject, then nothing prevents it from being in itself in a subject. It is an accident only because it is in itself in a subject that comprises accidentality and substantiality (I mean the fact that a thing is accidental for the thing or substantial for it), so this belongs to things according to this consideration: for if it is related with a thing it inheres in, and then it is like the thing in the subject, so it is an accident, and accidental [in the same time].

---

<sup>578</sup> Inherence in a compound and inherence in a genus are some of the kinds of inherence discussed by Avicenna above, I.4 **[§4]**; **[§6.4]**.

As to [its being] accident, it is because [C50] its essence has been realized as existent in a subject, because it is existent in this subject; this is a sign of the fact that it needs in itself a certain subject, since it needs that subject.

As to [its being] accidental, it is something which it has with regard to this subject; for with respect to this subject it is not constitutive of it, nor a part of its existence: thus, it is accidental.

Hence, the thing is an accident because it is in itself in need of a subject; and accidental because it belongs to something else in the state x. Since it is agreed upon that the subject is this thing, and that [the thing] is not constitutive of it, it is an accident in it.

Although these two notions are inseparable in this case, their consideration is different<sup>579</sup>; and each one of them has a proper opposite, according to a certain way of opposition. As to accident, [its opposite] is substance; as to accidental, it is “substantial”, namely “essential”, whether it be a substance (like “animal” for “man”) or an accident (like “colour” for “blackness”), provided that it be constitutive of what it inheres in.

[§5.4 *Inasmuch as it is a part of the compound, the accident is substantial – not a substance*]

Hence, if the accident is in something not-not as a part of it, but as a part, and it is constitutive of it, then it is substantial in it and it is not a substance.

The meaning of “substantial” is “essential”: for the essence of anything, be it an accident or a substance, may be called substance; so, the utterance “substance” to which “substantial” is related does not signify the meaning which we posited as opposite of the accident, in such a way that “substantial” be related to that substance; but it signifies the essence, so [we say] “substantial” in the place of “essential”. As for those people, it is as if they had taken substance and substantial as one, and so they said “X is a substance in Y”, and “something is not a substance with regard to something”, although it is substantial with regard to the thing it is in.

[§6 *Conclusion*]

[C51] We also say, from the beginning, that if we had said that something, once it is compared to something it inheres in, then one of the two: either it is therein as in a subject, namely inasmuch as the thing is its subject, or it is not; thus, if it is, then it is an accident, and if it is not such, and it inheres therein, then it is a substance in it; [if we had said this], then this doctrine would be correct. However, we did not say so: we rather say that if the thing in itself is not in need of a subject at all, then this thing it exists in, if it is in a thing or another, is a substance; if it is in itself in need of a subject to inhere in, namely something that is this subject, be it this very thing or another, different thing, then it is an accident.

I believe that who heard this and then established that a single thing is a substance and an accident, he lost his good judgment. [C52]

---

<sup>579</sup> I.e., in the case presented above ([§5.1]) “accident” and “accidental” are co-existent in the same thing, but they are actually different things.

**SECOND TREATISE**

Of the Second Section

Of the First Part of the *Book of the Cure*

**[C55]**



## [II.1]

**On the state of the relation of genera and their divisive and constitutive *differentiae*; on making known these ten highest genera, and the state of the relation of “existent” with them; [on] beginning the treatment of the fact that they are ten, they do not fall under a genus, none of them belongs to any other, and there is no genus outside<sup>580</sup> them<sup>581</sup>.**

[§1 *Divisive and constitutive differentiae*]

[§1.1 *The highest genera do not have constitutive differentiae; the lowest species do not have divisive differentiae*]

The highest genera do not have constitutive *differentiae*, but they result divided by themselves. They would have constitutive *differentiae* only if there were genera above them, and on the whole notions more common<sup>582</sup> than them taking part in their substance, so that they would need to be divided in their substances from [those genera], and by means of something other than them – as it became apparent in another discipline<sup>583</sup>. However, they only have divisive *differentiae*. The lowest species, [on the contrary], do not have divisive *differentiae*. Of course, they may have divisive accidents and properties. They would only have divisive *differentiae*, if there could be species underneath them.

[§1.2 *The intermediate genera and species have both constitutive and divisive differentiae*]

As to the intermediate genera and species, they are those that have constitutive *differentiae* and divisive *differentiae*. Thus, their constitutive *differentiae* are those which divide genera above them, and their divisive *differentiae* are those which constitute species underneath them. Everything that constitutes a genus above [also] constitutes everything below it, but its primary constitution concerns what the genus is divided into by a primary subdivision. Everything that divides a genus or a species below [also] divides what is above it, [C56] but its subdivision of it sometimes is not primary; for “rational” and “irrational” divide animal primarily, and also divide “body” in some way, but they do not divide it by a primary division; for body, in so far as it is not animal, is not disposed to being divided by rationality.

Moreover, it is not unlikely that someone express the “irrational” which is under “animal” by [the word] “barbarism”, even though “barbarism” is not really a constitutive difference; and if “barbarism” takes the place [of “irrational”], one cannot achieve the division of “body” thereby, as the division of “animal” is achieved [thereby], for you say “every animal is either rational or barbaric”, and stop here; you do not say “every body is either rational or barbaric”, and you stop here; since a plant and a mineral are bodies, but

---

<sup>580</sup> Reading *hāriḡan* with most mss., instead of *hāriḡa* (Cairo, MNRY).

<sup>581</sup> This chapter corresponds to *Cat.* 3, 1 b16-24; 4, 1 b25 – 2 a4.

<sup>582</sup> Reading *a‘amm* with all manuscripts, instead of *ahamm* (Cairo).

<sup>583</sup> This reference clearly points to the distinction between constitutive and divisive *differentiae*, expounded in *Madḡal* I.13.

they are neither rational nor barbaric. So, if you divide the body into “rational” and “irrational” by a division with which the discourse becomes complete, then “irrational” does not express the meaning that we seek for when we say: “irrational animal”.

From this we may sum up that the divisive *differentiae* of the lower genus, sometimes, are not divisive of what is above them, neither by a primary division nor by an exhaustive division; and the *differentiae* that divide what is above in most cases do not divide what is below, but constitute it (e.g. “sensitive animate body”, for “sensitive” does not divide any species of “animate body”).

[§1.4 *Some differentiae may divide the genus above and the species below, simultaneously*]

There may exist in some places *differentiae* that divide what is above and what is below simultaneously – according to common opinion: this [happens] where the genus has interpenetrating proximate *differentiae*. For “animal”, [for instance,] is divided by “rational” and “irrational” by a primary division; and it is also divided by “mortal” and “immortal”, by a primary proximate division; and likewise it is divided by “walking”, “swimming” and “flying”. So, if one begins to divide in one of these respects, so as [to say] for instance that “animal” is rational and irrational, then it is possible to divide “rational animal” by the two subdivisions “mortal” and “immortal”; and if one starts dividing [“animal”] by “walking”, “swimming” and “flying”, it is possible to divide “walking” by “rational” and [C57] “irrational”. Moreover, it is possible that the division by “rational” and “irrational” complete the genus before the division by “mortal” and “immortal”; and it is possible that the division by “mortal” and “immortal” complete the genus before the division by “rational” and “irrational”. So, it is not unlikely that animal be divided into “mortal” and “immortal”, and then “mortal” [be divided] into “rational” and “irrational”.

[§1.5 *The ontological status of the mentioned differentiae will be analyzed elsewhere*]

There remains one thing to say, that is: do “mortal” and “immortal” belong to essential *differentiae*, or to necessary concomitants? Similarly, do “walking” and the like belong to essential *differentiae*, or to necessary concomitants? If “mortal” and “immortal”, “walking” and the things mentioned with it belong to non-constitutive necessary concomitants, is this interpenetration possible in essential, actual *differentiae*?

However, this [sort of] speculation belongs to those things for which the discipline of logic is naturally not sufficient, so let it be postponed to its proper place<sup>584</sup>.

[§2 *The ten categories*]

[§2.1 *Enumeration of the ten genera*]

It has already become apparent with regard to the highest genera that they cannot have constitutive *differentiae*<sup>585</sup>. Hence, it is not unlikely that someone happen to imagine that

---

<sup>584</sup> The “place” Avicenna has in mind here is very likely *Ilāhiyyāt* V.4, devoted to the distinction between specific *differentiae* and dividing accidents and propria.

<sup>585</sup> Above, in par. [§1.1].

the highest genus is only one; and if it were many, then the multiplicity would be restricted to a comprehensive [genus] that would need a *differentia* [to exist] besides itself. However, the truth is that the highest genera are many.

So, let us begin and let us firstly posit these genera by convention; later we shall inquire about them by means of the kind of enquiry that is needed for this speculation. Thus we say that all the simple meanings that it is possible to express by means of simple utterances cannot fall outside these ten [meanings]; for [simple utterances] either express a substance, like when we say “man”, and “tree”; or they express a quantity, like when we say “two cubits long”; or they express a quality, like when we say “white”; or they express a relation, like when we say “father”; or they express a where, like when we say: “in the market”; or they express a when, like when we say: “it was yesterday”, or “the first year”; or they express having and possession, like when we say: “wearing sandals” and “armed”; or they express acting, like our saying “cuts”; or they express being acted upon, like our saying “is cut”.

### [§2.2 *Explanation of the examples*]

[C58] Nine of these examples that we mentioned do not express the category as the name expresses the meaning, but as the name expresses the thing having the meaning, since this [latter] is more [easily] knowable. We move from this to the meaning later on, and this is because our saying “white” is not a name for the quality, but a name for a thing which has a quality, namely substance. However, from here [we get] an indication of the existence of the quality; for “a white”, like Zayd and a cloth, are more [easily] knowable for imagination than the “whiteness” which is the abstract quality, and in these things we use imagination first, before the intellect. Thus, when “white” – being something having whiteness - comes to your mind, this points to whiteness as a meaning points to a meaning, and a reality points to a reality. Therefore, the category is not the white, but whiteness. Similarly, quantity is not something having two cubits, but the two cubits themselves. The same holds for the remaining ones.

Thus the utterances that express substances express only an essence, as the name [does]; they do not express a reality this essence is related with, neither<sup>586</sup> as the name [does] nor as the meaning [does]. As for when you say “whiteness”, this utterance expresses for you the meaning of whiteness (as the name does), and it expresses another meaning: namely, as you hear the word “whiteness” and understand [it], in most cases your mind promptly goes to figure something else out, i.e. “white”. It is the same for each of the nine [accidents]. Thus, the nine categories are what is signified by “whiteness”; “extension” and “number”; “fatherhood”; being in a place, for instance “travelling in the Nağd” or “being in the Tihāma”<sup>587</sup>; being in time, like your saying “being old” and “being young”; position, like when you say “standing” and “sitting”; also, what is signified by “being armed”; by the origin of an action, for instance “cutting”; by the act of receiving it, for instance “being cut”.

---

<sup>586</sup> Reading *lā dalālata* with all mss., instead of *dalālata* (Cairo).

<sup>587</sup> “Travel in the Nağd”, ar. *inğād*; “being in the Tihāma”, ar. *ittihām*. Nağd and Tihāma are two regions of the Arabian Peninsula, near the Ḥiğāz.

[§3 *Five inquiries concerning the ten categories in general*]

The subjects of discussion concerning these ten [things] are numerous. (1) Among them: is it possible that they all depend<sup>588</sup> on a single genus, as it was thought that the existent is a genus for them? (2) If this is not possible regarding them, is it possible to [C59] single out substance as a genus, and to make accident a single genus that embraces the nine [remaining categories]? Also, (3) if this is not possible, can they be regrouped into more than two<sup>589</sup> and less than ten [genera]? (4) Also, do these [genera] comprise all existents, so that nothing is isolated from them, or they do not comprise them, but there are other things that do not belong to any category? (5) Also: how does the existent branch out into these ten, [regardless] whether there are other realities that fall outside them, or there are no other realities that fall outside them?

[§4 *First inquiry: the state of the existent with respect to the ten categories*]

[§4.1 *The existent is only a predicate of the ten categories*]

We say: as to the first inquiry, namely the state of the relation of the existent to these ten [genera], the commonly accepted way of considering it consists of them enumerating the ways in which the one is divided into the many, and then discarding them, way after way, until there remains what they prefer to let remain<sup>590</sup>. However, there is no usefulness in all that enumeration, since it is known that the existent is said of these ten [genera], and that it multiplies in them as the predicate multiplies, not in any of the other ways of multiplication about which they talk at length. The multiplication of the predicate may occur in three ways: either it multiplies as the [name of] synonyms multiplies in its subjects, or as the [name of] pure homonyms (including resemblance and absolute homonymy) does, or as the ambiguous [name] does.

[§4.2 *Refutation of those who said that “existent” is homonymous*]

Then, he who forbade to intellect for “existent” a single notion in these ten [genera], has already departed from nature; particularly when he said that a sign of the difference of these ten with regard to the notion of existence is that substance exists by itself, and accident by virtue of something else; and that substance is an existent that does not need, in its existence, another existence, whereas accident is an existent which needs that, in its existence. Well, he has already tied these two things closely into a single thing, namely the utterance “existent”, and separated them thereafter by saying that [“existent”] is either by itself or by something else, and that it is either in need [of a subject] or it is not. Thus, if the [term] “existent” employed [by him] expressed a notion in which accident and substance were [initially] regrouped together, and were separated later, then a comprehensive notion

---

<sup>588</sup> Reading *tusnadu/tusnidu* with most mss., instead of *tastanidu* (Cairo, I). The correction is not particularly relevant for the translation, since forms IV and VIII of the verbal root *s-n-d* bear the same meaning (resting upon, relying on).

<sup>589</sup> Reading *itnayni* with most mss., instead of *itnatayni* (Cairo, B in mg.).

<sup>590</sup> Probably a reference to some previous commentators of the *Isagoge*; see the COMMENTARY *ad loc.*

was already realized; if it did not express a comprehensive meaning, how could he separate one from the other?

Rather, each one of them [should have] a meaning different from the meaning of the other, and one of them [should be] by itself, the other by something else; [C60] for it is not impossible that a single thing have two meanings, one of them by itself and the other by something else. That is not a difference between [the thing] and itself, unless one says that inasmuch as it has the meaning that is by itself, it is other than inasmuch as it has the other meaning (i.e., by something else). However, they did not follow this way in this place; nor does this belong to the things that it is good to consider in this place. They cannot absolutely express two different meanings with something other than [the term] “existence”; for they cannot realize a notion that they express by “existence”, in one case, other than the notion that they express by “existence” in the other; so that [in the end] they go back and [end up] adding extrinsically “by itself” to one of them, “by something else” to the other.

However, the truth is that things share in being-established and existence, because of a notion that is realized in the mind<sup>591</sup>; this is clear by itself and cannot be clarified, and he who denies it is mistaken because his thought goes astray. If it were not so, then it would not be true that something cannot fall outside the two extremes of contradiction; for each of the two extremes of the contradiction would be multiple things, and would not be actually a single extreme<sup>592</sup>. But existence in all of them is a notion unitary in signification.

[§4.3 “*Existent*” is not a genus]

[§4.3.1 “*Existent*” is not synonymous]

If so, the “name” existence” does not fall on these ten [things] as the name of homonyms, and not even as the name of synonyms: for the state of existence in these ten [genera] is not the same, but existence belongs to some of them before, and to some of them after (thus, you know that substance is before the accident); and existence in some of them is worthier, whereas in others it is not worthier (thus you know that the existent by itself is worthier of existence than the existent by something else); and existence<sup>593</sup> in some of them is stronger, and in others is weaker (for the existence of what is stable among them, like quantity and quality, is stronger than the existence [C61] of what has no stability, like time and being acted upon). So, “existence” does not fall upon them in the same degree, as the natures of genera fall upon their species, which is by pure synonymy: therefore, it is not a genus.

---

<sup>591</sup> This notion is the common, unitary notion of existence.

<sup>592</sup> In other words, the homonymy of existence would invalidate the law of the excluded middle: since things can do nothing but existing or not existing, being X or not being X, if neither being nor not-being were unitary concepts then the contradiction would have several poles instead of two, and this would be absurd.

<sup>593</sup> Reading *wa-l-wuġūdu* with most mss., instead of *wa-l-mawġūdu* (Cairo, **As**).

[§4.3.2 *Even if the existent were synonymous, it would not be a genus, for existence does not constitute the quiddity of anything*]

If it were synonymous, it would not be a genus; for it does not express a meaning that enters the quiddities of things, but it is something that accompanies them necessarily. It is for this reason that, if you conceptualize the notion of the triangle, and so you associate with it “shapeness”, and you associate with it “existence”, then you find that “shapeness” does enter the notion of the triangle, so that it is impossible to understand that the triangle is a triangle unless it has been necessary that it be, before this, a shape. Hence, as you conceptualize the notion of the triangle you cannot but conceptualize it as a shape first; and it is not necessary, besides this, that you conceptualize it as existent. You do not need, in your conceptualization of the quiddity of the triangle, to conceptualize it as existent, in the same way as you need to conceptualize it as a shape. Thus, “shape” belongs to the triangle because it is a triangle, and enters its subsistence; for this reason, [the triangle] is constituted by [shape] in external reality, in the mind and anyways. As to the existent, it is something by which the quiddity of the triangle is not constituted<sup>594</sup>; for this reason, you may understand the quiddity of the triangle while being skeptical about its existence, until it is demonstrated to you that it is existent, or it is possibly existent, in the first theorem of Euclid’s book<sup>595</sup>. You cannot do so<sup>596</sup> with regard to its being-shape; thus, what resembles being-shape belongs to the notions that constitute the quiddity, and what resembles the existent is not constitutive of the quiddity. If the existent did not separate, in your mind as well, from the triangle, it would be something attached to the triangle extrinsically; for this reason it would be impossible to ask what is the thing which makes the triangle a triangle, or the triangle a shape; and it would not be impossible to ask what is the thing that makes the triangle exist in the mind or in external reality.

What is essential for something does not belong to it by virtue of a cause external to [the thing’s] essence, and what belongs in virtue of an external cause is not constitutive and essential; even though there may be, among accidental [things], something whose realization does not depend on a cause external to the quiddity, [C62] but [such that] the quiddity makes it necessary, and requires it. As to what is not made necessary by the quiddity, and it is possible that it derive from an external thing that is beneficial to it, this is not constitutive of the quiddity. The genus only belongs to those things that resemble the shape, and to those things by virtue of which the notion becomes a notion, the quiddity becomes a quiddity. As to existence, it is something attached to the quiddity, sometimes among concrete beings and sometimes in the mind.

---

<sup>594</sup> Reading *tataqawwamu* with most mss., instead of *tuqawwamu* (Cairo, **BG**). The different reading does not affect the translation significantly.

<sup>595</sup> This demonstration is Euclid’s construction of the equilateral triangle, in the first proposition of the first book of the *Elements*.

<sup>596</sup> Cairo reads *wa-la-yumkinu li-dālika an taf’ala dālika*. Whereas **AsBDaDiGIJNkY** read the entire sentence but omit the word *li-dālika*, mss. **ADEMMkNR** read *ka-dālika* and omit *an taf’ala dālika*. Hence, Cairo is probably contaminating the text by juxtaposing two concurrent readings of the same sentence. *Li-dālika* can be explained as an easy corruption of *ka-dālika*, which might be found as a variant in the only Cairo manuscript that I have not consulted (Cairo, Dār al-kutub 262). Since I cannot decide the issue on a stemmatic basis, I simply choose the reading attested by **AsBDaDiGIJNkY** and expunge *li-dālika*.

Thus it has become clear that the name “existent” does not fall upon the ten [categories] by synonymy; and it has become clear that if it fell upon them by synonymy, it would not belong to the things that constitute the quiddity. Therefore, existence is not a genus.

[§4.3.3 *Aristotle’s argument against the genericity of being is incorrect*]

It has been said, in the commonly accepted answers, that among the things that point to the existent’s not being a genus there is this fact: if it were a genus, its *differentia* would be either existent or non-existent; so, if it were existent the *differentia* would take the place of the species, since the genus is predicated of it; and if it were non-existent, how could it divide [the genus]<sup>597</sup>? This objection is of no use in this regard, for the *differentiae* of substances are substances, and despite this they are *differentiae*. As for the quality of form with regard to this, it is up to another discipline, [and] it belongs to those things for which logic is not sufficient<sup>598</sup>.

[§4.3.4 *Objection: some genera seem to have prior and posterior species*]

Someone might raise a doubt about what we said in denying a generic nature to the existent, and say that many genera may fall upon prior and posterior species, just as for instance quality [falls] upon the discrete and the continuous: the discrete is prior to the continuous, and besides this it may also belong to it accidentally<sup>599</sup>; quantity has number as an intermediate [species]; but number itself falls upon two, three and four, and these differ in priority and posteriority. [Also, a genus may fall upon prior and posterior species] just as, for instance, substance falls upon primary substance and secondary substance, and as it falls upon simple [substance] and the compound. However, we had better speak of this doubt later on<sup>600</sup>. [C63]

---

<sup>597</sup> This seems a simplified version of Aristotle’s argument against the generic nature of being at *Metaph.* B 3. 998 b22-27; see the COMMENTARY.

<sup>598</sup> I.e. metaphysics.

<sup>599</sup> I.e. there are continuous quantities that may become discrete by accident. This issue will be tackled by Avicenna below, in chapter IV.1.

<sup>600</sup> As to the state of the genus “substance” with regard to primary and secondary substances, simple and compound substance, it will be clarified by Avicenna below, in chapter II.4 and chapters III.1-2; quantity will instead be discussed in chapter III.4.

## [II.2]

### On the fact that accident is not a genus for the nine [accidental categories], and the examination of what was said about this<sup>601</sup>

[§1 *According to some people, accident does not take part in the definition of when*  
[§1.1 *Exposition of the opinion*]

As for accident, some commonly accepted things have been said in forbidding its being a genus for these nine [categories]. Among these, they said that the definition of accident does not truly extend to the nine [categories]; and they attempt to confirm this by examples<sup>602</sup>, for instance: “yesterday” and “the year before last year” are, each one of them, a single thing, and their subjects are numerous. It is impossible that [each of them] be existent in all [its subjects]; for an accident that is one by number will not be in multiple subjects while existing in each one of them. Therefore, none of these things is in a subject and is an accident.

[§1.2 *Refutation*]

This is a fable, for if by “yesterday” and “the year before last year” the meaning of [the category of] when was meant, i.e. being in time, then each of the subjects has a proper relation, in virtue of which it is in its time to the exclusion of other things; for Zayd’s being in time is not the same as ‘Amr’s being in that time, inasmuch as the two being-in-time are one by number. If time itself was meant, then time is in the subject in which the motion, of which time is the number, is found, and this is a unitary subject according to some people, and a multiplicity of subjects according to other people; according to these [latter] a certain time is prior, and it is the one with which things are considered, so it is said that they are in a single time.

As for the particular moving things, each one of these has – according to those people – a proper time; unless their consideration with regard to people saying “this and that are in a time one by number” is nothing but [a consideration] of the stable, unique, primary time. I do not point to this or another doctrine as correct, but to the fact that this argumentative procedure, [if used] in order that it become apparent, thereby, that the definition of accident does not extend to time, is false. A group [of people] said that time does not depend on a subject, and there they said that it is a substance. As for the knowledge of which of these doctrines is correct and false, it is provided in the discipline of natural philosophers<sup>603</sup>.  
[C64]

---

<sup>601</sup> This chapter does not correspond to any section of Aristotle’s *Categories*, but develops the second problem listed in II.1 [§3].

<sup>602</sup> Reading *bi-amṭilatin* with all manuscripts, instead of *bi-as`ilatin* (Cairo).

<sup>603</sup> *Samā` tabī`ī* II.10-13.



Since there is no doctrine other than these three, and the three are<sup>604</sup>: either you make time a substance, or you make it such that it is defined by the definition of the accident, then this discussion is insignificant.

[§2 *Accident does not take part in the definition of where*]

Likewise, they objected by saying that the definition of accident does not extend to [the category of] where; for being in the market is a single notion, and many things share in it; so it is not possible that each of them be a subject for it, and not even the sum [of them]; for otherwise, nothing but the sum would be qualified by it. But the answer for this is the same answer [as before]<sup>605</sup>; for although the market is one for all [those things], since it is not the truly proper place, such that it is impossible to share it, but it belongs to the class of common place, [nonetheless] each one [of them] has a being-in-it proper to it, to the exclusion of the others; because the market is not a where, but the market belongs to the category of substance. However, if they assimilate to place the place that belongs<sup>606</sup> to the category of accident, they cannot posit a number of things therein. Where, if at all, is only the relation to the market; and each of the things that are in the market has a proper relation that agrees with the other relation by species, and differs by number. Our consideration, here, only regards the one by number, not the one by species.

[§3 *Accident does not comprise the categories of relatives and having*]

[§3.1 *Relatives and having have more than one subject*]

They also said<sup>607</sup> that the relative does not exist but in two subjects, so it is not existent in one thing, but in two things. They also said that being-armed is a notion not [existent] in a subject, since it is in two subjects, its subject being the armor and he who wears it.

[§3.2 *Relatives may exist in each one of their two subjects*]

We say: as to the relative, it is not as they surmised. First, because the fact that something is in two things may not prevent it from being in each one of them; and if it does not prevent it from being in each one of them, then its being in two things does not remove its being in something, for it was not said: “in one thing only”<sup>608</sup>. For instance, a father’s being father of two sons does not prevent him from being father of one son; and an animal’s being said of [many] things does not prevent it from being said of each one [of them]. Of course, in some things existence in a multiplicity may be such that it is impossible that [the existing thing] be in the one and also in that multiplicity; in that case,

---

<sup>604</sup> In the follow-up, Avicenna only lists two options instead of three: (1) time is a substance and (2) time is an accident. According to Bäck (BÄCK 2016, p. 117), the third option is: time is neither a substance nor an accident.

<sup>605</sup> I.e. the same reply as the one given for the category of when.

<sup>606</sup> Reading *allaḡī* with most manuscripts, instead of *allaḡī huwa* (Cairo, **AsM**).

<sup>607</sup> Reading *wa-qālū* with all manuscripts, instead of *qālū* (Cairo).

<sup>608</sup> I.e. in Aristotle’s description of the accident.

then, the existent in many things is not existent in one thing<sup>609</sup>. [C65] [As a matter of fact,] the difference between the existent in a subject, in the respect of its being existent in something, and the whole's being in the parts, is that the whole is in many things, and it is absolutely not in only one thing among them. As to the existent in a subject, it is not unlikely that it be existent in many subjects, but besides this [that it be existent] in every single subject among them; and [that there be] no mutual incompatibility between the two conditions. If this is what they held regarding the existence of a relation one by number, shared between numerically double relatives, it is a tenable doctrine<sup>610</sup>. As to the truth, it will be revealed to be different from this, and we shall explain how it is in places where we speak of the relative<sup>611</sup>.

[§3.3 *Having exists in one subject only*]

As to being armed and what they associated with it, the answer about it is that being armed is a relation, and a condition of him who wears with respect to the armour, by which he who is armed is described; so it is said that he is armed because of a being-armed that describes him, although he is in relation to something else. Thus being armed, despite being in relation to something else, need not be in that other [thing]. So, there is a difference between existence in something, and relation to something.

Therefore, there is no support for any such deliria, concerning the fact that it is said that the accident is not a genus, although the truth is that the accident is not a genus.

[§4 *Accidentality does not take part in the accidents' quiddities, but rather accompanies them inseparably*]

But they said something else, namely that accident does not express the nature of whiteness and blackness, and the natures of the remaining accidents; but rather the fact that it has a relation to what it is in, and that its essence requires this relation; and the genus expresses the nature of things and their quiddity in themselves, not relations attached to their quiddities<sup>612</sup>. This is pertinent: a sign of this is the fact that the utterance "accidentality" either expresses the thing's being existent in a subject, and so its expression regards this relation; or it expresses the fact that in itself it is such as to need inescapably a subject, and so this is also an accidental notion; this because the relation of such a notion to most accidents, such as quality, quantity and position, is something that does not constitute their quiddities, because their quiddities are like a comprehensible object of apprehension. [C66] Then, there are doubts regarding many of them: because it is not known whether [or

<sup>609</sup> For instance in the case of any whole with respect to its parts, as will be clarified right below.

<sup>610</sup> "Tenable doctrine": ar. *madhab ṣaḥīḥ*. I understand *ṣaḥīḥ* here not in the common sense of "correct" or "truthful", but rather as "credible" or "tenable". That this doctrine is not perfectly true is stated in the subsequent sentence, where Avicenna says that the truth (*al-ḥaqq*) regarding this will be revealed elsewhere.

<sup>611</sup> *Ilāhiyyāt* III.10: see the Commentary.

<sup>612</sup> The source of this doctrine is probably the Baghdadian logician Yaḥyā ibn 'Adī: see the note *ad loc.* in the Commentary.

not] they need a subject [to exist], until this is demonstrated about them in the discipline of First Philosophy, to the point that a group of people made these things substances<sup>613</sup>.

Thus, the relation of “accident” with these [nine categories] is the relation of the existent with the quiddities of the ten [categories], inasmuch as it is not intrinsic to the quiddity: as the existent is not constitutive of the quiddity of these ten, so accidentality is not constitutive of the quiddity of the nine. Hence, it is not assumed<sup>614</sup> in the definition of any of them that it is an accident.

---

<sup>613</sup> The accidentality of the three main accidental categories (quantity, quality and relatives) is proved by Avicenna in *Ilāhiyyāt* III.2-10.

<sup>614</sup> Reading *yuḥadu* with mss. **AA****S****B****D****D****i****G****I****J****N****N****k****Y** instead of *yūḡadu* (Cairo; **Da****E****M****M****k****R** have a partially or totally undotted *rasm*).

### [II.3]

#### On investigating what was said by those who required that the [categories] be less, or more<sup>615</sup>

[§1 *Some commentators restricted the number of the categories respectively to four and five*]

As to those who tried strainedly to make some of these [genera] belong to others, and to restrict them to a smaller number of categories, there is among them someone who said that the categories are four: substance, quantity, relative and quality; and posited the relative as embracing the remaining [accidents], because they are all related [to something]<sup>616</sup>. Among them, there is [also] someone who regrouped the six [other categories] into a fifth genus, since he enumerated the [first] four, and then said “the fifth is the extremes that take something from quality”<sup>617</sup>.

[§2 *The ten categories truly differ from one another*]

The falsehood of this doctrine, and its kin, will become evident to you when we shall teach you the descriptions of these [categories], and their properties; for it will become clear to you that they are mutually different.

What was said concerning their unlikeness, namely that what points to the fact that quantity, among them, differs from quality, is that the quantity and the volume of the body sometimes increase and its quality weakens, and *vice versa*, so quantity is different from quality, [this] is worth nothing; for he who does not concede a difference between quantity and quality says that a certain quantity increases, so another quantity decreases; or a certain quality increases, so a certain other quality decreases. And it is not [true] that, if these two [things] [C67] I indicated differ, it is impossible that they belong to the same category; for contraries, which cannot be together simultaneously but alternate [on a subject], may be regrouped into a category, also in the same proximate genus; and their considerable difference does not make it necessary for them to be different in respect of the category. You know that this repulsion [that holds] between them is stronger than the repulsion [that holds] between the things mentioned before<sup>618</sup>; however, the reliable [principle] for the knowledge of the differences between them comes from the descriptions that we shall explain for them, so you will know that some of them do not enter some others.

---

<sup>615</sup> In this chapter, Avicenna discusses the third question listed in II.1 [§3].

<sup>616</sup> A similar doctrine is found in the commentary of Elias/David (*In Cat.* 160.26-33); see the Commentary.

<sup>617</sup> This is probably Galen, according to the commentaries of Elias/David and Ibn al-Ṭayyib. “Extremes that take something from quality” is very likely an interpretative translation of the Greek expression τὰ πρὸς τί πῶς ἔχοντα. See below par. [§4], and the COMMENTARY *ad loc.*

<sup>618</sup> I.e., quantity and quality.

[§3 *Refutation of those who regroup the six minor categories under the genus “relative”*]

As to the question whether a number of them does belong to a [separate] group, as [held by] those who said that the relative embraces the remaining [accidents], we shall clarify the falsehood of this [claim] by ascertaining to you, with regard to the relative, that the true relative is not predicated of any other category as a genus, but it exists in each of them as belonging to it accidentally; so that this [category] has a relation to something, in virtue of which it becomes relative to it, without the relative becoming a genus for it. We shall make you know that something does not become, on account of its having something, or being in something, or with something, relative to it; but as you take it after this, inasmuch as it has this [character], then the fact that its quiddity, according to this consideration, is said with respect to something else belongs accidentally to it; for Zayd’s being in the house is the relation by virtue of which he is a “where”, and this relation is not a relation [in the sense of the category], but a “where”. Then, if you consider repetition<sup>619</sup>, you find out that what is described by “where” is accompanied accidentally, inasmuch as it is something that has “where”, by the fact its quiddity is said with respect to what it is in, inasmuch as itself is contained, and that [thing] is a container; not inasmuch as it is a “where” only, but inasmuch as it is the contained of a container; and you find that the relation belongs to it accidentally. Like whiteness, for inasmuch as it is whiteness it is something, inasmuch as it belongs to what has whiteness, namely to the white, its quiddity is said with respect to what has whiteness, not the quiddity<sup>620</sup> as whiteness, but its quiddity as belonging to the white. [C68] Likewise its being in a place, which is the relation of a single extreme, is not the same thing as its quiddity being said with respect to something else; but it is imposed to that [thing] in so far as the relation becomes comprehensive of the two extremes, the container and the contained. This will only become truly clear to you in the section on the relative; here, it is only something unvalidated, a sort of admonition<sup>621</sup>.

[§4 *Refutation of those who posit five categories, the fifth being “extremes that take something from quality”*]

As to what they say: “and the extremes that take something from quality”, it seems that thereby, the category of acting and being acted upon was meant; hence, “quality” is the reality to which action and affection lead, and “the extremes” are the two relations that the agent and the affected thing have with them. It also seems that it was meant, along with these two, position as well: this on account on the fact that position is necessarily accompanied by shape, or it accompanies shape necessarily. You know that this saying is very confusing, for the utterance “the extremes” does not express, here, a determinate meaning. And “taking something from quality” is an expression equivocal by resemblance, under which you do not find a synonymous meaning; nor does it express [its meaning] by ambiguity (although it suggests something); for among the worthiest states of relative

---

<sup>619</sup> “Repetition”: ar. *takrīr*. By “repetition” Avicenna means, as will be explained in more detail below (IV.3 [§5], 145-146), the linguistic counterpart of the ontological reciprocity that is proper of relatives.

<sup>620</sup> Reading *māhiyyatun* with most mss. (*bi-māhiyyatin R*), instead of *māhiyyatuhū* (Cairo).

<sup>621</sup> “A sort of admonition”: ar. *ka-l-tanbīh*.

meanings that do not agree with respect to the species, if a name falls upon them, there is their being by way of ambiguity, otherwise there is pure synonymy in them; particularly in this place, since “taking” does not have a definite signification, nor do the “extremes”.

If someone fixed this expression by saying “and the realities that have a certain relation to quality”, these things would be substances and quantities to which a certain relation to quality came to belong accidentally: thus, substances and quantities would enter a category other than their category on account of an accident, belonging to them accidentally; so, they would enter that category by accident. What enters a category by accident [is such that] the category is not a genus for it, nor is [this thing] a species of the category; [but] the categories, here, are only taken as genera, and it is only searched for things belonging to them as species of them. As for another consideration, it is not forbidden that some species of a category [C69] belong to another category<sup>622</sup>. Thus, if this was not meant, and it was meant the relation of substance, quantity or something else, if it is [a relation] to quality and not to things having substance and quantity, then quality is not worthier of this characterization than quantity, as someone might claim, and say: “why didn’t you posit another category for the relation to quantities?”. Therefore, it follows necessarily that the relation to every single category [should] be posited [as a category], and so the categories would double, or even go *ad infinitum*: for it would be possible to suppose a relation [even] to the category that is relation.

[§5 *Refutation of those who reduce the category of affection to quality*]

Another group of people said that [the category of] affection is quality, and nothing else; so, heating up is not different from heat. What they said is false, for heating up is a process leading to heat, and if what is heating up has heat in every instant, its heating up is not that heat, but its heating up is only [such] with respect to the desired heat. On the whole, heating up is an unstable configuration, and heat is a stable configuration. If heating up were heat, becoming qualified in absolute would be a quality, so the demand for a quality would be a quality; and what demands would be demanding something that [already] exists in it. This is all false and mistaken, and it will be clarified to you in natural science<sup>623</sup>. Thus, if becoming qualified is not a quality, then also making something qualified should not be a quality; and making qualified is acting, so acting should not be a quality. If making something hot were heat, then everything that makes something hot would itself become hot, and everything that moves would be moved. However, you shall learn that this is not necessary. Consider this with regard to love, for, as you shall learn about it, it moves, but it has no motion<sup>624</sup>.

---

<sup>622</sup> According to Avicenna, one and the same thing may belong to two different categories only if it belongs to one of them *per se*, to the other by accident.

<sup>623</sup> The nature of qualitative change is analysed by Avicenna in *Samā‘ tabī‘ī* II.3.

<sup>624</sup> A reference to God, the first unmoved mover, who moves as an end (and object of love).

[§6 *Refutation of those who thought that acting and being acted upon are reducible to a single genus, motion*]

A group of people said that the categories of acting and being acted upon are regrouped into a single genus, which is motion<sup>625</sup>. You shall learn in the natural sciences that an agent is not described by motion, and that motion is not an action<sup>626</sup>. If they said that being acted upon is the class of motion, or motion, and that acting is the class of moving, or moving, one would be more inclined to pay attention to them<sup>627</sup>. [C70]

---

<sup>625</sup> This is an objection found in many previous commentaries, probably stemming from a passage of Plotinus (*Enneads* VI.1 [42]); see the COMMENTARY.

<sup>626</sup> *Samā' ṭabī'ī* II.3.

<sup>627</sup> This remark is justified by the fact that Avicenna tends to identify motion with the category of being acted upon (*Samā' ṭabī'ī* II.2).

[II.4]

**On mentioning realities that made [people]<sup>628</sup> suspect them either to be common to some of the ten [categories] as a genus, or to fall outside the ten [categories]; [on] completing the discussion of this [topic]<sup>629</sup>.**

[§1 *Doubts: some realities seem to be possibly genera for certain categories, whereas there are realities that apparently do not fall in any category*]

There are doubts concerning certain realities, about which it is claimed that they exist outside these ten [genera] and do not belong to them; and [it is claimed] that some realities among them are more common than a certain number of them (for instance motion, for it comprises quality, quantity and where, in a certain way); and among them there are things differing from them, for instance unity, which is the principle of number, and point, which is in a certain sense a principle for extensions; but also like prime matter and form, and privations, like blindness and ignorance, and their kin. Some of [those people] mentioned, in this regard, overparticular examples, such as north and south, lunch and dinner<sup>630</sup>.

[§2 *Motion is not a separate genus*]

Thus we say: as for motion, if it is the category of being acted upon then it does not add a [further] genus; if it is not the category of being acted upon, then it must not be a genus, but it must be said of its species by ambiguity; and this is what prevents us from positing motion as the same as the category of being acted upon, if it is impossible. However, if there is no hindrance of this kind, then the category of being acted upon is itself motion. This discourse will be answered in the appropriate place<sup>631</sup>. Hence, this is what is determined with regard to motion.

[§3 *The existence of beings falling outside the ten categories does not imply that they be more than ten*]

As for these other things, we speak [firstly] about them in general; we shall later mention what is said about them according to common opinion; then, we will tell the truth about them.

We say that not every existence of things that do not belong to the categories compromises the categories' being ten, but rather a single type of such things; namely, that there be things that belong to none of the ten categories, and that have other genera which

---

<sup>628</sup> Mss. **AsDDiEGIJMNRy** supply *al-nāsa* ("people"). I do not adopt it in the text, but supply it between square brackets: the word is exactly the one that needs to be supposed in order to understand the preceding transitive verb *awhamat*.

<sup>629</sup> This chapter develops the fourth problem enumerated in II.1 [§3].

<sup>630</sup> See below, [§4].

<sup>631</sup> *Samā' tabī'ī* II.3.



are species below them; since it is not necessary, [C71] at first glance, that every essence that exists have something that participates in its definition (which would be another [essence], different from it and being existent) in order for that essence to exist; hence, it is not necessary that everything have a species, said of many things in act. And even if everything had a species said of many things [differing] in number, it would not be necessary that there be, together with that species, another species that takes part with it in a shared quiddity, so that there be a genus. Hence, it is not impossible that there be singular things that have nothing else participating in their species; or species<sup>632</sup> that are only species with respect to what stands below them, and have no relation to what is above them in such a way as to be species of genera above them. Since the first intellection does not forbid it, it is not impossible evidently and in itself. Since it is not so, if there are singular individuals that have absolutely neither species nor genera, according to the aforementioned condition, or there exist species<sup>633</sup> that have no genera, then none of them enters a category, and in spite of all that what was said is true, namely that the categories are these ten: because what falls outside them is not a category in itself, nor is it in a category other than them. An example of this is that someone said: there are no cities but ten cities, then there exists a group of uncivilized bedouins, but their falling outside these cities is not a reason for these cities not being ten.

Hence, if we conceded that the all the things that they mentioned fall outside the categories, this would not imply that there are not ten categories only, unless it is licit that those things have genera outside the ten [categories].

[§4 *Solutions of the previous commentators*]

[1] Then, some of the commonly accepted replies to these [doubts] concede that these things fall outside the ten [categories], and do not stretch another kind of answer; particularly those [beings] that play, among them, the role of principles, like unity, point, prime matter and form. For [these people] contend that the principles belong to none of the categories; this because these principles are principles of the categories; and if the principles of the categories belonged to the categories, they would be principles for themselves.

[2] Another [answer] does not concede that the principles fall outside [C72] the categories, but posits the principle and what derives from the principle into the same category, and says that unity belongs to quantity; if the one is in number, number is a quantity. Likewise, the point is in the line, and the line is a quantity. Similarly they say with regard to privations: they belong to the categories of their [opposite] possessions, like blindness [belongs] to quality and rest to the category of being acted upon, if motion belongs to the category of being acted upon.

[3] A little troop of scholars who stayed behind<sup>634</sup> come [after that], and posit many categories for the same thing: they say for example that point, inasmuch as it is the extreme

<sup>632</sup> Reading *aw anwā`un* with most mss., instead of *wa-anwā`un* (Cairo, **DDiM**).

<sup>633</sup> Reading *aw anwā`un* with most mss., instead of *wa-anwā`un* (Cairo, **Di**).

<sup>634</sup> “A little troop of scholars who stayed behind”: ar. *širdīmatun min al-mutaḥallifīna*. This ironic formula refers presumably to some later Arabic commentators, who reprised the doubts set forth by their Greek predecessors ([1]-[2]).

of the line, belongs to the relative, and inasmuch as it is a certain configuration, it belongs to quality. The North, inasmuch as it is a body, belongs to substance; inasmuch as it moving, it belongs to the category of being acted upon, inasmuch as it is characterized by one of the two poles, it belongs to [the category of] where. A meal, inasmuch as it is a production of motion, belongs to the category of acting; inasmuch as it belongs to him who is nourished, it belongs to the relative; inasmuch as it takes place at a specific time, it belongs to the category of when.

We must reflect on what is said by every single group, among those whose views we have reported.

[§5 *Refutation of the first group*]

[§5.1 *One and point*]

[§5.1.1 *One and point are not principles of the whole category of quantity*]

[1] Hence, we say that those who claimed that these principles are principles for the category as a whole, so they do not belong to the category, are absolutely doing some blind speculation.

**(a)** Firstly, unity is not a principle for quantity as a whole, but it is a principle for a species of its, namely discrete quantity. Point as well, if it is a principle for [quantity], is not a principle for quality as a whole, but [only] for extension. However, it will become apparent to you, in your rigorous study of the sciences<sup>635</sup>, that the state of the point is not like [the state] of unity; for unity is the principle of number as a cause, and principle as an extreme, whereas point is not such, for it is absolutely not a cause for the extension, but rather it is principle as an extreme [only]. That point is a cause [C73] for the line is only believed by a group of refrainers from the truth, who were induced to going astray by the exemplifications and fantasies that are used to make the [notion of] point understandable.

**(b)** Moreover, [even] if these two things were principles, their very being principles would not force them, I mean, point and unity, not to belong to quantity; until quantity would then be more general than the continuous and the discrete, because it falls upon the point and unity. These would be [then] causal principles for the continuous and the discrete, as they are now, not principles of the whole category of quantity.

Does he who posits point and unity in the category of quantity concede that they are principles for quality as a whole? This is only admitted by him who posits quantity as restricted, in predication, merely to the continuous and the discrete; so that what is a principle for them is a principle for everything that is in the category. If he conceded this, it would be evident to him that unity and point are not quantities, without that it is necessary to consider principiality. Since someone doubts about this, and that may be doubtful, how do you accept that unity and point are principles for the whole of quantity?<sup>636</sup>

---

<sup>635</sup> Ar. *al-ma'ārif*, the plural form of *ma'rifa* (“knowledge”). Even though the word normally employed for “science” is *ilm*, Avicenna seems to be using here the weaker term *ma'rifa* in the same sense. This is a reference to the third treatise of the *Ilāhiyyāt*, particularly the chapters (III.3-7) where Avicenna demonstrates the accidental existence of quantity.

<sup>636</sup> I change here the punctuation of Cairo edition, supposing a question mark after the sentence beginning with *fa-kayfa...* (73.9-10).

[§5.1.2 *The categorial status of one and point is independent of their being principles or not*]

However, the truthful way [of solving] this consists of considering: if the description of quantity is something said of unity and point, and what is said along with that is essential, and is a part of the definition of each one of [them], unity and point; then quantity is a genus for them, [regardless] whether they are principles or not. Then, if they are principles, they are not principles for all quantities, but to what comes after them<sup>637</sup>; and if [the description of quantity] is not said [of them], or it is not said essentially, then quantity is a genus for them. If you do this, you find that the description of quantity is not said of unity and point, and you find that the description of substance is said of prime matter and form. The description of quantity will be given to you later: so, consider what we craft like it there. As to the description of substance, it has already been mentioned to you that it is the existent not in a subject. You find that this description is said of prime matter and form essentially, and so you find that prime matter and form belong to the category of substance, and they are principles of some of the things of which the category is said, namely the natural bodies. Thus, the thing's being a principle<sup>638</sup> [C74] does not hinder it from participating with what has a principle in the category, nor does its being principle make this necessary; but the criterion<sup>639</sup> is the consideration of its state with regard to the description of the category.

If it were impossible for the point to share with extensions in the same highest genus (i.e. quantity) on account of [its] principiality, then it would be impossible for line as well to participate with surface and body in the same proximate genus (i.e. extension). Similarly<sup>640</sup>, it would be impossible that ten participate with one hundred in the same proximate genus, which is number; for ten is to one hundred as unity is to ten.

[§5.2 *Matter and form*]

[§5.2.1 *Doubt: matter and form are not in the same genus as body not because they are principles, but because they are prior to the body*]

Of course, here there is a doubt in whose solution there is a useful rule, that will be made known to you, concerning the states of the category and the states of what is predicated by the notion and is not a certain category; [a rule that] is absolutely necessary. That is, someone might say: “you have said that the existent is not a genus, because its falling upon the categories below it goes by priority and posteriority, and difference. Thus, it is necessary that substance as well be not a genus for prime matter, form, and the body;

---

<sup>637</sup> Reading *ba'dahumā* with most manuscripts, instead of *ya'udduhumā* (Cairo, **BJ**; mss. **NkDaR** have a partially or totally undotted *rasm*).

<sup>638</sup> Reading *mabda'an* with most mss., instead of *mabda'an mā* (Cairo, **EMY**). The presence of *mā* in some manuscripts may be a polygenetic mistake, caused by the partial dittography of the first syllable of the following word (*māni'un*).

<sup>639</sup> Ar. *al-mu'tamad*, literally “the object of reliance” (WEHR), namely what one relies on in order to decide whether the thing belongs or not to a certain category.

<sup>640</sup> Reading *wa-ka-dālika* with most mss., instead of *wa-li-dālika* (Cairo, **AMMkR**). The reading in ms. **E** is uncertain, since the copyist usually employs a *kāf mu'arrāt* that cannot easily be distinguished from the *lām* (cf. GACEK 2009, p. 319).

for prime matter and form are prior by nature to the body; so, the expression ‘substance’ is not [applied] to them equally, but by priority and posteriority. This ambiguity may occur also in other cases: for it may occur on account of the fact that some quantities are before some others, like line, for it is before surface; and being-three, for it is before being-four; and likewise as the thing is in other species of other categories. Therefore, what prevents prime matter and form from being in the genus of body is not their state of principiality or non-principiality, in the first place, but the genus being said of [form and matter] and of [body] unequally”.

[§5.2.2 *Reply: nothing prevents a genus from having prior and posterior species, if priority and posteriority do not concern the quiddity common to the genus and the species*]

Hence, we say that priority and posteriority are [found] in particulars embraced by a single notion, and one of the two: [a] either they are found in the signification they have, belonging to that [C75] notion or that category, or [b] they are found in another signification.

[a] As to what is found in what is signified by that notion, it is like the priority of substance with regard to the accident in the notion expressed by the utterance “existence”, if both are said to be existent; for existence belongs to substance before [it belongs] to the accident. And this, I mean substance, is a cause; for the accident is existent while it is realized, for it, the notion signified by “existent”.

[b] As to the second [possibility], it is like the priority of the man which is father with regard to the man which is son, who stand together below the species “man”; for the father is prior by time, and prior by existence; and time does not belong to the notion of manhood, nor does existence belong to it. Thus, as to the definition of man, inasmuch as it is the definition of man, it belongs to them both equally, even though the existence of manhood belongs to this one before in time, and to the other later, not in that it is manhood, but in that it is existent. With respect to the consideration of manhood, none of them in its being man is prior to the other in its being man, and a cause for it; I am not saying “in that it is existent as a man”. On the whole, nothing posited Zayd, who is the son of ‘Amr, as a man, for he is a man in his quiddity, for it is impossible that Zayd be not a man. For this reason, he has no cause [for] his being man, neither his father, nor anything else. It is not impossible, [on the contrary,] that it be non-existent; for this reason, he has a cause [for] his being existent. Likewise, whiteness is not a colour but by itself, but it is not existent by itself<sup>641</sup>. The genus ought to be said of its species equally, and so they share this notion signified by it; as to the case where they differ by priority and posteriority, with regard to another signification different from its, this is not impossible, nor does it prevent that the participation in the signification of the genus be similar [for all of them]: so, the genus is a genus. Hence, it is not necessary that the father be remote from the son in the category of substance, or the species man: because the father is prior to it by causality, or time. His

---

<sup>641</sup> Existence is an attribute extrinsic to the quiddity of colour, for no colour (or any other accident) is “existent” by essence.

manhood is not prior to the manhood of [the son], in that they are manhood, nor is it a cause for it<sup>642</sup>.

[§5.2.3 *Prime matter and form are only prior to the body with respect to existence*]

Likewise is the state as regards the relation of prime matter and form to body, for prime matter and form are not causes for the body's being substance. Indeed, the body [is body] by itself, and not by virtue of a certain cause, nor on a certain ground [C76] it is a substance, and the notion of substance is said of it; but in its existence it needs grounds for its existence. Nor is the substancehood of something, in its being substancehood, a cause for the substancehood of something else; in such a way that body be a substance because of the substancehood of matter and form; I do not say [for its being] an existent substance. Nor is being-three, in its being number, a cause for being-four's being a number; I do not say [for its being] an existent number. Rather, each one of the two examples is a cause for what comes after it in existence; so, the existence of something may be the cause for the existence of something else, although it does not have the quiddity firstly, and its relation to the other secondly. So, that one is the quiddity<sup>643</sup> of its manhood, because this quiddity is its manhood; just as is possible that the accident be existent because substance is existent; for this reason it is impossible that existent be a genus, since its notion exists in substance, and by its intermediation in the accident; and for this reason prime matter and form are not worthier of being existent not-in-a-subject than body, and there is no doubt about this, although they are worthier than it with respect to existence, and "more" with regard to it.

Therefore, it has already become apparent that the priority of three with regard to four is only such in existence, and [existence] is other than the notion of number; thus, that [priority] is not in the notion of number. Likewise, the priority of prime matter and form with regard to the compound is in existence, and [existence] is other than the notion of substancehood. Therefore, the species belonging to the notion of the category are not prior and posterior because of [the notion] itself, but because of a notion relative to it, in which there are priority and posteriority, namely existence.

This is a principle useful, to you, for knowing the difference between the priority of the species of the category with respect to one another, which does not prevent the category from being a category for them, and the priority of the kinds of the existent, and their kin, with respect to one another, which prevents the existent, or its kin, from being a category for them.

[§5.3 *Conclusion: unity and point are not quantities, matter and form are substances*]

You have learned from the validation of what was mentioned to you before, and it has become apparent to you, that unity and point do not belong to quantity, and that matter and form belong to substance.

---

<sup>642</sup> I.e., the father's manhood is not a cause for his son's manhood.

<sup>643</sup> Reading *māhiyyatu* with all manuscripts, instead of *al-māhiyyatu* (Cairo).

[§6 *Refutation of the second group*]  
[§6.1 *Unity does not belong to quantity*]

[2] As to their saying that unity is in number [C77] and number belongs to quantity, so unity belongs to quantity, it is also blind speculation<sup>644</sup>. Indeed, not everything that exists in a species of a category belongs to it; if not, all accidents would be substances, since they are existent in the species of substances. Rather, if unity were existent in number as the species in the genus, and then number were a species of quantity, it would be necessary that unity belong to the category of quantity. As to the case where unity is in number, and it is not a number; and then something is predicated of number, it is not necessary that [that thing] be predicated of [unity]. So, what they said is unnecessary. If what they said were necessary, then the hand of a man should be a man, and the leg of a cow should be a cow, or an animal<sup>645</sup>.

[§6.2 *If privations are contraries, they belong to the same categories as that of their opposites; if they are understood as privations absolutely, they don't*]

As to what is inquired with regard to the state of privation, it is unveiled when it becomes known that privation may be said of a contrary, and it may be said of the privation which is not a contrary. As to the privations by which contraries are meant, contraries may certainly be called privations, as you will know<sup>646</sup>: and these share the same category [as their possessions]. As for true privations, they are not essences, but privations of essences. The categories are categories of essences, and existential realities; privations have no share in existence and essence. Their existence in their subject is only an existence by accident, as will become clear; so, if they belong to a category, they belong [to it] by accident; and belonging to a category by accident is not the way a species belongs to a category, because the species belongs to its genus by the essence. If the category does not fall upon something in the same way as the genus falls, it is not a genus for it; and if it is not a genus for it, there is no category being in relation to it in such a way as to embrace it, in the same way as the category embraces the species below itself. Thus, privations do not belong to these categories.

[§7 *Refutation of the third group: nothing may fall, properly speaking, under more than one category*]

As to what was said concerning the north and the south, and nutrition, it is appropriate that you know first that the views of those latecomers, according to which something may belong to disparate categories, are inconsistent views<sup>647</sup>. Namely, everything has a single quiddity and essence, although it has disparate accidents. It is impossible that the single

---

<sup>644</sup> This is the view of the second group of commentators, as reported in par. [§4].

<sup>645</sup> The hand of a man, and the leg of a cow, are undoubtedly existent in men and cows (as parts in wholes); however, they do not share in the definition of “man” or “cow”, but are independent substances. For this reason, they need not fall under the same category as the wholes they are parts of.

<sup>646</sup> A reference to the discussion of privations, in chapter VII.1 [§3.2].

<sup>647</sup> See the opinion of the third group of commentators in par. [§4].

quiddity and essence, [C78] inasmuch as it is that essence and quiddity, belong to a certain category and to another category that is not [the first]; since if it is constituted in its essence by the fact of being a substance, it is impossible that it be constituted<sup>648</sup> by the fact of not being a substance. Thus, if [something] belongs to a category by itself and belongs to another by accident, it does not belong to the other as a species belongs to a genus; because the thing that is by accident does not constitute the substance of something; what does not constitute the substance of something is not a genus for it; what is not a genus for something is not a category that embraces it.

[§8 *A doubt on categorial complexes*]

[§8.1 *“White”, understood as “white body” or “white thing”, has an essence different from the essence of body*]

One thing may be proven to be false, in this regard; that is, what someone might say, namely that body, inasmuch as it is body, has a true essence; and inasmuch as it is white, it has undoubtedly another true essence that is not the true essence of body. Thus, if body is a part of [“white”] (and the meaning of “white” is “white body”), or [body] is a concomitant for a part of [“white”] (if “white” is not a white body, but something white, but it necessarily follows that that thing be a body)<sup>649</sup>, then it is possible that this thing which is a part or a concomitant have a category said of itself; as to “white”, it is something other than this, although it is associated with it, and it has an essence other than its essence. Their association does not require that the essences do not change; therefore, it is possible that white, inasmuch as it is white, have a category characterizing an essentiality of its<sup>650</sup>. This doubt may be solved in three ways.

[§8.2 *First solution*]

One of them<sup>651</sup> is: you must know that not every notion associated with [another] notion requires that [[you]] posit for it an unitary essence that may rightly be posited as deserving to fall<sup>652</sup> under a separate genus, or to be realized as a separate genus. Thus, if this is not conceded, what is held by him who doubts does not follow. As to what makes clear that this is not conceded, it consists of two ways [of explanation]: [a] the first is that if this were true, then man would be associated with whiteness, but man is also associated with farming, so [this] would become a unitary essence, and this should necessarily have a species for which man should become a genus. [b] The second way is that, if this were true, substance would be taken along with every single category, separately from the other categories; [C79] since none of the nine categories would be said by synonymy of that

<sup>648</sup> “Be constituted”: reading *yataqawwama* with all manuscripts, instead of *tuqawwama* (Cairo). The change in the text does not affect the sense of this passage.

<sup>649</sup> “Body” is a concomitant for a part of “white”: , and not a part of it, it means that even if “white” properly means “white thing”, the thing in question is necessarily accompanied by the fact of being a body.

<sup>650</sup> The essences of white (body) and body may change, when these two beings are associated; if they change, then the essence of white (body) is other than that of body, and it is not impossible that there be a category

<sup>651</sup> “One of them”: reading *aḥaduhā* with all manuscripts, instead of *aḥaduhumā* (Cairo).

<sup>652</sup> “To fall”: reading *li-wuqū’i* with all manuscripts, instead of *al-wuqū’i* (Cairo).

thing, for that thing would not be a quality, nor would it be defined by its definition, despite being qualified; and it would not be a quantity, nor would it be defined by its definition, despite being quantified; for if the essence is realized in act, what is attached to it does neither originate a characteristic specificity for it, nor a characteristic genericity, because its essential quiddity is one and stable, and it does not come to have other quiddities by virtue of its associations, and accidental relations.

[§8.3 *Second solution*]

As to the second of the first three ways [of solving the doubt], it is: if we posited that the sum of a substance and a quality deserves to be falling under a category, then what they said would be incorrect, namely that white, inasmuch as it has whiteness, belongs to the category of “how”. For if one means, by “how”, “having a quality”, whiteness does not belong to this category: this because [the category] is a quality, not having quality. And if by [“how”] one means “quality”, then what is qualified by whiteness, namely “white”, does not belong to this category as something belongs to a category, for you do not find the white qualified to be defined by “quality” and “whiteness”.

[§8.4 *Third solution*]

[§8.4.1 *White, understood as “white body” or “white thing”, is a substance*]

As to the third: the qualified, if it has – inasmuch as it is qualified – a unitary essence, need not fall in a category other than substance; for the thing which is qualified admits of the description of substance, since if the whole resulting from a body and a quality may have an actual oneness then, inasmuch as it is one, it is existent not-in-a-subject. The fact that the body which is a part of this whole belongs to the category of substance, or existent not-in-a-subject, does not prevent the sum from being such<sup>653</sup>; nor it requires that the second part, namely figure, be such.

Thus, it is not impossible that the part of something belong in the same category where the thing belongs. Why not, since it is commonly said that the parts of substances are substances, and it is certain that five is a part of ten, and it belongs to [the species] number [C80] so as ten, and [it is certain] that five is a part of six, and both [five] and six are numbers? Still, this is not absolutely necessary, since the second part of six, I mean one, is not a number. Likewise, if corporeity is concomitant to white; so, leaving its consideration aside does not prevent one from predicating its genus of the thing of which it is a concomitant, as a constitutive [predicate], not as a concomitant. So for “white”, namely the thing having whiteness, it is constitutive the fact that it is existent, undoubtedly, not-in-a-subject.

---

<sup>653</sup> I.e. a substance.



[§8.4.2 *Doubt: if corporeity is a concomitant of white, white cannot have the same genus as corporeity*]

But someone might say that [corporeity] is a concomitant of [“white”], and it is not constitutive of its quiddity, because we do not prevent the thing having whiteness from not being a substance, but rather an accident; and we do not prevent an accident from belonging accidentally to [another] accident. [However,] we have already agreed before upon the fact that what is such is not constitutive, but it is perhaps a concomitant. And if what we were mentioning [before] is not constitutive of the thing, but it is only a concomitant for its quiddity, then it is not a genus for it; so, substantiality is not a genus for the thing having whiteness, as body isn’t.

If someone says this, telling the truth, the basis for a reply to him is that it is not necessary that everything have a genus and a category, but rather what has an unitary, specific existence, and [what is such that] something else shares some essential characters of its. If you want to know that the thing’s having whiteness does not lead it to being unitary, just consider whether the thing’s having whiteness makes the thing realized and existent in act, the act of the *differentia* of colour (for colour) and the act of the *differentia* of animal (for animal); you will find that the thing only becomes realized as “thing” in virtue of it becoming a body, a quality, or something else. Therefore, the fact of having whiteness is only a concomitant or an accident of its; and were it not for the addition of corporeity to it, it would not become realized.

[§8.4.3 *Doubt: why is number ten, despite being a mere aggregation of smaller numbers, a species of a genus?*]

But someone might say: [number] ten is also realized as ten by the addition of five to five, and this does not [provide] an actual unity; nonetheless, you make a species of it, and five may [be said to] constitute a set of ten.

We say: [C81] we were speaking about the conjunction of what is equivalent to the genus with what is equivalent to the *differentia*, and in general about all predicates, for a nature to be formed as unitary. [The first] five is not a genus for ten, nor is the other [five] a *differentia* for it; the realization of ten does not occur because you form this aggregation, although this aggregation accompanies it; and ten is not two fives, but ten is a single ten. Ten is not a single ten when these details are taken into account, but in another respect: you will learn this according to truth in another discipline<sup>654</sup>. We were only speaking about the way of aggregation that [subsists] between the thing and “having whiteness”, and we judged that it does not impose an actual unity in it. For this reason we say that five and five do not impose unity; but there is another consideration, known by the masters of a discipline nobler than this discipline<sup>655</sup>, which imposes unity; rather, we say that the conjunction of animal and rational, inasmuch as this one is common and that one is

---

<sup>654</sup> I.e. metaphysics (most notably *Ilāhiyyāt* III.5): see the COMMENTARY.

<sup>655</sup> I.e. metaphysics, which is nobler than logic (and more entitled to study the differences subsisting between the types of unity).

distinctive, does not impose unitariness, but unitariness is made necessary<sup>656</sup> by a condition supplementary to that conjunction.

[§8.5 *Simple and complex categories*]

Among the things that must be said in this place, there is the fact that each one of the accidental categories may be said to be simple, for instance quantity, and [may be said to be] complex, and there are two ways of composing it: one is with substance, like the composition of substance and colour, or substance and extension; the other absolutely, undetermined in respect of the subject. This is the signification of paronymous names, for instance “white”; for its signification is “thing having whiteness”, and we don’t know whether it is a substance or an accident, I mean, from the utterance, but this follows in a certain sense from the meaning. Likewise, “having [a length of] two cubits”. The actual genus is the first<sup>657</sup>; something more about this will be said to you later<sup>658</sup>.

---

<sup>656</sup> “Unitariness is made necessary”: reading *yūḡibuhū* with all mss., instead of *yūḡibu* (Cairo).

<sup>657</sup> I.e. the accidental category understood *simpliciter*, as an abstract attribute (quality, not the qualified).

<sup>658</sup> See the discussion of the distinction between quality and qualified below, in chapter VI.3.

**[II.5]**  
**On notifying the state of the number of the categories<sup>659</sup>**

[§1 *The problem of justifying the number of the categories*]

[C82] Among the aspects related to the enquiry we are carrying out, there remained to inspect the confirmation of the number of these categories, and the fact that if it is not possible to restrict them to a smaller number, it is neither possible to expand them to a bigger number. This is something that the majority of logicians attempt [to do], and I will be truly loyal to what they showed me; for the manner of confirming this needs<sup>660</sup> three sorts of consideration.

[§2 *Three ways of justifying the number of the categories*]  
[§2.1 *First procedure*]

[1] One of them consists of explaining that nothing belongs to these categories if it is not said of what [falls] under it<sup>661</sup> as a genus. This needs one to clarify that their being said of what [falls] under them does not occur neither by homonymy, nor as a single notion differing by priority and posteriority is said (so that it is [said] by ambiguity), nor as concomitants are said of what [falls] under them, equally, without any difference, though they do not belong to constitutive [properties], but they belong to those concomitants and relational realities that do not constitute the quiddity of anything. Then, once they have explained that the predication of the categories, of what they posited as species for them, is a predication with a single notion, constitutive of the quiddity of those species, and does not occur in any of the excluded ways, each one of them is truly a genus for what has been posited as a species for it; and the relation of one of them to what has been posited as a species for it is not the same relation as that of accident to the nine [accidental categories]<sup>662</sup>, or the relation of the existent with the ten [categories]<sup>663</sup>, or the relation of relation to a number of them (for instance where, when, possession, action, affection). For if quality, for instance, does not fall upon the things posited as species for it under the same conditions as the genus, but falls upon them as concomitants do, despite being [predicated] with a single notion it is not a genus for what [falls] under it. However, if the predication of what [falls] under it of more specific things [falling] under it is the predication of a constitutive [property], then each one of the [species] under it is actually the highest genus, and for example one genus among these is the one called “affective quality, and

---

<sup>659</sup> Sections [§1-4] develop the fifth and last problem listed in II.1 [§3]; section [§5] corresponds, instead, to *Cat.* 4, 2 a4-10.

<sup>660</sup> Reading *yuhwiġu* with all mss., instead of *yahruġu* (Cairo, **As**).

<sup>661</sup> Reading *tahtahū* with all mss., instead of *tahta* (Cairo).

<sup>662</sup> As argued above in chapter II.2 [§4], “accident” is not a constitutive property, but a necessary concomitant of the accidental categories.

<sup>663</sup> Existent has been qualified as a necessary concomitant of the ten categories above, in chapter II.1 [§4.3].

affections”; the other, for instance, is “habits and states”. [C83] Thus, quality would be said of these not as the genus, but as concomitants are said, and the number of the genera that are actually the highest genera would surpass the mentioned number. This way of refining the analysis is something none of the predecessors engaged with.

[§2.2 *Second procedure: division of “existent”*]

The second way consists of explaining that there is no genus besides<sup>664</sup> those that we mentioned by means of a division of the existent, until the resulting division ends up with these. This also is something with respect to which nothing true came to us from them: we will mention what they said later.

[§2.3 *Third procedure: ways other than division*]

Otherwise, they explain in a certain way other than division that it is impossible that there be a genus other than these genera, if there is a way to [do] something similar.

[§3 *One commonly accepted division of the categories*]

My opinion is that [these logicians] made something that cannot be ignored<sup>665</sup>, in this regard. We now begin by mentioning one of the commonly accepted ways of division, in order to ponder its state; then, we will craft a division that gets closer to the scope, which however does not imply that the truth about it is secured by [the division].

As for the commonly accepted division, there is what one of them said, namely that substance is one of the categories, and there is no doubt about this; thus, if we divide the nine [other categories], which are the accidents, into their being-nine, the ten categories are complete. So, he said that the accident either is firmly established in its subject, not such as to appear in it in virtue of some other external thing, and it does not need a relation to that external [thing]; and this is of three types, quantity quality and position; or it appears on [the subject] from the exterior, so that it has no need for a reality to arise in itself, but because of the modality of existence of an external reality that is founded on it; and this is of three sorts, where, when and having; or there is some reality that only becomes *perfect* in between [the subject] itself and an external thing, and is not exclusively external; and this is of three types: relative, action, affection. Then, he consolidated the matter of this triplicity and praised its mention, conforming to the practice<sup>666</sup> that became current from the use of rhetoric in some philosophical questions, when [people] say [for instance], as an encomium for triplicity, that triplicity is a perfect number, and for this reason “whole” and “entire” are not said but of [what is] three [in number], the *tasābīḥ* are in triplets<sup>667</sup>, motions are three<sup>668</sup>, the dimensions are three<sup>669</sup>, and the like.

<sup>664</sup> “Besides”: reading *ḥāriḡan* (*ḥāriḡa JYGI*) ‘an with most manuscripts, instead of *ḥāriḡan min* (Cairo, **Di**).

<sup>665</sup> “Something that must be taken into account”: *ṣay’an yu’taddu bihī*, literally

<sup>666</sup> Reading ‘*alā l-’ādātī* with all mss., instead of ‘*alā l-māddatī* (Cairo).

<sup>667</sup> *Tasābīḥ* is the plural of *tasbīḥ*: an Islamic prayer where the name of God is repeated for a set of times.

<sup>668</sup> According to the Aristotelian doctrine of motion, motion is triple since it comprises qualitative, quantitative and local motion.

[§4 *Avicenna's division*]

[§4.1 *Accidents may be either relational or non-relational*]

This is what they said: you have already learnt that this is something done in a manner that leads closer [to the truth], but not close [enough]. However, it is possible to consolidate this procedure a bit, and to corroborate it, by saying that every accident, one of the two: either its conceptualization needs the conceptualization of a thing extrinsic to its subject, or it does not need that.

[§4.2 *Non-relational accidents*]

[§4.2.1 *Position*]

The [accident] that does not need that is of three<sup>670</sup> types: **[(a)]** either, despite not needing that, it may need a relation to occur in things that are in it, not extrinsic to it; **[(b)]** or it does not need that relation. **[(a)]** If it needs [that relation], this need makes the subject divided, in a certain sense, so that it has parts that have, with respect to one another, a varying state with regard to the relation; and this is the category of position, since it [consists in] the relation of the parts of the body to one another, [concerning] where each one of them is with respect to the whole; for these are differentiations that belong to them by themselves, inasmuch as they are parts of a divided [subject]<sup>671</sup>. As to what concerns other accidents, such as colours and smells, these are not but besides this, and besides the dividing relation that results between them, inasmuch as they are parts by which the thing has already been divided; but that differentiation occurs because of an alterity in virtue of which each one of them becomes different from the other, not in virtue of which a single, non-negligeable configuration comes to be; and our intention<sup>672</sup> does not regard [anything] but a state that comes to belong to the whole, in virtue of the mutual relations of the parts in a certain reality, and that is a unitary state of the whole. Thus, it seems that this [state] is position, for the whole, and relation, for the parts.

[§4.2.2 *Quantity and quality*]

As to the case where the conceptualization of that [accident] does not need a relation to occur in them, **[(ba)]** either [the accident] is a reality<sup>673</sup> that, in itself, makes substance such that it is possible, in this respect, to number it by a “one” supposed in it, either continuously **[C85]** or discretely, and this is quantity; **[(bb)]** or it is not so, and [the accident] is a configuration realized in the body, whose conceptualization does not

---

<sup>669</sup> I.e. length, breadth and depth.

<sup>670</sup> Even though Avicenna only mentions two types here, it will become clear in paragraph **[§4.2.2]** that type **[(b)]** is actually double, and comprises **[(ba)]** quality and **[(bb)]** quantity.

<sup>671</sup> The relations that characterize the category of position are intrinsic to the subject, and do not concern external beings. For this reason, according to the criteria mentioned in **[§4.1]**, position is a non-relational category.

<sup>672</sup> Reading *garadunā*, instead of *'aradiyyan* (Cairo).

<sup>673</sup> Reading *amran* with all mss., instead of *ataran* (Cairo).

absolutely need a relation with something to be posited for the body, in potency or in act, in order for it to be possibly conceptualized; and this is called quality. As to position, it imposes to the parts of a body a certain relation, in potency or in act<sup>674</sup>, with one another; as to quantity, it imposes to the whole a certain relation with a part or some parts [of its] in potency. These both share, I mean position and quantity, the fact of pointing to a certain kind of division and multiplicity, in order for their conceptualization to be possible. Thus, every configuration that does not impose in any way a division, in its conceptualization, and does not impose a relation to something extrinsic therein, is a quality. Therefore it is clear that this [first] subdivision consists of three types<sup>675</sup>.

[§4.3 *Relational accidents*]

[§4.3.1 *Relations are either symmetrical and reciprocal (relatives), or not*]

As to what requires a relation with something external, either it requires a relation that makes the quiddity be said with respect to the thing [the accident] is related with, and there is a mutually resembling reciprocity in the notion of the relation; and this is [the category of] relation; or the relation does not impose that, and therefore either it is [a relation] with substances or [a relation] with accidents.

[§4.3.2 *Symmetrical relations that are ontologically relevant only involve non-relational accidents*]

As for substances, they do not deserve in themselves a relation to be posited for them or with them; but they only deserve some realities and states to be [posited] in them, that characterize them. Therefore<sup>676</sup>, what is worth considering is [the relation] to accidents, and so these accidents either belong to relational accidents or do not belong to relational accidents. As to the relation with accidents that are [in] relation, it is one of the things that concatenate *ad infinitum*; nonetheless, the relation with relation leads ultimately to a relation with the last thing with which the relation is, and stops with the first unrelated thing; otherwise, it goes *ad infinitum*; so, the actual ultimate relation is only with those accidents that have no relation, namely either with quantity, or with quality, or with position.

[§4.3.3 *Relation with quantity: where, when, having*]

Things are not related to quantities in any way, but it is necessary, if they are related to them, that they be related to a quantity that makes a quantified substance a measure for another substance, and only<sup>677</sup> measures it by measuring [the substance] itself or by measuring its state; **[C86]** and no state of the body has a stable measure, in the measure of the body, other than the measure of the body [itself], but it must be an unstable extension

---

<sup>674</sup> Reading *al-fi 'li* with most manuscripts, instead of *bi-l-fi 'li* (Cairo, **M**).

<sup>675</sup> I.e. quantity, quality and position.

<sup>676</sup> Reading *fa-idan* with most manuscripts, instead of *fa-id* (Cairo; attested only by **B** and his probable *descriptus* **Da**).

<sup>677</sup> “another... and only”: supplying *wa-innamā* after *aḥara* (Cairo, om. **M**), with all manuscripts.

like it, so it belongs to an unstable state. Now, every unstable state is called “motion”. Therefore, this relation either occurs with an extension because of whose existence in the body another body comes to be in a certain state, namely the [first body] containing it, or it being contained in [the first body], and this is the container; or with an extension of the state as we described it, and this is time. Therefore the relation with the container, one of the two: it is either a relation with the container, or a relation with time. The relation with quantity is<sup>678</sup> either a relation with a container that is not moved with the motion of [the contained], nor does it follow it; and this is [the category of] where, which is either the relation to a primary place or to a second place; or [the relation with the container] is a relation with a container that follows [the contained] in its motion, and this – as some convalidating [philosophers] hold<sup>679</sup> – is the category of having. So, it is practically clear that the species of the categories arising from the relation with quantity are either where, or when, or having.

[§4.3.4 *Relation with quality: acting, being acted upon*]

As to the relation to quality, it behoves that you know that not every quality makes a substance related to another substance, but [only] a quality that [goes] from this [substance] to that substance, or from that one to this one. Thus, if the quality [goes] from one of the two substances to the other, the state of the [substance] where, among the two, the quality comes to be is the category of affection; and the state of the [substance] whence the quality comes to be is the category of acting.

[§4.4 *Despite being closer to the truth than the preceding division, this division is still imperfect*]

Well, this is an artificial manner of getting closer [to the truth]; I cannot guarantee for its correctness, and for its being compliant with the examination of the [received] canon. Still, it is the closest [to the truth] that has come to my mind, for the time being. You might wish [to add] other ways [of division] in it, and to stretch [it]. If I found some usefulness in this, or a truthful proof, I would strive to produce a division other than this one, and closer [to the truth] than this one; but “close” and “closer”, if the truth itself [still] does not reach us, are both remote. This much will suffice for us, then, as to the notification of the states of these ten [categories].

[§5 *Simple and complex utterances*]

These ten utterances, and their meanings, are those that are parts of what is composed. Not any utterance composed according to the [rules] of oral [speech] and language is composed according to the usage of logicians: for “‘Abdallāh”, [C87] “‘Abdarraḥmān”,

---

<sup>678</sup> Omitting *abadan* (Cairo, **BDa**) with most manuscripts. *Abadan* might derive from an erroneous dittography of the following term *immā*.

<sup>679</sup> Probably a reference to al-Fārābī: see the COMMENTARY *ad loc*.

“Ta’abbata Šarran”<sup>680</sup> and utterances like these, despite being composed according to language, are not numbered amongst the complex utterances [formed] according to the consideration of logicians, since one does not want to express by their parts, when they are posited as nicknames and proper nouns, any meaning; although one may agree upon the fact that he can express a meaning, by them, in another place. Sometimes, the utterance may not be composed according to language, despite being composed according to the consideration of the logician: for instance, when you say *a’išu* and *ta’išu*, the “a” of *a’išu* and the “t” of *ta’išu* express [something] as a simple utterance expresses a simple meaning. As to *ya’išu*, with “y”, it is not to be numbered amongst composed [things], because the “y” in it only expresses the relation with an absent subject; thus, in it there is nothing but the abstract signification of the word, I mean the signification of an indeterminate subject. As to when you say *a’išu* and *ta’išu*, with “a” and “t”, there is a determination of the subject, and that is an addition of signification to what the word [already signifies]. This will result apparent to you later.

These ten [simple utterances] are those from which the parts of the complex utterances named “statements” are taken; among the things composed by the meanings of these [utterances] there is proposition and assertion, namely that which may be true or false, for instance: “man is an animal”; or what is not a proposition and an assertion, namely what cannot be such<sup>681</sup>, for instance: “Zayd the writer”, and the [sort of] composition proper of definitions and descriptions. This [composition] consists of the fact that some of the utterances that are composed provide a trace<sup>682</sup> for others by notifying [them] more, or by specifying the notion that precedes their being such<sup>683</sup>. This is the [sort of composition] where it is appropriate to use [the relative pronoun] “which”, for example “the rational, mortal animal” (for this is equivalent to saying “the animal which is rational which is mortal”); and like the [sort of] composition that [C88] is found in call, request, order, refusal, exclamation, and other things that have been numbered elsewhere.

As to simple utterances, they express neither a true meaning, nor a false one; nor are their notions and singularities in the soul truth and falsehood, according to the truth and falsehood that are found in meanings; but when these utterances are composed by a specific kind of composition, then they express a true or false meaning; and when their meanings are composed in the mind, [either] if they agree with existent reality<sup>684</sup> they are true, or [they are] false, if they do not agree with it. Therefore these [meanings], although they are neither true nor false, are parts of true and false [meanings].

---

<sup>680</sup> ‘Abdallāh and ‘Abdarrahmān are proper names; Ta’abbata Šarran (literally, “he put mischief under his arm”) is the nickname of a famous pre-islamic poet.

<sup>681</sup> I.e. something that does not admit of truth or falsehood.

<sup>682</sup> Reading *aṭara* instead of *it̄ra* (Cairo).

<sup>683</sup> I.e. a more common notion such as the genus of things.

<sup>684</sup> “Existent reality”: ar. *wuġūd*, literally “existence”. My translation here is slightly interpretative: *wuġūd* refers to extra-mental existence, namely to the actual state of things outside the mind (which is the main criterion for truth and falsehood).



**THIRD TREATISE**

Of the Second Section

Of the First Part of the *Book of the Cure*

[C91]

### [III.1]

#### **On primary, secondary and tertiary substances; in general, on the state of the ranks of universal and particular substances with regard to substantiality<sup>685</sup>.**

[§1 *Some people deny to substance the status of a genus of all substances, corporeal and incorporeal*]

Let us now speak about the category of substance.

A group [of people]<sup>686</sup> claimed that the expression “substance”, if one wants to apply it to bodies alone, can be said [of them] by synonymy and as a genus. As to [its being applied to] a meaning more common than “body”, it only falls upon them homonymously, or by way of ambiguity, like “existent”. That is because matter and form are prior, with respect to the meaning of substantiality, to their composite; and the separate [substance], which is the cause for their existence and the cause for the subsistence of one of them by means of the other, is prior to their composition<sup>687</sup>; and [that is] because principles do not fall together with things having principles under the same category.

Moreover, they argued that the substances’ being existent not-in-a-subject is something which they all share, although “existent not-in-a-subject” belongs to some of them before some others. They said that if “existence” is said of them by way of priority and posteriority, “not-in-a-subject” follows it in addition, and it is a negative meaning which does not posit in [substances] existence in the same rank.

[§2 *Refutation*]

[§2.1 *The species of the genus “body” itself admit of differentiation in degree*]

Let us say: first, from these aspects it does not follow that the category of substance is not a genus of what is a body, and what is not a body. As to the state of priority and posteriority, and the state of the sharing of principles and **[C92]** effects in one genus, it is a thing we have clarified to you before<sup>688</sup>; moreover even bodies, whose common sharing in the genus of “body” is not questionable, are not equal in degree, but some bodies are prior to others<sup>689</sup>.

---

<sup>685</sup> This chapter constitutes a general discussion of substance, before Avicenna’s actual considerations regarding the text of Aristotle’s *Categories*. It does not bear, therefore, any specific reference to the text itself.

<sup>686</sup> It is not clear to whom exactly is Avicenna referring here, although some of the objections he will present below are for sure present in the Greek late ancient exegetical tradition. See the COMMENTARY *ad loc.*

<sup>687</sup> Here I slightly change the punctuation of the Cairo edition, which reads the sentence differently. As this passage is in the Cairo text, it conveys the idea that matter and form are prior in substantiality to “separate” substance; this however might sound strange, for Avicenna (as will become clear in ch. III.2 [§4], below) as well as for his anonymous opponents (whether they identify this “separate” substance with God or with other intelligible principles).

<sup>688</sup> See above, II.4 [§5.2].

<sup>689</sup> Heavenly bodies, for instance, are prior with respect to terrestrial bodies.

[§2.2 *The quiddity of substance does not comprise existence; hence, it does not admit of priority and posteriority in itself*]

[§2.2.1 *If existence not-in-a-subject took part in the quiddity of substance, the universals of substance would not be substances*]

As for the report of “existent” which is comprised in the description of substance, which undoubtedly falls upon some of them before others, it is a doubt that ought to be solved. We say that in our words “substance is what exists not in a subject” we do not mean by “what exists” the state of the existent inasmuch as it is existent, for the reason which we will explain soon. For if it were so, it would be impossible to posit universals as substances; since they absolutely have no existence among concrete beings, and their existence is only in the soul, [being such as] the existence of a thing in a subject. And if that<sup>690</sup> was meant by “existent”, namely “existent among concrete beings”, things would actually be as they believe; and some of [these beings] would be before some others. But they mean<sup>691</sup> by “existent not-in-a-subject” the notion and the quiddity which follows these beings among concrete beings, if it exists, [which] consists in their existing not-in-a-subject. Like when we say “laughing”, namely “it is in its nature to laugh, when surprised”<sup>692</sup>.

If you want the difference between these two things to become evident, and also the fact that one of them is the meaning of substance, and the other is not, just consider either a certain individual [man], like Zayd, when he is hidden from you; or another species of substance, together with the possibility of it disappearing from the world, if in your opinion its being disappeared is possible; or another species whose existence is doubtful. [If you consider them], you will learn that this [second] meaning is what first truly constitutes them<sup>693</sup>, and you will learn that it is substance; and you will not learn whether it is existent among concrete beings in act while not being in a subject, but it sometimes becomes non-existent [C93] later. For actual existence among concrete beings not-in-a-subject does not constitute the quiddity of Zayd, nor [the quiddity of] any other substance; but it is only something which accompanies [it], in the same way as “existent” accompanies the quiddity of things, as you learned<sup>694</sup>; this is not a genus, not even the first [genus].

---

<sup>690</sup> Reading *dālīka* with all manuscripts, instead of *wa-laka* (Cairo).

<sup>691</sup> Avicenna is probably not referring this opinion to some of his predecessors, but clarifying what meaning this definition has in his predecessors’ intention. Aristotle himself will be sometimes referred to by means of a plural pronoun in the following chapters.

<sup>692</sup> The first expression, “laughing” (*dāhīk*), indicates in Avicenna’s example a permanent character; the second expression indicates the actual disposition to laugh as exclusively being realized in certain circumstances (namely, in front of something surprising or amazing). Substance is “existent-not-in-a-subject” in the second sense; it is only such under certain conditions, because its quiddity does not coincide with existence, but is only accompanied by it when it has extramental existence (it exists *fī l-a’yān*, “among concrete beings”).

<sup>693</sup> The aforementioned examples show that Zayd and the hidden or non-existing species are still thinkable as substances, i.e. as beings which do not exist in a subject, even though they do not have concrete, extra-mental existence. For this reason substance does not require existence, to be such; it only requires that the condition of existing not-in-a-subject is fulfilled under a certain condition.

<sup>694</sup> Another reference to the discussion of existence in I.2 (10.8-16).

[§2.2.2 *An essentially existing thing and substances have nothing essential in common, since existence is only a concomitant of substances*]

For this reason if the quiddity of something is existence, and it is free from the subject, it is not in a genus, and it shares nothing with substances, in the sense that these are things and notions which are only accompanied by existence, when [existence] accompanies [them] in this way<sup>695</sup>. But there does not exist something which constitutes that thing<sup>696</sup> and the specificities of substances in common, because the equivalent of what is essential for that thing is accidental<sup>697</sup> for them<sup>698</sup>; like the existence which is realised in such and such manner. [On the other hand,] what is essential for these specificities, in the meaning of substantiality, is not predicated of that thing; because [in that thing] there is no quiddity other than existence which existence accompanies.

[§2.2.3 *Substances only admit of priority and posteriority with respect to the existence which accompanies their quiddities*]

So, you have already known the true being of substance in the sense that it is existent not-in-a-subject; and you have known that the being of substance in this sense is something in which there is no priority or posteriority, so as the meaning according to which man is said rational is neither prior nor posterior in it, nor more or less. As for the discrimination in act which accompanies this, for which differentia is a primary power, as well as for other things, there is a differentiation with regard to it<sup>699</sup>.

As to the proof for the fact that the substancehood which we clarified does not admit of priority and posteriority, it is [the following]: you cannot say that the fact that form is in itself a quiddity, if it exists and does not need a subject, and does not exist in [the subject], comes before the compound being likewise; or [you cannot say] that this essence is in the compound inasmuch as the compound's being in this way is dependent on the form's being in this way; [you cannot say that so] as you say that the existence of [C94] form, according to the way of being not-in-a-subject it has, [comes] before the existence of the compound. For its existence comes before the existence of [the compound]; and the existence of [the compound] is dependent on the existence [of form]; that existence [the form] has its existence not-in-a-subject. Therefore, this does not imply that substance is not a genus. This is the essential notion of substance.

---

<sup>695</sup> I.e. as extra-mental existence not-in-a-subject.

<sup>696</sup> I.e. the thing whose quiddity is existence.

<sup>697</sup> Reading *'araḍī* with all manuscripts, instead of *'araḍ* (Cairo).

<sup>698</sup> What is essential for the essentially existing thing, namely existence itself, is only “accidental” for substances, in the sense that it is a concomitant attribute which does not take part in their essences.

<sup>699</sup> This last sentence, set apart by the Cairo editors as a separate paragraph, is obscure; it is however to be read together with the preceding remarks. Avicenna suggests that, whereas in the notion of specific difference itself (i.e. in the meaning of “rational”) there can be no differentiation according to priority and posteriority, there is a sort of differentiation (*iḥtilāf*) with regard to the actual operation of “discriminating” (*tamyīz*) accomplished by the differentiae. See the COMMENTARY *ad loc.*

Furthermore, besides this there are more specific doubts, which we must leave for the *Book of Appendices*<sup>700</sup>.

[§3 *Division of substances*]

[§3.1 *Substance is either simple or composite*]

But we say that substance is either **(a)** simple or **(b)** composite; I mean, [a composite] of the things by which substance is composed, namely matter and form<sup>701</sup>. Simple substance can **(aa)** either not take part in the constitution of the composite, but be free and separate<sup>702</sup>, or **(ab)** it can take part in its constitution; **(aba)** that which takes part in the constitution either does it in the same way as wood does in the existence of the chair, and it is called matter; **(abb)** or it does it in the same way as the shape of the chair is in the chair, and it is called form. Matter is that thing according to whose consideration and definition the composite does not have existence in act, but [only has it] in potency. Form is that thing by whose existence only the composite becomes what it is in act.

[§3.2 *The existence of substances as universal or individual does not depend on their quiddity*]

All of these [substances] either exist as universals or exist as particulars. If substance is substance, as I showed you, only by virtue of a quiddity which is followed by existence among concrete beings or [existence] among estimations<sup>703</sup>, it is not [substance] insofar as it exists among concrete beings. If it were not so, the meaning of the expression “substance” would be ambiguous, not synonymous, as [those people] said<sup>704</sup>; but we mean by “substance” only the thing, the existence of whose proper quiddity ought to be not-in-a-subject; this quiddity, like for instance man, must be a substance in its essence. Therefore, man is a substance only because it is man, not because it is existent among concrete beings according to a certain way of existence; and if it is substance because it is man, the attribute which is attached to it, I mean individuality, being common, and also being realized among concrete beings or being established in mind, these are all things which are attached to substance. The substantiality of substance is not destroyed together with its attributes, its necessary concomitants and accidents; [substance may] be destroyed itself, so that these can be attributes of something different from that substance; since substance is sometimes destroyed in itself<sup>705</sup>.

---

<sup>700</sup> On the *Book of the Appendices* (*Kitāb al-lawāḥiq*), see the COMMENTARY *ad loc*.

<sup>701</sup> Composite substance is the sensible substance made of form and matter, like this man (Zayd, ‘Amr) and this particular horse.

<sup>702</sup> This subdivision of substance, which will not be taken into account explicitly in the following lines, includes “separate” substances such as intellect and soul. This division of substances is to be compared with the one Avicenna provides at *Ilāhiyyāt* II.1.

<sup>703</sup> Ar. *fī l-awhām*. *Wahm* is the “estimative faculty” of the soul: this expression indicates mental existence, as opposed to existence among concrete beings.

<sup>704</sup> I.e., the opponents would say that the meaning of substance is predicated “by ambiguity” (*bi-l-taškīk*), in the same way as “existent” is said of its subjects.

<sup>705</sup> Since none of these attributes takes part in the essence of substance, they can change or be destroyed without the essential nature of substance being altered.

[§3.3 *Besides individuals, the genera and species of substances are substances*]

[C95] Therefore<sup>706</sup> individuals, among concrete beings, are substances.

The intelligible universal is a substance as well, because it holds true of it that its quiddity, when existing among concrete beings, ought to be not-in-a-subject; not because it is an intelligible substance<sup>707</sup>. For there have been doubts about intelligible substance, and it was believed that it is knowledge, and it is an accident; but its being knowledge is something that accidentally occurs to its quiddity; this is an accident. [However,] as to its quiddity, it is the quiddity of substance; and what shares with substance by virtue of its quiddity is a substance. Likewise the definition of species, insofar as it is a nature, and also the definition of genus, insofar as it is a nature, are certainly predicated of the individuals – which are undoubtedly substances; and what shares with these<sup>708</sup> in their definition is a substance.

If they were substances just because they are existent among concrete beings while being surrounded by accidents, then the substancehood of things would only belong to their quiddity by accident, because it is correct that existence accidentally occurs in these quiddities; and accidents would posit as a substance what is not in itself a substance; hence, something would happen to be a substance by accident, and substantiality would be an accident of something.

Since this is impossible, universal substances are universal in their quiddities.

---

<sup>706</sup> Reading *fa-idan* with all manuscripts, instead of *fa-inna* (Cairo).

<sup>707</sup> I.e. not because of the particular form of existence it has, namely mental existence.

<sup>708</sup> I.e. of individual substances.

**[III.2]**  
**On primary, secondary and tertiary substance<sup>709</sup>.**

[§1 *Individuals are “primary” substances, but not with respect to substancehood*]

However, primary substances are individuals. “Primary”, in things which share one nature, can be [understood] in two ways: (a) for [a thing] is either “primary” with respect to that meaning in itself, as substance is “primary” in existence with regard to accident<sup>710</sup>; or (b) it is neither primary nor last in that meaning, but it is “primary” in another way and [according to] another meaning.

**[C96]** So, individual substances are not primary with regard to the essence of substantiality, although they are worthier [of it]; and there is a difference between primary and worthier, such that not all that is worthier with respect to a thing comes before, with respect to it; but it is worthier with respect to it if the attributes of the thing, and its perfections, belong to it more than to something else, or [belong] to it being prior in existence than to something else. Particulars are not primary with regard to the essence of substantiality; for that essence belongs to the quiddity they have, and they do not differ from other things with respect to it<sup>711</sup>.

[§2 *The primacy of individuals*]

[§2.1 *Individuals are worthier because they are primary in four respects*]

Still, individual substances are worthier of substantiality because they are primary (1) under the respect of existence, (2) under the respect of the establishment of that thing by virtue of whose consideration substance is substance, namely existing among concrete beings not-in-a-subject, (3) under the respect of perfection and excellence as well, (4) under the respect of precedence in being named<sup>712</sup>.

[§2.2 *Priority according to existence*]

[§2.2.1 *The existence of universals depends on that of individuals*]

As to the respect of existence universal substances, insofar as they are universal in act, are either said with respect to particulars in act, or are considered as having a certain relation to them. That existence of theirs consists of their being said, somehow, of subjects; so it is inevitable for them to have subjects. The individual [on the other hand] in its being

---

<sup>709</sup> This chapter follows Aristotle’s text from *Cat.* 2 a11 to 3 a6.

<sup>710</sup> I.e. substances and accidents have in common the fact of being existent; but substance is prior in existence because it exists by itself, whereas accidents need a subject, therefore a substance, to exist.

<sup>711</sup> I.e., other things which share the same quiddity.

<sup>712</sup> This distinction of the four main criteria for the priority of individual substances reworks the beginning of Aristotle’s chapter on substance, where the individual is said to be substance “most strictly”, “primarily” and “most of all”.

individual, i.e. [such that] its meaning is not said, existentially or mentally, of a multiplicity, has no need for another thing said of it, or of something else; if not, then it would be a condition for the establishment of the existence of the individual that something else be with it. [But] since every individual does not need a companion in the establishment of its existence, then it does not need the universal.

[§2.2.2 *Four doubts concerning the respect of existence, and their solutions*]

(1) If someone posed a question, and said: “As the universal is universal only with respect to the particular, so the particular is particular only with respect to the universal. As the quiddity of the particular, insofar as it is a quiddity, does not depend on the universal, but [it depends on it] inasmuch as [the particular] is a particular; likewise, the quiddity of the universal, inasmuch as it is a quiddity, does not depend on the particular; but it depends [on it] insofar as [the universal] is universal”; the answer to this would be that we are not speaking here about the universal and the particular, inasmuch as they are mutually relative; but we are meaning by “universal” what is said of [C97] many things; by “particular” what is not said of many things but is one by number, like Zayd and ‘Amr. This meaning [of “particular”] does not depend on the universal. We do not speculate about Zayd (and ‘Amr) inasmuch as he is the particular of a universal<sup>713</sup>, but inasmuch as he is a single individual, which is opposed to the universal in a way which is not the opposition of the relative<sup>714</sup>. The existence of this [particular] does not depend on the nature of the universal.

(2) If someone said that as the existence of the individual by itself does not depend on the fact that the universal is existent, so the universal does not depend on the individual by itself, we say: we also do not consider the individual in itself, but we say that the individual nature [taken] absolutely has no dependence, in existence, on the existence of the universal nature, inasmuch as it is universal, so that it is inevitable that there be a participation [in it]. As to universal nature, it is undoubtedly dependent on a certain individual.

(3) If one said that the nature of man is prior to the nature of Zayd, we say that we did not take the quiddity of substance inasmuch as it is a quiddity, but we took it inasmuch as it is a universal quiddity<sup>715</sup>; then, we judged in this way. ||So, this is the way of priority [in] existence||<sup>716</sup>.

(4) If one said: “you took one of them inasmuch as it is relative, and you took the other one inasmuch as it is not relative”, we say: no one can judge us about what we take in any way we wanted. Afterwards, we judge it by means of a judgment that only holds true

---

<sup>713</sup> Reading *kulliyatin*, with mss. **BDDiENkNoY**. The Cairo editors print *kulliyatihī*; the apparatus nonetheless reports *kulliyatin*. In the apparatus the variant *li-kulliyatin* is mentioned, with no indication of the manuscripts which bear it (it is however attested by **J** and **G**).

<sup>714</sup> They are in fact opposed inasmuch as the universal exists in mind, and the individual exists among concrete beings.

<sup>715</sup> If substance is taken just as a quiddity, it is clear that the notion of “man” as a part of Zayd’s essence is prior to him; but here Avicenna is taking it as a “universal” quiddity, i.e. as a quiddity which has mental existence, as opposed to the individual Zayd (who exists out of the mind).

<sup>716</sup> This remark apparently interrupts the discussion about the first sort of priority, which nonetheless continues with another doubt until a few lines below (where another formula is used to mark the end of the section: “and this is a way”).



according to that way of assuming; rather, if we judge what we took in any way we wanted as false, then he may contest. Besides, the utility of that consists of the fact that the logician only speculates about these things<sup>717</sup> inasmuch as they are universal; so, if he compares them to external things, he compares them insofar as these<sup>718</sup> are existent; so he must take the related thing as universal, and the thing related to it externally as singular, just as it is in existence; and this is a way.

[§2.3 *Priority according to the realization of the specificity of substance*]

As to [C98] the way of the priority [of primary substance] with respect to the establishment of the thing which is what is considered in the substantiality of substance, [this thing] is the fact that substantiality is the quiddity whose nature is such that, if it exists, it does not need a subject. In primary substances this thing, to which the quiddity is related, has been realized; in secondary substances it has not been realized<sup>719</sup>.

[§2.4 *Priority according to perfection and excellence*]

As to the discussion of perfection and excellence, a group [of people] said that since [individual substances] are subjects and principles for other things, and subject and principle are more excellent, then [individual substances] are more excellent. This is a hazardous speech; for it is not clear, in it, that principle and subject must be excellent; but sometimes something having a principle, which has the principle and a supplement of excellence, can be more excellent and more perfect than the principle [itself]. According to this [speech], nothing would be more excellent than prime matter<sup>720</sup>. But the excellence of these individualities consists of the fact that the goal of nature tends to the existence of these individuals; and the actions and states which must be realized are only<sup>721</sup> realized by virtue of [individuals] and for them.

[§2.5 *Priority according to precedence in being named*]

As for the discussion of precedence in being named, it is because the first thing of which it has been known that it is existent not-in-a-subject is the particular individuals; and it is appropriate that they precede all things [in being named “substances”].

---

<sup>717</sup> I.e. universal substances.

<sup>718</sup> I.e., the particular existent beings.

<sup>719</sup> Avicenna hereby insists on the fact that the quiddity of substance, despite being proper of both sorts of substances, is not “established” or “realized” in both. The terms *ḥuṣūl* (“being realized”) and *taqarrur/istiqrār* (“establishment”/“being established”) indicate concrete existence; the difference between primary and secondary substances under this respect depends, then, on the fact that individuals have extramental existence, and they therefore fulfil the main condition required by substantiality (that of existing among concrete beings not-in-a-subject), whilst universals do not.

<sup>720</sup> This paradoxical consequence of the opponents’ argument also helps explain the remark which precedes immediately: prime matter (*hayūlā*) works as a substrate for substances which are such in a higher degree; therefore, insisting on the excellence of substrate as such is not a convincing way to demonstrate the initial assumption.

<sup>721</sup> Reading *fa-innamā* with all manuscripts, instead of *fa-inna mā* (Cairo).

Since they are subjects for their universals, according to the way [of predication] “of”, and subjects for accidents according to the way [of predication] “in”, the existence of everything is either in being said of them, or existent in them<sup>722</sup>.

[§3 *Secondary substances are species and genera; species are worthier of substantiality than genera, because they are closer to primary substances*]

Although these universal substances are – all of them – secondary, they have a dissimilarity among them: the species, among them, is worthier of substantiality than the genus.

This is because it shares more in the quiddities of primary substances, since it expresses them more than the genus does. For if you are asked: “What is Zayd and ‘Amr?””, and you say “a man”, [this] is a more perfect answer than your answer: “he is an animal”; for there you do not present the quiddity integrally, but he who asks has an opportunity to repeat his question. So, everything that participates more of the first, inasmuch as it is first, is closer to it, insofar as it is prior and posterior with respect to it, and thus it is worthier of substantiality.

[C99] Moreover the state of the genus, inasmuch as it is universal, with respect to the species which is below it, is like the state of the species with respect to the individual which is below it. In the same way as the individual only becomes prior to the species because it is a subject for the genus and the species, so is the state of the species with regard to the genus; it is, after the individual, a subject for universal accidents; so, they<sup>723</sup> exist in it. For man is a subject for numerous accidents, like “walking” and “two-footed”, and raven [is a subject] for “black”. So, the relation of species to genus and to the rest of the things which come after individuals is like the relation of the individual to the species and the rest of things.

[§4 *Doubts*]

[§4.1 *A difficulty concerning the relation between genus and species*]

But someone might say: “The solution you mentioned for the doubt in which it was related that as the universal is dependent on the particular, so the particular is dependent on the universal<sup>724</sup>; [that solution you gave] by saying that the individual is not the particular which is relative to the universal (under the respect of the meaning), [well]: it is a useless solution, if a similar doubt is posed with regard to the species; for the species is not like the individual, but it is only said with respect to the genus; so, the species is not a species but with respect to the genus; unless of course they do not mean by ‘species’ the lowest species, whose specificity is related to individuals. Moreover, your speech is restricted to the relation between the ultimate species and its genera; it does not comprise the relation which [holds] between an intermediate species and the genus above it; it is therefore an

---

<sup>722</sup> The reference to denomination is not explained here; it however follows, from the fact that individual substance is known as such before universal substance, that it is what first receives the name “substance”.

<sup>723</sup> Reading *fa-tūğadu* instead of *fa-yūğadu* (Cairo).

<sup>724</sup> See above, doubts (1) and (4) in section [§2.2.2].

explanation [which] is neither comprehensive, nor posited when its position<sup>725</sup> is primary; for you undoubtedly posited the relation of what is an intermediate species with the genus above it as this relation”.

So, we say that we do not consider man as well, insofar as it is a species said with respect to a genus, but our first consideration is about the relation between universal and what is not universal, but shares the quiddity with the universal and [it is such that] the universal is said of it<sup>726</sup>. Our consideration now is about what is the state of the universal which is the genus, among the sharing universals that differ under the respect of commonness and specificity, with regard to the universal in which what is more particular shares [C100], which is not a genus<sup>727</sup>: hence, we find that it is<sup>728</sup> that state. The universal man does not need, in its being a universal man, that there be something above it of which it is a species, but [it needs] that there be a thing below it; but the universal animal does not need, in its being universal animal, that there be a universal body above it, nor *vice versa*. Although man, inasmuch as it is a species, needs the genus, and likewise does animal, we do not consider now the nature of man and animal, insofar as they are species, but we consider the nature of the species insofar as it is universal only; and the consideration of the nature of the species inasmuch as it is universal is not the consideration of the nature of the species inasmuch as it is the nature of the species, or as it is a species.

#### [§4.2 *A difficulty concerning intelligible substances*]

Someone might say: “You posited intellectual substances as posterior to sensibles; so the intellect and the Creator, be He praised, must be posterior to sensible individuals”. We say, as an answer to this: (1) first, as regards the Sublime Creator, you must know from what precedes that he does not fall under the genus of substances<sup>729</sup>. (2) In second place, although species and genera are intellectual substances, not all intellectual [beings] are species and genera; but among intellectual [beings] there are single [beings], subsistent by themselves and not depending on a subject of which or in which they are said; and these intellectual singulars are worthier of substantiality than anything else. As to [their being worthier] than corporeal singulars<sup>730</sup>, it is because those are causes for their existence; as to [their being worthier] than intellectual universals<sup>731</sup>, if they have them, it is because those are singular in the way we pointed to; as to [their being worthier] than natural sensible universals<sup>732</sup>, it is because [intellectual singulars] are worthier of substantiality than what is worthier of substantiality than these<sup>733</sup>, namely corporeal singulars.

---

<sup>725</sup> Reading *waḍ‘uhū* with most manuscripts, instead of *wasfuhū* (Cairo, **BNk**).

<sup>726</sup> I.e. the individual.

<sup>727</sup> I.e. species.

<sup>728</sup> Reading *fa-nağiduhā* (*fa-tağiduhū* **DiGJ**, *fa-nağidu* **Da**) instead of *fa-naḥuddu* (Cairo).

<sup>729</sup> This was clarified in chapter III 1, in the discussion of the nature of substantiality [§1.4 – 1.5].

<sup>730</sup> I.e. primary substances.

<sup>731</sup> The universals of intellectual substances, such as the genera and species which may be predicated of “intellect” and “soul”.

<sup>732</sup> The universals of sensible substances, for instance “man” and “animal”.

<sup>733</sup> I.e. natural sensible universals.

As to the relation we showed<sup>734</sup>, it does not hold between sensibles and these intellectual substances, but between individuals and universals; and if there is, in intellectual substances, an individual multiplicity embraced by a specificity, and a specificity [C101] embraced by a generality, then the relation between them [actually] is this relation [we showed]. It seems that that [relation] is existent in some of them, and not in others<sup>735</sup>. Likewise is the state as regards the elements of sensible [beings], for individual forms are prior to specific forms; for instance, the form of this water and that water is prior to the absolute form of water.

[§5 *Relations among substances of the same kind*]

Since we completed [the treatment] of the relations which occur between these substances according to depth<sup>736</sup>, let us consider now the relations which occur between them according to width<sup>737</sup>; and let us say that although particular individuals compete for precedence among things, nonetheless their quiddity, insofar as they are individuals, is not prior for some of them than for some others; and likewise is the state of their specificities. For Zayd is not worthier, with respect to the fact that the nature of his species is predicated of him, than another individual; but he only is worthier of some accidents which accidentally belong to his individual substantiality. For instance, if he is wiser than [another individual], he is worthier than him with respect to knowledge; likewise the specific man is not worthier than a horse, in its deserving the degree of specific substantiality, and in its deserving that a genus be predicated of it; although, under the respect of nobility and excellence, [man] is worthier of it.

There are no other substances besides primary substances, actually, than their species and their genera.

[§6 *The substantiality of differentiae*]

[§6.1 “Absolute” differentiae, or forms]

As for<sup>738</sup> differentiae, in a certain respect they are like species; you have learned, regarding this, what to count on [to understand this]. In another respect, one means by “differentiae” either<sup>739</sup> the form which is like rationality, and this is not said of Zayd and ‘Amr, even though it is a substance, nor is there a relation between it and the individuals and the species under the consideration of commonness and specificity, but [there is] under

---

<sup>734</sup> Namely, the individuals of intelligible substances are more entitled to being substances than their species, and the species are more entitled than their genera.

<sup>735</sup> This depends on the fact that not all intellectual substances have universals, i.e. genera and species, above them.

<sup>736</sup> Ar. *‘amqan*. This expression refers to the “vertical” relations holding among substances which are subordinate or superordinate to one another, in this case genus, species and individual; it derives from the use of late ancient Greek commentators (in its original form, κατὰ βάθος).

<sup>737</sup> Ar. *‘arḍan*. This expression refers to the “horizontal” relations holding among substances which are on the same level. It is already used by the late ancient Greek commentators (in its original form, ἐν πλάτει/κατὰ πλάτος).

<sup>738</sup> Reading *ammā* with all mss., instead of *wa-ammā* (Cairo).

<sup>739</sup> The second part of this alternative is logical difference, discussed in the following paragraph [§6.2].

the consideration of simplicity and composition. They are formal substances which have, between their particulars and their universals, this very relation; if they are related with composites, inasmuch as they are elements of them, they are prior [to them] according to the priority of the principle with respect to what has a principle. These [differentiae] are, with respect to their particulars, species and genera; so they are also species of substances, and genera [of substances], although with respect to something else they are differentiae.

[§6.2 *Logical differentiae*]

As for the differentiae that are actual logical differentiae, like “rational”<sup>740</sup>, although their like is nothing but a substance, the notion of substantiality, as you have learned, is not included in them; but the meaning which is like [that of] this differentia, [C102] be it [for instance] “rational”, is that it is “something having rationality”; then, that thing is nothing but a substance, namely it is not devoid of the meaning of substantiality as a concomitant of it; and this is something which was verified for you in what precedes<sup>741</sup>.

[§6.3 *Degrees of substancehood in differentiae and species*]

In general, substances are the individuals of substances, their species and their genera; their differentiae are numbered among their genera and species according to the way which was mentioned.

Hence if abstract differentiae, which are forms, are compared with the natures of the species that are composed by them, then they are worthier of substantiality in respect of priority, but they are not worthier of substantiality in respect of perfection<sup>742</sup>. As for the logical [ones] among differentiae, they are posterior [to the species] with respect to substantiality, in another way; because substantiality is concomitant to them, and it does not take part in their meaning; for you have learned that “rational” must not be a substance, or an animal which has rationality, but a “thing” that has rationality.

---

<sup>740</sup> “Logical” differentiae are the predicates which derive from absolute differentiae (conceived of as forms), and are said of their individuals according to predication “of” a subject.

<sup>741</sup> Cf. above, *Madḥal* I.13.

<sup>742</sup> I.e. if differentiae are taken as abstract forms, they are in a certain way prior to species in substantiality, since they are considered as elements or principle of the species as a composite thing; but they are not more perfect in substantiality than species themselves.

[III.3]  
On the descriptions of substance, and its properties<sup>743</sup>.

[§1 *First property: substances do not exist in a subject*]  
[§1.1 *All substances are such as not to exist in a subject*]

All substances share a property which is equal for [all of] them, namely the fact that they are existent not-in-a-subject<sup>744</sup>. Also logical differentiae, since they are substances, although genera and species are more entitled to it for the reason you learned<sup>745</sup>, are existent not-in-a-subject; for their individuals are given their names with their definitions<sup>746</sup>; those [things] that are said “in a subject” only correspond, sometimes, with respect to the name<sup>747</sup>.

Nothing, among substances, is in a subject; nor anything which is in a subject is a substance.

[§1.2 *The parts of substances are not necessarily substances*]

It is not [true] that, if the parts of substances<sup>748</sup> [C103] are in the wholes which are the composite [substances], and if their particulars are in the universals, then for this reason it is necessary that they are in a subject; for you already learned that existence in-a-subject is different from the existence of parts in wholes, and [from the existence] of particulars in universals<sup>749</sup>. Therefore, do not pay attention to what is said, namely that forms and non-logical<sup>750</sup> differentiae only fall under the category of substance inasmuch as they are considered as parts of a substance, and that<sup>751</sup> with respect to their matters they are accidents, and fall under the category of quality; for you have learned that nothing can fall, by essence, under two categories<sup>752</sup>. You have also learned that these are not, with respect to their matters, accidents; and that “quality” is said of them and of the meaning of the category by homonymy, not as the genus is said [of its species]<sup>753</sup>.

---

<sup>743</sup> This chapter corresponds to *Cat.* 3 a7 – 4 b19.

<sup>744</sup> *Cat.* 3 a7: Κοινὸν δὲ κατὰ πάσης οὐσίας τὸ μὴ ἐν ὑποκειμένῳ εἶναι (“It is a characteristic common to every substance not to be in a subject”).

<sup>745</sup> See above, III.2 [§6].

<sup>746</sup> I.e. they are predicated synonymously of their individuals, in the same way as genera and species are said of their subjects.

<sup>747</sup> I.e. they are predicated accidentally, in the sense that they do not share their definition with the subject – but they only give it their names.

<sup>748</sup> Reading *al-ġawāhir* with all mss., instead of *al-ġawhar* (Cairo).

<sup>749</sup> This difference has been the subject of a lengthy discussion in chapter I.4.

<sup>750</sup> Reading *al-ġayra l-mantiqiyiyati* with most mss., instead of *ġayra l-mantiqiyiyati* (BDa, Cairo).

<sup>751</sup> Reading *wa-innahā* with all mss., instead of *wa-innamā* (Cairo).

<sup>752</sup> The distinction between form and differences, on one side, and quality on the other side was the subject of chapter I.6.

<sup>753</sup> See above, I.6.

So, actual substances and logical differentiae share this property; for these [latter] are substances as well. Logical differentiae also share with secondary substances in the fact that they are said, with respect to the individuals of substances, in the same way as the “said of a subject”. This property, I mean “being not-in-a-subject”, is either with respect to absolute substance, thus being an equal and convertible property<sup>754</sup>; or it is with respect to actual substances, which are individuals, species and genera, and it is more common<sup>755</sup>.

[2. *Second property: substance is determinate, for it is susceptible of being pointed to*  
[§2.1 *Individual substances are susceptible of being indicated, whereas accidents are not*]

There are other properties, among which there is what is believed, in common opinion, to be a property of all substances, whereas it is not such; but [it is only a property] of some substances. This property belongs to those properties which specify what is characterized [by the property], and do not make it common<sup>756</sup>. This property is that substance is sought for by means of an indication<sup>757</sup>; for indication is a sensible or intellectual sign that [points] to something in itself which does not share [this sign] with any other different thing, be it even of its species.

Accidents do not happen to have such an indication but by accident; for they only become separate or manifold by virtue of the substances to which they belong, and each one of them becomes one and determinate because of the determination of its subject. So, sensible and determinate indication only extends to those substances that have separation and particularity<sup>758</sup>. [C104] As to the indication which is commonly known to be intellectual, it also includes accidents. But if it includes them in the respect of their meanings, then it is not the indication which we named [as such]; for their meanings are suitable of being shared; and if it includes them in such a way that they do not share it, and this is what must be characterized by the name “indication”, then it is not possible to intellect this; unless they are characterized by different intellectual subjects which multiply the accidents. They are [either] multiplied by themselves, before those accidents are multiplied; or they are multiplied by other causes of their multiplicity, before those accidents are multiplied; like for instance the matters with which they have a certain relation, as you will learn in the appropriate place. Thus, intellectual indication [taken] in this sense does not also include intellectual accidents, if they exist, according to a primary

---

<sup>754</sup> It is equal because it belongs to all substances without any sort of differentiation; it is “convertible” (*mun’akisa*) because, in a proposition of the sort “substance is not-existent-in-a-subject”, subject and predicate can be converted (that is what Avicenna himself did in par. [§1.1]). Convertibility is a distinctive character of properties in the strictest sense, as they are described in Porphyry’s *Isagoge* (Porph. *Isag.* 12,12-22).

<sup>755</sup> “More common” is to be understood as “less proper”: it is not strictly attached to “actual” substances (individuals, species and genera: not substance absolutely, but substance *secundum quid*) in the sense that they present some sort of differentiation with regard to it, as has been clarified in the preceding chapter [§1-2].

<sup>756</sup> I.e. this property, when applied to substance, only defines a specific subdivision of substance (in this case sensible substance, which only has this property), without being applied to other subdivisions of its.

<sup>757</sup> This expression translates intuitively, in Ishāq’s Arabic version of the *Categories*, the property which an individual substance has of expressing “this certain thing” (*Cat.* 3b10: Πᾶσα δὲ οὐσία δοκεῖ τόδε τι σημαίνειν; ar. *Wa-qad yuẓannu bi-kulli ġawharin anna-hu yadullu ‘alā maqṣūdīn ilay-hi bi-l-iṣārati*), namely a determinate being.

<sup>758</sup> Namely, individual substances.

intention. For what is sought by means of indication, namely in a primary intention-by-indication, is substances, without accidents.

There is no objection to positing the mentioned indication as sensible, so that it points to sensible substances only; or to positing [an indication] more common than it, which would encompass both indications, although this would not be by synonymy; for many of the descriptions and definitions which have been mentioned for these things are [given] in such a way.

[§2.2 *Secondary substances are not determinate, but they only qualify primary substances*]

However, this is a property of primary substances, not of secondary [substances]; for there is no indication for universals, since there is no determination in them. Do not believe that when you are pointing to Zayd you also point to “man”<sup>759</sup>; for there is a difference between man and Zayd, even if man is predicated of Zayd. If there were no difference, then [“man”] would always be predicated of Zayd only, and every man would be Zayd. Sure, “man” and the other universals do not express something which is subject to indication; but [they express] which one sort of thing subject to indication there occurs<sup>760</sup>. For among them, I mean secondary substances, there are those which give the meaning of a qualification<sup>761</sup> which is isolated by them, like specificities; and there are those which do not give them a qualification by which they are isolated, like the substance which is a genus for the genera; unless this being-isolated is posited not with respect to what shares in a genus, but with respect to existence.

[C105] These secondary substances, when they notify a qualification, notify it either as an essential qualification, and this is the isolation of a group by itself, without being considered as [falling] under some common [thing] which embraces it; or it does not, so that for this reason that qualification is not the qualification of differentia, for the separation of the qualification of differentia is a separation under a genus, and this way of separating is not said of the species but by accident, in a certain respect, as you learned<sup>762</sup>. I mean, by saying “by accident”, the fact that it does not belong to the thing primarily, but because of something different; I do not mean by saying “by accident” that its nature is not isolated by essence, for manhood is isolated, but it is only isolated since there is in it an isolating thing with respect to which it is the first.

---

<sup>759</sup> “Man” is here to be intended not as a concrete individual, but as the species which is predicated of the individual man Zayd.

<sup>760</sup> Aristotle ascribes to universal substances the property of expressing, instead of a determinate thing, a certain “which” (ποιόν τι); without therefore being qualities, they separate individuals from other individuals by grouping them according to their common characters.

<sup>761</sup> Cairo prints *anniyya*. I read here *ayyiyya*, as a noun expressing the sort of “qualification” which secondary substances provide for individuals. This reading, besides being reported by some manuscripts (cf. **DiY**), seems to make more sense in this passage, which treats the consequences of secondary substances indicating a sort of “quality” (“what sort of thing”, *ayyu šay’in*, in Iṣḥāq’s translation; *ayyu wāḥidin*, “which one”, in Avicenna’s text). I adopt this reading for all of the seven occurrences of *anniyya* in these lines: 104.16; 104.17; 105.1 [2]; 105.2 [2]; 105.3. For similar cases in the *Madḥal* and the *Ilāhiyyāt* of the *Šifā’*, see BERTOLACCI 2012.

<sup>762</sup> Specific difference has been characterized by Porphyry (*Isag.* 11,8-9) as “what is predicated, in answer to ‘what sort of so-and-so is it?’, of several items which differ in species” (τὸ κατὰ πλειόνων καὶ διαφερόντων τῶ εἶδει ἐν τῶ ποῖόν τί ἐστι κατηγορούμενον). Avicenna is here referring to his own discussion of this characterization, carried out in his reworking of the *Isagoge* (*Madḥal* I 13).



So, secondary substances express the “which sort” in two ways: one of these is the fact that they do not express this thing subject to indication by itself, but they only express what sort of thing [it is]; the second is that they separate by means of a substantial separation.

[§2.3 *This is a property of substances only, but not of all substances*]

This property related to indication is a property of substance, in the sense that it does not exist but in substance, although it does not belong to all substances. So, it is a way of characterizing substances by saying that substance, among the categories, is the category which exists in things which are embraced by that condition; so as it is said that the Ka‘ba is proper of Mecca not in the sense that all of its parts are the Ka‘ba, but in the sense that some of its parts are the Ka‘ba; but the [whole] city is not such.

[§3 *Third property: substances do not have contraries*]

[§3.1 *Substances do not have contraries, because they have no subjects*]

Substance also has a property which embraces all of its species, but is not a property of substance with respect to every accident, but with respect to some accidents [only]; [this property] is not having a contrary, for it does not have a subject. The “contrary” we are speaking of here is a thing which shares, with what is contrary to it, a subject; they are two essences which succeed each other on the subject, and whose conjunction thereon is impossible<sup>763</sup>. As to the possibility of meaning by “contrary” everything which shares a receptacle, [C106] be it a matter or a subject, we are speaking in this section of something else, and it is not unlikely that formal substances have a contrary [in this other respect]<sup>764</sup>.

[§3.2 *This property is proved, in logic, by induction*]

The logician must not try to found these things by verification: his capacity will not be sufficient for them. However, the most he can sustain is to know this by means of induction, or by means of proofs taken among those that are commonly accepted; and that the doubts which occur to him be removed from him by means of inductive examples, which make him understand that the doubts which shook his heart, and that were incumbent on him, are false; although their cessation does not make it necessary, for him, to believe that this is true<sup>765</sup>.

---

<sup>763</sup> For Avicenna’s definition of “contrary”, and more in general his treatment of the kinds of opposition see below, chapter VII 1.

<sup>764</sup> The distinction between subject and receptacle (see above, I 4, and *Ilāhiyyāt* II 1) allows Avicenna to distinguish coherently between substances which do not have contraries and substances which have them (namely, forms, whose contrariety only makes change and motion possible). In fact, if substances do not have a subject they can have a receptacle, as is the case of forms (whose receptacle is matter). On a same receptacle there can be contrary forms or substances, according to the principles of natural change.

<sup>765</sup> Induction is not sufficient to fully remove the logician’s doubts; only demonstration can establish the truth of what he is speaking about, and provide an integral verification (*tahqīq*) of what he is concerned with.

Induction clarifies that there is no contrary to man and horse. As to the hot body and the cold body, they are not contraries by themselves, but by accident, since the two contrary things in them are hotness and coldness.

[§3.3 *Quantity shares in the same property*]

Other categories share in this property; for quantity has no contrary, as well.

If someone is doubtful about this, and mentions “small” and “large” as an objection to this opinion, in order to make this impossible and destroy it, he must reflect attentively in order to learn that “four”, “three” and “five” do not have contraries, since no number is more entitled [than others] to being posited as the most different from them in such a way as to be a contrary, unless there exists [a number] which is at most far and different from it. If one learns that three and four do not have a contrary, according to this explanation, he finds that there is in quantity something that shares with substance in the fact of not having a contrary (i.e. the species that we mentioned<sup>766</sup>), although among quantities there is what has a contrary, namely multitude and littleness, if these two are quantities, and if they are contraries. Since the objection is removed [also] when the existence of contrariety in “large” and “small”, “multitude” and “littleness” is conceded, there is no utility here in employing the explanation that multitude and littleness, large and small are neither quantities nor contraries<sup>767</sup>.

Moreover, even if quantity shares in this [property] with substance, some species of the other categories do not; for most qualities have contraries, although some of them do not have a contrary<sup>768</sup>.

[§4 *Fourth property: substances do not admit of more and less*]

[§4.1 *The more and the less are always found in between contraries, but not all contraries admit of more and less*]

**[C107]** Another property follows this one, namely the fact that substance does not admit of more and less. For what becomes “more” of something, becomes “more” [by departing] from a certain state which is contrary to the state towards which [it goes] in becoming “more”; and it does not cease leaving the state of weakness<sup>769</sup> by little steps, being directed towards strength, or [leaving] the state of strength, being directed towards the state of weakness; the two states are opposites and contraries, which cannot be conjoint.

---

<sup>766</sup> Among these species of quantity that certainly do not admit of contraries, Avicenna has just mentioned numbers.

<sup>767</sup> This point will be discussed extensively below, in chapter IV.2 [§2.2].

<sup>768</sup> For instance figures and shapes: see below, VI.3 [§2.2.1].

<sup>769</sup> I translate here the Arabic *du'f* as “weakness”, to maintain in Avicenna’s sentence the opposition to *quwwa* (which is to be intended in the plain sense of “strength”, instead of “potency”). In its other occurrences in these lines, nonetheless, the root *q-’f* is used to render the idea of being “less”: the couple *ašadd wa-aq’af* (literally, “more intense and weaker”) corresponds to the Aristotelian formula *μᾶλλον καὶ ἧττον*, which in Ishāq’s translation of the *Categories* is rendered differently and more literally (*aktar wa-aqall*). I choose to follow here the conventional translation and to avoid more literal solutions, in order to make Avicenna’s text more intelligible to a reader of Aristotle.

So, if they<sup>770</sup> are accidents, then becoming “more” and “less” is [found] in accidents, as it actually is; if these were substances, then there would be contrariety in substance, which is impossible.

Thus, if the property before this was posited simply, this property is posited as well, for becoming more and becoming less are absent when contrariety is absent.

Moreover, the kind of contrariety by whose removal from substances there is no becoming “more” [or “less”], belongs to what does not admit of a development from one thing to another according to the “more” and “less”; for the transition from one [contrary] to the other is not such for all contraries; but it sometimes occurs all at once. But the elimination of the [capacity] of admitting contraries eliminates becoming “less” and “more”, whereas positing [the first] does not posit [the second], nor makes it necessary<sup>771</sup>.

Someone thought that becoming more and less is sometimes not [to be found] between the contraries; for instance health is not contrary to beauty, and it does not have a contrary; but sometimes there is more of beauty than of health. You should not take this into account; for what this man holds is a way<sup>772</sup> of considering increasing and decreasing which is different from the one we hold here.

[§4.2 *Refutation of those who believe that degrees of intensity may not be found in between contraries*]

As substance does not admit of more and less according to motion, so there is not in it something which is “more” and something which is “less”; I do not mean the relation which occurs according to the worthier and the more appropriate, and in depth<sup>773</sup>; for it has been said that some substances are worthier, with regard to substantiality, [than others], in a certain respect<sup>774</sup>; but I mean the relation which characterizes [something] by the same nature, and the same definition. Thus, no one among the individual men is, with respect to its being man, **[C108]** which is his substance, “more” than another individual; in the same way as whiteness is, sometimes, in its being whiteness, “more” than another whiteness. Nor an individual man can be, in its being an individual man<sup>775</sup>, “more” than an individual horse, with respect to being a horse; in the same way as whiteness is imagined to be “more”, with respect to its being white, than blackness in its being black; and hotness [is imagined to be] “more”, with respect to its being hot, than coldness in its being cold. Likewise is the state of the species which are on the same level; for it is not [true] that one of them is “more”, as regards itself, than another, since we have supposed that the genera

---

<sup>770</sup> I.e. the opposite states which constitute the extremes of this changing process.

<sup>771</sup> I.e., whilst the presence of degrees of intensity implies the existence of contrariety, the reverse is not true; for there can be a sudden transition from a contrary to another, which does not go through different degrees of intensity.

<sup>772</sup> Ar. *naw'*, literally “species”, here intended in a generic sense.

<sup>773</sup> I.e. according to the vertical relations among subordinate and superordinate substances. Here Avicenna applies this expression to the degrees of worthiness with respect to substantiality which are found in substance. For another use of this expression see above, III.2 [§5].

<sup>774</sup> This concept has been made clear in the first lines of chap. III 2: primary substances, i.e. individuals, are worthier, with respect to substantiality, than secondary substances (their species and genera). See above.

<sup>775</sup> “In its... man”: supplying to the Cairo text *fī anna-hu šaḥṣu insānin*, found in all manuscripts except **D** (probably omitting it by *saut du même au même*).

are predicated of them only equally; for this reason primary substances, despite being worthier than the secondary ones with respect to substantiality, are not “more” with respect to substantiality. “Worthier” is different from “more”: for “worthier” depends on the existence of substantiality, while “more” depends on the quiddity of substantiality<sup>776</sup>.

Quantity also shares this [property] with substance, as we shall explain later<sup>777</sup>.

[§5 *Fifth and last property: substance only admits of contraries as a substrate of change*]

[§5.1 *Individual substances admit of contraries in this sense, universal substances do not*]

It is believed, apparently, that the most proper property of substance is that its quiddity is a quiddity that, if it is individualized, is a subject for contraries. Hence, substance is that thing one of which by itself (not the universal one [of it]) admits of contraries, because of its changing, in itself. As to universal substance, it does not admit of contraries; because the universal embraces every individual; and it is not true that every individual is black and every individual is white.

[§5.2 *Universal accidents do not have this property*]

If someone thought that the universal accident admits of contraries as well, like colour, [which] is [both] whiteness and blackness, let his opinion be destroyed by the fact that the colour which is black does not admit of the colour “white” because blackness is stripped off the colour, and whiteness overcomes it<sup>778</sup>; but it is said that the absolute colour admits of contraries only in the sense that it is “some” and “some”<sup>779</sup>; or because the nature of colour is separate, as being abstracted in the estimation; and it admits, in estimation, whatever of the two differentiae you want. We are not speaking here about things like these; but we are speaking about the reception [of contraries] which takes place in existence<sup>780</sup>, and the reception which belongs to a single receiving thing; if the universal colour admitted of them both, then every colour would be blackness and every colour would be whiteness. And if the abstracted nature of colour [C109] admitted of that, then it would not be blackness and whiteness, but blackened and whitened; so that a certain colour would not be blackness, nor a certain colour whiteness; and it would be<sup>781</sup> by alternation, not simultaneously.

---

<sup>776</sup> *Awlā* (“worthier”) has already been used to characterize the status of primary substance with respect to substantiality; it is related to the attributes other than essence which describe substance, like existence. “More” and “less” indicate a difference of intensity with respect to the essence of substantiality, as they do when applied to all of the other essences.

<sup>777</sup> The properties of quantity are tackled in chap. IV 2: See below.

<sup>778</sup> Contrary properties in natural beings are such that they cannot subsist simultaneously on a single subject. If blackness and whiteness do not succeed each other on the universal colour as on their subject, then it is clear that universal colour does not admit of contraries in the same way as natural beings, i.e. individual substances, do.

<sup>779</sup> I.e. some of the things which share the definition of “colour” are white, whereas some others are black.

<sup>780</sup> I.e. in extra-mental existence.

<sup>781</sup> Reading *wa-la-kāna* (*wa-lākin* **MkNk**, *wa-lākin kānā* **Da**, *wa-law kāna* **E**, *deest* **A**) with mss. **AsDDiGJMNRy**, instead of *la-kānā* (**B**, Cairo).

[§5.3 *This property is not shared by all substances*]

This property does not embrace every substance. So, not every substance admits of contraries [in such a way]; for intellectual, simple substances do not change at all; and what does not change at all does not admit of contraries; but only changeable substances, and corporeal substances which are composed of form and matter admit of them. However, not all corporeal composites [have this property]; for many of the heavenly bodies do not admit of contraries. So, only some corporeal substances admit that. This property is equal for this group [of substances]<sup>782</sup>, and it is a property which does not belong only to the particulars of that group, but belongs to all of it. For the fact that what among them is numerically one admits of this and that [contrary] is predicated of their universals as well; and [also] the fact that, although its universality does not admit of it by virtue of its universality, nonetheless its universality is described by the fact that one single thing of it admits of that. [As to] individuals, [each] one of them admits [of that].

So, if someone said: “If you posit this property in such a way that it is holds true of universals, then it is not correct for particulars; for the fact that a [part of Zayd] which is numerically one admits of contraries is not said of Zayd”, the answer would be that this is true and correct<sup>783</sup>. This property, in the first consideration, belongs to the nature of the mentioned corporeal substance, if its quiddity is considered; this [nature] is universal and particular, and this property is attached to universality<sup>784</sup>, because it is attached to the nature [of substance], and to the category, in the same way as has been said with regard to some properties that specify, and do not make more common, the subjects of the specified [thing]<sup>785</sup>.

[§5.4 *Some accidents seem to have the same property*]

[§5.4.1 *The same property seems to be applicable to accidents such as speech, opinion and surface*]

But it is held that among accidents there is what is like this; this because speech is sometimes true and sometimes false; and opinion sometimes is true, then it becomes false; and surface is white, and then becomes black<sup>786</sup>.

---

<sup>782</sup> I.e. the group of corporeal substances that admit of this property.

<sup>783</sup> Avicenna’s answer is not to be read as conceding what the objection explicitly says, namely that particulars do not admit of this property if universals do in a certain way; for both the preceding and the following passages clearly state that this property belongs to both particulars and universals. He seems rather to agree with another, more subtle point made by the objection, namely the fact that universals cannot have this property *primarily*. In fact, the property is primarily attached to the quiddity of sensible substance, which however does not differ from the quiddity of universal substance; the only difference between these, as has been clarified many times in these chapters, is to be found in the way of existence they have.

<sup>784</sup> Reading *al-kulliyya* (*al-kulliyyata* **BDaMkNk**, *li-l-kulliyyi* **D**, deest **A**) with mss. **AsDiEGIJNRY**, instead of *wa-l-kulliyyata* (Cairo).

<sup>785</sup> The same has been said with regard to the second property of substance, namely being something determinate [§2.1].

<sup>786</sup> The first two doubtful cases are discussed by Aristotle himself in the *Categories* (*Cat.* 4 a21 – b19).

[§5.4.2 Aristotle's answer: change does not take place in speech and opinion themselves, but only in some external objects]

**[C110]** This obscurity has been investigated: as to the case of speech, it does not remain by itself [as a substrate for] truth and falsity; so, a [part] of it which is numerically one does not admit of truth and falsity. As to opinion, it remains, and it is a place [where] this obscurity [occurs]. The commonly accepted answer to this obscurity is common for speech and opinion: it is that nothing changes [by departing] from the state of speech and opinion [towards another state], but change from a state towards another state only occurs in the thing which is the object of speaking, and the object of opinion; the contraries succeed each other on that thing, aside from speech and opinion.

[§5.4.3 Avicenna's corrections: (i) truth and falsehood are at stake here, not the possibility of existing and of not existing; (ii) truth and falsehood are relative attributes which pertain to opinion and speech by themselves, not to their objects; (iii) the change of something can be a cause of change for something else]

**(i)** But this answer, [given] in this way, is not pertinent; for it is not [true] that, if the [actual] thing changes, then the opinion must not change; for the [actual] thing changes in such a way as to make change necessary in opinion [as well], and this because the [actual] thing changes with respect to its being existent; and the opinion about it holds as true that it is existent; thus, since [the actual thing] becomes non-existent and the opinion persists [in stating that] it is existent, the opinion changes as well, since that remaining opinion about it is [now] false, after having been true. This solution only establishes another alteration, while not opposing the refutation of the first alteration; this because it establishes, for the thing, an alteration with regard to existence and non-existence; and we are speaking about the alteration of truth and falsehood<sup>787</sup>.

**(ii)** It is renowned that to the fact that an opinion is true it corresponds a [certain] notion in the opinion, although [this notion] is relational; this notion sometimes ceases to be, not exclusively in the thing itself, but in the opinion. For this attribute, namely “being true”, or being “correspondent to what exists”, belongs to the opinion, not to the thing; and if it ceases to be, it only ceases to be in what it is in. Not every attribute which changes on something needs to be established and stable; also the relative belongs to the group of attributes and accidents which are attached to things, as they concede<sup>788</sup>.

**(iii)** It is not impossible that the change of something be a cause for the change of something else: for instance, I say that the sun and its sunset are a cause for an alteration of

---

<sup>787</sup> Aristotle's point is effectively based upon the existence or non-existence of the object of speech/opinion (*Cat.* 4 b8-10): τῷ γὰρ τὸ πρᾶγμα εἶναι ἢ μὴ εἶναι, τούτῳ καὶ ὁ λόγος ἀληθοῦς ἢ ψευδοῦς εἶναι λέγεται, οὐ τῷ αὐτὸν δεκτικὸν εἶναι τῶν ἐναντίων (“For it is because the actual thing exists or does not exist that the statement is said to be true and false, not because it is able itself to receive contraries”; *wa-dālika anna l-qawla innamā yuqālu fī-hi inna-hu ṣādiqun aw inna-hu kāḍibun min ṭarīqi anna l-amra mawḡūdun aw ḡayru mawḡūdin lā min ṭarīqi anna-hu nafsū-hu qābilun li-l-aḍḍādi* [Ishāq]).

<sup>788</sup> Speech and opinion admit of contraries with regard to a relative attribute of theirs, namely truth (which, being understood as an adequacy to what exists in reality, is relative to existent beings).

the state of the earth and the air; and each of these [things] changes by itself<sup>789</sup>. [C111] It is not true that, if the [actual] thing changes, opinion must not change by virtue of another alteration which follows the impossibility of the thing; but if it is said that substances do not admit of contraries by virtue of their changing, in themselves, with regard to some non-relative meanings, according to a primary alteration, or according to an alteration which does not follow the alteration of something else in the way of the relative only, then opinion is not such, and the obscurity has been solved.

[§5.4.4 *Surface*]

As for surface, it does not change by virtue of an alteration which occurs to it in itself; but [it is] because its subject has an alteration with regard to it. For if we enquire, and we mean by saying “by virtue of its alteration in itself” the fact that it needs not, by itself, to be a subject for the contraries by effect of which it changes in itself, and it does not need - in that - something which determines it and exposes it to that change, then surface, opinion and speech are excluded from the things which share [this property] in some way<sup>790</sup>.

[§5.4.5 *Accidents do admit of contraries in change, but not by themselves*]

As for the objection regarding the fact that accidents do not, by themselves, bear accidents, and the fact that certain accidents will not cease from them by ceasing and being accidental [for them] in a primary way, being succeeded by relational or stable accidents, well, this belongs to substances by means of them; thus this is something I do not think an equitable man has to embark on. [Moreover], even though substance is a cause for the existence of the accident, it is not necessarily impossible that things which accidentally occur to the accident, are concomitant for it or attached to it in the first place, may be attached to substance through it<sup>791</sup>; although this attribution is existent [only] together with [the accident] in substance, and it needs [the accident to be] together with it; as it is not impossible that it have species as well, and genera, that are said thereof. As to the verification of this, you will find it in the sciences<sup>792</sup>.

Let us now sum up, by helping [ourselves] with the fact that accident does not admit, in its being single and in its change by itself, of any contrary; but either it changes with respect to a relative thing, which is not a change in itself, i.e. in a disposition which is established in its essence; or it changes by virtue of the change of what it is in<sup>793</sup>. On the whole, accident certainly has no change that characterizes itself, but it only has a relative change or a subordinate change. [C112]

---

<sup>789</sup> If this is true, it is not impossible that a change in the object of opinion or speech be the cause of a change in opinion and speech themselves.

<sup>790</sup> The solution proposed by Avicenna for this puzzle can be seen as a sort of reformulation of Aristotle’s explanation; it is based upon the point, made in these lines, that if accidents

<sup>791</sup> I.e. it is not impossible that any properties of an accident be transferred to the substance which is

<sup>792</sup> *Kawn wa-fasād* 4 ff.

<sup>793</sup> I.e. it changes when its subject does.

[III.4]  
On beginning the treatment of quantity<sup>794</sup>.

[§1 *Reasons for treating quantity immediately after substance*]

It has become of use to mention quantity right after completing of the treatment of substance, because of some notions that recall it; among these, some coincidences between substance and quantity which have been mentioned to occur in [their] properties, which required the mention of quantity in [the treatment of] substance, without [mentioning] quality and the relative<sup>795</sup>. As to the other six [categories], they follow these four, as you will learn below<sup>796</sup>.

Among these [notions, there is also] the fact that quantity is more common, with respect to existence, than quality, and more correct, with respect to existence, than the relative. As to [its being] more common than quality, it is because number is a part of quantity, and it is not restricted, in its existence, to the things which are connected to motion and matter, without [being present in] the separate things which do not accept neither quality nor anything which is far from their substance. As to [its being] more correct in existence than the relative, it is because the relative is not established in an underlying essence in the same way as quantity is<sup>797</sup>.

It is so also because continuous quantity exists in all natural bodies, without any differentiation; but qualities are different in them. If quantity shares substances with quality, it is attached to the first substance among them, namely body; qualities, instead, are attached to the specific substances which are inferior or intermediate after corporeity<sup>798</sup>.

It is possible to list other things, among these [notions]: [for instance] it is also possible to search, for quality, for properties with respect to which it excels over quantity<sup>799</sup>; but we prefer not to engage ourselves in a research like this, if not in a direct research<sup>800</sup>.

---

<sup>794</sup> This long chapter covers the first lines of ch. 6 of the *Categories* (4 b20 – 5 a14).

<sup>795</sup> Namely, the properties of being unable to accept contrariety and more/less.

<sup>796</sup> The remaining categories will be very briefly discussed by Avicenna in chs. VI.5-6.

<sup>797</sup> This point has already been clarified in the division of categories carried out in *Maqūlāt* II.4: quantity, as an accident, can be conceptualized as such independently from anything else, while relatives always need to be referred to another thing.

<sup>798</sup> Quantity is, in a certain sense, an attribute of body insofar as it is a body (even if, as Avicenna will clarify below, it does not take part in its essence); being as such, it accompanies the “generic” body, while quality only affects “specific” bodies, like those of animals or inanimate things.

<sup>799</sup> The Cairo text runs as follows (112.14): *wa-yumkinu an tuṭlaba li-l-kammiyyati ḥawāṣṣu tafḍulu bi-hā ‘alā l-kayfiyyati* (“it is possible to search, for quantity, for properties with respect to which it excels over quality”). According to all manuscripts, however, Avicenna would speak about properties of quality (*kayfiyya*), instead of quantity (*kammiyya*), thus suggesting that there are properties with respect to which quality is more excellent than quantity. This would sound strange in this passage, where the focus of Avicenna’s enquiry is the reason for the priority of quantity with respect to quality. The Cairo editors therefore exchange *kayfiyya* and *kammiyya*, adopting a suggestion from a marginal gloss in codex **B**, preceded by the note *bi-ḥaṭṭi l-muṣannifi* (“in the handwriting of the author/compiler”); the same correction is suggested in the margin of ms. **Nk**. I translate according to the reading found in most manuscripts: by arguing



[§2 *First question: is quantity a substance or an accident?*]

[§2.1 *Position of the problem: the quantity of body seems to be a form, therefore a substance*]

The first thing we must enquire about, as for the state of quantity, if it is possible and if the enquiry allows it, is whether [quantity] is a substance or an accident. So, if quantity is the corporeity that is united with matter, and constitutes body as a body, then it should be a form which is constitutive of the substances. Form is a substance; therefore, quantity would be a substance. [C113] We say that the verification of these things belongs to what the logician does not take care of, but it is necessary that the logician [just] takes what we say as granted: the clarification of this to him is [to be made] in another discipline<sup>801</sup>.

[§2.2 *Distinction between corporeal form as substance and measurable extension as quantity, i.e. as accident*]

So we say: you must learn that every body is finite<sup>802</sup>; but the definition of body, insofar as it is a body, is not the definition of finite body, insofar as it is finite. Finitude follows every body [only] after this has been constituted as a body by the definition of corporeity<sup>803</sup>; for this reason, body is intellected as a body, and its finitude is not intellected, until it is clarified by means of a demonstration, in the same way as accidents that belong to subjects are clarified by the demonstrations that explain them. So, finitude does not take part in the quiddity of body; and “surface” is not a part of a definition belonging to body. Moreover, even though every body is finite, it is not necessary for dimensions to be realized in the body in act; since [for instance] a sphere, insofar as it is a sphere, is a body, and it is only enclosed by one limit; no separate dimensions in act are supposed in it. But body is a body only because it is, in its disposition and nature, such that it is possible to suppose in it absolutely three dimensions, which intersecate one another perpendicularly upon a single common boundary. This is the form of corporeity.

Hence, the thing in which you can suppose a dimension, then another dimension which intersecates it perpendicularly, then a third [dimension] which intersecates the first two in the same way as the first intersecates [the second, namely] perpendicularly; this thing is a body. Then, if two bodies differ because one of them admits one, or two, or three dimensions more or less than the dimensions which are in the other body, [the first body] does not differ from the second with regard to the fact that it admits three dimensions in an absolute manner; it differs from it regarding how many of these dimensions it has accepted, according to what has been mentioned. So, insofar as it admits three dimensions, it is a

---

that there may be properties in virtue of which quality excels over quantity, Avicenna probably wishes to suggest that the order of the categories is not as relevant a matter as the previous tradition thought.

<sup>800</sup> Literally: a research “without a middle”, “non-mediate”, therefore an “immediate” or “direct” research about the properties of quality.

<sup>801</sup> The demonstration of the accidental nature of quantity (discrete quantity, number, and continuous quantity, extension) will be carried out by Avicenna in *Ilāhiyyāt* III 3-5.

<sup>802</sup> Finiteness is here taken by Avicenna as a basic quantitative determination: it consists of having three dimensions of a certain extent.

<sup>803</sup> Reading *bi-ḥaddi* with all mss., instead of *ḥaddu* (Cairo).

body absolutely; insofar as it admits of three dimensions, some of them or the three of them, which do exist in it actually, if it is possible, then it is measured; this happens to it insofar as [C114] it is measured, whether the measurement is not characteristic of it, if possible, or it is characteristic.

The corporeal form, whose form is substantiality, is that with respect to which no body is bigger than another body<sup>804</sup>; so it belongs to the first subdivision, namely substantial form, but it is a substance, not an accident. That which is characterised and described by measurement in the three dimensions, being measured by means of a definite or an indefinite measure, is the accident which belongs to quantity.

[§2.3 *Differences between substantial and accidental corporeity*]

One body exists in such a manner that it accidentally happens to be different with respect to quantity, but not to be different with respect to form; because for a piece of wax, according to whatsoever shape you shape it, it is maintained that it is such that one may suppose three absolute dimensions therein, according to the mentioned form; and that [form] is not different with respect to it, but with every [different] shape those dimensions which are defined and determined, in length, width and depth in act or potency are different, when that shape is defined. Because if the candle is shaped like a sphere, it is large according to the relation of definite dimensions, which are different from the definite and determinate [dimensions] it would admit if it were shaped like a cube; and this is its quantity. Water's substance as water is maintained, but its volume grows when it rarefies; in fact, it is established for it a specific substantiality, not to speak of the generic corporeity, and [only] its corporeal extension changes. Nobody could say that, when the spherical body becomes a cube, its dimensions do not change, because it is equivalent to what has been at first as regards its surface<sup>805</sup>. This is because you will learn that "equivalent" is said of what is equivalent actually, and it is said of what is equivalent potentially; [and you will learn] that shapes like these do not have a true equivalence; but the meaning of what is said about them with this [word] is that they are in potential equivalence; and what is in potency is not existent later.

Actual corporeity in the first sense is not measured by anything at all, because what measures<sup>806</sup> must be [either] equivalent to what is measured<sup>807</sup>, or different from it and lesser than it<sup>808</sup>; and what is equivalent to what is measured does not measure in equivalence insofar as it is different from what is measured; [on the other hand,] what is lesser is different from what it measures; so, [C115] what measures<sup>809</sup> is not non-different from everything which has the same nature as the thing it measures; but it is inevitable that it be different from some of the things which have the same nature as the thing it

---

<sup>804</sup> Bodies share the character of corporeity, i.e. tridimensionality, as an unchanging substantial attribute in which no changes at all take place. Therefore

<sup>805</sup> *Miṣāḥa*, namely "surface" in a geometrical sense.

<sup>806</sup> Reading *al-muqaddir* instead of *al-muqaddar* (Cairo).

<sup>807</sup> Reading *al-muqaddar* with mss. **GDYNkNoBJ**, instead of *al-miqdār* (Cairo).

<sup>808</sup> Whilst something measured can be bigger than its measure, its measure to be effective needs to be either lesser than it or equal to it.

<sup>809</sup> Reading *yuqaddiru* instead of *yuqaddaru* (Cairo).

measures<sup>810</sup>. Likewise what measures, in this notion according to which a body is not different from another body, is not established as being measuring or measured; therefore, the measurement of bodies occurs in that other sense, and that is quantity<sup>811</sup>.

If that [thing] in which there are equivalence, difference and measurement is not the meaning because of which a body becomes a body, the corporeal form is not the corporeity which is quantity; but the corporeity which is quantity, which is an accident, is corporeity in another sense, namely the one we pointed to, although it is close to the corporeal form, and it requires it<sup>812</sup>. Likewise, you will find things which resemble quality, but are not qualities<sup>813</sup>.

[§2.4 *Surface has a bidimensional form which is not its quantity; this form is not a substance*]

Also surface has a form which is different from the quantity which is in it; that form is the fact that it is possible to suppose in it two dimensions, in the mentioned way; this happens because surface is the end of a certain thing in which it is possible to suppose three dimensions. Likewise, this form does not exempt [surface] from accidentality, and from the need for a subject. As to its quantity, it is like the quantity of a body, and it is a quantity stable in it which does not change, not<sup>814</sup> as [it does] in the body. Furthermore, regarding this subject, deeper investigations should be carried out, which will be taken up in the *Appendices*<sup>815</sup>. If surface has a form which quantity accompanies and constitutes, it is not necessary that surface be a substance. We did not say that every form, belonging to a certain species, which is accompanied by an accident is a substance; this happens with regard to the form of body, and with nothing else.

So, the corporeity which falls under quantity follows the corporeity which is the form by necessity, in the determination which follows the body; and if the corporeal form is abstracted with its quantity, or quantity is abstracted from it as being taken in mind, the abstracted [quantity] is called mathematical body.

[§2.5 *Number is an accident*]

---

<sup>810</sup> Reading *muqaddarahū* instead of *muqaddirahū* (Cairo).

<sup>811</sup> I understand this difficult passage as follows: measurement, where it is found as such, presupposes either equivalence or difference between what measures and what is measured. If it also presupposes difference, it cannot be found in substantial corporeity, which has been described as being something with respect to which all bodies are equal, independently on the actual quantity of their corporeal dimensions. Therefore, measurement is not to be found in corporeal forms.

<sup>812</sup> If quantity is to be understood as the measurable, accidental amount of the dimensions of a body, it requires of course that there be dimensions (namely, it requires the existence of the substantial form of corporeity).

<sup>813</sup> This might be applied, for instance, to the case of specific differences and forms, which are substances but may be seen as qualities; see above, ch. I.6 and III.3 [§1.2].

<sup>814</sup> It is difficult to explain this remark: if the quantity of surface is quantity, it should be subject to change (by virtue of its being an accident); on the other hand, it is not clear why the quantity of body, of which surface is a limit (or a common boundary between its parts), should change while that of surface itself should remain unchanged. It would be probably better to read, instead of *lā, illā* (attested by mss. **DiNo** and **Δ**, according to the Cairo apparatus), for the sentence would run as follows: “which does not change, but as [it does] in body”.

<sup>815</sup> For the *Book of Appendices*, see above III.1 [§1.5].

[C116] You must also know that it is sometimes disputed, regarding number, whether it is an accident or not an accident; you must know that unity, in things which have unity, is an accident which does not take part in their quiddity; and that what is composed of accidents is an accident<sup>816</sup>. This is the proportion according to which you recall what is true, in these enquiries; as to the verification of these things, it [will be] in another discipline<sup>817</sup>.

[§3 *The differentiae of quantity*]

We now say that quantity is subdivided into continuous [quantity] and discrete [quantity]. In another respect, quantity is subdivided into [quantity] whose parts have position, and [quantity] whose parts do not have position. So, quantity is divided by two interpenetrating divisions<sup>818</sup>.

[§4 *First division: continuous and discrete*]

[§4.1 *The meaning of “continuous”*]

[§4.1.1 *There are three possible meanings of “continuous”*]

However, “continuous” is an equivocal name to which it may happen to be multiple, although its meaning is a unique notion; and because of this [fact] there occurs a mistake in the meanings of “continuous”. For “continuous” is [1] what constitutes a differentia of *quantum* or quantity; “continuous” is [2] an accident which accompanies magnitudes, insofar as they are magnitudes; “continuous” is [3] an accident which accompanies them, insofar as they are natural<sup>819</sup>.

[§4.1.2 *First meaning of “continuous”: continuous per se, a difference of quantity*]

[1] As for the “continuous” which is a differentia [of quantity], it has the property of being said of the only extension in itself, and it does not need to be related to another extension; that is because its definition is “that for which it is possible to suppose some parts, between which a common boundary is traced, that is the limit for two of these parts”; under another consideration, [this boundary] is a limit for one of these two parts; I mean, if you posit it in your imagination, in indication, as being closer to you; so it is as if [this part] were first, and [it were] the beginning of the other; and it is said about this whole thing that it is continuous. But it is not a condition, for this [continuity], that there be a subdivision,

---

<sup>816</sup> Namely, all other numbers, numbers being aggregates of unities.

<sup>817</sup> Avicenna’s statement is probably to be understood as a warning to the reader, which cannot expect to read more than what he briefly said; this problem must not be tackled in logic. The reference to the “other discipline” is probably a reference to *Ilāhiyyāt* III 3-5.

<sup>818</sup> The divisions are said to be “intertwined” (*mutadāhila*) by Avicenna because they do not perfectly correspond to each other: although the second division (things with position – without position) might be seen as a redefinition of the first one (continuous – discrete), they are in fact diverging, and classify the same quantities in different ways. Whilst in this chapter Avicenna extensively deals with the first division, the second will be treated in chapter IV.1.

<sup>819</sup> The same tripartition of the meanings of continuous (*muttaṣil*) will be recalled in the *Physics* of the *Šifā’* (*Samā’ tabī’ī* III 2).

or a part in act; but the condition for it is that there be the possibility of this conjecture, and this supposition. This sense of continuous is that into which quantity is subdivided, [being also subdivided] into the discrete.

[§4.1.3 *The second sense of “continuous”: continuous in relation to something else*]

What the two other senses have in common is that they are both said in relation to something else; in their cases, “continuous” is not the “continuous” by itself, but the continuous in relation to something else. [2] So, [something] is said continuous because in it there is an extremity and a limit in act which is by itself an extremity of what [the first thing] is said to be continuous with; so that, if they were two limits [instead of one], there would be contiguity instead of continuity<sup>820</sup>. For instance, it is like the line which is continuous to another line when forming an angle, defined by one endpoint in act<sup>821</sup> which is an extremity for both lines<sup>822</sup>. Or it is like a body, if it comes to have two parts by virtue of two accidents which are separate in it<sup>823</sup>; so, it is clear that each [C117] one of the two accidents is not in what the other one is, like blackness and whiteness; because each one of them is characterized by a subject which is what made it different from the other. In fact, things which in nature share a certain accident are mutually different in number; so, what is characterised by the spreading of whiteness in it is finite, and what is characterised by the spreading of blackness in it is finite; and all this is in act. The two supposed limits are not two, because of what occurred; but there is only one limit.

This is a continuity which sometimes belongs to quantities; and they are quantities to which nothing but attributes of quantities are attached, like the disposition of position which belongs to the two lines of the angle; and like a contiguity which is supposed instead of blackness, in the example that we have made. There is no contiguity which is supposed in it instead of whiteness, in such a way that it is not taken together with a natural accident; so, by virtue of that, two parts of a surface or a body are discriminated. But this continuity is the [sort of] contact which, if the ends in it were not one in the subject and two according to relation, and if they were two according to the subject, then instead of this continuity there would be [the sort of] contact which is contiguity<sup>824</sup>.

---

<sup>820</sup> “Contiguity” or “contact” (*tamāss*, being *mumāss* “contiguous”) is defined in the *Physics* of the *Šifā’* as the condition of two things whose limits are considered as having the same position (*Samā’ tabī’ī* III 2), and therefore are “together” (*ma’an*). Continuity is different, inasmuch as two continuous things do not have two contiguous limits, but a single limit in common which is, by itself, a limit of both.

<sup>821</sup> Reading *bi-l-fi’li* with all mss., instead of *bi-l-faṣli* (Cairo).

<sup>822</sup> Avicenna is here referring to the vertex, upon which the two half-lines which form an angle are continuous.

<sup>823</sup> The example Avicenna will describe in the following lines is that of a body which comes to have, by accident, a white part and a black part.

<sup>824</sup> If the two accidents are held by the same subject, as in the example Avicenna mentioned, they are to be taken as “two” in a relative sense only; if they were two different subjects, there would be two different things whose common boundary actually results from their two limits being taken together (therefore, two contiguous things).

[§4.1.4 *The third sense of continuous: continuity in motion*]

As to the third sort of continuity, it is [the following]: the thing which has something continuous with it follows the continuous [thing] in its motion<sup>825</sup>; [a motion] in which the extreme on which [the thing] borders ceases to be in its place, where it encounters its limit. It is not impossible that there be contiguity in this continuity, if there is a following in motion [depending] on adjacency or interweaving<sup>826</sup>. For, if the state of a body with respect to another body is such that when it is moved and transferred from its place, its extremity moves the extremity of the other [body] on which it borders, so that the other [body] comes where [the first] comes, then it is said that [the body] is continuous with it.

[§4.1.5 *The sense of continuous at stake in the Categories is the first one*]

The actual continuity, as regards this place, is the first one, although its name has merely been transferred to it from the continuity which is according to relation; since there were imagined for [the thing continuous in the first sense] some parts, between which there is relational continuity. On many occasions in which a name is transferred, for a meaning, from the name of another thing, then [the second thing] becomes, according to a certain discipline, more entitled to [bearing] that name<sup>827</sup>.

[§4.2 *Continuous quantities are continuous in this sense*]

**[C118]** So, among quantities there is what is continuous; and there is what is not continuous. The body which falls under quantity comes under [what is] continuous. How [could it] not? You find that this body is such that it is possible to suppose, between its parts, a common boundary, which is a surface; therefore, you find that its parts share a single surface, on which they meet. And you will find the same for [the parts of] a surface, in the line; and [the same] for the line in the point, and even [the same] for time: indeed, we imagine in it something upon which its past and its future are continuous, namely the instant.

[§4.3 *The divisibility of bodies depends on their quantity, not on their substantial corporeity*]

This sensible body [which falls under quantity] is divided into parts only insofar as it has a dimension; so, that dimension [can be] divided into what it is divided into. So, [this body] has parts insofar as it has that extension<sup>828</sup>, not insofar as it is a body in an absolute sense, or a substantial body; for this body has parts insofar as it can be different and equivalent, not insofar as it does not admit difference and equivalence, as you already

---

<sup>825</sup> I.e. when the continuous thing moves, the thing continuous to it follows it.

<sup>826</sup> As will be clarified in the following example, this same sort of continuity can admit of contiguity, in the sense that it can occur in the case of moving contiguous bodies.

<sup>827</sup> It is the case of “continuous” by itself, which is the primary meaning of *muttaşil* in logic.

<sup>828</sup> Namely, the aforementioned “dimension” (*bu’d*).

learned. Therefore, division into parts only pertains to the body in the first way, insofar as it has a quantity, not because of its form.

If someone said: “partition cannot be caused but by a thing which naturally admits partition; this admittance and predisposition are only to be found in matter, therefore the predisposition to partition would be caused by matter, not by quantity”, [well]: this is a problem which we will solve in the [other] sciences. You must concede here that partition belongs to extension, inasmuch as it is extension, although it has some share in this regard with matter. In the [other] sciences we will explain what is the property of matter in this respect, and what is the essential role of quantity in this respect, since we must not occupy ourselves with this problem in the science of logicians. You will learn, nonetheless, that the partition which is accompanied by motion and separation in a place is different from the partition in which there is only the determination of the part [as a part]. All of what we said is our indication of continuous quantity.

[§4.4 *Discrete quantity does not have continuous parts*]

As to discrete quantity, it is like number seven, for whose parts there exists no common boundary; for if you part seven into three and four, you cannot find between them a common extremity, because numbers have no extremities other than unity. There does not exist a common unity between the part which is three and the part which is four; if it existed, [C119] and it were one of their units, then the units would become six, and number seven would be diminished; [on the contrary], if it were external to them, number seven would be composed by eight units.

[§5 *Types and properties of continuous quantity*]

[§5.1 *The two types of continuous quantity*]

Let us say now that continuous quantity either has a stable essence in the thing for which it is a quantity; or its essence is not stable, but it is in the renewal<sup>829</sup>.

[§5.2 *First type: changing continuous quantity*]

Let us posit that every continuous which is by itself in the renewal is a disposition of motion, which undoubtedly is a state of the body, because it is time; the explanation of this will be in<sup>830</sup> natural science.

[§5.3 *Second type: stable continuous quantity*]

As to stable continuous quantity, let it be called magnitude and measure. Its extension can be **(a)** one dimension, so it allows only one partition, to which no other partition perpendicular to it is opposed: this [extension] is the line. Or **(b)** it allows partition in one

---

<sup>829</sup> “Renewal”: ar. *Tağaddud*. The case of continuous quantities “in the renewal” is the case of changing continuous quantity, which correspond to time.

<sup>830</sup> Reading *fī l-‘ilmi l-ṭabī‘iyyi* with all mss., instead of *al-‘ilmu l-ṭabī‘iyyu* (Cairo).

direction, and then it is possible that another partition, perpendicular to the first, opposes it, so that it is possible to suppose in [the quantity] two dimensions which mutually intersect perpendicularly, and no other [intersection] is possible: this is the surface. Or (c) the extension which allows partition does it in three directions; and this is the body which falls under quantity. It is called body insofar as it has this attribute. It is also called depth, height, thickness. As to [its being called] “thickness”<sup>831</sup>, it is because it is a sort of filling between the surfaces; as to [its being called] “depth”<sup>832</sup>, it is because it is a descending thickness, namely [a thickness] considered from the top to the bottom; as to [its being called] “height”, it is because it is an ascending thickness, namely [a thickness] considered from the bottom to the top<sup>833</sup>. The name “depth” sometimes falls upon another meaning, which we will mention [later]<sup>834</sup>.

[§5.4 *The status of place with regard to the category of quantity*]

[§5.4.1 *From Aristotle’s definition of place, it is clear that place is a surface*]

As for place, and the fact that they<sup>835</sup> add it to the notion of extensions, it is something of which I do not perceive the usefulness.

This because they say that “place is the limit of a containing body”, which encompasses the contained body; hence, this limit is a place with respect to the contained body; so, place is a limit with respect to the containing body, and containing in relation to the contained body; but [it is] a surface in its substance and essence.

[§5.4.2 *Place is not a quantity in its being place, but in its being a surface: there is no reason for positing it as a separate species of quantity*]

We say to them that the genus, for everything which has a genus, belongs to the things by which its substance is constituted. So, if place is a quantity because it is a sum of these [things], namely because it is a surface that is a limit, and [because it is] containing, then either its being [C120] a limit and a container takes part in its constitution as a quantity, or these do not.

(a) If they take part [in its constitution], then place, insofar as it is a quantity, must have the quantity which benefits from the two specifying notions of being receptive of dimensions and of a subdivision, which is different from the subdivision from which surface, insofar as it is surface, benefits. But it does not<sup>836</sup>.

---

<sup>831</sup> Ar. *Tiḥan/Tuḥn*: it is the *maṣdar* of verb *taḥuna*, which means “to be/become thick, dense, compact” (LANE).

<sup>832</sup> Ar. *‘Amq*, also used to indicate the third dimension.

<sup>833</sup> “Height” translates here *samk*, which “[...] signifies the *extent* of anything *from top to bottom*; its *height*, *depth*, and *thickness*” (LANE).

<sup>834</sup> The various meanings of “depth” (*‘amq*) will be discussed again in the treatment of quantity by accident (see below, IV.1 [§4.2]).

<sup>835</sup> I.e. Aristotle.

<sup>836</sup> If we expect the quantity of place to be different from that of surface, we must also expect some distinctive features in the properties of its being quantified (namely, its being receptive of dimensions and its admitting of a division into parts). However, it does not; it is therefore a continuous quantity inasmuch as it shares the properties of surface.



(b) If its being a limit and a container do not take part in its being a quantity, then this aspect falls under quantity only because its subject or a part of it, namely surface, falls under quantity. Then the actual quantity is surface; and it accidentally occurs to that thing, which is in itself a quantity, that it contains. In its substance there would not be, therefore, any other thing than surface; it would then fall under what has been exhaustively mentioned and enumerated<sup>837</sup>; and it would not be a species extrinsic to it.

Furthermore [it is so] since, if place were a quantity because it is a limit or a container, then something, insofar as it is relative, would be a quantity<sup>838</sup>.

Moreover, they must show us the quantity that belongs to the limit, inasmuch as it is a limit, and [the quantity which belongs] to the container, inasmuch as it is a container, as a quantity which is different from that of surface. They do not find [it]; it remains, then, that place is a quantity by virtue of its being a surface.

For place is either a species of surface, which is [ranged] under it, and not a species of quantity, in the rank of surface, numbered with it as a species under quantity; or [it is] a surface taken in a specific state. Then it is also necessary that body, taken as a being in a specific state, be among the things numbered as a sixth species [of quantity]; for instance it is necessary that body, inasmuch as it is localized, be another species added to those we mentioned, not, if it must be absolutely so, a species of the absolute body, if you consider the first species of something. We must not then, when we enumerate the species of the genera, enumerate the species of their species together with them; and we must not enumerate their species insofar as they accidentally have properties more specific than those, which divide them<sup>839</sup>.

Hence, this is continuous quantity.

[§6 *Types of discrete quantity*]

[§6.1 *Number*]

[§6.1.1 *Number is in itself a collection of units*]

As to discrete quantity, it cannot be anything else than number; because the subsistence of the discrete [as such consists] of separate things; separate things consist of single things<sup>840</sup>; single things are units. Units are either the thing itself which is not divided [C121], insofar as it is not divided, or a thing in which there is unity, and this is only endowed with unity, and it has another existence which bears unity<sup>841</sup>. Unities are those things from which [in themselves] a thing endowed in itself with discrete quantity is collected, and its number is the amount of those unities. As for the things in which those unities are, they all bear number, which is in itself a discrete quantity; moreover, there does

<sup>837</sup> Namely, the aforementioned kinds of continuous quantities [§5.3].

<sup>838</sup> Being a limit and containing are relative determinations; if these constitute place as a quantity, quantity will not be a quantity by itself, but a quantity by virtue of some attributes which fall under another category (that of the relative).

<sup>839</sup> The consequence of this statement is that place must not be mentioned among the species of continuous quantities, but simply as a species of surface.

<sup>840</sup> The Arabic word for “discrete” (διωρισμένον in Aristotle’s *Categories*) is *munfaṣil* (also *mutafaṣṣil*), which literally means “divided”. It is then clear that what is divided consists of separate, divided parts (*mutafarriqāt*), which are by themselves singular (*mufradāt*).

<sup>841</sup> See the definition of unity in the *Ilāhiyyāt* of the *Šifā’*, ch. III.2.

not exist in them a notion of discrete quantity other than the notion of the collection of those units; and they do not have a measuring thing extrinsic to their own measuring thing, insofar as they are numbered; nor have they the possibility of being equivalent and non-equivalent, which depends on their discreteness, in a notion other than that of the number which falls upon them.

[§6.1.2 *There is no discrete quantity other than number*]

Hence, it is not possible that they have a measuring thing, or the possibility of being equivalent and non-equivalent, in such a way that you do not take into account number, when considering them; but you only take into account, when considering them, a certain meaning different from number, among the meanings which are to be found in something that belongs to the items which are not numbers; as if it were, for example, a voice, or a motion, or a body. Hence, if it were possible to find, in one thing, a measurement and a consideration of equivalence and non-equivalence which does not include the continuity of the thing, nor includes on the other hand its numerical discreteness, but instead [includes] another type of discreteness, then it would be possible to find discrete quantities other than numbers. But you cannot find anything related to capability of allowing measurement and the possibility of being equivalent and non-equivalent, if you do not consider its continuity or number, nothing else. And if you do not take into account the number of things, and they do not have a continuity which is measured by that [number], you cannot find in them any measurement or discrete quantity.

[§6.2 *Audible speech*]

[§6.2.1 *Some people had doubts concerning the nature of speech, and Aristotle's claim that it is a discrete quantity*]

\*\*Particularly, their commentator says that the short syllable has, with the long syllable, the same relation as that of a number to a number. This is what permits to number it by virtue of number. Its state, in this respect, is the same as that of an amount [of units]\*\*<sup>842</sup>.

---

<sup>842</sup> This brief quotation, despite being related with the following discussion about the status of speech, seems out of context here, and it does for four reasons. (1) The question of speech has not yet been introduced, whereby it openly will be a few lines below; it seems unlikely, though not impossible, that the discussion begin with a specific statement about the relation between syllables, after the general observations which immediately precede; (2) moreover, the junction to the preceding sentence - by means of the adverbial locution *lā siyyamā* ("particularly") - should be exegetic, or imply a sort of consecutiveness, which is difficult to see here. (3) There is no possible referent, in the preceding sentences, for the male plural pronoun to which "commentator" (*mufassir*) is connected; this difficulty could however be avoided by supposing that Avicenna, here as in other places, is speaking of Aristotle, or the ancient philosophers, in the plural (see for instance above, III.1 [§2]). (4) It is not easy to guess the connection between this passage and the statement that immediately follows: there it is said in fact that the only case in which, for some reason, it was not possible to discriminate clearly between continuous and discrete quantity is that of speech. The passage would better fit instead the end of section [§6.2.1], as a specification of the sentence "They said... by essence"; at least the referent of the expression "their commentator" would be then clear. However, no manuscript evidence legitimates such a transposition: this short passage is present, with minor variations, in all of the consulted manuscripts. The only exception is ms. E, where these lines are missing integrally.

What is strange is that this was not doubtful about bodies which are composed by non-continuous [parts], which are measured by [number] one and have parts, insofar as they are discrete; nor [was this doubtful] about separate times, nor about the motions of percussions, [C122] nor about the number of qualities which are found in paintings and drawings<sup>843</sup>; this was only doubtful, and obscure to some people, in the case of audible speech. They said, in fact, that [speech] is a certain part of discrete quantity by essence.

[§6.2.2 *First explanation: speech is a quantity by virtue of the number of its temporal divisions*]

Furthermore, some of them posited as a cause for this the fact that speech is measured by its syllables; syllables are its parts; syllables have times that measure them; therefore, syllables measure the aggregate by virtue of their time.

Hence, they only measure speech by the number of the subdivisions of its time, and by the extensions [of these subdivisions]; so, they actually render speech a quantity by virtue of the number of its time; then speech, in their opinion, is a quantity because of two things [already] belonging to quantity, that are united with it, but not in its essence.

[§6.2.3 *Second explanation: speech is a quantity because voice can be enlarged and diminished*]

Other people abstain from this [opinion], and make efforts for this in another way. They say that voice can be enlarged and diminished with regard to the state of hitting and being hit; this enlarging is not considered in time, therefore it falls under another kind [of consideration]. So these people do not only posit speech, namely [the speech] which is composed by syllables, and only this as a discrete quantity; but they [also] posit voice itself as a quantity. Moreover, this sophism is not even useful to them, as to what concerns us: because the way in which voice should be a quantity for them, if it [actually] is a quantity according to it, is a way that imposes continuous quantity therein. They only needed to establish a non-continuous quantity, while the enlargement and diminution of voice is its heaviness and lightness, or its loudness and feebleness; and these are actually qualities, as you will learn in the appropriate place<sup>844</sup>, not quantities. Moreover, they posited the quantity of the voice in the quantity of what is produced by it; then, they posited among quantities by accident many other examples of things other than the voice.

[§6.2.4 *Third explanation: speech is a quantity because it is formed by syllables as numerable parts*]

---

<sup>843</sup> All of these are here mentioned by Avicenna as examples of continuous quantities which are discrete *per accidens*. The bodies of animals are continuous by themselves, but discrete inasmuch as they have countable limbs (two arms, two legs, etc.); time can be subdivided into discrete moments, despite being continuous *per se*; the surface of paintings is accidentally discrete, because it is divided into parts of different colours. These examples will be recalled below at [§7.2.5].

<sup>844</sup> I.e. in the treatment of the category of quality, in treatises V-VI.

A group of better-discerning people<sup>845</sup> stated that speech is not a quantity by virtue of any of these [reasons]; but it is because syllable is a part of speech, and syllable numbers it. Everything which has a part is numbered by its part; then, it is a quantity.

[§6.2.5 *Correction of the third explanation. Speech is numerable because of its parts, but is not a quantity per se*]

The major [premise] of their syllogism is incorrect; **[C123]** because not everything that has a part is measured by its part in such a way that it must fall by itself under quantity<sup>846</sup>. It is possible, however, that it have another existence and essence, and a certain quantity came to fall accidentally upon it: either an extension, or a number, such that it is quantified by it, and thereby [the thing] comes to have a part that numbers it. Things like these are not quantities *per se*, nor do they enter [the category of] quantity as a species enters the genus. The particularness and measurement of a syllable [only exist] because [the syllable] is one, and speech is manifold; hence, speech has the property of quantity only in virtue of the multiplicity that is found therein, namely number; so, if you consider neither the multiplicity that is therein and by which [speech] is determined, nor the time which accompanies it, nor even the extensions of what produces voice, or are [found] therein, you find absolutely no quantity in speech. Hence, if such things made the things they are associated with fall under the category of quantity *per se*, then there are the motions of impacts, the tones of melodies, the colors of [painted] decorations, the limbs of animals, and other things among what has such quantities, all of them or some of them: how come these do not belong to quantity by itself?

Nobody can say that number may fall upon extensions, and the fact that number falls upon them does not prevent them from being quantities in themselves; and [that] it is so [in the case of] speech. For extensions, although they are multiple by number, have the property of quantity after multiplicity and before it, in the definition of their continuity, and certain states which follow upon them and accompany them insofar as they are continuous [quantities], whose number is not taken into account: for instance, their being receptive of partition and [their] being divided in actuality. So, if you posit them as numbers in themselves, being receptive of partition does not posit them as numbers in themselves; and they also allow equivalence and non-equivalence by adaptation in the definition of their continuity, as we shall explain later, without needing a number or some other thing to be attached to them.

[§6.2.6 *Aristotle listed speech among discrete quantities according to a commonly accepted opinion*]

---

<sup>845</sup> “A group of better-discerning people”: ar. *qawmun mimman hum ašaddu taḥṣīlan*. “Validating” philosophers are those who better confirm Aristotle’s thought; for other occurrences of this word in the preceding chapters, for instance I.1 [§5]. In this case, the reference is very likely to al-Fārābī: see the INTRODUCTION, 2.4.3, and the COMMENTARY *ad loc*,

<sup>846</sup> For the logical structure of the commentator’s argument, see the COMMENTARY *ad loc*.

As to the First Teacher<sup>847</sup>, he carried out his discourse about this according to something that was commonly accepted among [his contemporaries]. He enumerated among quantities some commonly accepted subdivisions, but he did not undertake to verify them. He did the same in other places of this book, as he did when dividing motion, or as he did in some places of [his discussion of] the relative.

[§7 *Some people hold that heaviness and lightness are quantities*]

[C124] Some other people claimed that heaviness falls under quantity. They said: for this reason, sometimes a weight is half of a weight, and a weight is equivalent to a weight. It is not so, because weight cannot be said to be divided into parts, and equivalent, by itself. Weight, instead, is the principle of a downward motion; so, if there is in weight [one weight] that resists to another weight, and the other cannot lift it on a balance, being firm in itself, it is said that it is equivalent to it (namely, not resisting to it with respect to motion)<sup>848</sup>. Thus, if [the first weight] can [lift the other], it is said to be bigger than that<sup>849</sup>; and if it can move that other body, and it does not manage to move a body whose nature is the same as the other body, which is the double of that other body (not the double of that body that is capable of moving it); then it is said that [the first] is equivalent to the double [of the other], and the other is equivalent to the half [of the first]<sup>850</sup>. Furthermore, it is said of the “heavy” that moves, in the same time, along the double of a certain distance, that it is “double”<sup>851</sup>.

In general, heaviness can only be measured by measuring motion, time or interval; resistance does not belong to the extensions of bodies. Heaviness is only a capacity, and likewise lightness; I mean by “lightness” the potency that ascends upwards. It is possible to use, for lightness, a reversed balance (in fluids); I mean by “reversed” that the correspondences between its scales are ascending<sup>852</sup>.

You can also use, for the compulsory inclinations that result from [the acts of] pushing and throwing, balances whose rules are the same as those of the balance [that measures] heaviness; but they are not [seen] in respect of heaviness, so it does not follow from this that compulsory inclinations are quantities.

---

<sup>847</sup> I.e. Aristotle.

<sup>848</sup> Two equivalent weights perfectly balance the scales (which must be imagined here as a two-pan balance): therefore, none of them is heavy enough as to lift the other. “Equivalence” with respect to weight also means that, on the scales, none of these weights opposes the other in the action of moving.

<sup>849</sup> Of course, if the weight on the scales manages to lift another weight, it is heavier.

<sup>850</sup> This situation can be better explained by means of a concrete example: if an orange (the first body) on a balance lifts a 150-gram mass (the “other” body), while it does not lift a 300-gram mass, then it is clear that the weight of the orange is equivalent to that of the second mass, whereas the 150-gram mass is surely equivalent to half the weight of the orange.

<sup>851</sup> I.e. it is double with respect to a weight which, during the same time, moves along the single interval.

<sup>852</sup> Avicenna seems to have here in mind a sort of hydrostatic balance.

**FOURTH TREATISE**

Of the Second Section

Of the First Part of the *Book of the Cure*

## [IV.1]

### On the clarification of the second division of quantity, and the clarification of quantity by accident<sup>853</sup>

[§1 *The second division of quantity. Three conditions for a quantity having position*]

[C127] As to the other division of quantity, it [consists of the fact that] among quantities there is what has a position in its parts, and what does not have a position [in its parts]<sup>854</sup>. The parts which have a position must have [(1)] a stable existence in actuality, simultaneously, in order for some of them to have a position with respect to some others<sup>855</sup>; [(2)] they also [must] have continuity, and also [(3)] an ordering [such that] this makes them undergo a designation of where each of them is with respect to its companion.

[§2 *“Position” as a property of quantities*]

[§2.1 *The meanings of “position”*]

“Position” is a shared name, which is said of diverse meanings. [(1)] “Position” is called everything which is the object of any sort of pointer, where the pointer is the determination of the direction which characterises something<sup>856</sup> among the [possible] directions in the world. In this sense, we say that a point has a position, and that unity does not have a position. [(2)] “Position” is also said of a meaning more specific than this; because “position” is said of some quantities, and this sense is what we spoke [about]<sup>857</sup>. [(3)] “Position” is also said of the meaning which is embraced by one of the nine [accidental] categories; namely, it is the state of a body with respect to the relation [which] its parts [hold] towards one another, in their directions. This “position” is not said truly but of substances; it is not said of the line and the surface<sup>858</sup>. “Position” is also said of other meanings which do not depend on extensions or indications.

[§2.2 *The “position” found in quantities*]

[C128] The “position” which is sought for with regard to quantity is “position” in the second sense. It is as if its name were transferred from the third meaning; so, since the

---

<sup>853</sup> This chapter corresponds to *Cat.* 5 a15 – b10.

<sup>854</sup> *Ar. Cat.* 5 a15-16: Ἐτι τὰ μὲν ἐκ θέσιν ἐχόντων πρὸς ἄλληλα τῶν ἐν αὐτοῖς μορίων συνέστηκεν, τὰ δὲ οὐκ ἐξ ἐχόντων θέσιν (“Further, some quantities are composed of parts which have position in relation to one another, others are not composed of parts which have position”).

<sup>855</sup> This does not mean that these parts exist simultaneously in act, since (as will be stated below, [§2.2]) continuous quantities only have parts in potency; but it means that they can be supposed as simultaneous and fixed.

<sup>856</sup> Reading *taḥuṣṣu l-ṣay’a* with mss. **DiJGY**, instead of *taḥuṣṣuhu* (Cairo).

<sup>857</sup> I.e., the sense introduced in the first paragraph.

<sup>858</sup> For Avicenna’s brief treatment of the category of position (the Aristotelian κείσθαι) see below, ch. VI.6 [§1].

position of the body which belongs to the category of substance is due to the mutual state of its parts, it is as if an analogous of it, or an associated thing, were posited, when a [certain] position was considered in the body belonging to quantity; although neither the body which belongs to quantity, nor the surface nor the line, must have directions and a place by themselves<sup>859</sup>. But the body which belongs to quantity has parts in potency, which have continuity and distribution; and each of these parts, if they are supposed as existent, has an indication of where it is with respect to the other parts; the same [holds for] the line and the surface. This meaning is in some way correspondent to that [other] meaning, which concerns the substantial body; thus, it has been called by its name.

[§2.3 *A moving body has a changing position*]

It has been said that a moving body does not have a position. Thus, if he who said this, [namely] that it does not have a position, meant the “position” that falls under the category, it might be supposed to be true; but it is not so, for there is a difference between something not having a position and something not having a fixed position; so as there is a difference between a body not having a “where”, and a body not having a fixed “where”. As motion, according to [its] verification, does not prevent the body from having a “where”, although it prevents it from having a fixed “where”, so is the state of motion with respect to position: because it does not prevent the body from having position, though it prevents it from having a fixed position. But the position which is considered in the category of quantity is different from that position<sup>860</sup>; and it is not changing, nor capable of change in the moving body. If [the body] is moving, this motion does not deprive anything of the conditions of this “position”, which is the fact that quantity is such that it is possible to suppose in it some parts, if they are supposed, which are continuous, and some of them are close to some others, [so that] this closeness follows in the body. For motion does not remove the proximities of the parts in relation to one another; and it does not prevent from pointing, for each part, where it is in relation to the other; those proximities are preserved.

If the proximities come with other things external to the body, and changeable, so that if for instance a body which is **[C129]** moving has a distinguishing figure or quality, and this mark is in some of its extremities, [then] some of its parts are said to be adjacent to that mark, and the other part is said to be remote from that mark; and if motion does not maintain the relation of the parts to the directions in space, [then] that relation is that which depends on the meaning of “position” which is the category. However, even though it is so, it implies a transfer from a position to another position, and this does not imply that what is transferred does not have a position; but it only implies that the position is changing, according to continuity or discreteness; in every moment it is supposed, it has a position; but this position is not the position which belongs to quantity.

Furthermore, if the division of quantity into “having position” and “not having position” is a division by means of differentiae, it is not possible that differentiae change

---

<sup>859</sup> Continuous quantities like body, surface and line, in fact, are only potentially divisible into parts. See above, *Maqūlāt* III.1.

<sup>860</sup> I.e. position in the third sense, as an accidental predicate of a substantial body, which was discussed in the preceding paragraph.



because of the motion and rest which accidentally belong to the body, so its nature<sup>861</sup> is preserved.

[§3 *Quantities having position and quantities without position*]  
[§3.1 *Line, surface and body have position in their parts*]

Moreover, it is clear that the parts of the line have position, and the parts of the surface have position, and also the parts of place have position, in relation to what it is q surface of and in relation to what it contains<sup>862</sup>.

[§3.2 *Time, number and speech do not have position in its parts*]

As for time: how could its parts have a position, while no part among them exists in association with the existence of another part in such a way that a proximity to the other part is established<sup>863</sup>? How could it be established, the proximity of what is supposed to be existent and what is supposed to be about to exist, to what is now absent or missing (whether or not it exists, in its parts, a continuity)<sup>864</sup>? That continuity means that a unitary boundary is<sup>865</sup> the end of what does not exist, and the beginning of what exists<sup>866</sup>. Its parts only have an ordering from the point of view of priority and posteriority<sup>867</sup>.

As to number, even if its parts have a stable existence and an ordering, it does surely not have continuity, thus it does not have position. It is possible to suppose a number whose parts are not subject to a local indication, let alone where they are reciprocally placed; like this is the number which falls upon the intelligibles. Actually, number does not require a position; but it accidentally belongs to it that it comes to have a position, [only] because of something which is associated with it.

[C130] Speech is even further from these [requirements], because it requires neither a natural order nor an established [existence].

---

<sup>861</sup> I.e. the nature of the moving or quiet body.

<sup>862</sup> It has already been remarked, in the preceding chapter (see above III 4), that place is a quantity under the respect of its being a surface and under the respect of the surface of the body it contains.

<sup>863</sup> Time does not, therefore, fit the first of the three conditions required by Avicenna for position in quantities [§1], namely the simultaneous existence of their parts.

<sup>864</sup> It seems quite difficult to determine, by means of an indication, “where” the present (what exists) and the future (what is about to exist) are situated with respect to the past (i.e. what is “absent” or “missing”).

<sup>865</sup> Reading *huwa* with most mss. instead of *wa-huwa* (BDa Cairo).

<sup>866</sup> The second of the three conditions, namely continuity, is not sufficient, since the continuity which holds in time and its parts is different from that of other continuous quantities. What Avicenna seems to suggest here is that, since time continuously flows, the common boundary which can be supposed between two of its parts (let us say, the current minute and the minute to come) is not an end or a limit, but always the beginning of the following part.

<sup>867</sup> Not even the condition of having an ordering (*tartīb*) is satisfied by time, for it only has one in a limited sense (inasmuch as its parts are only “prior” or “posterior”).

[§3.3 *Summary*]

The quantity which has position is extension. Extensions are, actually, three<sup>868</sup>; if one also takes place among them, they become four. Time, number and speech remain deprived of position. This is quantity in its true sense.

[§4 *Quantity by accident*]

[§4.1 *Three sorts of accidental quantities: subjects of quantities, accidents which depend on quantities, relative properties of quantities*]

There are also other things which are said to be quantities; and they are only such by accident, not by themselves. This is said of them only because of their association with those quantities which are quantities by themselves.

**[(a)]** Some of these [accidental quantities] are subjects for quantities, like man and horse, for instance when it is said: a tall and short man, a tall and short horse.

**[(b)]** Some others are accidents which only exist along with the existence of quantities, like motion, for it only exists by virtue of the association of a moving body with an interval in which motion is, so [that] it is measured by it, and with a time in which it also exists, [so that] it is measured by it, and [it does not exist but] in a moving body in which it is, so [that] it is measured by it. So it is said: “long motion”, namely “[motion] in a long interval” or “[motion] in a long time”. Likewise, it is said: “large whiteness”, namely “[whiteness] in a large surface”<sup>869</sup>.

**[(c)]** Some of these are proper accidents of quantities, like the length and shortness which are relative; like when it is said that this line is long, and another [line] is not long, but short, although every line is “long” by itself in another sense, [namely] insofar as it has one dimension only; and “this surface is large but that other surface is not large, it is narrow”, although every surface is large by itself in another sense, namely insofar as it has together with one dimension which is supposed as length, another dimension which is supposed as width; and when we say “this body is thick and the other [body] is thin, not thick”; even if every body has thickness in another sense, namely insofar as it has depth, namely insofar as it has three dimensions. Likewise you say that this number is “much” and that number is not “much”, but “little”; although every number is “much” in another sense, insofar as it is a discrete quantity which is numbered by units. These things and the like are said to be quantities, but they are not quantities; they only are states which accidentally belong to quantity because of a certain relation which takes place between some of them and some others, as we shall clarify.

---

<sup>868</sup> Namely line, surface and body, whose status with regard to position has been briefly discussed by Avicenna in par. [§2.4].

<sup>869</sup> Avicenna’s examples here are both Aristotelian (*Cat.* 5 b1-3): οἷον πολὺ τὸ λευκὸν λέγεται τῷ τὴν ἐπιφάνειαν πολλὴν εἶναι, καὶ ἡ πρᾶξις μακρὰ τῷ γε τὸν χρόνον πολλὸν εἶναι, καὶ ἡ κίνησις πολλή (“For example, we speak of a large [amount of] white because the surface is large, and an action or a change is called long because the time is long”).

[§4.2 *The meanings of “length”, “width” and “depth”*]

[C131] You must know that “length” is said homonymously of some meanings; is called “length” every sort of single dimension; “length” is also said of the single dimension which is supposed at first<sup>870</sup>; “length” is said of the longest of two extensions which enclose a surface, without considering priority and posteriority<sup>871</sup>; “length” is said of the single extension, insofar as it is taken from the centre<sup>872</sup> of the world towards its circumference; like the “length” of man, namely the dimension in which the first motion of growth is<sup>873</sup>.

Likewise, “width” is said of the quantity in which there are two dimensions; and it is said of the single dimension which is supposed as intersecting a dimension which has been supposed, in first place, as being length; “width” is said of the shortest of two intersecting dimensions; and “width” is said of the dimension which takes from the right [side] of the animal to its left [side].

“Depth” is said of the thickness which is encompassed by the surfaces; and “depth” is also said of that [thickness] under the condition of being taken from upwards to downwards. “Depth” is also said of the dimension which intersects two dimensions supposed in first place as length and width, according to the intersection that we know<sup>874</sup>; for if the two lines are supposed first, and then a third [line] comes in that way, [this third line] is said to be depth; and if one started with it first, <it would be length><sup>875</sup>. “Depth” is also said of what is contained by the front part of man and his back, and by the four limbs, the upper and the lower ones.

[§4.3 *Length, width and depth in their absolute meaning only fall under the category of quantity*]

We say that if someone imagined a point in motion, or a body in which a point is moving, and it encounters a surface with the point, that [moving point] would trace a length and a line in the area that it covers. Thus, if this line does not move in the direction of the motion of the point, but [moves] in a direction which intersects it, then a surface and a breadth is traced. And if the surface is lifted, or it is lowered so that its motion is on a dimension which intersects the other two dimensions perpendicularly, a body is traced.

Moreover, the external part of the body, inasmuch as it is its external part, and inasmuch as together with it there is nothing of what is behind the exterior part, is a plane and a surface. [C132] Then, if this thing that is a surface is cut, and only the cut that results is observed, without taking into account the fact that the body or the surface share in it;

---

<sup>870</sup> Length is, according to this meaning, the first dimension which is supposed in a body (see for instance above, III 4 [§2.2]).

<sup>871</sup> I.e. without considering what is traced at first, as instead was done in the previous example (namely, “length” as the first dimension).

<sup>872</sup> Reading *min markazi l-‘ālamī* with all mss., instead of *markazu l-‘ālamī* (Cairo).

<sup>873</sup> I.e. “length” indicates the tallness of a man, the direction which the growth of his body follows.

<sup>874</sup> Avicenna is here referring to perpendicular intersection, which characterises the three dimensions. See above, *Maq.* III 4, pp. 113,12 ff.

<sup>875</sup> “It would be length”: supplying *la-kāna (kāna Da) fūlan (ṭawīlan No)* with all manuscripts.

then the extreme which results from the cut is the line. Thus, if the line is cut its extreme, according to this consideration, is the point. Hence, the determinate line is the dimension which is supposed between two points; the determinate surface is the dimension which is supposed between two lines; and the determinate depth is the dimension which is supposed between two surfaces.

[§4.4 *Relative quantities*]

Know that length, width and depth, insofar as there is no relation in them, fall under quantity; and relatives are accidents for quantity; know that “much” without relation is number, and “much” with relation is an accident for number; likewise is the discourse as regards the other things that resemble [these]. Know [also] that the “long”, “wide”, “deep” and “much” which are mutually relative may be mutually relative absolutely; so, it is not in the nature of that thing with which one of their extremes is in relation that it comprises a relation with a third [thing], as you say: “much”, or “big”, and so on<sup>876</sup>; or they are related according to a relation that implies this, so that it is said “longer”, “more”, “deeper”; for each of these has a relation to something which has a relation to a third thing, because “longer” is longer with respect to a thing which is long with respect to a certain [other] thing, provided that this [third] thing is not longer [than it]<sup>877</sup>.

[§5. *Continuity and discreteness by accident*]

[§5.1 *What is continuous by itself can only be discrete by accident*]

We say that estimating the extension<sup>878</sup> is a measurement for the continuous, and counting is a measurement for the discrete; of counting and estimating there is [a component] in the soul, which is what counts and what estimates the extension, and one [component] in the thing [itself], which is what is counted and what has its extension estimated. If this thing whose extension is estimated becomes counted, then counting is accidental to it, and it does not imply that the discrete be a genus for it.

[§5.2 *Time is continuous by itself and by accident, and discrete by accident*]

**[C133]** Time is continuous by itself and also by accident, and discrete by accident. As to its being continuous by itself, it is because it is in itself a measure for motion; as to its being continuous by accident, it is because it is measured in relation to the interval, so it has an accidental measurement of extension which comes from another thing; so it is said: “time of the motion along a parasang”<sup>879</sup>, and time is measured by a parasang; a parasang is a measure which is external to it; this measurement is a quantity for motion. There is no

---

<sup>876</sup> Namely, they are only relative to another thing

<sup>877</sup> This is the case which was already discussed in par. [§3.1], case (c).

<sup>878</sup> Ar. *misāḥa*. This word may signify the “extent”, the “area” of a surface (WEHR) but also a “mensuration”, for example “of land” (LANE); the verb *masaḥa* may express the meaning of “make a cadastral survey” (WEHR). I take it to be used here in this second sense, as signifying the active operation of estimating the extent of a continuous quantity.

<sup>879</sup> Ar. *farsaḥ*. “Parasang” is an ancient Persian measure of length, equivalent to 5762 meters.

objection to a thing being in itself in a category, and then having accidentally another thing from that [same] category; for relation accidentally has relation, and quality accidentally has quality.

As to the fact that [time] is discrete by accident, it is by virtue of the division it has accidentally into hours, days, and so on. He is not right who says that time is also discrete not by accident; and that would be because it is the number of motion, and the instant makes its division<sup>880</sup> necessary. For the instant in time is imagined, as the dot in the line; and if it were an existing thing, then - as they say - it would produce a division. But this would happen without discrete quantity being associated with time. So, it is not [true] that, if the instant is assumed to be productive of division, then it is not productive of continuity. Since [time] is worthier of being continuous than of being discrete, if [the instant] is existing in act, the parts of time come to have an actual common boundary which points to continuity in themselves; and if it accidentally occurs to them, insofar as they are parts, that they are numbered, not numbers, and that they have discrete quantity, not discrete quantities, it is like the state of the line and surface and body, if we suppose in them common boundaries. This division is not that which does not combine with continuity, because this is the division which separates some parts from the others by virtue of different extremes; and the separating division does not posit the thing undoubtedly under discrete quantity, but it posits it as having discrete quantity<sup>881</sup>.

[§6 “Continuous” and “discrete” are differentiae, not species]  
 [§6.1 A doubt concerning the status of “continuous” and “discrete”]

Know that if continuous and discrete quantity constitute the essence of something, it is doubtful whether that thing belongs to this category<sup>882</sup> or not. Because they maybe constitute as simple differentia [does]; and someone might say that the simple differentia must not necessarily belong to the category of the species it is attached to. [But] so, what if they are accidental and they do not constitute [the thing]?<sup>883</sup>

[§6.2 Solution: “continuous” and “discrete” are logical differentiae of quantity]

**[C134]** Know that the continuous and the discrete are two differentiae of quantity, not two species thereof, unless you associate with them the nature of the genus; but they do not belong to the differentiae that are other than the species. Know that logical differentiae<sup>884</sup> are, all of them, predicated of the species; so they are not other than the species as regards the subject, but they are different [from it] in respect of consideration. So, if the logical differentia is paronymous with respect to the notion of something that exists in the species and is not predicated of the species, the species is divided by some other differentia; like

---

<sup>880</sup> Reading *faṣla-hu* with all mss., instead of *fi'la-hu* (Cairo, D).

<sup>881</sup> I.e. as being accidentally endowed with discrete quantity.

<sup>882</sup> Namely, the category of quantity.

<sup>883</sup> If continuity and discreteness are constitutive of quantities, they must be conceived of as forms which may fall under another category (for instance, quality); this casts doubt on the possibility that the thing which is essentially continuous or discrete falls under quantity.

<sup>884</sup> For the distinction between logical and simple differences see above III 2, [§6].

the man who is rational; he is only rational by virtue of a rationality which exists in him, but rationality is not predicated of man, so you do not say that man is rationality, not only under the consideration but also by the subject; so, this differentia and the like is based on something which is not the species, in such a way that it is not predicated of it. Know that continuous quantity only from discrete quantity in itself, not in virtue of another continuity; and discrete quantity only differs from continuous quantity in itself, not in virtue of discreteness. So, here the essence of the species and the differentia are the same thing by the subject; they are not one the same under the respect of consideration. As to the simple differentia, it does not absolutely belong to them: because this is not continuous because of continuity, nor is that discrete because of discreteness. You are promised an explanation of these things for you in the appropriate place<sup>885</sup>. [C134]

---

<sup>885</sup> Possibly a reference to the discussion of differentiae at *Ilāhiyyāt* V.3-4.

[IV.2]  
**On the properties of quantity**<sup>886</sup>

[§1 *The predecessors' opinion concerning the properties of quantity*]  
[§1.1 *Quantity has two basic properties, and two derivative properties*]

It is appropriate that we now speak about the properties of quantity; so we say that some of our predecessors said something, the sense of which is the following: quantity has two primary properties, one of which is that quantity admits of measurement; the other is that quantity does not have anything contrary to it. Moreover, from these two properties there derive two other properties: thus, from the fact that [quantity] admits measurement it derives that quantity is said equivalent and non-equivalent; from the fact that [quantity] does not have a contrary it derives that it does not admit of more and less.

[§1.2 *Avicenna's view: only the first basic property is actually proper of quantity*]

**[C135]** We say, on our part, that the first property of quantity is that which ignites in us the understanding of the meaning of quantity, [and of] the fact that by itself, not by virtue of something else, [quantity] admits of measurement falling upon it<sup>887</sup>. As to the fact that quantity does not have a contrary, it is something which does not lead the mind, once it understands this, to a comprehension of the quiddity of quantity. How is it also that this one is one of the [properties] that substance shares with quantity? For this belongs to the properties that are with respect [to something else], not among those which are absolute.

[§2 *Quantities do not have contraries*]  
[§2.1 *Quantities do not have contraries: proof by induction*]

Establishing the fact that quantity has no contrary is something that needs to be posited conventionally in logic: be persuaded about this by induction, or by means of proofs that resemble it; for example, by saying that continuous quantities may abound simultaneously in a single subject, and some of them are limits to the others<sup>888</sup>; and [by saying] that, for discrete quantities, how would it be possible to suppose for one of them a contrary? Since for anything which may be posited as a contrary to [number] two, for example, there is a thing which is further, in being similar to number two, than it, namely the number which is

---

<sup>886</sup> This chapter corresponds to *Cat.* 5 b11 – 6 a35.

<sup>887</sup> As it is formulated, this property does not allow us to understand whether quantity admits such measurement by itself or by virtue of another thing. As Avicenna will make clear below ([§5]) admitting of measurement, and consequently equivalence and non-equivalence, is a property which quantities have by themselves.

<sup>888</sup> This brief remark stands as a proof for the fact that no continuous quantity has contraries. These quantities can subsist simultaneously as accidents of a same, single subject (which real contraries cannot do: for example no substance can be simultaneously hot and cold), since for instance in a body lines and surfaces subsist simultaneously without being contrary and incompatible with one another.

higher than it. So, if you posited one thousand as a contrary to two or three, [or something else] from their class, then ten thousand would be further from its nature<sup>889</sup>, so it would be worthier of being contrary to it; one thousand would be then more entitled to be intermediate between the two contraries<sup>890</sup>. Moreover, how [could] it be intermediate<sup>891</sup>, whilst the extreme is not<sup>892</sup> fixed<sup>893</sup>? So, if we say that one thousand, for instance, has something which is at most far from it, like two, why is that not its contrary? The answer is that the contrary of a thing is only a contrary for it if the thing [itself] is contrary to it; so, if two were contrary to one thousand, because it is at most far from it, then one thousand would be contrary to two, and at most far from it. Since however this does not occur on both sides together, but on one side only, this does not impose contrariety.

[§2.2 *Things which are held to be quantities and contraries*  
[§2.2.1 *The contrariety of “continuous” and “discrete”*]

Moreover, although for the logician there is no way of establishing that quantity has no contrary, he cannot escape from enquiring about things which are held to be contraries and quantities at the same time, so as to notify that they are not such. The first thing which is believed is that continuous quantity is contrary to discrete quantity. The first answer about this is that continuous [C136] and discrete, insofar as they are specific differences, fall under the attributes of quantity, not under quantity itself, in such a way as differences do. Furthermore, discreteness is the fact that continuity is missing in what by nature is continuous, in itself or in its genus. Privation is different from contrary; so, discreteness is not contrary to continuity, and if one thing is subject to a continuous measure, and then it is divided, it is subject to a number which accidentally belongs<sup>894</sup> to it.

[§2.2.2 *“Even” and “odd”, “straight” and “curved”, “equivalent” and “different”*]

As to evenness and oddness, and straightness and curvedness, they are neither contraries nor quantities. As to evenness and oddness, their proximate subject [consists of] certain numbers; and these do not share even and odd in potency<sup>895</sup>. So, the number which is a subject for even does not become odd by itself, nor the number which is a subject for odd becomes by itself even; nor there does exist anything which is by itself a subject for both things. What is such is not a contrary. Moreover, odd is nothing but the fact that a number has not a division into two equivalent [numbers]; so, the division of number into even and odd<sup>896</sup> is a division made with respect to specifically affirming a thing or

---

<sup>889</sup> I.e. the nature of two or three, the first number whose contrary has been posited.

<sup>890</sup> Namely, two and one hundred-ten.

<sup>891</sup> Reading *mutawassītan* with all mss., instead of *mutawassīṭun* (Cairo).

<sup>892</sup> Reading *gayru* with mss. **JNkGYDaMRAeN**, instead of *wa-ġayru* (Cairo).

<sup>893</sup> Reading, *mutaqarrir* with the majority of mss., instead of *munfarid* (Cairo, **M**).

<sup>894</sup> Reading *ya riḍu* with mss. **ENoNkGYDaMRN**, instead of *yufraḍu* (Cairo).

<sup>895</sup> I.e. a number cannot be said to be potentially even or odd; according to its nature, it is either even or odd.

<sup>896</sup> Reading *ilā l-zawġi wa-l-fardi* with all mss., instead of *ilā l-‘adadi l-zawġi wa-l-fardi* (Cairo).



specifically denying it<sup>897</sup>; but it was agreed to posit for quantity, as associated with this negation or privation, a determinate name; so that it resembled its being established<sup>898</sup>. Evenness and oddness, moreover, are qualities of quantity; and it is not impossible that there be, in quantity, contrary qualities, so that quantities become, by virtue of them, quantities contrary by accident, like substances. What is sure is that quantities are not contrary, in virtue of their specificities, in the same way as blackness and whiteness are.

Likewise, the state of straightness and curvedness, since they are neither contraries nor quantities.

Likewise, also equivalence and difference are all of them relations in quantities, not quantities, and between them there is not the opposition of contrariety.

### [§2.2.3 “Large” and “small”]

Also largeness and smallness, and what is equivalent to them, are relations attached to quantity. “Large” is nothing but a quantity, but its quantity does not lie in its being large; for “large”, for instance, is in itself a body or a surface, and for this reason it is a quantity which accidentally has a certain relation, because of which it becomes large. And if it accidentally has a relation, then [this relation] only follows it besides the fact that it is a quantity; so, if there is a contrariety in that [C137] relation, or in another accident, it is not in quantity itself, but in an accident of quantity; because it only belongs to quantity under the respect of an accident which belongs to it.

### [§2.3 *Contrariety only takes place as a relation between two absolutely incompatible natures*]

Know that the examples that have been mentioned in the claim that there is contrariety in quantities are – all of them – accidents of quantity, and they are not quantities, as you have learned; moreover, there is no contrariety in them, for contrariety only takes place between two natures, each one of which is intelligible by itself, and then if it is related to the other it is said to be contrary to the other. Like heat and coldness: because each one of them is intelligible by itself, then if it is related to the other it is contrary to it. So, there is a nature to which it accidentally belongs a relation, which is the relation of contrariety. From the essence<sup>899</sup> of “large” and “small” it can be intellected nothing but the fact that they are relative; [“large”] does not have, insofar as it is “large”, a proper existence, like blackness, insofar as it is the blackness which is contrary to whiteness, so that the relation of contrariety accidentally belongs to that proper existence in the same way as it does in the case of blackness and whiteness; for this reason, the thing is sometimes large and small in relation to two different things. But if “large” were something realized in itself, to which

---

<sup>897</sup> For this reason the opposition of even and odd is not the opposition of contraries, but the opposition of affirmation and negation (i.e., contradiction). The thing which is either affirmed or denied is the possibility of being divided into two equal numbers (affirmed in the case of even numbers, denied in the case of odd numbers).

<sup>898</sup> I.e. the name “odd” has been posited for the negation of a property (capability of being divided into two equal numbers) as if it were a positive property in itself; while it is not.

<sup>899</sup> Instead of the usual term *wuġūd*, Avicenna employs here *huwiyya* (three other occurrences of this word in *Maqūlāt*: V.1, VI.4, VII.2).

the relation of contrariety is attached, then “large” would not turn small with respect to something else; for if “large” had an existing nature being a subject for contrariety, then the two realized<sup>900</sup> natures to which the relation would belong accidentally would subsist together simultaneously in a single thing, which would be large in relation to something, small in relation to something [else]. So, if someone said that between these two natures there is no contrariety, because “large with respect to something else” is not contrary to <“small with respect to something else”><sup>901</sup>, then he would confirm that “large” and “small” have no realization but by virtue of relation only. Contraries have a realization, in their natures; and those natures are mutually exclusive and contrary, so the relation which is proper of contrariety belongs to them accidentally; and those natures, even if you do not consider the mutual relation which is in contrariety, are hostile natures, which cannot be conjoint. So, if “large” and “small” were like blackness and whiteness, and like the remaining [C138] contraries, and contraries are natures to which the relation of contrariety belongs accidentally, then “large” and “small” would be two natures which would require, between themselves, incompatibility, even when not considering their contrariety; like those natures<sup>902</sup>, since, also if their contrariety is not considered, they require incompatibility; I mean that, by virtue of their being that natures, they cannot be conjoint.

[§2.4 *Mutual relation and contrariety are different kinds of opposition*]

I add an explanation to that, saying: it was understood that the opposition of contrariety is not the same as the opposition of mutual relation; although mutual relation is similar to contrariety, insofar as it is an opposition, and insofar as their extremes are not conjoint. Because of the difference between contrariety and relation what you find is that the natures of contraries, like blackness and whiteness, are not in mutual relation; and you find that near and near are not contraries<sup>903</sup>. Furthermore, you will learn that contrariety, inasmuch as it is contrariety, falls undoubtedly under mutual relation<sup>904</sup>: therefore it is appropriate that there be in contrariety something, which is that in which there is no mutual relation, while contrariety, insofar<sup>905</sup> as it is contrariety, is mutually relative; so, it remains that the thing which in contrariety has no mutual relation is the subjects of contrariety, and their natures: namely, the subjects which are in themselves intelligible things. If one of them is related to another thing, there is the relation of contrariety, and this prevents from [their] conjunction. Therefore, contrariety is not accomplished but by virtue of the subjects not being mutually relative by themselves, and their being followed by a mutual relation which is contrariety; and those subjects by themselves are absolutely not conjoint, not even

---

<sup>900</sup> Reading *al-muḥaṣṣalatāni* with the majority of mss., instead of *wa-l-muḥaṣṣalatāni* (Cairo, **D**).

<sup>901</sup> I follow all manuscripts in supplying *ṣaġīrun* (*ṣaġīran* **EJNkDaMRAeN**) *bi-l-qiyāsi ilā ṣayʿin aḥara* (*ilā aḥara* **DiGY**), omitted by Cairo.

<sup>902</sup> I.e. the aforementioned natures of blackness, whiteness, and “the remaining contraries”.

<sup>903</sup> Proximity (“near and near”, *al-ġiwār wa-l-ġiwār*) is in fact a relative opposition, which does not share the nature of contrariety.

<sup>904</sup> This is very likely a reference to the discussion of opposites in chapter VII.1.

<sup>905</sup> Reading *min ḥaytu huwa* with all mss., instead of *ḥaytu huwa* (Cairo).

if in them only mutual relation is considered; but they must have that<sup>906</sup> as something which comes by itself before mutual relation, and mutual relation is attached to it.

Thus “large” and “small”, if they are contraries, must have subjects, and those subjects must be intelligible by themselves, and they must not be conjoint, even if their mutual relation is not considered. And it is not so; but it is not true that “large” and “small” are not conjoint, if they are mutually relative by virtue of realized natures they have; and those natures are not conjoint so as the two natures of blackness and whiteness are not conjoint, because they are blackness and whiteness, so they are mutually contrary, and so they are mutually relative. For the relative in a certain respect is more common than the contrary, not insofar as the contrary is a nature, but insofar as it is a contrary. But “large” and “small” are not conjoint because they fall under what is merely said by relation.

[C139] So, you must understand this place in this way, and you must not consider another way. Therefore, people will not persist in saying that if “large” were contrary to “small” they would not exist together [on the same subject]; for he who speaks says that “large” is contrary to the small which is small with respect to it, not [contrary] to everything which is supposed as small.

[§2.5 *Criticism of a commentator, concerning the sophism of “opposition” and “indulgence”*]

Some of those pedantic commentators say, as regards this place, something which returns to the error we spoke about right above; but they add to it a sophism, which is imagined to be something [true]. That is because to what someone may say, that “large” and “small” are quantities, and that “large” and “small” are contraries, so some quantities are contraries, they reply: “We say that there are two [possible] answers to this: the answer of opposition and the answer of indulgence<sup>907</sup>. As for opposition, it consists of us saying: these are not quantities. As for indulgence<sup>908</sup>, it is that we say: even if we concede that these are quantities, they are not contraries”. This [latter] answer, if it has been truly clarified and if the two premises are verified according to necessity, is true. As to the sophism of mentioning “opposition” and “indulgence” in it, it falls under the genus of sophism<sup>909</sup>; that is because one of the two answers “makes opposition” in the minor premise; the other “makes opposition” in the major premise. “Opposition” in the minor

---

<sup>906</sup> I.e. the incompatibility which prevents them from being conjoint or mixed up in the same subject.

<sup>907</sup> Ar. *ḡawābu mu‘ānadin wa-ḡawābu musā‘adin*. This doctrine is found in Ibn al-Ṭayyib’s commentary on the *Categories* (*Tafsīr*, 229,22 ff. Ferrari): the “way of opposition” (*ṭarīq al-mu‘ānada*) and the “way of indulgence” (*ṭarīq al-musā‘ada*) are listed as the two different solutions proposed by Aristotle himself to solve the aporia of contrary quantities.

<sup>908</sup> Whereas the Cairo text reads *musā‘ada*, the majority of manuscripts reads *musāhala*. According to the apparatus the correction seems to be made *ope ingenii*, though the variant reading *musā‘ada* is attested in one of the manuscripts used for the edition (J). Although the correction proposed by the editors is evidently due to needs of terminological coherence, the fact that Avicenna is probably already modifying the original word might make a *variatio* acceptable as well.

<sup>909</sup> “Sophism” translates here and in the preceding lines *takalluf*. Despite this reference to a “genus” of *takalluf*, and the common use Avicenna makes of this term to indicate the specious or deceptive arguments of his opponents, there is apparently no classification or organic treatment of *takalluf* in his works. The expression may then be read as generically indicating a kind of sophistical deception (for a similar expression, see *Ġadal* I 6, 58,3: *ra‘aytu hāḡā l-kalāma naw‘an min al-takalluf*).

premise makes turn away from the major, and leads to make free of it; <“opposition” in the major premise makes turn away from the minor, and leads to make free of it><sup>910</sup>. So, it is as if, when he says “These are not quantities”, he said “take them as contraries”, or “take me as being helpful to you on this point; but I say that they are not quantities”. Likewise, when he said: “These are quantities”, it is as if he said: “take them as quantities, and take me as being helpful to you on this point; since they are not contraries”. In the same way he said everywhere, when he contests him in a premise: “Grant me as having conceded to you the other premise”, or he did not say so, for there is no [introduction] in the way he is following. What would they<sup>911</sup> say to him if someone said: “take them as contraries, for they are not quantities”; would then opposition be transformed into indulgence? They might also use “opposition” and “indulgence” in another sense: [C140] they would posit “indulgence” in conceding a premise, and not conceding the other one; and they would posit “opposition” in not conceding any of the two premises.

[§2.6 *Other arguments for the fact that quantity has no contraries*]

It has been said, as an answer to these doubts, that “small” is a partition of “large” which constitutes it, and that “odd” is a [constitutive] part of “even”; and the constitutive thing is not contrary to what it constitutes.

They [also] said that small and large, with respect to the proportionate<sup>912</sup>, are contraries. It seems that the truth of this [point] is not related to the “large” and the “small”, but to the “excessive” and “defective”, insofar as it occurs in the extension, or rather insofar as it occurs in quality. This occurs on the part of the increasing and decreasing natures, not on the part of “excessive” and “defective” insofar as they are only such. For instance, cowardice is contrary to recklessness, not because “increasing” is contrary to “decreasing”, but because of the nature of cowardice and the nature of recklessness; since those things in which there is contrariety are intelligible by themselves, if this relation<sup>913</sup> belongs to them accidentally.

[§2.7 *The absolute largeness and smallness found in nature are not contraries*]

As to the determined definitions, with regard to physical constitution, of “large” and “small”, that are not said with respect [to anything], they are also contrary; not because they are extensions, but because they are associated with qualities, and in virtue of the fact that they are natural extremes; like the fact that the bones of animals have extensions which are the largest in extension, in them, and extensions which are absolutely the smallest in extension, in them. “Large” is not only said of the large [bone] among them with respect to the small [bone], but by itself, and with respect to the nature of its species; likewise is the

---

<sup>910</sup> I follow all manuscripts except **B****D****a****M** in supplying *wa-l-‘inādu fī l-kubrā i-‘rāḍun ‘ani l-ṣuḡrā ilā an yufraḡa (yufraḡa DE) lahā (la-hu DiG)*, omitted by the Cairo editors.

<sup>911</sup> Namely, the commentators who adopt the sophism of opposition and indulgence.

<sup>912</sup> Ar. *mu‘adil*. This term means here “of proportionate dimensions”, as an intermediate attribute between “big” and “small”.

<sup>913</sup> I.e. the relation of contrariety.

case for the small [bone] among them. They function like the extremes of the distance belonging to the motions of heaviness and lightness<sup>914</sup>.

[§2.8 *Contrariety in place*]

Among the doubts [that arise] about this property there is also what is believed concerning the fact that the lower place is contrary to the upper place. This is impossible; for place is not contrary to place by its essence, which is that of a surface and a quantity. How could two places be contrary, while not succeeding each other on a single subject? And isn't place, insofar as **[C141]** it is place, neither upper nor lower? But [it is only such] insofar as it is a limit of motion, insofar as it is the extreme of an interval; or insofar as it is the extreme of a containing body; and these are accidents of quantity. These accidents do not make it such as to participate of up and down in a single subject, so that it is truly a contrary; but the two [things] are mutually contrary, I mean the fact that something is upper is contrary to the fact that the thing is lower; and these are not places.

It is not necessary, if there is the longest distance between two places, that they be mutually contrary; although contrariety implies this condition, or some people understood contrariety primarily from place, from the state of two places which have the longest distance between them. As a matter of fact, they do not manage to distinguish whether the state of two places in their being such that between them there is the longest distance is contrariety, or [rather contrariety is] the state of the localized thing, when it is sometimes in this place, at some other time in another place. Nonetheless, we do not base the canons for the use of philosophical expressions upon the usage of the mass; but we need to observe, when considering the meaning of the expression “contrariety”, what we come to know when we use the expression “contrariety” according to the second imposition<sup>915</sup>. This expresses the state that comes about between two essences which share in a subject, in such a way as to succeed each other [on it]; [it does not mean] that the subject is informed/imprinted by one of these; and [in such a way that] between them there is the maximum distance. There do not exist, in [the case of] the two places, all of these conditions.

The proof for this is that place, insofar as it is place, and insofar as its individual nature is realized, does not need but to be said in relation to the localized [thing]; and when it is said “upper”, it is said in relation to another place. Moreover, “being upper” and “being lower” may be considered in the respect of relation; so [that] there is no contrariety in them, as there is not in “small” and “large”; and they may be considered in the respect of nature, so that “being upper” is either a state that place has in its being the limit of a body whose natural position in the world is such; so that, if place accidentally has contrariety, in this respect, it is because of the nature of that body; and we shall explain that this consideration, and the like, do not posit the body which is upper as contrary to the body which **[C142]** is lower, since the highest body has in no way a contrary, as you will learn; or [“being up”] is a state of place, inasmuch as it is the place of a body whose natural position is such. If it has been supposed or agreed that this makes necessary, or is associated with the fact that

---

<sup>914</sup> For a discussion of the status of heaviness and lightness with respect to quantity, see above (III 4, **[§8]**).

<sup>915</sup> The “second imposition” corresponds here to the technical, philosophical usage of the word “contrariety”.

the two bodies are contrary by nature, then contrariety in place belongs to something in the localized thing; so, contrariety in place is only [such] by accident. From all this we can sum up that there is no contrariety in quantity.

[§3 *Quantities do not admit of more and less*]

Likewise, there is in its nature neither less and more, nor decreasing and increasing. I do not mean hereby that a quantity is not higher or lower than another quantity, but I mean that a quantity is not “more” or “higher” in its being quantity than another one which shares in it<sup>916</sup>: so a [number] three is not “more” three than another three, nor a four is [“more” four] than another four; nor a line is more line, namely “more” with respect to having one dimension, than another line, although it may be, according to the relative meaning, “higher” than it, I mean with respect to relative length. But it is not possible that a quantity is higher and “more”, in its nature, than another quantity which is lesser or bigger than it. I mean that “being three”, in that it is “being three”, in that it is a number and has the definition of number, is not bigger than “being four”, insofar as it is “being four” and insofar as it has the definition of number; I mean, insofar as it is a discrete quantity which is measured by unities. Sure, they may become higher or lower according to the different relations which accidentally occur between them.

The difference between this “higher”, and the “more” and “higher” which cannot be<sup>917</sup> in quantity, is that in this first “higher” it is possible to point out things like product or addition; [as to] the “more” and “higher” which cannot [be in quantity], this is not possible in them<sup>918</sup>. The dissimilarity of “more” and “less” is restricted between two contrary extremes<sup>919</sup>; the dissimilarity of “higher” and “lower” is absolutely not restricted between two extremes.

[§4 *Quantities are by themselves equivalent and non-equivalent*]

Among the properties of quantity there is also the fact that they are said by themselves, not by virtue of something else, equivalent and non-equivalent. Equivalence is the state that comes about when you imagine to adapt the dimensions of some continuous [quantity], or the unities of some discrete [quantity], to [C143] some other [quantities], as crossing their augmentation, so that you do not find that one of the adapted things is determined at a limit at which the other one is not determined. Non-equivalence means that one of them exceeds [the other], or falls short [of it]. So, the correspondence in which there is no difference with regard to the limits is called “equivalence”, for if the limits differ there is no equivalence. You will learn that heaviness and motion, when they are considered by themselves, without taking into account the extensions which are extraneous to them, do not have this coincidence; so, they do not accept of equivalence and non-equivalence.

---

<sup>916</sup> Namely, shares the definition of quantity.

<sup>917</sup> Reading *yumna ‘u* with all mss., instead of *yumnaḥu* (Cairo).

<sup>918</sup> The more and less of intensity (not belonging to quantity) do not allow arithmetical operations such as product (*ḥāṣil*) and addition (*ziyāda*); the more and less of quantity, on the contrary, do.

<sup>919</sup> This has been observed by Avicenna with regard to the properties of substance: see above III 3, [§4].

[§5 *Summary*]

So, for quantity three real properties have been mentioned: these are [(a)] the fact that they have parts<sup>920</sup>, [(b)] the fact that they allow measurement, [(c)] the fact that they admit of equivalence and non-equivalence. Two relational properties were also mentioned for it: [(d)] the fact that they do not have contraries by themselves and [(e)] the fact that they do not admit, by themselves, of more and less.

---

<sup>920</sup> This property was not mentioned in this chapter, but its existence follows from the discussion lead in ch. III 4 (See above).

### [IV.3]

**On beginning the treatment of the relative, notifying its former definition and explaining that definition; on the general indication of the types of relative<sup>921</sup>.**

[§1 *The reason for discussing the relative right after quantity*]

It has become of use to deal with the clarification of the category of the relative after completing quantity, and before quality. People have [made] different deductions of the reason for this; it seems that the most evident among them is what has been agreed upon, that [the reason is] the mention of the relative in [the treatment] of the category of quantity<sup>922</sup>.

[§2 *Logicians cannot prove anything about the existence of relatives*]

It is not a logician's business to verify the relative, and to explain its state with regard to existence and conceptualization; he who undertook<sup>923</sup> this undertook what does not concern him, and that which he does not take care of<sup>924</sup>, inasmuch as he is a logician<sup>925</sup>. **[C144]** Understanding relatives is easier, for the mind, than understanding the abstract relations which constitute the category<sup>926</sup>.

[§3 *First definition and types of relatives: "absolute" relatives and relatives by any other sort of connection*]

Hence, the things which fall under the relative are the things whose quiddities are said with respect to another thing, **[(a)]** in an absolute way or **[(b)]** by another sort of connection.

**[(a)]** Those [which are such] absolutely are like the things whose names are names that perfectly express the meaning they have, insofar as they are relative, for instance "brother"<sup>927</sup>.

---

<sup>921</sup> This chapter corresponds to *Cat.* 6 a36 – 7 b14. The "former" (*aqdam*) definition of the relative is the first of the two definitions presented by Aristotle in chapter 7 of the *Categories*, which the commentators used to ascribe to Plato and his followers (also Avicenna mentions Plato in the *Muḥtaṣar al-awsaṭ*, 338,13 Kalbarczyk). The second definition will be extensively discussed by Avicenna in chapter IV 5.

<sup>922</sup> Namely, in the discussion of "large" and "small"; see *Cat.* above, IV 2.

<sup>923</sup> Reading *takallafa* with all mss., instead of *yatakallafu* (Cairo).

<sup>924</sup> Reading *yaštaḡilu* with mss. **AeJNoY**, instead of *yastaqillu* (Cairo).

<sup>925</sup> The place for Avicenna's "ontological" treatment of relations is the *Ilāhiyyāt* of the *Šifā'* (ch. III 10), even though some issues concerning the existence of relatives will also be discussed in this section of *Maqūlāt*.

<sup>926</sup> Relative things are more easily comprehensible than abstract relations, therefore the discussion of relation is mostly based on concrete examples.

<sup>927</sup> The name "brother" is a perfect relative inasmuch as the notion it expresses is absolutely relative, being deprived of any absolute meaning (no one can be "brother" *per se*).



**[(b)]** As to those which [are relative] according to another sort of connection, they are those to which the connection is attached; so, they become relative for this reason, like potency, insofar as it belongs to what has potency, and knowledge, insofar as it belongs to he who knows; for all of these things are by themselves qualities. If these are relative, they are with respect to something different from what their relation is forcibly reduced to; like science, for by means of a certain particle it becomes relative to him who knows, without that particle it is relative to what is known. For knowledge appears to be necessarily accompanied, in itself, by a connection with the object of knowledge. Knowledge, physical strength, potency and so on, although they are all relative, are not in themselves relative to what was related with them in our examples; but a certain kind of connection was attached to them, so that they became, by virtue of it, relative; this because of a particle, which is introduced and combined [with them]. Like when between “man” and “house” an expression of connection is introduced, so that there comes to be by virtue of it<sup>928</sup> a relation between house and him who has a house. This connection is sometimes included in the expression of one of the two sides; the other side needs that a connecting expression be attached to the name of the first, like when we say: wing and “having wings”<sup>929</sup>. For the expression “having” only occurs on one of the two sides; and the other side has no need for something alike. But if its name is associated with the name of the connection, it is the name of the other side; and in most cases, it is such that one of the two relatives, insofar as it is a relative, has a name, and the other does not, but it only has the commonly accepted name, expressing its essence or being derived from the point of view of some other state, different from its relationality; or it does not have a name at all.

Sometimes, it is not done so; but a connecting **[C145]** expression which characterizes the relative, and maintains its name is associated with it, like when we say: “he who knows knows a knowledge”, so that with the name “knowledge” a particle is associated, which expresses the fact that he who knows is relative to it. As to the first example, this particle was only associated with the name of the relative, not with what is relative to it. Sometimes, the relative particle is different in the two of them, like when you say: “knowledge belongs to he who knows, and he who knows does not belong to knowledge, but [he knows] knowledge”<sup>930</sup>. A group [of people] says that the meaning of their saying “by another sort [of connection]” only refers to [those relatives] in which the opposite particles are not similar<sup>931</sup>. It will become clear to you, right below, the verification of what we said, and its explanation; and also that it is worthier than the mentioned interpretations.

---

<sup>928</sup> By virtue of the *nisba*.

<sup>929</sup> Ar. *ḡū l-ḡanāḡ*. I adopt this translation, instead of “winged”, to maintain the form of the Arabic original, where the “connecting expression” (*lafẓ al-nisba*) is the adjective *ḡū*.

<sup>930</sup> I render here the sense of Avicenna’s remark, given the difficulty of preserving in English the grammatical distinction he is referring to. In Arabic, however, these two constructions effectively require two different particles, *li-* and *bi-*: knowledge (*al-‘ilm*) belongs *to* he who knows (*li-l-‘ālim*); but he who knows (*al-‘ālim*) does not “belong to” knowledge (*li-l-‘ilm*); he just *knows* it (*‘ālim bi-l-‘ilm*, where *bi-* indicates the object of the action of knowing, expressed by the present participle).

<sup>931</sup> For example, relatives like “knowledge” and “he know knows”, where in one direction a certain particle is employed (e.g. *li-*), in the other direction another particle is used (e.g. *bi-*).

[§4 *The meaning of “said with respect to another thing”*]

As to the fact that the thing<sup>932</sup> is said with respect to something else, it means that if the conceptualization of the meaning of the thing is sought for, its conceptualization requires the conceptualization of another thing extrinsic to it, but not of any thing it may be. For, when the meaning of the roof is conceptualized, the meaning of the wall which carries it is also conceptualized along with it, and the quiddity of the roof is not said with respect to the wall. But the intellected meaning which belongs to the thing that needs something else to be intellected along with it, only belongs to it by virtue of the existence of that different thing in front of it; thus, that meaning which belongs to the thing, by virtue of the realization of the state according to which the other is with it, is its relation, like “brother”: for the essence of what is signified by brotherhood, belonging to one of the two brothers, is [such] by virtue of the existence of the other [brother], and it is the state which belongs to him because of this, namely his being son of the father of the first [man]; for brotherhood is the very consideration of his [condition], inasmuch as he has another [brother] who has such an attribute; although sometimes in some<sup>933</sup> relations [there is] the very consideration of one of the two things, inasmuch as it has another thing whose attribute is different from its own [attribute]<sup>934</sup>. This is [the meaning] of the quiddity being said with respect to another thing.

[§5 *Distinction between connection (nisba) and relation (idāfa)*]

Not every connection is a relation, for everything has a connection, in the mind, with the thing which follows it in the mind<sup>935</sup>; but that is not a relation, as we said; if the connection were taken as “repeated” in every thing, then it would become a relation for it.

[C146] The meaning of my word “repeated” is that not merely the connection is taken into consideration, but [it is] by addition of the consideration of the fact that the thing has a connection, inasmuch as it has a connection, and [the consideration] of what is connected to it alike<sup>936</sup>. For the roof has a connection to the wall, so if you consider the roof under the respect of the connection it has it stays upon the wall; and [if] you consider it under the respect of its staying upon the wall, it becomes relative not to the wall, inasmuch as it is a wall, but inasmuch as itself stays upon it. So, the contact of the roof with the wall, insofar as the wall is a wall, is a connection; insofar as the wall is taken as connected to it by virtue of the fact that [the roof] stays upon it, and the roof is by itself connected, then it is a relation. This is the meaning of what they say, that connection belongs to one extremity [only], whereas relation belongs to both extremities. This because if you take the roof as

---

<sup>932</sup> Reading *kawn al-šay'* with all mss. (except N), instead of *kawn li-l-šay'* (Cairo).

<sup>933</sup> Reading *fī ba'ḍi l-idāfāti* with all mss., instead of *fī l-idāfāti* (Cairo).

<sup>934</sup> This is true for other cases of relations, such as that subsisting between “large” and “small”.

<sup>935</sup> Avicenna is very likely referring to the connection of a knowable concrete being with its corresponding form in the soul.

<sup>936</sup> “Repeated” (*mukarrar*) means that both sides of the connection are taken into account, and that they are both considered inasmuch as they are connected to each other. “Repetition” will be mentioned again in this chapter [§6.3.1], with regard to the verbal expression of reciprocating relatives.

staying upon the wall, you find a connection from the point of view of the roof which stays [upon it]; as to the side of the wall, it does not have a connection with anything inasmuch as it is a wall. If you take the connection inasmuch as the roof stays upon a basement, and the wall is a basement for something which stays [upon it], the connection has become mutual, and it is rightly entitled to being a relation. So, every connection which does not exist between two extremes together, inasmuch as it is a connection, is a connection different from relation; every connection in which both extremities are taken under the respect of the connection is a relation. The things which are taken as being connected, without any addition, are only “connected”, whilst if they are taken under this condition they are relative. Thus, things themselves are connected; and if they are taken together with the connection, inasmuch as it is a connection, they become relative.

[§6 *Types of relatives, and their characters*]

Among relative things there is what is like “larger” and “smaller”, “double” and “half”; what is like “strength” and “power”, for “strength” and “power” are “strength” and “power” of doing something, belonging to something; and “state” is the state of what has a state; sensation is the sensation of something which senses a sensible thing; knowledge is the knowledge of someone who knows a knowable thing. Likewise, standing is the standing of he who stands, sitting is the sitting of he who sits; all of these are therefore relatives.

However, what resembles the large among these [C147] is not large in itself and large in its quiddity, unless there exists a small; the same holds for “similar” and “equivalent”. As for “power” and “strength”, “sensation” and “knowledge”, it seems that this is not the case for them, since the quiddity of the thing which is “knowledge” is not said “knowledge” merely with respect to him who knows, even though it does not exist but in him who knows. Likewise, the quiddity of whiteness, redness and sitting: whiteness is not said whiteness only with respect to the subject which has whiteness, although it does not exist but in what has whiteness. There is a difference between the fact that one thing does not exist but if another thing exists, and the fact that its quiddity is said with respect to [another] thing; for the world does not exist but because of the Creator, and his quiddity is not said with respect to the Creator. Likewise, “two-ness” does not exist but by virtue of “one-ness”, but its quiddity is not said with respect to “one-ness”. Existence and quiddity are not the same thing; nor the association of a quiddity to [another] quiddity is the fact that the quiddity is said with respect to the [other] quiddity, but the fact that the quiddity is [said] with respect to the fact that the [other] quiddity is truly associated with its fellow in the state of association. The quiddity of some of these numbered things is said with respect to other things, like “large” and “small”<sup>937</sup>; some of them are posited as such if taken together with the connection, like whiteness: for if [whiteness] is taken inasmuch as it is in the white [thing], then it is relative; for instance if its being, insofar as it is in the white [thing], were called “body”, then the quiddity of “body” would be said with respect to the thing which has whiteness<sup>938</sup>. You have already learned that the quiddity of some of the

---

<sup>937</sup> It is the first of the two classes of relatives identified in par. [§2], namely “absolute” relatives.

<sup>938</sup> Whiteness falls under the things which are relative “by virtue of a certain sort of connection” [§2].

things which we have numbered under the relative is said with respect to another thing; some others are said with respect to another thing by virtue of a certain connection which is attached to their quiddity, therefore they are [simply] said with respect to another thing. For that attachment another quiddity is posited, established by itself; so, relative things are like these.

[§7 *First property of relatives: some relatives admit of contraries*]

There exists in them a contrariety, for instance excellence and infamy, each of whose two [members] rightly has a relation to its subject. But not every relative admits of [this property]; for there is no contrary to “double”, nor to what increases as a part.

**[C148]** The canon about this is that the relative is among the things which accidentally belong to all of the categories; for the relative is sometimes [found] in substance, like “father” and “son”; sometimes in quantity, like “large” and “small”; sometimes in quality, like “warm” and “cold”, or “disposition” and “endowed with a disposition”; and sometimes it is in the relative itself, like “larger” with regard to what is “smaller” in largeness; like the “friend” which is more of a friend than a “friend”. It is also sometimes in [the category of] “where?”, like upper and lower; in the category of “when?”, like “earlier” and “later”; likewise, it is in the rest of the [categories], and thus the relative accidentally has that which accidentally belongs to its category<sup>939</sup>. So, since doubleness accidentally belongs to quantity, and in quantity there is no contrariety, doubleness does not have contrariety. Since the relation of “excellence” accidentally belongs to quality, and there is contrariety in quality, it is possible that this relation have contrariety accidentally.

[§8 *Second property: some relatives admit of more and less*]

Likewise is the state [of the relative] as concerns admitting of more and less, or quantitatively more and less:<sup>940</sup> it is believed that the “non-equivalent”<sup>941</sup> may be quantitatively more and less, since quantity is quantitatively more and less; as [it is believed] that “similar”<sup>942</sup> is more or less, since quality is more or less. We say that as to the non-equivalent, it actually is not more or less, but is “further” and “closer”; for ten is further from three, with respect to equivalence, than nine. The cause for these two things (I mean, the impossible one and the possible one) is what we have already mentioned, namely that quantity is not more or less, neither with respect to itself, nor with respect to the state of another thing by that thing itself; for “ten” is not “more” with respect to being ten than nine in its being nine, in the same way as white is “more” with respect to being white than black in its being black; although a number can be increased and larger by a

---

<sup>939</sup> Namely, as the following examples will show, the relatives which fall in different categories seem to share the properties of the categories under which they fall.

<sup>940</sup> By “quantitatively more and less” I translate here the Arabic *aktar wa-aqall*, not to be confused with “more and less” (*ašadd wa-aḍ’af*), which expresses qualitative intensity.

<sup>941</sup> “Non-equivalent” is, together with “equivalent”, one of the two members of the relation of equivalence, which falls in the category of quantity.

<sup>942</sup> “Similar” is, together with “dissimilar”, one of the two members of the relation of similarity, which falls in the category of quality.

certain number than another number, as we clarified<sup>943</sup>. So, as to this case, non-equivalent is closer than another non-equivalent; as to its being non-equivalent, it does not admit of increasing or decreasing with regard to it.

[§9 *Third property: convertibility*]

[§9.1 *Relatives are convertible; conversion may occur by means of certain particles, or without them*]

Among the properties of the relative there is also the fact that all of them return to each other by mutual equivalence, and convert into each other; the way of this return is different from the way of return which being predicate has with being subject, and from other ways of return and mutuality which have been presented to you earlier<sup>944</sup>. That is because here the subject is repeated by one [C149] of the two extremes, and the predicate is repeated by the second; so, if they are converted, the predicate becomes a subject, and a similar repetition is attached to it on its part; and the subject becomes a predicate, and the repetition is removed from it; so you say: “The slave is a slave to the master”, then you say: “The master is a master to the slave”, so “slave” is repeated in the first [sentence], and “master” in the second [sentence]. For some things you need to attach to the extreme you have posited as a predicate an additional thing, which is not attached to it and is a subject, like attaching preposition “to”<sup>945</sup> to the master and the slave here; but [also] attaching what you attach when you say “sensation is sensation of the sensible”, and “sensible is the sensible of sensation”<sup>946</sup>. In the case of some subjects you do not need that, like when you say “the father is father of the son”, and “the son is son of the father”<sup>947</sup>. Whether you say that as an expression or you do not, you understand a meaning: for you<sup>948</sup> take the predicate as being connected to it, whether you have attached to it the expression which means<sup>949</sup> that, or not, and you do not take it according to this way by itself when you posit it as a subject.

As for the remaining conversions, which we will present to you in the appropriate places, they differ from that which belongs to the relative<sup>950</sup>.

---

<sup>943</sup> For Avicenna’s discussion of this matter see above, ch. IV 2 [§4].

<sup>944</sup> Avicenna has probably in mind, here, to the “conversion” referred to by Porphyry when discussing the predicable *proprium* in the *Isagoge* (Porph. *Isag.* 12,20-22).

<sup>945</sup> “Proposition ‘to’”: Ar. *al-lām*, literally “letter *lām* [L]”. Avicenna is here referring to the preposition *li-*, written by means of the sole letter *l*.

<sup>946</sup> In this latter case the attached thing is preposition *bi-*, namely letter *bā’* (ب).

<sup>947</sup> Although in English there is “of”, the junctions between “father of the son” and “son of the father” are made in Arabic by means of a *status constructus*, which does not require any connecting particles.

<sup>948</sup> Reading *fa-innaka* with most manuscripts, instead of *fa-anta* (Cairo, **Da**).

<sup>949</sup> Reading *al-dāllu* with all mss., instead of *al-dallu* (Cairo).

<sup>950</sup> The mentioned conversions are those of the premises of syllogisms, discussed by Aristotle in his *Prior Analytics* and by Avicenna in *Qiyās* II.1-3.

[§9.2 *The main condition for the convertibility of relation is that there be, between them, a certain equality*]

But there is a condition in this mutual equivalence, which must be taken into account, namely that if relation does not occur in a state of equality, then this mutual equivalence is not necessary; and its occurring in a state of equality means that it occurs with respect to the thing to which the relation is primarily and by itself, for if it occurs either with respect to its subject, or a thing which belongs accidentally to it, or its genus, or its species, then the relation does not occur as mutually equivalent. For if you say that “head” is the head of man, or an animal, or “head” is the head of a capable of walking, or “head” is the head of a Peripatetic, or likewise [if you say] that a wing is the wing of a bird, and a rudder is the rudder of a ship, you cannot convert and say: “a man/animal/capable-of-walking/Peripatetic is a man/animal/capable-of-walking/Peripatetic with respect to the head”; likewise, you do not say the bird “bird” with respect to the wing, nor do you say the ship “ship” with respect to the rudder; this because “head” does not equally convert with what has been mentioned, but its correspondent is “headed”; so “head” is the head of the headed; likewise, “wing” [C150] is the wing of the “winged”, and similarly “rudder” is the rudder of the “ruddered”. As to what has been mentioned, it is either the subject of the equivalent relative, or the genus of its subject, or the genus of the relative, or an accident which belongs to the subject of the relative<sup>951</sup>. Most of these occur in the place in which the relation does not occur where the quiddity is said with respect [to something else], but where it is posited as such by virtue of a sort of connection, so the thing related does not have a name inasmuch as it is related, but if it does it does inasmuch as it is a subject for the connection to it, or under another respect. Therefore one must invent, for such things, a name corresponding to the connection<sup>952</sup>.

If there are doubts regarding the determination of what admits a relation by equality, by distinguishing [it] from what does not admit [a relation] by equality, your way of doing this is collecting together the descriptions of the thing; then, for any of those descriptions, if you posit it as established and you remove the other thing, and you can remove it as well or not, then you can maintain the relation; and if you remove it and you posit the other thing, and you cannot preserve the relation, then it is what has equality, and what is not such does not have equality<sup>953</sup>. For if you remove from the thing the fact that it is an animal, a man, a Peripatetic, and the fact that it has the ability to walk, as it has been agreed, and if you preserve its being headed, then you can put “head” in connection with it. If you

---

<sup>951</sup> “Man” is the subject of the relative, “animal” is the genus of the subject, “capable of walking” is an attribute which accidentally belongs to the subject.

<sup>952</sup> The necessity of inventing new names for those relatives which do not reciprocate is also a point of Aristotle’s discussion of the relatives in *Cat. 7*. See *Cat. 7* a5-7: ἐνίοτε δὲ καὶ ὀνοματοποιεῖν ἴσως ἀναγκαῖον, ἐὰν μὴ κείμενον ἢ ὄνομα πρὸς ὃ οἰκείως ἂν ἀποδοθεῖ. (“It may sometimes be necessary even to invent names, if no name exists in relation to which a thing would be given properly”).

<sup>953</sup> The “method” suggested by Avicenna corresponds to that envisaged by Aristotle at *Cat. 7* a31: ἔτι ἐὰν μὲν οἰκείως ἀποδεδομένον ἢ πρὸς ὃ λέγεται, πάντων περιαιρουμένων τῶν ἄλλων ὅσα συμβεβηκότα ἐστίν, καταλειπομένου δὲ τούτου μόνου πρὸς ὃ ἀπεδόθη οἰκείως, αἰεὶ πρὸς αὐτὸ ῥηθήσεται (“Again, if that in relation to which a thing is spoken of is properly given, then, when all the other things that are accidental are stripped off and that alone is left to which it was properly given as related, it will always be spoken of in relation to that”).

remove [from it] the fact that it is headed, and preserve its being animal, man, Peripatetic, capable of walking, you cannot put “head” in relation with it.

[IV.4]  
On the properties of the relative<sup>954</sup>

[§1 *Simultaneity in existence*]  
[§1.1 *The meaning of being simultaneous in existence*]

One of<sup>955</sup> the things that are held in common opinion to accompany all relatives is their being simultaneous in existence, i.e. [the fact that] whatever of the two exists, the other is existent as well; and whatever of the two does not exist, the other is non-existent, like “double” and “half”.

[§1.2 *Some relatives seem not to have this property*]

However, in some things there does not occur a mutual equivalence in existence simultaneously, in another respect, like in the case of knowledge and sensation, [C151] namely the two cognitive acquisitions - not the faculties that share their name; for this knowledge itself is always accompanied, in its substance, by its being relative to the object of knowledge, and existent simultaneously with it, while the object of knowledge itself is not accompanied by that; for it sometimes exists as not relative to knowledge, although, insofar as they are mutually relative in act, none of them is prior to the other. The aim is not this; the aim is that one of the two *essences* cannot separate from a relation that accompanies it, and makes it necessary that there be always a relation with it; while the *essence* of the other may exist without being relative [to the first]<sup>956</sup>. Likewise is the conceptualization of the state of this sensation, for<sup>957</sup> its essence cannot be separated from the fact that a relation accompanies it, whilst the sensible itself [can be] separated; for it is not necessary that [the sensible] be not existent when sensation does not exist, since it is possible that a sensitive [being] do not exist, whereas the sensible elements which are principles of the generation of animals, and of all the other terrestrial bodies are existent. As to other things, they are either reciprocal in being accompanied [by that], if they are taken as relative, or are not reciprocal in being accompanied [by that], if they are taken absolutely. You must understand this place in this way. As to the way according to which the other interpreters<sup>958</sup> understand it, it is an imperfect way.

---

<sup>954</sup> This chapter corresponds to *Cat.* 7 b15 – 8 a12. Most of the properties of the relatives have been discussed in the previous chapter; the only property at stake here is simultaneous existence, whose treatment covers the whole chapter.

<sup>955</sup> Reading *wa-mimmā* (*mimmā* As) with all mss., instead of *wa-mā* (Cairo).

<sup>956</sup> The “aim” of this enquiry is not to highlight the simultaneity of the two relatives, when they are effectively related, but to highlight that one of them may only exist in relation to the other, whilst the other may not reciprocate.

<sup>957</sup> Reading *fa-inna dātahū* with most manuscripts, instead of *wa-anna dātahū* (BDa, Cairo).

<sup>958</sup> “The other interpreters”: ar. *al-ṭāʿifa*, literally “the group”. It is not clear to what group of people Avicenna is here referring to.



[§1.3 Aristotle's example: the squaring of the circle]

As for the example on the side of knowledge, the commonly accepted [one] is what they have mentioned concerning the square equivalent to the circle, for knowledge thereof did not exist up to now, but [the square] is existent<sup>959</sup>.

[§2 Objections]

[§2.1 Knowledge does not require its object to be existent among concrete beings, regardless whether it is known by conceptualization or by assent]

Now, we should enquire about this point truthfully. We say: someone might say that this discourse is made carelessly, and this because it is not necessary that every knowledge have an existent object of knowledge as its counterpart; for a kind of knowledge is conceptualization, and certain things may be conceptualized that need not be existent, like the sphere inscribed in a icosahedron<sup>960</sup>; for we conceptualize something like this truly, and this does not oblige us [C152] to posit, for it, existence among concrete beings. On the whole this does not oblige us to posit, for it, a way of existence other than [the existence] which is in the mind: and this [existence] that is in the mind is knowledge itself. However, our enquiry only concerns a knowledge that is relative to a certain related [thing], and the related [thing] is a second thing. Also among things that are knowable with respect to assent<sup>961</sup>, there are many things falling under relatives that only have existence among concrete beings possibly; and possibility is other than existence, for it is as if we said: “if from a figure X a curved line Y is traced beside a [straight] line Z, the two lines do not stop getting closer to each other, but they do not meet”<sup>962</sup>; for this also does not have existence but in mind.

[§2.2 Objection: the squaring of the circle is a doubtful example]

This example that they mentioned, namely the state of the square equivalent to the circle, which they posit as existent although it is not known, is an example [even] more doubtful than the claim [in question]. If only we knew where it exists! For if it has existence in mind then it is necessarily known, while if it has real existence among concrete beings, by means of what proof would they have learned it? Who told them that? If they mean that it is possible for it to exist then it is something in potency, just as it is also possible for knowledge thereof to exist.

---

<sup>959</sup> Arist. *Cat.* 7b 31-33: οἷον καὶ ὁ τοῦ κύκλου τετραγωνισμὸς εἶγε ἔστιν ἐπιστητόν, ἐπιστήμη μὲν αὐτοῦ οὐκ ἔστιν οὐδέπω, αὐτὸ δὲ τὸ ἐπιστητόν ἔστιν (“Take, for example, the squaring of the circle, supposing it to be knowable; knowledge of it does not yet exist but the knowable itself exists”).

<sup>960</sup> Avicenna is referring to Euclid's construction of an icosahedron in a sphere, as carried out in proposition 16 of book XIII of the *Elements*.

<sup>961</sup> After discussing conceptualization (*taṣawwur*) as a type of knowledge, Avicenna gives an example of knowledge by assent (*taṣdīq*).

<sup>962</sup> Avicenna's example is that of an asymptote moving along the branch of a curve: although the two lines may be intellectually supposed to never meet each other, they are only potentially found as such in concrete reality.

[§3 Replies]  
[§3.1 Reply to the first objection]

Hence we say to him who said this, and asked it: being a logician, you cannot verify these states by means of an essential verification. Our goal, in what we mentioned, is only that you learn that the essence of one of two mutual relatives may have an existence which does not separate from the relation to the other, while the other may not be reciprocal with it in this respect<sup>963</sup>. So, if a conceptualizing or assenting knowledge is not relative to something else, then it does not fall under the relatives which we mention; if it does not fall under the relatives that we have mentioned, then he did not contradict what we said, but we posited our example, which we use as a basis, concerning the thing which is not knowledge unless it is relative; and that is like our knowledge of the fact that the celestial sphere exists as moving in circle. This knowledge [C153] falls under what we have mentioned, and under the condition we pointed to. and if it is, according to the example that we have mentioned earlier, relative in mind, or outside the mind, but its reciprocal is in existence simultaneously [with it], then that also is not something that contradicts our words. For we did not say: “none of the relatives is reciprocal in existence simultaneously”, but we said: “most of them are such”.

[§3.2 Reply to the second objection]

As to the case of the square equivalent to the circle, our aim does not change in virtue of what was claimed about it; this because if this square has the possibility of existence, then it is not impossible to suppose it as existent, and its supposition as existent does not make it necessary, for knowledge thereof, to be realized; but it is possible that this square be existent, and that we are all ignorant of it. So, it is clear that all that was mentioned by these criticisms does not destroy the scope we aim at<sup>964</sup>.

[§3.3 Conclusion]

What touches us is not this; what we need to do is to undertake, in logic, a knowledge different from logic, which it is not in the nature of the logician to verify essentially. Know that the two mutually relative things, insofar as they are mutually relative in actuality, according to a relation by mutual equivalence, are simultaneous; for the quiddity of one

---

<sup>963</sup> Avicenna recalls here what he has already stated above, namely that the logician is not entitled to truly verify anything concerning the existence of relatives (see IV 3, [§1]).

<sup>964</sup> To sum up the argument of section [§2], Avicenna’s point seems to be the following: the aim of the whole discussion is to show that there may be some relatives which do not exist simultaneously; one of them may only be realized when the other is realized, while the other does not. The example provided by Aristotle for this, namely knowledge of the squaring of the circle, is ineffective. [§2.1] The first reason for this is that there may be knowledge of things having only mental existence, as the geometrical examples of the icosahedron and the asymptote show. [§2.2] If the advocates of Aristotle defended the example by describing it as a potentially existent knowable thing, known by a potential knowledge, they would still not provide a good example: a merely potential knowledge is not a relative, since it is not actually determined as knowledge by the existence of its object.

thing is only said with respect to something that is together with it. As for the case where one of them is taken as actual, and the other as potential, the equivalence ceases to be<sup>965</sup>.

[§4 *Two other doubts concerning the simultaneous existence of relatives*]

[§4.1 *Prior and posterior, being relative, should be simultaneous, which is absurd; the Resurrection of bodies on the day of judgment is knowable, therefore knowledge of it and the resurrection itself should be simultaneous*]

But about this there is a doubt, namely: someone might say that what is prior in time is said with respect to what is posterior, and there must be between them a relation in actuality, but not a contrariety, so they are existent simultaneously<sup>966</sup>. Furthermore, we know that<sup>967</sup> the Resurrection will be; and the Resurrection is absent and not existent, but knowledge thereof is existent; there must occur, in between them<sup>968</sup>, a relation in act, and no contrariety, so [that] they are simultaneous.

[§4.2 *Avicenna's reply to the doubt concerning priority and posteriority*]

[§4.2.1 *Prior and posterior may be considered in two different ways*]

We say that, as to the mentioned doubt concerning the prior and posterior, it is solved by saying that this notion is considered in two respects: **[(a)]** one of them is with respect to the mind, absolutely; **[(b)]** the other is with respect to existence, based on the mind.

[§4.2.2 *Mental existence*]

**[(a)]** As to the [consideration] with respect to mind, it is that the mind makes the two times simultaneously present to the estimation, and it finds one of them prior, the other **[A154]** posterior, so that they are realized simultaneously in the mind; or one of the two times, like a certain day, is present in existence and in the mind, and the mind puts in relation to it another time which it conceives of as future, so that therefore it judges between them [a relation of] priority and posteriority<sup>969</sup>, because [earlier] it has made them present simultaneously.

[§4.2.3 *Mental and extra-mental existence*]

**[(b)]** As to the other way [of consideration], it is that if the prior time is existent, then the existence of the other [time implies] that it is not [the first], and it is possible that it exist according to a possibility which tends to necessity, and this is its being “posterior”. This attribute of the second time is existent in the mind when the prior time exists. If “posterior” exists, then it is existent in mind in such a way that the second time does not

---

<sup>965</sup> The reason for this is the fact that something potential (for instance, a seed) cannot subsist simultaneously with its actualization (the plant).

<sup>966</sup> This is, needless to say, absurd: prior and posterior are not simultaneous by definition.

<sup>967</sup> Reading *bi-anna* with most manuscripts, instead of *anna* (**Da**, Cairo).

<sup>968</sup> I.e. between the Resurrection and knowledge thereof.

<sup>969</sup> Reading *bi-taqaddum wa-ta'ahhur* with all mss., instead of *bi-taqaddum* (Cairo).

exist; and its connection with the mind is the connection of something that was existent, and then was destroyed. This is also something that exists along with the existence of the posterior time.

[§4.2.4 *Priority and posteriority exist in the mind*]

As to the connection of “prior” and “posterior” according to another way, which is not one that we mentioned, it has no existence among [concrete] things, but in mind only; for every time exists in such a way that, insofar as it is existent, it is neither prior nor posterior, nor relative to any other time; if it were not [so], then it would be relative to infinite things at the same time, and there would be infinite relations, existing in actuality<sup>970</sup>. However, it is by itself such that if it is intellected, and the other [time] is intellected, the intellect judges it to be posterior to something that is existent in mind.

[§4.3 *Avicenna’s reply to the doubt concerning resurrection*]

As for the knowledge of resurrection, it only consists in judging that “it will be”; for knowing of it that “it will be” is the knowledge of a certain state of its, which exists in the mind simultaneously with the knowledge of the fact that “it will be”, not when it is, but before that, when it is non-existent among concrete beings and existent in the soul<sup>971</sup>. As to the conceptualization of the quiddity of resurrection as an abstract [thing], it is not relative to something in existence insofar as it is a conceptualization<sup>972</sup>.

[§4.4 *These are cases of intellectually existing relations*]

Know that all these examples of relations are only established in the estimative faculty, and the mutually relative among them are also only mutually relative in the estimative faculty. The deep enquiry and clarification of this is only [given] in the true sciences<sup>973</sup>.

[§5 *The answer of a group of commentators to the doubt concerning knowledge*]

However, a group of sophists gave a reply to the doubt concerning the equivalence of knowledge and knowable, and said that what has been said regarding the fact that the knowable exists by itself, while knowledge thereof does not, is not true; for there is an existing knowledge of every thing, which exists [A155] while not being posterior to the

---

<sup>970</sup> If each time were by itself, when existing, prior and posterior, it would be posterior to all of the infinite times before it and prior to all of the infinite times after it; it would then entertain simultaneously infinite actual relations, which is absurd.

<sup>971</sup> This is the text as it is found in Cairo and in mss. **BNkDa**; the other consulted manuscripts read “As to the knowledge of resurrection, the knowledge that ‘it will be’ is a knowledge of a certain state of its, which exists in mind together with knowledge; [for it only consists in judging that ‘it will be’], not when ‘it is’, but before that, when it is non-existent among concrete beings, and existent in the soul”.

<sup>972</sup> Resurrection as such is relative to nothing, therefore it is not conceptualized with respect to any other thing; it only matters, in this doubt, inasmuch as it is an object of knowledge.

<sup>973</sup> The existence of relatives is discussed, as already clarified, in *Ilāhiyyāt* III.10; See the COMMENTARY *ad loc.*

[knowable] things, which is the knowledge of the Creator and the angels. They did not know, although this is true, that this is not an answer to him who doubts; for he who doubts does not say that none of the mutually relative [things] is non-simultaneously, nor does he say that neither knowledge nor the knowable are simultaneous; and there is no need for this, since his claim is that not all mutually relative things are simultaneous<sup>974</sup>.

[§6 *Another doubt: a certain existing knowable thing may not realize a particular knowledge.*]

This claim is correct according to one example mentioned by him who doubt, which regards one [singular] knowledge. He says: “my knowledge of the existence of the world cannot be a knowledge, and an essence, while the world is not actually existent. Furthermore, the world may exist in itself, but my knowledge thereof is not existent; similarly if the condition of essence is not taken into account”. Hence, if his knowledge of the world is such and there can be absolutely no knowledge besides this singular knowledge, unless when it and the world always exist simultaneously (not only the knowledge that he mentioned, but all knowledges), then the world may be existent, and a certain knowledge among the knowledges of his existence may be not existent: thus the ambiguity subsists.

As a matter of fact, the obscurity was not mentioned inasmuch as the knowable is existent, and there is no knowledge at all; but it is another ambiguity, and another solution should be sought for it; the least it may be said is that the world is not relative to this knowledge, for it is not known by it<sup>975</sup>.

---

<sup>974</sup> Since Aristotle himself admits that not all relatives satisfy the condition of being simultaneously existent, it is clear that providing God’s knowledge as a counterexample is – again - not a good objection.

<sup>975</sup> The doubt presented here effectively seems to contradict Avicenna’s claim, inasmuch as it presents the case of an actual existent thing whose existence does not necessarily realize a certain knowledge of it. It is therefore a counterexample which calls into question the relative nature of knowledge as such.

#### [IV.5]

**On verifying the relative that is a category; on the difference between what is relative by itself and what has relation by accident, or as a necessary concomitant; on the properties of the relative that is a category<sup>976</sup>.**

[§1 *The aforementioned description of the relative does not describe the category, since it may be applied to things from other categories*]

Know that up to now we only notified relatives to which the mentioned definition corresponds; thus, some of them are such that their quiddities are said with respect to another thing, some others are such by virtue of a certain sort of connection which is attached to them. Let us now examine whether the mentioned description is the description of the category, or the description of a notion that is correctly said to be relative, but is not the category itself or a species of the category.

We say [A156] that we know that the categories are mutually different, and that it is not correct to say two categories together of one thing by saying them as a genus, so that the thing falls, under the respect of its quiddity, under two categories; although the thing may sometimes belong to a category by itself, and be in the other accidentally. We already discussed this completely, in what precedes<sup>977</sup>.

Moreover, the intellect does not prevent this [mentioned] definition from corresponding to things which belong to other categories, for the head may need to be by itself a substance in order to be a head, [so] as it needs that its quiddity be said with respect to something else in order to be a head; thus, both things are constitutive of it insofar as it is a head, and it is not [true] that one of them is by essence, the other by accident<sup>978</sup>.

The head is only such if it is taken as a head absolutely, and it is according to the consideration of secondary substances. As to the case where it is taken as restricted to being “this [particular] head”, its quiddity is not said with respect to something else; this for the reason that it is itself perceived and imagined without knowing the thing of which it is a head, inasmuch as it is “this head”; and the [thing] of which it is head, inasmuch as it is “this head”, is “this man”. As to the case where it expresses the fact that it is the head of a thing as a whole, it does not have it insofar as it is this head, but insofar as it is a head absolutely. Likewise, it is not said that this head is a certain head with respect to a thing; but [it is said] that it is a head absolutely with respect to a thing<sup>979</sup>. We can say that the head is only a head with respect to the headed, but we cannot say that “this hand” is “this

---

<sup>976</sup> This chapter corresponds to *Cat.* 8 a13 – b24.

<sup>977</sup> This is a reference to the questions discussed in the second treatise, notably in chapters II 4-5.

<sup>978</sup> Given that the head cannot belong essentially to two different categories at the same time, Avicenna is here excluding that it be falling under one category essentially and another category by accident. Even the “relational” character of the head, namely its quiddity being said with respect to the “headed”, is a constitutive character of its; if the head is to be understood absolutely as a substance it is evident, then, that the first definition of the relative does not correspond to that of the category.

<sup>979</sup> I.e. the “headed” thing.

hand” only with respect to Socrates, or to this [man] who is headed, in such a way that if you saw this hand as revealed from<sup>980</sup> [having been] concealed<sup>981</sup>, it would be represented necessarily in your mind, in the face of it, that which it is in relation to, namely Socrates, or “this headed”, as here [in the first case] the “headed” is represented to you<sup>982</sup>.

Moreover, some of the things that have been mentioned are also by themselves in the category of quality, like possession; for it is a quality, and it has been said [to be] with respect to something different according to a certain sort of connection. Likewise, other things from other categories.

Hence, the first description does not forbid that there be things which fall under [C157] substance and other [categories], belonging to the relative. Therefore, this definition is not the definition of the category, and if it were not [so]<sup>983</sup> then things from various categories would share one definition, although it is not a definition for them; but [a definition] is only a definition with regard to the name of a meaning which embraces them, is constitutive of their quiddities, and is said of them; for it is not possible that the genus of things whose genus is substance be something<sup>984</sup> other than substance.

[§2 *The second description: relatives are those things whose existence consists in their being relative*]

You must now reflect on this definition and correct a flaw, if there occurs in it. The commonly accepted correction for this is that the things that fall under the relative are those whose existence consists in their being relative. This correction is right, but some people hold it to be the same as the first definition; you will learn that it is not the first right below. If [this definition] were the first, then because of the first there would be no need for it; and particularly, the first [definition] would express the meaning which it expresses in a clear way, in which this second [definition] would not express [it], if [the first] does express it by means of that clarity<sup>985</sup>.

[§3 *A formal objection to the second definition*]

[§3.1 *The definition includes the word “relative” itself, therefore is circular.*]

Some of them believed that in [the second definition] there is a circular proof: namely, the relative has been taken as a part of its own definition. Those who occupied themselves

---

<sup>980</sup> Reading ‘an with most mss., instead of ġayr (DJMY, Cairo).

<sup>981</sup> Reading mastūrin with most mss., instead of mastūratin (BDDaNk, Cairo). Ġayru mastūratin is certainly *facilior* in this context,

<sup>982</sup> In the case of the universal head it is possible to say that head is said with respect to a headed thing, which is not possible in the case of any individual part of an individual substance (such as Socrates’ hand or head).

<sup>983</sup> I.e. if it were effectively the definition of the category.

<sup>984</sup> All consulted manuscripts read šay’ (sic, D omits the passage): I adopt the correction šay’an, proposed by Cairo.

<sup>985</sup> Namely, if both descriptions define the same thing, there would be no need for a second one (which is, moreover, less clear than the first).

with this matter already strived to solve this doubt, and some of them came close to the solution, though they missed it by little<sup>986</sup>.

[§3.2 *Avicenna's reply: a same name may be used, at different times, to indicate two non-identical notions. The example of "possible"*]

However, we say that there are things whose genus is better known by common people, so that the name is posited for their genus, or for what in their opinion resembles the genus, in a primary imposition. Then, properties define a specific meaning under [this genus], or what resembles a specific [meaning] under it, and the name of the genus is transferred to it, by virtue of an agreement which makes this necessary. You can find many examples of this, I mean that you can find things to which names were transferred, that depart from the expression of the primary imposition; but you can find, for those cases which we pointed out, where it is of use to transfer the name from the genus to the species, numerous examples [as well]. Among them there is the fact that the mass thought that each thing that may be imagined is either impossible<sup>987</sup> or not impossible, and they posited the name "possible" as a synonym<sup>988</sup>, or a quasi-synonym, of their words "not impossible"; so they said that every being is either impossible or possible; since [some] properties differentiated the state of the non-impossible existent, they found it to be on the one hand necessarily existent<sup>989</sup>, on the other hand not necessarily existent, and both share the fact of being [A158] not impossible and of being<sup>990</sup> "possible" in this sense, i.e. in the sense of "not impossible". Then, they found among things what is neither necessarily existent, nor impossible; what does not have the impossibility of existing and not existing, so its existence and non-existence are possible; and they characterised it by the name "possible", since it is not out of necessity, and they excluded "necessary" from the expression of this second imposition, and transferred the name of what resembled the genus to what resembled the species<sup>991</sup>.

Such is the state of the relative, as well; for the name "relative" was said in the primary imposition, according to the philosophers, of the mentioned meaning; namely, [of] the fact that [the relative] is that whose quiddity is said in the mentioned way, without considering whether it has an existence different from that, or it does not have an existence different from that; in such a way that if the thing falls under substance, or under quality, and then a certain connection is attached to it, and if it is considered under the respect of its connection, then insofar as it is such its quiddity is said with respect to something different from it, and it falls under the relative while having a proper quiddity which is not said with

---

<sup>986</sup> This is very likely a reference to Porphyry, or to the Peripatetic Achaicus; see the COMMENTARY *ad loc.*

<sup>987</sup> Supplementing <immā mumtani 'wa->immā (aw **DiDaNk**) ḡayr mumtani', with all mss.

<sup>988</sup> Ar. *Murādif*. The word has the same root as *mutarādif*, which I have translated above (I.2 [§8.1]) as "polyonym", to maintain the terminology adopted by the Greek commentators of the *Categories*. I employ here the more usual "synonym" for the sake of clarity.

<sup>989</sup> Supplementing *wāḡib* <al-wuḡūd>, with all mss.

<sup>990</sup> Supplementing *fī annahu* <ḡayru mumtani 'in wa-ft> *annahu*, with all mss.

<sup>991</sup> "Possible" in the second sense is in fact a subdivision of the first "possible" (equivalent to "non-impossible"); it is therefore a sort of species, and the first "possible" a kind of genus.



respect [to anything]<sup>992</sup>. If the thing is like fatherhood and sonship, its quiddity is said with respect to something else, although it does not have another existence and another quiddity which also belongs to the relative; so, the relative falls upon the two meanings together in a way that defines [the thing], although it is not a genus for them together. Not everything that is predicated with its meaning of two categories, or of two things from two categories, or of<sup>993</sup> two things that fall under the same category, is a genus for the two categories, for you have already known and verified this<sup>994</sup>. If it is so, then the meaning of the relative that is assumed in the [second] definition is that common meaning, and the meaning of the relative that is defined is that proper meaning.

[§3.3 *The “relative” taken in the second definition is not the definiendum itself, but a more generic notion*]

It is as if someone, when defining “possible” in its true sense, said that the true possible is that for which it is possible to be and it is possible not to be; his way of saying would not be weak inasmuch as he has taken the thing in its own proof, because he does not mean, by the “possible” taken in the definition, but the generic meaning, which is [to be understood] in the sense of “non-impossible”. For this reason, if he says that the true relative that he defines as being one of the ten [categories] is that whose quiddity and existence consists of its being relative, and [if] he means that it is that [thing] whose existence and quiddity consists of its quiddity being said with respect [to something], [A159] and it does not have any other existence, then he did not take the *definiendum* in the definition, or the described thing in the description.

So, this is one of the specified things that are specified by attaching the condition of abstraction<sup>995</sup> to a nature that embraces them; for if the nature of the genus, inasmuch as it is the nature of the genus, admits that a certain notion may or may not be attached to it, and one of the two things must not [be attached to it], and [if] it is the case that when one attaches the condition of the existence of that notion to [that nature] it becomes specified; then, if one attaches the condition of the non-existence of that notion to it, [the nature] becomes specified [as well]. I do not mean here by “genus” and “species” the actual<sup>996</sup> genus and species, but only “proper” and “common”<sup>997</sup>.

---

<sup>992</sup> I.e. the proper quiddity of a substance, a quality, or another category.

<sup>993</sup> Supplementing *aw* <‘alā> *šay’ayni* with all mss. (except **YB**).

<sup>994</sup> Probably a reference to the discussion of extra-categorical beings in chapter II.4.

<sup>995</sup> Reading *al-tağrīdi* with all mss., instead of *al-tağribati* (Cairo).

<sup>996</sup> Reading *al-ḥaqīqiyayni* with most mss., instead of *al-ḥaqīqayni* (Cairo, **YB**).

<sup>997</sup> If Avicenna were really arguing that the “relative” included in the second definition is a genus, he would be granting it the status of a category; he clarifies, therefore, that he only means by “genus” and “species” respectively a more generic and a more specific notion.

[§4 *The second definition solves Aristotle's puzzle concerning secondary substances*]

Thus, if the definition of the relative that is a category is this one, the head is not relative in the sense that belongs to the category, since its existence does not consist merely of its being relative, but it has<sup>998</sup> another existence to which this meaning is attached<sup>999</sup>.

The same with knowledge, for it is a form, and a quality established in the soul; but a certain relation follows it, and it has a proper existence insofar as it is a form in the soul. Likewise “double” is a form in the soul, a number or a quantity, and a connection occurs accidentally to it.

[§5 *Two objections*]

[§5.1 *If “relative” is understood as “something having a relation”, it cannot be a proper category; the two definitions do not differ from each other, since both posit the relative as “something having relation”*]

However, someone might say: you forbade that something whose name is derived from simple accidents be a category, like “white”, which means “thing endowed with whiteness”, without any addition<sup>1000</sup>; moreover, there is no doubt about the fact that the first meaning that is understood in “relative” must be “thing endowed with relation”, without any specification; and there is no doubt, because of these principles, that according<sup>1001</sup> to this meaning it cannot be a category, or a species of a category.

Moreover, the relative that they<sup>1002</sup> posit as a category is also a thing endowed with relation, since it is a thing whose quiddity is said with respect to something else; and if it is such, this relative which is the category shares [something] with the relative which is not the category, so there is no difference between them.

[§5.2 *Avicenna's reply: the “thingness” of the actual relative is specified by a different sort of existence*]

As to thingness, it is something from which the relative which is a category is not disjoint, and it is not possible to deny it; so you cannot say that the proper existence because of which what is not the category is not a relative [A160] consists of its being a thing; for what posits for it a proper existence different from its being relative is not disjoint from “thing” either. But by “proper existence” we only mean an existence which is more specific than thingness, and an existence belonging to the ways of existence that specify things, not the thing in which all categories share<sup>1003</sup>. So we say, as an answer to

---

<sup>998</sup> Reading *bal* <*lahū*> *wuğūd* with all manuscripts, instead of *bal wuğūd* (Y, Cairo).

<sup>999</sup> I.e. its existence as a substance.

<sup>1000</sup> This point was discussed by Avicenna in ch. II 4.

<sup>1001</sup> Reading *kāna ‘alā hādā l-mafhūmi* with all mss., instead of *kāna hādā l-mafhūma* (Cairo).

<sup>1002</sup> This is a reference to the first definition of “relative”, i.e. that whose quiddity is said with reference to something else.

<sup>1003</sup> Namely, “existence” in its proper sense, as a transcendental property which is shared by all beings. Quiddity is also called “proper existence” by Avicenna, in *Ilāhiyyāt* I 5.

this, that it is not equivalent<sup>1004</sup>; for the thingness which is predicated of the true relative is the thingness whose specification is the existence which the relative has insofar as it is a relative; as to the thingness which is predicated of the other meaning, its specification is another existence, for if the thingness of the thing endowed with relation is specified, it becomes by virtue of it a substance, or a quantity, or another thing. As for the thingness of relation, it is relation, so the thingness of what is endowed with relation requires, for that thing, an essence different from that by virtue of which it is relative; and the thingness of relation is not such.

When we say that the relative that belongs to the category is the thing which does not have existence but the existence by virtue of which it is relative, we do not mean thereby the common existence, but a certain sort of existence which specifies the common one, which is not only the specification of its being a relation, but<sup>1005</sup> may be specified somehow in its being a relation. Also “white” does not have a specification in its thingness in the specification of its thingness consisting only of its being something that has whiteness, but it is [rather] something which has a specific connection with whiteness, whose thingness is not actually complete unless it is accompanied by the fact of being, in itself, a corporeal substance. Thus, the difference is that one of the two [relatives] is a thing which is constituted by the fact that its quiddity is said with respect [to something else], and by the fact that it is specified by virtue of this, not being specified by something different; and this is [the relative which is] the category. The thingness of the other [relative] is constituted by a proper existence, and a proper essence which is accompanied by relation, and it is not [such] by virtue of relation; this is [the relative] which is not the category. It is because of this difference that one of them is a category, while the other is not a category, nor is equivalent to it, but as abstractly being a thing which has a relation<sup>1006</sup>. Thus, this doubt has been solved.

[§6 *The determination and specifications of relatives*]

[§6.1 *The existence of one extreme, in a relation, determines the other extreme as well*]

So, if the relative does not have any [other] existence but the fact of being relative, it follows that when one of its two extremes is determined in a certain way, then the other is determined because of it; so that [A161] if you say “double” absolutely, without any determination, you figure out with respect to it “half”, without any determination; and if you say “a double which is four”, you figure out with respect to it “a half which is two”.

[§6.2 *Relations can be specified either with respect to the thing to which they are attached, or by themselves*]

Our saying “determinate knowledge of the relative” is an expression by which we understand [multiple] meanings. We must make a premise before clarifying this, so we say

---

<sup>1004</sup> I.e., it cannot be said that the relative which is not a category and the category are the same on the basis of their common being “things”.

<sup>1005</sup> Supplementing <bal> qad (om. **RENNoM**) with all mss., except **YB**.

<sup>1006</sup> The only common feature of relatives in the first sense and relatives in the second sense is their being abstractly endowed with a relation.

that the relative does not have separate<sup>1007</sup> existence, but its existence consists of being a reality which is attached to things, and its characterization [depends] on the characterization of this being-attached.

The characterization of this being-attached is understood in two ways: [(a)] one of them consists of taking the thing [to] which [the relation] is attached and the relation together, so this [consists of] a category and another category, not the category, but is composed by a category and a category; [(b)] the other [way] consists of taking, as associated with the relation, a certain way of that proper, intellectual being-attached; and [of] taking them together as one accident of the thing [to] which [the relation] is attached<sup>1008</sup>.

This is the specification of relation, and its determinate knowledge<sup>1009</sup>, since “similarity” is for instance a certain agreement with respect to quality: an agreement with respect to quality is different from the agreeing quality [itself], so the agreeing quality is not a relation, but it is a thing having relation. As to the agreement connected with quality, it is a species of the relative; like equivalence, which is agreement with respect to quantity, and resemblance, which is agreement with respect to the species. So, if the determinate knowledge in the relative is only possible where the relative [thing] is previously undetermined, and it is a relation which is taken in the general sense, since there must be something for which or to which the relation is supposed; then, if it is determined, it becomes determined undoubtedly by virtue of the determination of that thing; and if the thing<sup>1010</sup> were in a certain state, then the relation would be because of that state.

[§6.3 *Relatives are realized simultaneously, not according to priority and posteriority; what realizes a relation is the realization of its subject*]

If the relative is determined, its determination does not happen with respect to the thing that it was in the first place, i.e. [with respect to] how it was in the first place.

An example of this is the fact that if we take firstly a numerical double absolutely, it is [such] with respect to numerical half absolutely; hence, if the number which is a double is determined, in such a way that the doubleness becomes determined [as well], the other side is not established according to its state, for the absolute [state] [A162] of that side, I mean “halfness”, is not determined with respect to the absolute [state] of this side, namely doubleness. So, since it has been determined, it becomes clear from this that the other is determined as well; for if the thing which is double is determined, the thing of which [the first] is the double is undoubtedly determined; for it is not possible that everything be the double of everything, insofar as it is a determined double. Thus, whatever of the two relatives is known because of its determination, the other is known as well because of it<sup>1011</sup>.

<sup>1007</sup> Reading *munfarid* with most mss., instead of *mufrad* (Cairo, **BNkDa**).

<sup>1008</sup> As it will be made clear below, the first characterization specifies relation in its wider sense (as something which may be accidentally attached to other categories); the second way of characterization, which only characterizes the relation in itself, is proper of relatives in a more specific sense.

<sup>1009</sup> Ar. *taḥṣīluhū*: the realization of the specification (*tanwī'*), not of the relation.

<sup>1010</sup> “Thing” translates, here and in the preceding sentence, *ma' nā*.

<sup>1011</sup> The two members of a relation are always determined simultaneously; the determination of one of them is not a cause for the determination of the other.

(b) Hence, if the determination does not occur to it in so far as the relation is determined because of it, but inasmuch as the subject [only] is determined and the relation is left aside (along with its state), then the opposite relative is not determined; this because it is not the nature of relation that is determined, but only its subject.

[§6.4 *Not all determinations of the subject determine the relation as well*]

It is not the case that, if a relation is only [known] determinately along with its subject, whenever the subject is [known] determinately the relation is [known] determinately as well. An example of this is the fact that, if “being-head” is a relation that accidentally belongs to a certain member [of the body], and [being-head] is [such] with respect to the “headed”, then: this particular member is [known] determinately inasmuch as it is a substance, and “this head” takes part in specifying its substance, but not in specifying its relation. It does not follow necessarily that, if this head is known determinately as being “this substance”, it can be known from this that it is a head, because “being-head” has been omitted (along with its state). And it was not known determinately with regard to intellect, but with regard to sensation; Hence, it does not follow that the intellect can afford the determinate knowledge of the second [thing], since the first has not been known determinately by it; and for sensation there is no way to acquire a second [thing] that is not concretely present to sensation, because of a first [thing] which is present to sensation<sup>1012</sup>. So, if one strived in order for the characterization of this substance to be determined in the intellect, he should characterize it by means of its accidents; among its accidents there is its belonging to Zayd’s body; therefore, “headed” would be specified<sup>1013</sup> for the intellect. This is a certain judgment which contains a subject and a relation<sup>1014</sup>.

As to the case where the relative [thing] is the relation itself, none of the two extremes is known determinately but by virtue of the determinate knowledge of the other, because none of the two extremes has an existence other than [that of] the relative<sup>1015</sup>.

From this it derives that every thing which falls under the relative, if it is determined according to a certain way of determination, [is such that] it does not follow that its opposite is determined, for the relation is attached to it **[A163]** and it<sup>1016</sup> has a proper existence. It does not follow, from this, that everything to which a relation is attached also has proper existence; for it is not realized by the realization of its opposite, but it may be

---

<sup>1012</sup> In Avicenna’s explanation, the apprehension of a certain individual substance (“this head”) by means of sensation does not entail that, together with this sensible apprehension, its relative nature (being the nature of a “head” related to a “headed thing”) is apprehended as well. If the intellect has not already apprehended that “this head” is a head, in a relative sense, it cannot acquire its relation to the “headed” (that which here is called “the second thing”); sensation may not either. This proves, according to Avicenna, that not every realization of a thing subject to relation realizes the relation as well: the thing must be somehow realized together with the relation itself.

<sup>1013</sup> Reading *yataḥḥṣṣaṣu* with most manuscripts (*taḥḥṣṣaṣa R*) instead of *yataḥḥṣṣalu* (Cairo).

<sup>1014</sup> To be understood as a relative thing, “this head” must not be sensibly apprehended by itself; it must be intellectually apprehended along with a certain accident of its (i.e. its being a part of Zayd’s body).

<sup>1015</sup> This is the case of proper relatives, which do not have a proper existence other than their being relatives.

<sup>1016</sup> Not the relation itself, but the thing to which the relation is attached.

realized when the realization is [only] intellectual<sup>1017</sup>. As to relation itself, it is realized in the intellect along with the realization of its subject.

[§6.5 *Some features of the subject do not specify the relation, but individualize it*]

In the realization of relation by virtue of the realization of its subject there is what specifies it, and also what does not specify it, but restricts<sup>1018</sup> it or individualizes it. Hence, if it makes its definition different, then it specifies [the relation]; if it maintains its definition and attaches to it an extraneous accident, if it were not unlikely that that nature of relation be maintained, then it does not specify [the relation], but restricts<sup>1019</sup> it; like the fatherhood of a just man and the fatherhood of an unjust man, for they differ by certain states, but [these states] are external to their quiddities; for if the just man is imagined as not just, the notion which is fatherhood does not cease to be. Thus, as for equivalence, if you imagine to substitute in it quantity with quality, you do not find equivalence as existing, nor does the relation in itself remain existent<sup>1020</sup>.

[§7 *Relations are unitary by species, but differ individually in their subjects*]

As to individuality, it is like “this [particular] fatherhood” and “that [particular] fatherhood”, or rather like the proximity which belongs to each one of the two things which are near; so, you must know that what they say concerning the state of relation in cases like these, namely that a connection which is one by number exists in both things together, does not make sense<sup>1021</sup>. But each one of them is described by a relation to the other, which is not by number the relation of the other to it; their species only is one, like [in the case] of the proximity of this [thing] to that [thing], and the proximity of that [thing] to this [thing]; and they differ by the species, like fatherhood and sonship. Likewise [in the case of] contact: for each one of the two things is described by its being contiguous to that other, so that it has a contact with the other, and the connection of that contact with the first is in itself that it is in it, and [the connection it has] with the other consists of its belonging to it, and of being such with respect to it and by virtue of it, **[A164]** <not because that is in it><sup>1022</sup>. Likewise, the other is also contiguous to the first by virtue of a contact it has with the first, so the connection of that contact by virtue of which the other is contiguous, [the connection of this] to the other thing is a connection which consists of the fact that it is in it; with respect to the first, it is a connection which consists of its belonging to it, not of its being in it, or because of the fact that one of them is not contiguous to the other, by virtue of a contiguity which is in the other; but by virtue of a contiguity which is in itself because

---

<sup>1017</sup> This is the case of actual or “proper” relations.

<sup>1018</sup> Cairo reads *yudayyifuhā*. Should we read *yudayyiquhā* instead?

<sup>1019</sup> See the previous note.

<sup>1020</sup> In the case of the two particular fatherhoods, removing an accidental attribute of the subject (such as “just” or “unjust”) does not affect the nature of the relation; in the case of equivalence, which is defined as “agreement with respect to quantity”, if “quality” substitutes “quantity” neither the definition nor the relation itself are maintained.

<sup>1021</sup> The matter of the unity of relations will also be discussed by Avicenna in the *Ilāhiyyāt* of the *Šifā'* (III.10).

<sup>1022</sup>

of that other [thing]. But they, from the point of view of contiguity, or rather from the point of view of contact, share in the same way as individuals share common things.

Let this be sufficient, as concerns the clarification of the relative.

**[C165]**

**FIFTH TREATISE**

of the second section

of the first part, concerning Logic

ON QUALITY

**[C167]**



[V.1]  
On notifying quality and its primary subdivisions<sup>1023</sup>

[§1 *The two customary ways of defining quality*]

As for quality, it has become<sup>1024</sup> customary to notify it according to two ways of notification: **[(a)]** one of them consists of saying that quality (*kayfiyya*) is “that by means of which it is said, of individuals, *how* (*kayfa*) they are”<sup>1025</sup>; **[(b)]** the other consists of saying that quality is that in virtue of which it is said, of things, that they are similar and dissimilar. Let us consider the state of these two notifications, whether they provide us with a conceptualized notion.

[§2 *The first way of notifying quality*]

[§2.1 *What is answered to the question “how?” may belong to other categories*]

**[(a)]** Hence, we say: as for the case where this notification has the character of referring to the common usage, [to] that of which people usually ask “how?”, and [to] what is answered when “how?” is asked, this is something that is not determined in a single category. This because ordinary people may ask: “How is Zayd?”, and they may expect to be answered: “he is standing, or sitting”, and so the answer falls in the category of position. It may also be asked, and said: “How did you see ‘Abdallāh?”, and it is acceptable, in the common usage, to reply by saying: “I saw him walking, or eating”; or “I saw him blushing, or becoming yellow”, or something else. It is not rare, in the countries of the Arabs and in Persia as well, that [people] say: “I saw him in a good place”, or “on a bed”, and the like; so that according to them these states are “qualities”<sup>1026</sup> of the states of men. **[C168]** Hence, the common usage does not inform us, by this, of something which directs the mind to imagining the quality which falls in the category; but it is as if they said “state” not only of that which is called “state” in the *Categories*<sup>1027</sup>, but [also] of all attributes, even though they are quantities; so, it is not rare that they say “quality” of other things. Thus, if all of what they call “quality” in this way does belong to this category, then position will belong to this category as well<sup>1028</sup>.

---

<sup>1023</sup> This chapter corresponds to Arist. *Cat.* 8 b25-26.

<sup>1024</sup> Reading *ḡarā* (sic) with most manuscripts, instead of *taḡrī* (Cairo; بحرى **Da**). This change does not affect the translation significantly.

<sup>1025</sup> This is Aristotle’s first description of quantity, according to the interpretation of Ishāq b. Hunayn.

<sup>1026</sup> I.e., they are “qualities” (*kayfiyyāt*) inasmuch as they are answers to the question “how?” (*kayfa*). The last example provides a case where the answer to the question “how?”

<sup>1027</sup> “State” (*ḥāl*) in the technical sense is, together with “habit” (*malaka*), one of the four species of quality (see below, ch. V 3).

<sup>1028</sup> This is absurd, since “position” constitutes in itself another category.

[§2.2 “Position” may not be said to belong to the categories of quality and position under different respects]

Furthermore, I do not hold it for unlikely that one of those troublemakers<sup>1029</sup> take up my words, and say: “As to position, inasmuch as it may correctly be an answer to the question ‘how?’, it is a quality; inasmuch as it is a state of a substance having such and such parts, it is [in the category of] position”. If he said so, we would not contradict him by saying to him that this is not possible, and we would not blame<sup>1030</sup> him because of what was mentioned before; but we would urge him, rather, to posit position as a species of quality, for the respect in which it is position does not make it such that it is not possible, for it, to be an answer to the question “how is the thing?”; but instead it makes it apt to that<sup>1031</sup>. So, this is not like two mutually different considerations by virtue of which the thing comes to be in two categories, but it is like two considerations, one of which is said of the other, and is more common than it. If the more common one is said [of the other], the more specific falls under it, so the more specific is not said [of the first] in turn. So, if with regard to this the common usage was not taken into account, but a notion was meant, on which there fell a specific usage, he who expresses what he wanted by means of this should inform us of what he means by the second “position”.

Thus, I cannot understand so far, from this description, the essence of this category; it is not implausible that someone other than me have understood this, or the explanation must be what we shall say later.

[§3 *The second way of notifying quality*]

[§3.1 *In common usage, the notification by means of “similar” and “dissimilar” does not define the category univocally*]

**[(b)]** Likewise is the case as regards the [notification by means of] “similar” and “dissimilar”; for “similar” is employed in a common usage, and it is [also] employed in a specific usage.

**[C169]** As to the common usage, it does not concern the notion which is meant in this category, but sometimes people say: “the way of sitting of X is similar to the way of sitting of Y”, and “the combustion of petroleum is similar to the combustion of balsamic oil”; and they do not refrain from saying “Zayd’s tallness is similar to ‘Amr’s tallness”. So, I think

---

<sup>1029</sup> “Troublemakers”: ar. *al-mubarḥiṣīn*. This rather unusual term is attested in this form by four of the consulted manuscripts (**BNkNDp**), and maintained by the Cairo editors; despite the variety of forms found in the other manuscripts, none of them seems to actually provide a valuable alternative. No verb *barḥaša* is attested in classical or modern Arabic; the critical editors mention as a possible parallel, in a note, a proverbial expression which contains the words “*ḥirbāš* and *birḥāš*” in the sense of “disorder” and “noise” (attested by the *Tāğ al-‘Arūs*). Since however a similar expression, *barkhash*, is more commonly used in Persian in the sense of “quarrelling”, “disputing” and “fighting”, the word *mubarḥiṣīna* might also be a Persianism.

<sup>1030</sup> Reading *nu’āḥadāhū* with mss. **AsBDDiEGINKY** instead of نواخذہ (Cairo; يواض N).

<sup>1031</sup> Even when understood in the sense proper to the category of position, position is susceptible of being an answer to the question “how?”. Avicenna’s assumption is, of course, that “being an answer to the question ‘how?’” is not a good way of defining the category of quality.

that common usage, in the case of “similar”, does not accomplish but what it accomplishes in the case of asking “how?”<sup>1032</sup>.

### [§3.2 “Similar” by metaphor]

If someone said that for some [things “similar”] is used metaphorically, while for some others it is used truly, we concede to him that if they say: “similar with regard to tallness”, they know that they use it metaphorically; but if they say: “a way of sitting is similar to a way of sitting”, they also do not<sup>1033</sup> get to using anything metaphorically; likewise, if they say “a combustion is similar to a combustion”; but they would say it by telling the truth, and it is not possible to say “you do not know this”. But this expression is metaphorical with respect to a thing, and true with respect to [another] thing, only according to their will; for the expression does not require anything of this by itself, but it only has this according to common usage<sup>1034</sup>. Common usage, as concerns what is used metaphorically, is that the speaker says this, and the speaker knows that a different expression was used metaphorically of it, because of a certain likeness or similarity. As to the case where he who says does not know this, but his saying: “a combustion is similar to a combustion” is like his saying: “a heat is similar to a heat”, then we have no way, from this usage, to know what he truly expresses by means of this expression.<sup>1035</sup>

### [§3.3 The specific usage of “similar” has not been defined properly]

Furthermore, he who claims in a certain expression synonymity or metaphorical usage must specify the meaning he intends [to express] with it, in the place where he uses it; particularly if the form of the expression is far from making it possible, for the listener, to discern the intended meaning (as if he said ‘*ayn* of [a source of] water, ‘*ayn* of the sun, ‘*ayn* of the eye)<sup>1036</sup>. [C170] Hence, we must<sup>1037</sup> provide the meaning of “similar” when we speak of its usage here; and the utmost of what they made us understand of the word “similar” in the specific usage, and the most of what they specify, is their saying: “by this we mean ‘concordant with respect to quality’”. If we said that “quality” is that of which “similar” is said figuratively, not according to the usage of the mass; and [if] the explanation of this “figuratively” was “that whose meaning is ‘concordant with respect to quality’”, then undoubtedly “quality” itself would necessarily be more knowable than

---

<sup>1032</sup> As Avicenna’s examples show, even things belonging to categories other than quality may be said “similar” and “dissimilar”: for instance the way of sitting, which belongs to the category of position; combustion, which belongs to the category of passion; tallness (*tūl*), which being a certain length belongs to the category of quantity. As in the case of asking “how?”, then, this way of notifying quality does not define it univocally.

<sup>1033</sup> “Also do not”: reading *wa-lam* (*fa-lam* I) with all manuscripts, instead of *lam* (Cairo).

<sup>1034</sup> I.e., as is made clear in what follows, the metaphorical use of expressions only depends on the intentions of the speaker.

<sup>1035</sup> In the case of a speaker who consciously uses metaphors, we may discern whether “similar” and “dissimilar” are used properly or metaphorically; but in the case of current speakers who use this expression in a certain manner it is impossible to say the proper use from the metaphor.

<sup>1036</sup> Since the meanings of the word ‘*ayn* may vary considerably from context to context, and

<sup>1037</sup> “Hence, we must”: reading *fa-yağibu* with most manuscripts, instead of *wa-yağibu* (Cairo, AE).

“concordant with respect to quality”; so, he who said “similar means ‘concordant with respect to quality’” would already know “similar” because of quality, and this means that he would know quality because of “similar”, so in this explanation there would be, for the student, no utility at all<sup>1038</sup>.

[§4. *The proper way of including “how?” and “similar” in the notification of quality*]

One stratagem is only possible here: this consists of [saying] that “how?” and “admitting of similarity” regroup for us, among beings, different notions. Then, if we divide these categories, and we know what we have posited as different from quality, and exclude it, there remains for us, limited to the category of quality, that which is said as an answer to the question “how?” (among the things which do not belong to the others), and that which is said to be with similarity (among the things which are not the first); so, the mind would imagine some things instead of some others. [And, according to this trick] there is, here, another possible consideration, namely to posit as the truth of searching, about a thing, “how” it is in itself, what is restricted to itself and to its state; so, if the attribute belongs to those things which need the consideration of another thing, other than itself or other than its state, for it to be said “how” it is; then [this attribute] turns away from what is necessary; for the questioner only wishes to be informed about a thing in itself; since he said “how is it in itself?”, without something belonging to it because of something else: in itself<sup>1039</sup>.

It seems that for position (and other categories) it is only licit to say “how” of them either by metaphor and second imposition, or in a wide sense, so that because of this it became possible to reply, by them, to the question “how is the thing?”; [C171] then, the extension of meaning endured, and it was established for the mass as the original [meaning]. For position is not a notion that is conceptualized for something, as long as parts different from it in external directions are not conceptualized; then position is conceptualized for the thing. Hence, position differs from the meaning belonging to the thing in itself and by itself, to which the question “how?” should be restricted. Thus, if we may say this, we are overtaking common usage to reach a certain type of consideration and conclusion. As to quantity, common usage seems to indicate it as not fit to be said as an answer to “how is the thing?”; and if it is said as an answer, then it is only metaphorically.

Thus, if it is so, the meaning of the question “how” has already been established. “How” is more well-known than quality; for the noun “quality” is derived from the noun “how”; and the thing from which the name derives is more evident, and better knowable than the thing having the derived name. This is like the case where the name of the state is derived from the name of the thing which has the state, not in the same way as the [thing] in which the name of the thing which has the state is derived from the state, like the

---

<sup>1038</sup> Since that which is used to notify a thing must be, in itself, clearer and more knowable than the notified thing itself, if the expression “similar” is meant in the aforementioned way then it is improper to notify quality by means of “similar” and “dissimilar”.

<sup>1039</sup> This way of defining “how?” identifies quality univocally, since most of the other accidents (at least those of which the question “how?” can be asked) are conceptualized with respect to something else (as is clear from Avicenna’s division of the categories, above, II 5).

derivation of the name “beater” (*dārib*) from “beating” (*darb*)<sup>1040</sup>. Moreover “how?” itself, not under the respect of question and answer, but [also] inasmuch as it is a thing, is more knowledgeable than quality; for the way to [know] it is sensation, while sensation does not discern quality singularly; it only includes it, together with the thing qualified by it and together with the extension attached to it because of it, by means of a single, undivided inclusion; then, later, what has been determined<sup>1041</sup> is determined.

Consider [also] “similar” in this way, and according to its being similar by itself, without a need to consider something else. Let this be all that we say concerning this notification [of quality].

[§5 *The definition of quality*]

[§5.1 *Avicenna’s definition of quality*]

Let us establish now that “quality” is every disposition stable in what is described by it, which does not require or necessitate it to be measurable, whose conceptualization may occur without the need to consider any relation subsisting with something other than that disposition. This is a way of explanation which depends on establishing a thing, and then on notifying it by denying it [certain] attributes<sup>1042</sup>.

[§5.2 *Refutation of the idea that qualities bring about a description in substance*]

[C172] A group [of people] said that quality is that which brings about a “description” in substance, and they thought to have provided an explanation<sup>1043</sup>; but it escaped their attention that the use of the expression “description”, here, seems to be a metaphorical use, which does not truly establish a meaning; if it does establish [it], it does not according to the common usage, as concerns the use of this expression, but it does according to a way of signifying which is associated with it extrinsically. This expression is confusing<sup>1044</sup>, misleading, further from being clear than the expression “quality”. Likewise, they have other explanations which resemble this one.

[§6 *Avicenna’s divisions of quality*]

[§6.1 *First division*]

Let us say, now, how<sup>1045</sup> quality is subdivided<sup>1046</sup> into the four things that have been posited as its species. Thus we say that quality is either **[(a)]** such that there come about,

<sup>1040</sup> *Kayfiyya* here is a certain state, and it derives its name from the thing having a certain state (*kayfa*); the case of the derivation

<sup>1041</sup> Reading *mā yataḥaṣṣalu* (*bi-taḥṣīlin* **Di**; om. **E**; *lahū* **I**) with most manuscripts, instead of *mā yataḥayyalu* (Cairo).

<sup>1042</sup> I.e. it is a “negative” definition, which first describes quality generically as a “disposition” (*hay’a*), and then denies this disposition the attributes of quantity (measurability) and relationality (being conceptualized with respect to something else).

<sup>1043</sup> See the COMMENTARY below.

<sup>1044</sup> Reading *muḥīl* (e.g. **DaDiIJJNkRY**) instead of *muḥayyalun* (Cairo).

<sup>1045</sup> Reading *kayfa* instead of *kayfun* (Cairo).

<sup>1046</sup> Reading *tanqasimu* (e.g. **DMI**) instead of *yanqasimu* (Cairo).

from it, acts that work according to the way of making similar and transforming<sup>1047</sup>, or **[(b)]** it is not such.

**[(a)]** That which produces its act according to the way of making similar and transforming<sup>1048</sup> is like hot, which makes other things hot, and darkness, which throws its indistinct shape into the eye, and this [latter] resembles it; [it is] not like weight, for its act in the body consists of causing motion, not of [producing] weight.

**[(b)]** That which is not such is either **[(ba)]** dependent on quantity, inasmuch as it is quantity, or **[(bb)]** it is not; that which is not dependent on quantity either **[(bba)]** belongs to bodies only inasmuch as they are natural bodies, or **[(bbb)]** it does not, but belongs to them inasmuch as they have a soul, or belongs to the souls. So, those that unite things among which actions and passions [occur] are those which are called active and passive qualities; those which depend on quantity are like shapes, and so on; those which belong to bodies, inasmuch as they are natural bodies, are active and passive powers; those which characterize animated things are those which are called states and habits.

#### [§6.2 *Second division*]

Or we may say that quality either **[(a)]** depends on the existence of soul<sup>1049</sup>, or **[(b)]** it does not; and that which does not either **[(ba)]** depends on quantity<sup>1050</sup>, or **[(bb)]** it does not; that which does not depend [on quantity] either **[(bba)]** has an existence which consists of an aptitude<sup>1051</sup>, or **[(bbb)]** it has an existence which consists of being an act, although it occurs to it to be an aptitude<sup>1052</sup>.

#### [§6.3 *Third division*]

We may also try, in this regard, [other] ways of division that would lead to this scope. Were it not for the matter of the qualities that are found in number, we could well say: “that which is not according to the way of making similar is either dependent on bodies”, and then divide<sup>1053</sup> [this] by saying: “either in respect of their quantity, and their being mathematical; or in respect of their nature, **[C173]** and in respect of their being natural”, and then the subdivision would be complete, and this division would be more correct in method. However, oddness and evenness and the like elude that [division]; so, if these do not belong to the qualities of this category, and qualities are [only] those which belong to corporeal substances, then you must divide as we said<sup>1054</sup>.

---

<sup>1047</sup> Reading *al-iḥālātī* instead of *al-iḥālātī* (Cairo).

<sup>1048</sup> Reading *al-iḥālātī* instead of *al-iḥālātī* (Cairo).

<sup>1049</sup> Qualities which depend on the existence on the soul correspond, as in the previous division, to states and habits.

<sup>1050</sup> Qualities which depend on quantity correspond, as in the previous division, to shapes and the like.

<sup>1051</sup> Qualities whose existence consists of being an aptitude correspond to the second genus, namely capacity and incapacity.

<sup>1052</sup> This last type of quality corresponds to affections and affective qualities, which mostly display “active” potencies (such as heat and coldness) but may also be “passive” potencies.

<sup>1053</sup> Reading *nuqassimu* instead of *taqassama* (Cairo).

<sup>1054</sup> Oddness and evenness are qualities of numbers, which in Avicenna’s view are accidents (not substances, nor bodies).

[§7 *Two commonly accepted ways of dividing quality*]

[§7.1 *First way*]

As for the commonly accepted ways of subdividing [quality], among them there is their saying that quality is either **[(a)]** natural or **[(b)]** acquired. Then, they explained that natural [qualities] are those which are generated naturally and intrinsically, and always exist in the thing in which they are; and acquired quality is that which is perfected from the outside, whose rejection is possible. Among acquired [qualities], let there be **[(ba)]** habits and states. As to the natural [quality], it may be in **[(aa)]** potency or **[(ab)]** in act. That which is in potency is the qualities because of which we are “apt”, and have the possibility of doing a certain thing<sup>1055</sup>. That which is in act is either that which reaches the depth, namely **[(aba)]** affections and affective qualities; or **[(abb)]** that which appears from the outside, namely shapes and forms<sup>1056</sup>.

[§7.2 *Second way*]

They also have another subdivision of quality, for they say that quality either **[(a)]** appears in the soul or **[(b)]** in the body. That which appears in the soul either **[(aa)]** appears in the rational soul, or **[(ab)]** in another soul. That which is in the rational [soul] is **[(aaa)]** either difficult to pass away, like habit, or **[(aab)]** easy to pass away, like state. That which is not in the rational [soul] is either **[(aba)]** in a passive potency, or **[(abb)]** in an active potency. That which is in an active potency is the second type among the species of quality; I mean, capacity and incapacity. That which is in a passive potency is the third type among the species of potency, namely affection and affective quality. That which appears in the body is either **[(ba)]** in its depth or **[(bb)]** in its surface. That which is in its depth is the third type among the species of quality; then, if it is unstable, it is an affection. That which is found in the surface of the body is shape and countenance. They said: “shape” is shared by the animate and the inanimate. As to countenance, it [only] characterizes the animate; and they also subdivided this according to ways which resemble these. **[C174]**

---

<sup>1055</sup> This division corresponds to the second main species of quality, namely capacity and incapacity.

<sup>1056</sup> Whereas the “superficial” character of forms and shapes is rather intuitive, it is not clear in which sense affective qualities may be said to be “deep”. Avicenna will tackle in detail the distinction between “deep” and “superficial” qualities in the following chapter.

[V.2]

**On the investigation of the ways according to which a group of people divided quality into its four species<sup>1057</sup>**

[§1 *The two aforementioned divisions of quality are sophistical*]

We should reflect, right now, on the two divisions they made sophistically<sup>1058</sup>; so that, by this, you may have a way to decide the issue, as to what their ways of dividing [quality] make you think. We say that all of these ways of dividing are not technical and shamelessly sophistical, much more disgraceful than the way we ourselves tried.

[§2 *The first commentator's division*]

[§2.1 *The commentator's distinction between "natural" and "acquired" qualities multiplies the species of quality*]

As to the first division, it necessarily implies that the blackness of a raven is different, in the species of its being black, from an acquired, assumed blackness<sup>1059</sup>. It occurs, from this, that habits and states are not a single species among those which result from the division, but they are a second species which stays below one of those which result from the division, according to what he who divides said: "among these, there are habits and states". Since this saying implies that there be other divisions besides habits and states, if habit and state are numbered then these [divisions] must be numbered along with them; so, these subdivisions are added to the four [divisions of quality]<sup>1060</sup>.

[§2.2 *The commentator's distinction between "qualities in potency" and "qualities in act"*]

[§2.2.1 *If potency is understood as potency of existence, or of being something else, this is absurd*]

[As to] his saying: "among these there is what is in potency and among these there is what is in act"; if by this he meant that the disposition of aptitude for wrestling and the disposition of healthiness and sickliness are things belonging to quality, and they are

---

<sup>1057</sup> This chapter does not correspond to any section of Aristotle's *Categories*; it is – instead - a long digression, which elaborates critically on the two divisions of qualities provided by Avicenna's predecessors (presented at the end of the previous chapter).

<sup>1058</sup> See above, V.1 [§6].

<sup>1059</sup> Whereas the commentator only numbers, among "acquired" qualities, habits and dispositions (see above, V.1 [§6.2]), it is clear according to Avicenna that also the other species of quality (such as blackness, belonging to the genus of affective qualities) may be either natural or acquired. This would bear the result of multiplying the species of quality, since below the species "acquired" other sorts of qualities might be listed (for instance acquired affections, acquired capacities, acquired shapes).

<sup>1060</sup> The unwelcome necessity of adding other species of "acquired" quality is also implied, according to Avicenna, by the commentator's saying "among these, there are...", though the remaining species are left undetermined.



neither wrestling itself, nor health itself, nor sickness, this is a very bad expression. For if he said: “among these there is what is potency and among these there is what is an existent act”, then he could remotely do it, even if it would be in need of excuse; for the thing which [C175] is in potency would be something which is not existent, and for which it is possible to exist<sup>1061</sup>. Thus, if that which is in potency is “healthiness”, not “health”, then this species is “healthiness in potency”; so there would belong to the species of quality what is a non-existent healthiness<sup>1062</sup>. If, [on the other hand], he did not mean by this expression that “healthiness” is in itself in potency in its existence, but that it is in potency some other thing, then he would posit “healthiness” as health in potency, so the thing which is health in potency is “healthiness”, and “healthiness” becomes health at a certain time. [Nevertheless], none of the accidents ever becomes the other [accident]; for they do not have, in themselves, a shared thing<sup>1063</sup>. And if it was not meant, by “what is in potency”, healthiness, but health in potency, [so that] it is health; if it is a non-existent health whose existence is possible, it belongs to a certain species; if it becomes [health] in act, it belongs to another species; so, what does not exist will be an existent quality<sup>1064</sup>. Moreover, the species of quality have been doubled; since each one of these species may be in potency as well; and this is useless<sup>1065</sup>.

[§2.2.2 *If potency is understood as aptitude, this is absurd as well*]

If it was not meant what we said, but it was meant that that thing is either potency or act; and by “potency” it was meant the thing opposite \*to the act which is existence, not\*<sup>1066</sup> to the act which is action or the like (and the opposite of this act is a certain aptitude for something), so that the division into potency and act has a certain [other] sense; [if it was meant this], then it must be first considered whether these [things] which we call act are not, in themselves, potencies. So, it seems that heat is a potency, since by virtue of it one becomes apt to a certain thing. Likewise coldness, colors, tastes and smells; for the thing that has smell is apt to produce a certain action. Some of these qualities, moreover, are apt to a certain affection, like humidity, or to a certain non-affection, or a certain difficulty at being-affected, like dryness; unless one said that heat in itself is a thing, whereas the aptitude to affecting by means of it is an inseparable concomitant of heat; since heat, in its nature, is a quality. As to the aptitude, it is something [C176] which

---

<sup>1061</sup> Here Avicenna tries to interpret the commentators’ “potency” not as the “potency” which may become something else, but the “potency” of something in itself.

<sup>1062</sup> It is impossible that some non-existent thing belong to a species.

<sup>1063</sup> I.e., an accident may not become another accident without a substrate.

<sup>1064</sup> If potency and act are divided as species, it is clear that a certain quality in potency would belong to a certain species, whereas the same quality, when in act, would belong to another; but this is absurd.

<sup>1065</sup> If “potency” and “act” is a feasible criterion for subdividing qualities, we may also expect to find a different species for every quality in potency (shape in potency, state/habit in potency, affection in potency, etc.) and every quality in act (shape in act, state/habit in act, and so forth) which inevitably leads to double the species of quality.

<sup>1066</sup> *al-fi’la llaḍī huwa l-ḥuṣūl* might be, here, an addition, since it makes the argument incoherent. As it stands in the Cairo text, it means that Avicenna is suggesting to consider, now, the absolute potency of existence, not the potency that is aptitude. This, however, is neither coherent with the preceding paragraph (where the case of the absolute potency of existence has already been inquired) nor with the follow-up (where Avicenna’s examples clearly regard aptitudes).

accidentally belongs to it, inasmuch as it may be said with respect to a thing, or in relation with it. As to that which we speak of, it is the very aptitude which belongs to substance, not the thing to which the aptitude accidentally belongs.

Thus, if this has been said, it follows that this sort [of quality] is wider than what they said; and they would end up positing these aptitudes which belong to heat and the like under quality, whilst they are qualities which accidentally belong to heat and the like; but this is not their doctrine. They do not hold that to heat there accidentally belongs a quality of the aptitude type, other than the quality which is said of it, because of which it becomes apt [to something]; nor can this be said or believed correctly. Hence, if they became more indulgent by saying: “our speech concerns the aptitudes of substances in themselves”; healthiness should be an aptitude for health in the body, and in the sickly [person] there should be healthiness; for he is not deprived of the aptitude for health. And if they posit it as an aptitude in a certain state, they may be right; but their words and expression do not point to that but according to a stretched and arbitrary interpretation. Therefore, they did not do well by dividing in this way.

[§2.2.3 *Potency and act should belong to the same accidents*]

Moreover, what would be convenient about dividing the thing into potency and act is that potency and act be [found] in the thing as belonging to a single thing; and they did not do that. For not all of what they posited as act is the act of what they posited as potency; nor they posited as potency the potency of all that is act, like [in the case of] the capacity of making dry and blackening, and the capacity of having knowledge<sup>1067</sup>.

[§3 *Against the common distinction between “deep” and “superficial” qualities*<sup>1068</sup>]

[§3.1 *Some qualities do not exist in bodies but because they inhere in quantities*]

As to what they said concerning the fact that some [qualities] are in depth, others in the surface, it is very bad. This because they left out the qualities of numbers, and the straightness and curvedness which are qualities of the line: for the line is neither a substance nor a body<sup>1069</sup>. Unless – of course – they said (by using, however, the ambiguous expression “in”) that, if straightness and curvedness exist [C177] in the line, they also exist in the body; for line is in the body, and what is in something which is in something is also in that other thing; then, it would follow according to them that the body is straight, or curved, if there is in it the straightness of a line, or its curvature. As to the body’s being curvilinear, it is true; but the curvature, which is not an accident of it, does not inhere *in* it; for [the body] is not described by it, nor derives its name from it; but it only exists in some

---

<sup>1067</sup> This means that the commentator’s division did not classify qualities correctly: he excluded states and habits from the potency/act subdivision, which eliminates the case of knowledge; but he also excluded from the species “potency” affective qualities and affections, such as dryness and blackness, which however may definitely have a potential aspect.

<sup>1068</sup> Before turning to the specific errors of the second commentator [§4], Avicenna discusses lengthily the distinction between deep (affections) and superficial (shapes) qualities, which is common to both divisions.

<sup>1069</sup> Both divisions speak of “deep” and “superficial” qualities with respect to the body, which clearly rules out the case of qualities belonging to quantities.

[part] of [the body] which essentially inheres in it<sup>1070</sup>. Likewise, curvedness and straightness are not actually existent in the external part of the body, which is the surface, essentially, so as to be by accident in the body alone; but they are in both of them by accident. So, let them be excused on this point, and let that their saying “existent in the body or in its surface” be dependent on every [type] of existence, even if it is not primary<sup>1071</sup>.

[§3.2 *Solid figures do not exist in the external part, but in the whole of the body*]

Then, we say that their saying: “figures exist in the external part of the body” is stupid and careless. For the existence of solid figures only consists, inasmuch as they are bodily, of their being current in the body as a whole; for, if what encloses the figures consists of one or more boundaries, we only<sup>1072</sup> encompass the boundaries with surfaces, and surfaces with depth. Let us verify this more [in detail]: we say that here [in a figure] there are **[1]** boundaries; there is **[2]** something with boundaries, which has - because of the boundaries - a certain configuration; and there is **[3]** that configuration.

**[1]** As to the boundaries, they are not figures, but extremes; it is not possible to say, of any thing among those, that it is “in” the external part of the defined thing<sup>1073</sup>, so as to say: the surface is “in” the external part of the body, or the line is “in” the external part of the surface. This because the “external part” [itself] is different from what is “in” the external part; and the surface is not different from the external part of the body, but it is itself the external part of the body. [Similarly], the line is not in the external part of the surface, but it is the external part of the surface itself. If someone [among them] said, in defense, that this man used the expression metaphorically, and though it was convenient to say “external part” he said “in the external part”, he would not be excused either. This because the other subdivision is “in depth”, and its **[C178]** meaning is not “depth”; nor the counterpart of his saying “external part” is “in depth”, so that the thing be either “external” or “in depth”. The counterpart of “in depth” is “in the external part”, and the counterpart of “external part” is “depth”. But that which is the external part is a quantity, not a quality; so that that group among them is not authorized to say: “by ‘in depth’ he meant depth itself” as an attempt, on their part, to adjust the division. For, if this doctrine is interpreted correctly, it is as if he said: “although some qualities of the bodies are surface, and some are depth”; and this is impossible.

**[2]** As to the case where they meant the thing endowed with boundaries, it is an extension, not a quality<sup>1074</sup>.

**[3]** If they meant the configuration which results from having boundaries, there are in the external part [of the body] only the dispositions which are existent in surface (either a shape, like squareness, or a disposition other than the shape, such as the form of surface,

---

<sup>1070</sup> I.e., in the line.

<sup>1071</sup> This first error may be excused, if we admit that the commentators tacitly took into account the possibility of something inhering in bodies indirectly (i.e., by not existing “primarily” in them), such as the straightness and the curvedness of the line.

<sup>1072</sup> Reading *fa-innamā* with all manuscripts, instead of *fa-innanā* (Cairo; deest **G**).

<sup>1073</sup> Reading *al-mahdūdi* with all manuscripts, instead of *al-ḥudūdi* (Cairo; deest **G**).

<sup>1074</sup> Being an extension (*miqdār*), it belongs to the category of quantity.

convexity and concavity). As for solid shapes, they are not dispositions which exist in the boundaries, but dispositions which exist in the whole defined by boundaries; and in the boundaries, the relation entertained by the existence of their being, by participation, with the boundaries, is not worthier than their relation with the thing having boundaries.

[§3.3 *Solid figures do not exist in boundaries, but in the whole defined by boundaries*]

Thus, if the spherical [shape] were found in the surface itself, then it would be concavity or convexity, not spherical [shape]; likewise, if the circle were found in the line itself, then it would be roundness and curvature, not circle. And just as the subject of<sup>1075</sup> the shape of the circle is the surface, not the line itself, so the subject of<sup>1076</sup> the shape of the sphere is the body, not its external part (which is the surface); although the shape of the circle is not perfected but by the curving of the line, and the shape of the sphere is not perfected but by the surface's being made convex. These shapes, although they were originated in the defined things by the boundaries, are not in the boundaries; even though the boundaries are causes for them, they are not causes for them in themselves, but in another thing which is defined by them.

**[C179]** Know that the boundaries themselves are not said to be existent but in the whole<sup>1077</sup> delimited thing. For the line is an end of the surface of which it is a line, as an end of its whole; so, it is existent as end in the whole, in the same way as the attribute exists in the [thing] described by it. It does not exist in an extreme of it, nor in a part of it without the remaining parts [being] in potency. Likewise, the solid shape is an attribute of the body as a whole, not existing in the surface (which is merely an extreme).

Moreover, they posited this species as “shape” and “external form” alone, as you hear, since the First Teacher mentioned, among the examples for the first type, these two only; but it is not so, for convexity belongs to this sort [of quality], and it is not a shape (since it does not have the definition of shape).

[§3.4 *Other qualities exist in the whole, not in parts*]

Thus, if he said: “I mean, by this, that each part in the interior of the body, or its exterior, is described by those powers and qualities which belong to this species”, it is not so; for the shape which is in the whole does not exist in the parts.

As regards this, firstly, he could have said this utterance<sup>1078</sup> as it should [be said], and his expression would have been correct; so, what is it that made it necessary, for him, to deviate from it?<sup>1079</sup> In second place, many of the things which do not belong to the species of shape only exist in the whole, not in the parts; like the hand's power of [doing] its acts, for it does not exist but in the aggregate of the parts; unless, of course, he said that those

<sup>1075</sup> Reading *mawḏū 'uhū* (*mawḏū 'uhā* **DDiEIMY**) with most mss., instead of *mawḏū 'atun* (Cairo; deest **G**).

<sup>1076</sup> Reading *mawḏū 'uhū* (*mawḏū 'uhā* **DDiEIMY**) with most mss., instead of *mawḏū 'atun* (Cairo; deest **G**).

<sup>1077</sup> Reading *ḡumlatihī* with most manuscripts, instead of *ḡumlatan* (Cairo, **M**; deest **G**).

<sup>1078</sup> I.e., “part”.

<sup>1079</sup> The commentator's remark would be correct, in Avicenna's view, if he did not speak of “each part” (*kullu ḡuz 'in*), but of “all parts” (*kullu l-aḡzā*), thus meaning the whole of the body. “From it”: reading *'anhu* with all mss., instead of *minhu* (Cairo; deest **G**).

are not one potency, but [more] potencies that display a single act. So, if he says this, then you will find that the disposition of the wrestler is similar; likewise, the disposition of being receptive of many diseases<sup>1080</sup>.

[§4 *The second division: active and passive potency*]

[§4.1 *Many sorts of qualities which the commentator said to be depending on the soul do not depend on it*]

As to the other subdivision, its beginning is not directed towards the four [species], but goes beyond them, as you know<sup>1081</sup>. [C180] Then, he goes too far in his delirium, for he says: “those which are not in the rational soul are either in an active potency, or in a passive potency”. I don’t know how many correct things escape this man’s attention! For instance, the species of capacity and incapacity do not depend on the soul, for hardness and softness commonly belong to this type and do not depend on the soul<sup>1082</sup>; secondly, even if we were indulgent regarding these, and we posited them among the things which depend on the soul, what about affections and affective qualities, like heat, coldness and their like? He posited them in this subdivision, while they are not at all among the accidents which depend on the rational soul, or the irrational soul<sup>1083</sup>.

[§4.2 *Not all capacities are active potencies*]

Again, not everything which belongs to capacity and incapacity depends on active potency, for sickliness and the aptitude for being hit are not of the type of potency by which something is effected<sup>1084</sup>. Furthermore, healthiness is in the sense of the potency which is not affected, if it must inevitably be in the sense of potency of an action; for although the healthy [person] happens to be capable of acts, that is a concomitant of healthiness; as to healthiness, it is healthiness inasmuch as it is not affected by the causes of sickness, not insofar as it produces actions.

[§4.3 *Not all affections are passive potencies; the division is redundant*]

Moreover, although the things which he posited in [the species of] affective quality are called “affective” and “affections”, not all of them belong to passive potencies<sup>1085</sup>. For heat and coldness are worthier of being posited in active potency, than of being posited in passive potency. Thus, if he says that these are produced by affections in matter, then those first [qualities] also are not produced by affections in matter. Moreover, if the

---

<sup>1080</sup> As will be explained in the following chapter (V.3 [§2]), the wrestler’s capacity is a certain capacity belonging to all the parts of body.

<sup>1081</sup> Avicenna has not, previously, mentioned all the subdivisions of quality found in the second division, but this remark might mean that it is productive of further, different species.

<sup>1082</sup> Hardness and softness are properties of bodies.

<sup>1083</sup> Reading *aw gayri l-nāṭiqati al-battata* with most manuscripts, instead of *aw gayri l-nāṭiqati*, *aw gayri l-nāṭiqati al-battata* (Cairo, **M**; deest **G**).

<sup>1084</sup> As it will be made clear below (ch. V.3), sickliness and the aptitude to being hit are rather to be numbered among passive capacities (since each of them is an incapacity of not being affected by something).

<sup>1085</sup> “Passive” and “affective” correspond here to the same Arabic term (*infi ‘ālī*).

consideration is such that the meaning of one of the two poles resulting from the division is not predicated of the result of the division, but [it is such] that it is related to them both, then each of the two genera has simultaneously a relation to an active potency and a passive one; since none of them is produced but by an active or an affective cause.

Moreover, what is redundant in this division is that in dividing he repeated the third species [of quality] twice<sup>1086</sup>.

How astonishing that someone paid attention to what those people said, wrote it down and compiled it; and that we [even] need to contradict it! **[C181]**

---

<sup>1086</sup> See above, V 1 **[\$6.2]**.

[V.3]

**On notifying the essence of every two species of quality, namely state and habit and capacity and incapacity<sup>1087</sup>**

[§1 *State and habit*]

[§1.1 *The difference between state and habit*]

Let us now begin with the species which exists because of the soul. This species has no [common] name embracing it, but has two names according to two different considerations: for among the qualities whose existence depends on souls there is **(1)** that which is firmly established in the thing qualified by it, and never passes away (or its passing away is difficult, and in general it is not easy); and it is called “habit”; and **(2)** that which is not firmly established [in the qualified], and is susceptible of passing away, easily removable; and it is called “state”<sup>1088</sup>.

What is most evident, in the common usage of the validating experts of the discipline [of logic], is that the state is not said of the habit in such a way that “state” is the name of this genus, which is a species of quality, in such a way that every habit is a state, and not every state is a habit; But “state” is a name for the nature of this genus, when it is subject to passing away, and it is not firmly established; if it is firmly established it is not called “state”, but “habit”<sup>1089</sup>.

The division of state and habit is not the division of two species under a genus, for the division between them does not occur but according to the relation with change and the time of change; and this is a division by accidents, not by differences which participate in the nature of the thing. Nor it is necessary that there be, between state and habit, a duality, as it is found between two individuals; but there may be found a duality between them, like that [which is found] in a single individual with respect to two times [of his life], for instance child and man<sup>1090</sup>. For it is not necessary that the child be an individual other than the man, in itself, although they differ in consideration; and the thing which is a certain state, like being a beginner with regard to a certain art or disposition, is not established later in the soul. If one exercises it, it leaves an imprint hard to remove; the thing which by itself was a state later becomes a habit, and thus it is not a state [anymore].

---

<sup>1087</sup> This chapter corresponds to *Cat.* 8 b26 – 9 a27.

<sup>1088</sup> *Cat.* 8 b26 – 27: “One kind of quality let us call state and condition (ἔξις καὶ διάθεσις). A state differs from a condition in being more stable and lasting longer”. Ishāq b. Hunayn’s version of the *Categories* renders ἔξις as *malaka* (which I translate as “habit”) and διάθεσις as *hāl* (which I translate as “state”, according to the basic meaning of this expression in Arabic).

<sup>1089</sup> This very issue will be discussed more in detail below [§1.4].

<sup>1090</sup> The same example is found in Simplicius (*Simpl. In Cat.* 229.11-12).

[§1.2 *Habits: knowledges and virtues*]

[C182] Among habits there are knowledges and virtues. We do not mean, by “virtues”, commendable actions, but the dispositions of the soul from which commendable actions derive easily, almost naturally, without the need of previous deliberation and choice; so that if one wants the contraries of those actions, this repugnates to those who are accustomed to them, such [contraries] are withheld from them, and they need to act forcedly. This is like the character of justice and honesty. Vices, which are their contraries, are habits as well; since for the dissolute by character it is hard to be ashamed when in power, so if he does it and if acting immorally is easy for him, there is in his soul a disposition which tends to a certain action, and does not tend to another; so, this is a habit. Also knowledges are habits. It is not true that, only when the student learns in full the principles of the discipline, he is skillful with regard to them; but even the single opinion, if it is firmly believed and known with certainty, hardly passes away, unless the body undergoes a huge damage from illnesses or other states.

[§1.3 *States: emotions, opinions, temporary beliefs*]

As to the state, it is called in such a way any [quality] of this genus which easily passes away, in the same way as accidental heat and accidental coldness pass away; or as health passes away from a sickly [person], and the acute disease from a recovering [person]; although heat and coldness do not belong to this genus, and we only mentioned them here as an example for what passes away easily<sup>1091</sup>. As to health and disease, when they are easy to pass away they belong to this kind [of quality]. Among states there are anger, shame, sorrow, worry, opinion, and the belief which is not firm<sup>1092</sup>. As to the case where a certain opinion and [condition] of health or disease become firmly established, and such as not to pass away easily, then they belong to habits.

[§1.4 *On Aristotle’s remark that habits are states, but states are not habits*]

Every thing which is an acquired habit has been a state, namely [it has been] that disposition to becoming firmly established as a state; but not every state has been a habit, before being dissolved as a state. Thus you must understand this place, not as it has been understood, namely in the sense that “state” is said of the notion which is more general than habit. Moreover, habit certainly does not become a species under [“state”], like it is not necessary that the moving animal and the quiet animal be a species [of “animal”], inasmuch as they add to the common nature [C183] an accident (not a specific difference), for this is not the case; since he who posited these two names said that the difference between habit and state is that the latter is easy to pass away, [whereas] the former lasts

---

<sup>1091</sup> Heat and coldness belong, in fact, to another genus of quality (namely, that of affections and affective qualities).

<sup>1092</sup> Reading *lam yanbarim* with mss. **AAsDaDiGNNkY** (*lam* om. **AsG**; **MJ** have partially or totally undotted *rasm*). Although the root is the same (*b-r-m*), the fifth form seems not to be attested with the meaning of “being firm, settled, solid”, but rather in the sense of “being weary, displeased, disgusted” (cf. LANE, WEHR).



longer, and is more difficult to remove. A specific differentia is not said of the common [notion], nor the accident opposed to another accident specifies one of the things falling under [the common notion], which was already named and considered with regard to it<sup>1093</sup>; as one does not say that the difference between animal and man, or “animal” and the healthy animal, consists of the animal’s being speechless or sick, and the man’s being able to speak or the other [animal’s] being healthy<sup>1094</sup>.

However, I take the matter of names into little consideration; and I do not hold it impossible that the side which needs an explanation be this expression, and that among the things<sup>1095</sup> he who posited this denomination said, namely that habits are also states, not in the sense that they have been states, but in the sense that they are - truly speaking - states; [so that] where he said: “*the difference between state and habit is that this is easy*”<sup>1096</sup> this means that [habit] may be easy [to pass away]. However my choice of what I chose depends on the common usage of the predecessors, taken from them, of these utterances; namely, that state is a quality that passes away quickly, whereas habit is a firmly established quality.

[§2 *Capacity and incapacity*]

[§2.1 “*Capacity*” differs from other sorts of potency]

As for the other genus, among the genera of qualities that are the common species of quality, it must be conceptualized as a perfect corporeal aptitude [oriented] towards an external thing, in a certain sense (neither as the potency of prime matter, nor as the potency of possibility<sup>1097</sup>). For every man is in potency healthy or sick, but<sup>1098</sup> the completion of the aptitude; so that this potency (which is in the sense of natural possibility<sup>1099</sup>) becomes fulfilled according to one of the two extremes of the contradiction; hence, the thing does not potentially admit of sickness and capacity of wrestling only, in any way, but it may favor the admittance of sickness rather than that of health, or favor the incapacity of

<sup>1093</sup> I.e., the specific notion is already named and considered with respect to the common notion.

<sup>1094</sup> The specific differentia is not said of the genus, but always of the species; thus, if “easy to pass away” was meant as a specific difference to distinguish “state” from “habit”, “state” cannot be a genus for “habit”. Furthermore, an opposition between accidents cannot produce a specification under a genus: “man” is not a species of “animal” because the man’s being *nāfiq* (“rational”, but also “capable of speaking”) implies the animal’s being speechless; moreover, if we specify the genus “animal” by means of the attribute “healthy”, this does not imply that the generic animal be sick.

<sup>1095</sup> Reading *mimmā* (*fī-mā NR*) with most manuscripts, instead of *mā* (Cairo, **AsDM**).

<sup>1096</sup> *Al-farqū bayna l-ḥāli wa-bayna l-malakati anna ḥāḍihi sahlātun* [...]: this is a passage of Iṣḥāq’s Arabic translation, word by word. As the text goes on, it says: [*ḥāḍihi sahlāt*] *al-ḥaraka, wa-tilka aṭwal zamānan wa-a’sar taḥarrukan* (“[the latter is easy] to move away, while the former lasts longer and is more difficult to move [away]”). The use of the demonstratives *ḥāḍihi* and *tilka* may suggest to the Arabic reader, effectively, that *malaka* (mentioned in second place, thus a referent for *ḥāḍihi*) is said to be easy to pass away, whereas (ὥστε διαφέρει ἕξις διαθέσεως τῆ τὸ μὲν εὐκίνητον εἶναι τὸ δὲ πολυχρονιώτερον τε καὶ δυσκίνητότερον).

<sup>1097</sup> “Possibility”: reading *al-ḡawāzi* (cf. e.g. **AAseDDiJY**) instead of *al-ḡawāri* (Cairo). It must be kept in mind, here, that - as in the case of the Greek δύναμις - the Arabic word for “potency”, “capacity”, “strength”, “faculty” and the like is mostly *quwwa*. This explains why Avicenna is explicitly distinguishing, here, “capacity” in the sense of the category from the “potency” of prime matter and natural “potency”. I differentiated the translations since the species of quality may not be named “potency and impotency” in a technical sense, and as to make the distinction clearer.

<sup>1098</sup> Reading *lakinna* with most manuscripts, instead of *lakinnahū* (Cairo, **A**).

<sup>1099</sup> “Possibility”: reading *al-ḡawāzi* (cf. e.g. **AAseBEDIInkJY**) instead of *al-ḡawāri* (Cairo).

wrestling rather than the capacity of wrestling. Healthiness, sickness, the disposition of wrestling and the disposition of being hit, hardness (whose preponderant inclination is not to be pressed), softness (whose preponderant inclination is to be pressed) belong to this type [of quality].

[§2.2 *First doubt: “capacity” and “incapacity” are almost said by homonymy of their different meanings*]

But there are doubts, in this place; since the things [C184] which belong to this genus are three things: **(a)** a strong aptitude for being affected, like sickness; **(b)** a strong aptitude for acting, like wrestling; **(c)** a strong aptitude neither for being affected nor for acting, but for not being affected, like healthiness and hardness. The way in which “capacity” is said of these three is close to being according to the way of homonymy: if one wanted to collect them in a single meaning it would be difficult, and stretched<sup>1100</sup>.

[§2.3 *Second doubt: is the capacity of wrestling an aptitude for acting or an aptitude for not being affected?*]

Someone might also doubt whether wrestling belongs here inasmuch as it involves not being hit, or inasmuch as it involves hitting someone else. For, if it does inasmuch as it involves not being hit, the burden of doubt is light, and this genus is the establishment of one of the two extremes of what has the passive capacity with respect to being affected or not-being affected; but it loses the aptitude it has, inasmuch as it moves, to other subdivisions [of quality] (since it may not exist in the other genera, or it is difficult). If it does inasmuch as it involves hitting, then the first doubt is confirmed<sup>1101</sup>; and you have practically understood it.

[§2.4 *Avicenna’s solution to the second doubt: the aptitude for wrestling is a passive capacity*]

We do not mean here by “capacity of wrestling” the first moving potency of the soul, which is a substance and does not admit of more and less; but we mean this [capacity] as a perfection of that potency, in the respect of the suitability of the limbs. Its relation with the [primary potency] is the [same] relation held by the strength of acumen and intelligence with the rational soul. Thus, we now say that [the capacity of] wrestling must be understood as depending on three things: **(a)** body, **(b)** moving potency, **(c)** faculty of apprehending. As for **(c)** what depends on the faculty of apprehending, it is a certain technical knowledge which makes wrestling conceivable, such as the knowledge of the art of dancing [C185] and hitting by the stick; in general, it is a certain type of knowledge of the modality of actions related with motion, and with what does not have a known stably

---

<sup>1100</sup> As will be better explained in the following discussion ([§2.3]) on the aptitude for wrestling, and in the following chapter (V.4, [§5]), Avicenna is rather inclined to rule the capacity of acting out of this genus, since it has apparently nothing in common with the capacities of being affected and not-being affected.

<sup>1101</sup> Namely, the doubt exposed in [§2.2].

existing disposition in its subject, like the art of construction and writing<sup>1102</sup>. As to **(b)** what depends on the moving potency, it is a habit by which one disposes well of his muscles to attain the scope of wrestling. As to the third, the remaining one, it is **(a)** a matter of body: namely, the limbs' being, in their natural disposition, such that their bending and motion is easy. This belongs to this sort [of quality], and it is a certain part of the perfection of the natural art of wrestling; it differs from the notion of moving potency, since what occurs to the moving potency, and in general to the faculties of the soul is that they belong to the first species of quality.

[§2.5 *Recapitulation and conclusion*]

This doubt has then disappeared, and it has been established that this genus is the completion of the aptitude of one of the two extremes of the thing of which there is potency (in the sense of possibility), so that it is strongly apt to a certain existence such that, if it exists, it is an affection in act, like sickliness; or strongly apt to not [having an affection] existing in it, and this is healthiness. In general, either this capacity is completed as being taken towards change from the adequate natural state, and it is incapacity; or [it is taken] towards not changing from it, and then it is natural capacity<sup>1103</sup>. **[C186]**

---

<sup>1102</sup> This is – as architecture and the art of writing - a practical knowledge, opposed to theoretical knowledge.

<sup>1103</sup> Avicenna's conclusion seems to refer again to the example of healthiness and sickliness: a change in the adequate natural state, namely sickness, is produced by an incapacity of not-being affected, whereas the conservation of health is produced by a capacity of not-being affected.

[V.4]

**On mentioning doubts about the species related to capacity and incapacity<sup>1104</sup>**

[§1 *This species also comprises the capacity for acting*]

However, it has become customary to contradict what we said; because it was clarified, in the first teaching<sup>1105</sup>, that capacities are capacities only with regard to their being easily acting (like [that of] the wrestler), or their not being easily acted upon (like hardness); and incapacity is what does not have the capacity of not being easily affected (like the sickly, who does not have the capacity of not being affected, and softness, which does not have the capacity of not being cut).

[§2 *Doubts*]

[§2.1 *Doubt: does heat belong to this class inasmuch as it acts easily?*]

Let us reflect on the state [of things] concerning this point; as a matter of fact, our difficulty has returned<sup>1106</sup>: for heat is a capacity of acting easily, since it burns easily; so, does it belong to this genus? As to what has been said, namely that the thing is in this or that genus, this or that species according to this and that consideration, it is something that we exhaustively forbade to consider<sup>1107</sup>. Maybe the essence of heat, inasmuch as it is heat, does not truly imply its burning easily; or maybe heat has the potency of burning easily not because it is heat, but because it is intense heat, so that the strength of heat belongs to this species<sup>1108</sup>. This also implies that the strength of heat accidentally belongs to heat, so that one and the same heat intensifies and weakens, and it is in its being one and the same heat; and strength only belongs to it accidentally, because strength is not like another heat to which it is related, but a quality other than heat, which is associated with heat in such a way that heat burns more intensely because of it; and this is not acceptable.

[§2.2 *Doubt: “easiness” is a relative notion*]

Moreover, the matter of easiness is doubtful as well, for the thing is only easy with respect to something else; thus, it seems that every heat has something with regard to which it burns easily, and something with respect to which it burns with difficulty. **[C187]** Likewise is the state of the wrestler: for a single thing, with respect to a certain [other]

---

<sup>1104</sup> This chapter does not correspond to any section of the *Categories*.

<sup>1105</sup> The expression “first teaching” does not refer here, as it often does, to Aristotle’s *Metaphysics*, but rather to the text of the *Categories* (notably, to *Cat.* 9 a14-27).

<sup>1106</sup> The ambiguous nature of heat, which Avicenna is about to discuss here, was alluded to previously (in the refutation of Simplicius’ division of quality: see above V.2, **[§2.2]**).

<sup>1107</sup> It may not be said that something belongs to a certain species under two different respects, as was said more in general for forms and specific differences (which are, according to some philosophers, oscillating between the genus of substance and the accidental category of quality): see above, I.6.

<sup>1108</sup> I.e. the species capacity/incapacity.

thing, has the capacity of hitting it, and with respect to another thing has the capacity of being hit by it; and there may be also, among men, he who is [capable of] hitting with regard to the majority of people, and among them there may be he who is [capable of] being hit with regard to the majority of them. So, it seems that the capacity is this, namely hitting rather than being hit, so that the active capacity in it is preponderant (because of a certain thing which exists in it undoubtedly); so each one of the strong and weak [person] has, in itself, the [principle] according to which he hits, but in one of them it is stronger, in the other it is weaker. So, he who has a stronger capacity of hitting has a weaker capacity of being hit, and he who has a stronger capacity of being hit has a lesser capacity of hitting: in each one of them there is the capacity for both things, but in one of them it is more, in the other one it is less.

Thus, can you see whether the two capacities differ in their natures by the more and the less, after belonging to a single species, or<sup>1109</sup> it is not so, but weak heat differs from strong heat in its species? So, if they are mutually different by the species<sup>1110</sup>, it seems that the capacity differs in species from the incapacity; and if they are not mutually different, then capacity does not differ from incapacity in species, but it is like the longer and the shorter line<sup>1111</sup>. Hence, things like these present a doubt, regarding what we said.

[§2.3 *The species of this genus have nothing in common: it is, rather than a genus, a mere collection of elements.*]

Moreover, if the capacity of acting easily, the capacity of not being acted upon easily, the privation of the capacity of not being acted upon easily<sup>1112</sup>, were numbered under quality as proximate species, we could be indulgent<sup>1113</sup> about all this<sup>1114</sup>. But they are numbered as confined under a genus which is a species of quality, and as [falling] in the second subdivision. [C188] Then, if one wants to notify this genus, he may not express it but by saying: “it is that to which there belong X and Y”; so, he does not express a common nature more specific than quality, but more general than each of these [things], although it may be possible to do it forcefully, and then harm the truth<sup>1115</sup>.

[§3 *Aristotle’s metaphorical use of “incapacity” and “capacity”*]

---

<sup>1109</sup> Reading *aw laysa* with most manuscripts, instead of *wa-laysa* (Cairo, **EGNR**).

<sup>1110</sup> Reading *mutahālifatayni bi-l-naw’i* with all manuscripts, instead of *mutahālifatayni* (Cairo).

<sup>1111</sup> A long and a short line only differ individually by their capacity of admitting, accidentally, of a different length, but they belong to the same species.

<sup>1112</sup> Expunging *wa-‘adamu l-quwwati ‘ala an lā taf’ala bi-suhūlatin* (“and the privation of the capacity of not acting easily”), found in Cairo and in manuscript **M** but omitted by all the other witnesses.

<sup>1113</sup> Reading *nusāhila* with most manuscripts, instead of *natasāhala* (Cairo). The correction does not affect the translation significantly.

<sup>1114</sup> If these capacities were posited as separate species under quality, there would be no need to find a notion capable of embracing them all (and many doubts discussed in this chapter would disappear).

<sup>1115</sup> The notion embracing these sorts of capacity and incapacity should be more specific than quality, their highest genus, and more common than all of them. This doubt reprises Avicenna’s previous remark (V.3, [§2.2]) on the absence of a common notion for capacities and incapacities.

[§3.1 *Softness is an incapacity, but also a positive determination*]

However, there is something else, namely that by their saying: “softness is that which does not have the capacity of not being split”<sup>1116</sup> either they pointed by this to the privation of a quality (such that, if it were [present], then it would be a capacity of resistance, and because of it the thing would not be split easily) without wanting to establish, as its counterpart, a [positive] notion, so softness is [simply] a privation of quality, not a quality; or it was meant by that to establish a [positive] notion meaning what is apt for admitting quickly of pressure, so it is nothing but an affective capacity; and this would be better. For it is convenient that softness be a notion, not the privation of a notion, and hardness similarly; therefore, what they called “incapacity” is a strongly apt affective capacity, regardless whether you say that the capacity of not being divided<sup>1117</sup> is a stable quality, by which matter is prevented [from being split], or you say that the capacity of not being divided is not a stable quality, but<sup>1118</sup> the privation of material tractability. As a matter of fact, if that thing were a privation, then what is opposite to it in matter would be an existential notion, and a quality; then, therefore, softness is not itself the privation of something, but a determinate notion associated with privation.

[§3.2 *As Aristotle uses “incapacity” metaphorically, so he does with “capacity” in the case of active capacities*]

Hence, it is evident that this utterance here, namely their saying “incapacity”, is a metaphorical expression that needs to be taken into account; since in it an utterance was taken, instead of<sup>1119</sup> that quality, which expresses a concomitant thereof, i.e. the privation of another thing that does not mingle with it. Thus, it is not also unlikely that the other utterance, namely “capacities”, be this way; and that although its primary meaning is that which has the capacity of acting easily, this is not the aim of that use of it; what is meant by “capacity” is not “this capacity”, but what accompanies this capacity: namely, the thing being in itself, for instance, hard to be hit; so that it follows, from it, that it be easy [C189] to hit something else; so that the state because of which the thing is hard to be hit belongs to this genus of quality, though it has been expressed by means of a concomitant of it, like in that case<sup>1120</sup>; since there a certain capacity was expressed by means of what accompanies it, namely another incapacity, but by it it was not meant that very incapacity.

Likewise here, it was not meant by “capacity” that very capacity, so that it is as if he said that the notion because of which the thing resists what is acted in it, so that it comes to acting in the other easily, or not being acted upon by the other easily, this is what is named

---

<sup>1116</sup> Arist. *Cat.* 9 a27-28: “Similarly with the hard and the soft: the hard is so called because it has a capacity not to be divided easily, the soft because it has an incapacity for this same thing”.

<sup>1117</sup> I.e. hardness, the opposite of softness.

<sup>1118</sup> I here modify the Cairo punctuation by attaching *wa-lākinna ‘adam* at 188.12 to the end of the previous sentence (*kayfiyya qā’ima* at l. 188.11).

<sup>1119</sup> Cairo has a printing problem here: I restore *badala* with most manuscripts.

<sup>1120</sup> I.e., in the case of “incapacity”.

“capacity”. Thus, if these words are understood according to this interpretation, the weaknesses disappear, and no things from other genera belong to this genus<sup>1121</sup>.

[§3.3 *Both Aristotle and his exegetes were neglectful and unclear*]

Well, know that the book named *Categories* is written for the education of those who were not trained; and one does not attain, in it, the [degree of] verification that would be necessary, but every sort of metaphorical speech<sup>1122</sup> has been used<sup>1123</sup> in it to make [things] easier. So, it is as if the state of the man capable of wrestling, because of which he is not hit, and by means of which it is made possible, for him, to hit something else, according to this sentence which was pointed at in this book, were a knowable state, which could [also] be expressed; thus, if it is detailed for the student that there is a state because of which one is not hit, and a state because of which one hits, the beginner is confused, and his comprehension becomes difficult<sup>1124</sup>. So, there was negligence, as many other things were neglected in this book<sup>1125</sup>. Afterwards, those who came later complicated the matter regarding this, and apparently did not desist from it.

[§4 *According to some commentators, the capacity and incapacity of not being acted upon are one and the same capacity*]

A group of people held that it is possible to posit the capacity of being acted upon<sup>1126</sup> and the incapacity of not being acted upon as a single capacity, according to two different considerations and with respect to two different things. For instance softness, for it has the capacity of [C190] being split easily, and it does not have the capacity of not being split easily; and this is a single quality [found] in it by itself; and what does not have the capacity of getting sick quickly, has the capacity of not getting sick easily; and what has the capacity of getting sick quickly, does not have the capacity of not getting sick quickly; and what has the capacity of not getting hit easily, does not have the capacity of getting hit easily. Thus, these are a single quality of which it is said in a certain respect that it is a capacity, and in another respect that it is not a capacity.

However, even though it is so, they use “is not a capacity” only in the case of what does not have a capacity of resistance to an active capacity; [their usage with regard to]

---

<sup>1121</sup> As a matter of fact, this would prevent things such as motions (produced by active capacities) from belonging to the wrong category (quality).

<sup>1122</sup> Reading *kulla l-taḡawwuzi* with all manuscripts, instead of *kulla l-taḡwīzi* (Cairo).

<sup>1123</sup> Reading *tuḡuwwiza* instead of *yaḡūzu* (Cairo).

<sup>1124</sup> What baffles the student is Aristotle’s distinction of the capacity of acting, on the one hand, and the capacity of not-being affected, on the other hand, while he probably means – on the contrary – a single property which comprises (or explains) both aspects.

<sup>1125</sup> Reading *fī hādā l-kitābi* with all manuscripts, instead of *fī hādā l-bābi* (Cairo).

<sup>1126</sup> Reading *‘alā an yanfa ‘ila* with mss. **Di**, instead of *‘alā an lā yanfa ‘ila* (Cairo). So as it is read in Cairo, the text makes no sense: this sentence would imply that these commentators believed the capacity of not being affected and the incapacity of not being affected to be the same thing. Now, this is not only absurd in itself, but also inconsistent with the two following examples: as a matter of fact, softness is not in the same time a capacity of not being cut and an incapacity of not being cut, but rather a capacity of being cut and an incapacity of not being cut.

“incapacity” is that it is a natural weakness, of which it is convenient to say, in some places, that it is “impotence”.

[§5 *The notion common to active and passive capacities*]

As to the fact that there is no capacity of receiving quickly, and tractability, it is as if they<sup>1127</sup> did not include it in this species; for this reason, they remained with three subdivisions left: capacity of affection, capacity of resistance, capacity of action.

So, if they did not do so, but posited the capacity of resistance as an impotence, with respect to the velocity of affection; and the common element to them is that each one of them is a completion in taking the being affected or not-being affected of which the primary capacity [is capacity], then between them there is a common element, which is what tends to make [us] posit this one as the species of quality which is this genus, and posit these two as two opposite species below it (one of which is called natural capacity, the other natural impotence)<sup>1128</sup>. But we [still] need a common element between this common element and that which is potency of action, and this is difficult. So, let this common element be that in the thing there is a principle by virtue of which the realization of something reaches its completion, insofar as the eventuality of its realization is predominant<sup>1129</sup>. So, if we do this, and force it<sup>1130</sup>, then the active capacity which is easy, the [capacity] of resistance, and [the capacity] of being acted upon easily belong to this sort [of quality]. But, however, the previous monstrosities, and others, remain; and the division into four [species] is intermingled, not rigorous<sup>1131</sup>.

Let us now content ourselves with what we said: if we mentioned in this place all [C191] that needs to be mentioned [the discussion] would become too long, and there is already no great advantage in positing this book before logic, let alone in making it prolix.

[§6 *The outcomes of capacities belong either to other species of quality, or to other categories*]

It is not convenient to think of the reason why the outcomes<sup>1132</sup> of this genus fall either in a category external to quality, or in a species of quality other than this species. Well, this species may fall outside quality, or belong to another species under [quality]: for instance, the wrestler has the capacity of producing a hitting in another, and [the capacity] of not

---

<sup>1127</sup> I.e., Aristotle.

<sup>1128</sup> Avicenna argued, in the preceding chapter, that the capacities of affection and resistance (not-being-affected) have something in common: this is what made him inclined to posit their common meaning as the true species of quality (see above, V.3 [§2.4])

<sup>1129</sup> If this common notion is adopted, it may embrace both the capacity of acting (as a principle for the advent of something in something else) and its impotence, and both the capacity of being-affected (as a principle for the advent of something in the capable thing itself) and its impotence.

<sup>1130</sup> Reading *wa-takallafnāhu* with all manuscripts, instead of *wa-takallafnā* (Cairo).

<sup>1131</sup> I.e. the division of quality into its four species.

<sup>1132</sup> Ar. *ḡāyāt*, more properly meaning the “purposes” or, more in general, the terminal points of every action or affection perfected by a natural capacity, as is made clear by Avicenna’s following examples: hitting something as a result of the natural capacity of wrestling, sickness as a result of the natural capacity of sickliness.



having a hitting produced in himself. And the disposition of hitting, I mean, the outcome which results from it, not the production of motion towards the outcome, belongs to [the category of] position; the production of motion belongs to [the category of] acting. Likewise, the sickly has a capacity [of]<sup>1133</sup> admitting of sickness easily, and sickness belongs to the first among the species of quality<sup>1134</sup>. For we do not name the wrestler “wrestler” because he is in the aforementioned state with regard to hitting, nor the sickly “sickly” because sickness exists in him, but inasmuch as they have the capacity for that, although this is an active notion because of which [they] are said to be how they are; but that activity is neither hitting, nor sickness.

---

<sup>1133</sup> Reading *quwwatun* with all manuscripts, instead of *quwwatun ‘alā* (Cairo).

<sup>1134</sup> I.e., state and habit.

[V.5]  
On affective qualities and affections<sup>1135</sup>

[§1 “Affective quality” and “affection”]

[§1.1 *Affective qualities and affections constitute a single species of quality*]

The third genus among those that are the species of quality, and genera<sup>1136</sup> for the species<sup>1137</sup> of quality, has the same state as the second genus (with regard to not having a common name)<sup>1138</sup>. Likewise, no common description was mentioned for it, but two names were posited, and one of the two names was posited as being said by homonymy of its species; the other [was posited] as being said of them [C192] metaphorically<sup>1139</sup>. This means that this genus is said to be the genus of affective qualities and affections; so, among affective qualities there is what resembles the “habit” of the first species, and [among] affections what resembles the “state” [of the first species]<sup>1140</sup>.

[§1.2 *Affective qualities*]

The name “affective quality” is said of some of its species, since they are brought about by an affection (such as the yellowness that follows the establishment of a hot<sup>1141</sup> complexion in the liver); and it is said of some others because they bring about an affection, not in everything but in the senses.

[§1.3 *Affections differ from affective qualities in that they are less durable*]

As to<sup>1142</sup> affections, what belongs to them is apparently thought not to be a quality; like yellowness, [which] if it is not established [in the subject] for a long time it is not in the category of quality; not because it is a “becoming yellow”, namely SOMETHING

---

<sup>1135</sup> This chapter corresponds to *Cat.* 9 a28 – 10 a10.

<sup>1136</sup> Cairo reads *ġinsun*, “genus”, in the singular. I translate it as a plural, since I take it to refer again to the aforementioned “species” (*anwā’un*) of quality. In mss. **AA**sBDaEGJNk the singular form *naw’un* is also attested instead of the previous *anwā’un*.

<sup>1137</sup> Reading *li-anwā’i* with most manuscripts, instead of *al-anwā’i* (Cairo, **A**).

<sup>1138</sup> This was true, actually, not only of capacities and incapacities, but also of states and habits (see above V.3, [§1.1], [§2.2]).

<sup>1139</sup> “Affective quality” is said by homonymy: as Avicenna will clarify right below [§1.2], there are two substantially different types of affective qualities, namely those which cause an affection and those which result from an affection. “Affection”, instead, is said metaphorically, since the name “affection”, though being more appropriate for things belonging to the category of “being acted upon”, is also said by metaphor of some qualities [§1.3].

<sup>1140</sup> Avicenna will explain this point below [§1.3]: affections and affective qualities differ inasmuch as the former are less durable (like states), while the former are stable (like habits).

<sup>1141</sup> Reading *al-ḥārri* with all manuscripts, instead of *al-ḥādda* (Cairo).

<sup>1142</sup> Reading *wa-ammā* with most manuscripts, instead of *ammā* (Cairo, **ADE**).

LEADING to yellowness; for if we thought of becoming yellow even in a long period of time, it would not be either quality, but would only lead to a quality which is produced at its end; and when [the process] ends with it, then<sup>1143</sup> “becoming yellow” is extinguished, and stops. Becoming yellow only belongs to the category of affection. If we think of becoming yellow as having ended with yellowness itself, another yellowness has been established, which lasts longer and persists; but the former was established for a day, or one hour, whilst the latter had a longer persistence; for the former yellowness is called “affection”, the one which lasts longer “quality”<sup>1144</sup>. Similarly for blackness, heat, coldness and the like.

If this appearance is correct, but it was denied that the length and shortness of time may rule a thing out of a category, or include it therein (as was done where habit and state were mentioned)<sup>1145</sup>, then those which are called affections are also qualities; but, because of their short duration, and their easy passing-away, they are refused the name of their genus (as it may be said, of what is little, that it is not at all)<sup>1146</sup>; and they are called by the name of the thing which is in a condition of renewal and change, namely affection, so as to be called affections. This name, thus, is somehow applied to them, or transferred to them, by similarity; without meaning, by the imposition of this name to them, what is usually understood by it. It should be so, and the easy aptitude to pass away should not rule the thing out of its genus.

[§1.4 *The different aspects of this species have in common the fact of affecting, somehow, the senses*]

[C193] Now, the meanings that are expressed by these two words are three: **[1]** the meaning of the quality by which the senses are affected, and which has persistence; **[2]** the meaning of the quality which is brought about in its subject by an affection, and which has persistence; and they were circumscribed into a single expression; **[3]** the meaning of the quality which has no stability<sup>1147</sup>.

It is not true that every meaning of these is common to all that which is under this species, nor expresses the true *differentiae* by which the species ordered under this species are divided. However, one of these meanings may embrace the three of them, namely: **[1]** “[quality] such that the senses are affected by it”. For affections and affective [qualities] all share in this, and have something in common, namely<sup>1148</sup> that they produce in certain matters things which participate in their notion: for hot makes hot, cold makes cold, black also establishes the spectre of black in the senses, and in the imagination. You also find that they share the fact that they may naturally belong by accident to bodies, as bodily affection does; and also the heat of fire, even if it was hold superficially, until it was known by verification how it is, that it does not exist in fire by affection, nor in the matter of fire,

<sup>1143</sup> Reading *fa-yafnī* (*fa-yafī* E) with most manuscripts, instead of *yafnī* (Cairo, DiI).

<sup>1144</sup> The quality called “affection” is not the very process of becoming yellow, which – as Avicenna says – truly belongs to the category of being acted upon; the quality named “affection” is, on the contrary, the

<sup>1145</sup> See above, V.3 [§1.2].

<sup>1146</sup> Being short-lasting qualities, they are not even said to be “qualities”.

<sup>1147</sup> **[1]** and **[2]**, being durable, are affective qualities; **[3]**, being unstable, is an affection.

<sup>1148</sup> Reading *wa-huwa annahā* with all manuscripts, instead of *wa-annahā* (Cairo).

since the realisation of what is realised in it is not by affection, and affection is only found in subsistent subjects. Thus, if we concede this speech as tolerable, then in the nature of heat, inasmuch as it is heat, there would be its coming about by affection, even if it is in something other than fire; and the sweetness of honey, although it does not result in honey as an affection of honey, has come about as an affection in things which have been formed to make honey, and were affected by an affection because of which they became sweet.

So, because of this they have in common the fact of being such that they may come about from affections [C194] in a certain subject, though they differ with regard to the fact that some of them come about by affecting themselves the subject, whilst others come about by following an affection in the subject. All of their types, however, share in the fact that senses are affected by them.

[§2 *Do all perceptible qualities belong to this species?*]

[§2.1 *Some properties seem to belong to this species indirectly, only inasmuch as they are sensible*]

Moreover, apparently it is not unlikely that under these common meanings there belong certain things, among which there is what belongs [somehow] to quality, despite the fact that it is found in a genus different from this; like wetness and dryness, hardness and softness, heaviness and lightness, for they are all sensible; like roughness and smoothness, for although they do not belong to quality, but to position, they are sensible. Wetness and dryness, apparently, and hardness and softness, belong to the genus of capacity and incapacity.

[§2.2 *Wetness and dryness, hardness and softness*]

But if we say “affective qualities” roughness and smoothness are excluded; as to wetness and dryness, hardness and softness, their case is [to be] considered: for either their quiddity consists of their being the perfection of an aptitude, inasmuch as it is easily palpable and shaped, or as it is not easily palpable and shaped, or [their quiddity] is another thing which exists and is realised in itself, and quality is a concomitant of it; and it is only sensible in respect of the other thing, so that this quality is a sign of that other existence. This becomes clear by reflecting on its state as regards its falling under sensation, whether it belongs to it by virtue of its being palpable or not palpable, or [it does] under the respect of another thing. As to its not being palpable, it is a privative meaning, which perception must perceive by means of its interruption, as it interrupts in darkness; and our perception of darkness consists of our not seeing anything. Then, it seems that our acquisition of “hard” occurs by means of touch, like an existential acquisition; and softness like a non-existential [acquisition], with which absolutely no resistance is perceived. As for the palpability which is in softness, it consists of admitting of motion according to a certain configuration; motion with a configuration is not sensible but mediately, and palpability may also be perceived by sight (without touch).

[C195] Likewise the quickness of motion towards a [certain] shape, and its slowness; so, that is not a sign of hardness, softness, wetness and dryness being perceived by sight; so what is touched is neither palpability nor the absence of palpability, nor even the aptitude,

for aptitudes, insofar as they are aptitudes, are intelligible meanings. Likewise, the capacity of wrestling is surely not perceived by its wrestler, but there a certain hardness is perceived, due to resistance. Likewise the inflated goatskin full of air, for the air therein does not harden in any way, rather it is as it is naturally; but sensation perceives it as it perceives hardness. Likewise winds, for the thing that is perceived as resistance is different from the natural aptitude which is in the existent thing; for the air is not believed to be hard in its nature, even if it is closed into a goatskin and it does not become wind; but the natural aptitude exists therein, and it is not perceived.

Therefore, the thing which is perceived by itself (if a thing perceived by itself is absolutely necessary) is not that aptitude, although it is associated with it<sup>1149</sup> and together with it; and it is not the motion of palpability itself, nor impalpability. So, one of these is privation; the other belongs to the genus of motion, not to the genus of quality; the third belongs to the genus of qualities which are in quantities, not to affective qualities and affections.

So, among the two aspects considered about dryness and wetness, what falls under this genus is the perceptible one; and what falls under the other genus, namely the genus of capacity and incapacity, is the non-perceptible one: and these two are inseparable.

### [§2.3 *Roughness and smoothness*]

As to roughness and smoothness, they do not absolutely belong to the genus of quality: how could they be affective qualities? For roughness is the differentiation of parts, in the surface of the body, insofar as some of them are protruding, while others are bent inwards, and this belongs to the genus of position; smoothness is the evenness of parts in position. Roughness [C196] and smoothness, insofar as they are such, are only sensible mediately, in the same way as extensions, figures and dimensions are sensible. So, if you perceive mediately hardness, or softness, or blackness, or something else, they do not belong to the sensibles<sup>1150</sup> we are dealing with: for they do not produce, in perception, an effect from the point of view of the very state absolutely belonging by accident to their parts, which is the position; but to another thing, notably hardness or softness or heat or whiteness or something else. So, if roughness and smoothness have a state because of which they are truly perceived immediately, that state is not the state of the thing which accidentally belongs to them because of their parts (namely, their position), and that state is a quality.

### [§2.4 *Heaviness and lightness*]

As for heaviness and lightness, they do not belong but to the genus of quality: for what is thought of them is that they belong to the genus of deep quantity (and this we have somehow already discarded completely)<sup>1151</sup>; but it may be thought of them also that they belong to the genus of capacity and incapacity, and this would happen only if active

<sup>1149</sup> Reading *yuqārinuhū* (cf. e.g. **AA**BDDaDi**EG**IJNNkY****) instead of *yuqāribuhū* (Cairo).

<sup>1150</sup> Reading *al-maḥsūsāti* (*al-maḥsūsiyyāti* **EG**) with most manuscripts, instead of اسوسات (Cairo).

<sup>1151</sup> See the discussion in ch. III.4 [§7].

capacities were a part of this genus, for instance heat and the like<sup>1152</sup>. Thus, heaviness and lightness also belong to this genus: they are among sensibles, and among things that occur in bodies by affection, for the body heats up (and becomes light), and it coldens up (and becomes heavy), while remaining one by itself: for steam is water made lighter by heat, and similarly the heated parts of earth may become lighter, so as to ascend as smoke; and the thing buried in the earth may grow in weight without growing in measure; and mutually different things may form, as a whole, a certain weight; so, if they assemble, there comes about a major weight, or lesser, if some of them are affected by some others. [C197]

---

<sup>1152</sup> That heat is not an active capacity has already been shown by Avicenna in ch. V.4 [§1].

[V.6]  
On solving the remaining doubts<sup>1153</sup>

[§1 *Do density and rarity belong to quality?*]  
[§1.1 *The three meanings of “density” and “rarity”*]

As for “rarity” and “density“, one can express many meanings by their two utterances<sup>1154</sup>: for one may say “rarity” and mean thereby **(a)** the swelling of parts because a body thinner than them abandons them, so that they move away from one another<sup>1155</sup> (like swollen wool); and “density” may be said of the opposite of this, as happens in compact [wool]<sup>1156</sup>. **(b)** “Rarity” may also be said, when the body comes to have a consistency which better admits of being cut and being shaped, without being divided; “density” is said of the opposite. **(c)** “Rarity” is said of matter receiving a bigger volume; and “density” of its receiving, in itself, a smaller volume.

One may think that the second and the third meaning are the same, though carelessly. For fire is more rarified than air in the sense of gaining volume, but it does not better admit of cutting and shaping: for air is very wet, and fire is dry; and when air changes into fire, it gains volume and becomes more resistant, and dry. But when water is heated, so as to become air, it happens to have an augmentation of volume and a weaker consistency; thus, he who does not establish in his judgment, and follows the elimination of exemplification and induction, holds that the two things are the same.

[§1.2 *Each of the three meanings of condensation and rarefaction belongs to a different category*]

As concerns us, we say that the first meaning belongs to the [category] of position<sup>1157</sup>; as for the second meaning, it belongs to quality; as to the third meaning, it belongs to quantity associated with relation, or relation associated with quantity, because it is an augmentation of volume. There has been agreement on the fact that, in the cold elements, rarefaction in the sense of gaining volume is associated with rarefaction **[C198]** in the sense of thinness; and condensation in the sense of diminution of volume [is associated with] condensation in the sense of thickness and resistance. In hot elements, instead, it is the contrary: for instance when air becomes fire, it augments by condensation with respect to the volume, not by condensation with respect to resistance; and when fire becomes air, it is the contrary. As to the case where cold becomes hot, both rarefactions occur to it

---

<sup>1153</sup> This chapter corresponds to *Cat.* 9 a28 – 10 a10.

<sup>1154</sup> Reading *bi-lafḏīhimā* (*bi-lafḏayhimā* **M**) with all manuscripts, instead of *ba`duhā* (Cairo).

<sup>1155</sup> Reading *tatabā`adu* with most manuscripts, instead of *tatabā`adu minhā* (Cairo, **M**).

<sup>1156</sup> Reading *al-kanizi* (cf. e.g. **M**) instead of *al-kīri* (Cairo).

<sup>1157</sup> It belongs to position inasmuch as it results from a certain relation of the parts of a body with one another.

together; and when hot becomes cold, both condensations occur to it together. This is what needed to be verified: do not take into account what was written elsewhere<sup>1158</sup>.

[§2 Recapitulation of Aristotle's account of affective qualities]

Let us limit ourselves to this amount of explanations for this genus<sup>1159</sup>. [Now,] let us run parallel in our interpretation to the arrangement [of topics] of the first teaching<sup>1160</sup>, in order to make what was said in it so comprehensible as to stop all doubts.

We say: this genus includes affective qualities, namely those which are stable and firmly grounded in the thing, like the sweetness of honey and the blackness of raven; they are not said to be affective because the thing in which they are must undoubtedly be affected by them, but rather since either<sup>1161</sup> the senses exclusively, or the senses and other things are acted upon by them in the way mentioned [above]<sup>1162</sup>.

Some of these [qualities] have a privileged relation with affection, for instance whiteness and blackness; for these do not exist in their bodies but when there have been, before them, affections in their subjects, regarding the primary tactile qualities<sup>1163</sup>, such that there came out a mixture that made their [existence] necessary. As a matter of fact, what is other than tactile [qualities] by essence follows tactile [qualities]: you see the man affected by hot or cold because of shame and fear, and this is followed by redness (as in the case of shame), or by yellowness (as in the case of fear). Thus, if similar causes occur in the principle of generation and filiation, they are established and realised as a complexion, then redness or yellowness follow it, and redness and yellowness become concomitant; hence, they belong to affective qualities. Likewise if it happens after birth, it is established as a sort of complexion<sup>1164</sup>, which produces and establishes what it necessitates.

As to what occurs accidentally because of [some quality] ceasing to be<sup>1165</sup>, it is for instance the thing that, if one asks some people about an accident they have by a certain affection, it is not right to answer “it is it”, and what occurs to them because of it is not to be taken into account.

---

<sup>1158</sup> I.e. the opinions of other commentators regarding the status of density and rarity (see the COMMENTARY *ad loc.*).

<sup>1159</sup> This refers to the discourse carried out in chapter V.5 and in V.6 [§1], understood by Avicenna as a preliminary explanation (*ṣarḥ*) of the species affective qualities/affections.

<sup>1160</sup> “First teaching”: ar. *al-ta'lim al-awwal*. See above, V.4 [§1]. Avicenna means thereby the text of the *Categories*, notably 9 a28 – 10 a10.

<sup>1161</sup> I read *immā* instead of *ammā* (Cairo), and change the punctuation accordingly.

<sup>1162</sup> Above: see V.5 [§1.4].

<sup>1163</sup> The primary tactile qualities are the four primary qualities that characterize the elements, i.e. heat, coldness, wetness and dryness.

<sup>1164</sup> An acquired state which works as a complexion.

<sup>1165</sup> Most manuscripts read *al-zawāla* instead of *li-l-zawāli* (Cairo). I maintain *li-l-zawāli* (AAsEJ) because *al-zawāla* would make the sentence incomprehensible, and the passage from *li-l* > *al* (and vice versa) is a very common mistake.



[§3 *It is not incorrect to answer the question “how?” by stating one’s affection*]

It has become customary, for [people], to notify [C199] only the qualities that accompany them necessarily; so it is not said, of him who has a red skin, that he is yellow in colour because of an accident derived from fear, or anger, other than his colour; for this reason these [accidents] were not named qualities, but affections. Know that this is a large and metaphorical way of speaking; if not, then quality would be said of the two meanings together; this because, if one asks him who is yellow from fear, *how* he is in that moment, and he is answered “yellow in colour”, the answer is not false; and if one asks him how he is absolutely, he usually does not answer “yellow” if he has a red complexion. The reason for this is that the respondent is aware that the questioner is asking how he is in his healthy<sup>1166</sup> nature, and how he is<sup>1167</sup> most of the time; and he knows that the questioner speaks largely, and left out some of the things that he should have expressed; so, he answers as he answers. And if [the questioner] also asks how Zayd is absolutely, and the question does not require more awareness, or the question makes the respondent think that [the questioner] is asking about his present state, then he would not lie if he said: “sad” or “hopeful” (although these are [qualities] that pass away quickly). As to the fact that the question “how”, namely the answer, requires a consideration of times, and a consideration of the duration of the state, or its non-duration, it is something which we do not need to clarify.

Thus, the thing must be conceptualized in this way; do not pay attention to him who denies that qualities that pass away quickly may be said as an answer [to the question] “how?”. Know that this is not correct, because of the aforementioned awareness about the question on the part the questioner.

[§4 *Similarities and differences between the first and the third species of quality*]

[§4.1 *Name and definition*]

These [sorts of] question and answer are not only commonly used for the qualities which belong to this genus, but also [for the qualities belonging] to the first genus: for habits may be called affective qualities, and states [may be called] affections; although this, if [the first genus] is considered along with the third genus, is said by similarity of name<sup>1168</sup>. Unless one posits the name “affective qualities and affections” as an equivalent name, not for the meaning of this genus, but for a meaning more general than this, namely that [C200] every quality which passes away slowly from its qualified is called “affective quality”, and every quality which changes easily is called “affection”; then the division of quality into passive qualities and affections would not be [part] of a four-fold division, but of a three-fold division. So, quality would be divided into: affective qualities and affections, capacity and incapacity<sup>1169</sup>, shapes and their kin. Then, affective [qualities] and affections

---

<sup>1166</sup> Reading *al-ṣiḥḥiyyati* with most manuscripts, instead of *al-ṣaḥīḥati* (Cairo).

<sup>1167</sup> Reading *ḥālatihī* with most manuscripts, instead of *ḥālatin* (Cairo, **As**).

<sup>1168</sup> “By similarity of name”: ar. *bi-tašābuh al-ism*. Similarity or resemblance has been associated, in chapter I.2 [§3.3], with a kind of homonymy where the homonymous things bear some sort of similarity to one another.

<sup>1169</sup> “Capacity and incapacity”: supplying *wa-ilā quwwa wa-lā quwwa* with all manuscripts.

would be divided into this third genus, and into state and habit. So, this genus, in respect of its particularness, does not have a name, and only the meaning more general than it has a name. So, if this name were posited for it in respect of its particularity, its falling upon habit and state would be by homonymy, for it would not have there a perfection in its definition.

[§4.2 *Example: stable and unstable anger*]

Let us return [to the beginning] and say, after what we determined concerning the state<sup>1170</sup> of the similarity of these two expressions: who has an irascible complexion producing the aptitude for anger, because of his being primarily such, for instance, or [who] acquired it not because of complexion, but by performing acts of anger; [he] has an affective quality, by which it is either meant “habit” (by homonymy or by a metaphorical example), or a meaning more general than “habit”. He who accidentally has anger, [derived] by a contingent cause, does not have an affective quality. Thus, if by affective quality “habit” is meant, this meaning is not said of the third genus but by homonymy; and if it was meant the more general meaning, it is said of it by synonymy. But it is said of the third genus by homonymy, in two senses: it is inasmuch as it is posited as a name which, in its particularity, expresses a certain meaning; and inasmuch as it is meant, by it, the common notion that expresses a certain meaning. The two meanings are existent together [C201] in the proper thing, and predicated thereof. This is like [the case] of him who calls his black slave Aswad because of his personality, so “black” (*aswad*) is said by homonymy of the single in two senses<sup>1171</sup>. This [is all.]

[§4.3 *The “affections” that Aristotle includes in this species are actually qualities*]

[Hence,] who heard that people agreed upon the fact that state and habit are a single species, and they are both qualities; and heard that habits are the ones characterized by the name “affective qualities”, states [are characterized] by the name of “affections”; and heard that the reason for this is that it was not of use to call him who accidentally has anger in a certain time and moment, without duration, and by character, “qualified by the quality of anger”; [well,] he has no excuse for doubting that the affections in the third genus are truly qualities, although they are not named qualities, but “affections”. The reason for which affections are not thought to be qualities must be thought as well for states; but, since it is not thought regarding states, it must not be thought here either; and it is known that this negation is metaphorical, I mean their saying “they are not qualities”.

---

<sup>1170</sup> Reading *min ḥāli štibāhi* with all manuscripts, instead of *min ištibāhi* (Cairo).

<sup>1171</sup> “Black”, in one sense, is said by homonymy of the man, whose proper name is Aswad (“black”); in the other sense, it is said by homonymy of the temperament (which is “black”, in the sense of “melancholic”).

[C203]

**SIXTH TREATISE**

of the second section

of the first part of the *Kitāb al-Šifā'*

[C205]

[VI.1]  
On mentioning the species of the fourth genus of quality<sup>1172</sup>

[§1 *The species of the fourth genus of quality: figure, non-figure, and that which results from figure and non-figure*]

As to the fourth genus, we already mentioned its species as well, but we did not mention the notion common to them. What is commonly accepted concerning its species [is that they are] three kinds: figure, what is not a figure, and the sum of figure and non-figure.

As to figure, what is commonly said about it is that it is what is enclosed by a boundary or more boundaries; As to [a single] boundary, it is like what belongs to the sphere or the circle; as to more boundaries, it is like what belongs to the square and the cube. As to what is not a figure, it is like the straightness and curvedness of the line; and the concavity, the convexity and the flatness of the surface. As to what results from the sum of figure and non-figure, it is that which is called “external form” and “shape”, namely the figure inasmuch as it is sensible in a natural or artificial body, particularly by [the sense of] sight; this because it has a certain colour, so the coloured figure is a shape or external form.

[§2 *Aristotle’s reference to “another species of quality”*]

[§2.1 *Two solutions of the previous commentators concerning the status of this fifth species*]

Then, after these three ways [of dividing the genus] were mentioned, it was said: “it seems that quality has another species”<sup>1173</sup>; so, those who explained [the text] vacillated. For some of them said that he means the things which in first philosophy are called qualities, which are the absolutely separate things, such as the presumed ideas, mathematical beings, and the intellects which are deprived of matter. [C206] They did not realize that the application of the name “quality” to this, and these listed things, only occurs by homonymy, or similarity<sup>1174</sup>. The definition of quality in them is not the same, so what is common to these things is not a species of quality supplementary to the mentioned species of quality<sup>1175</sup>.

Others said that this [further species] is heaviness and lightness, although according to themselves and according to others they belong to the [species] mentioned before; for<sup>1176</sup>

---

<sup>1172</sup> This chapter corresponds to Arist. *Cat.* 10 a11-16.

<sup>1173</sup> Arist. *Cat.* 10 a25-26: “Perhaps some other manner of quality might come to light, but we have made a pretty complete list of those most spoken of”.

<sup>1174</sup> Reading *aw tašābuhihī* (cf. e.g. **AsDGNRY**) instead of *aw yušābihuhū* (Cairo).

<sup>1175</sup> I.e.: being said “qualities” by homonymy or similarity, their are said qualities in a way which is different from the being of “proper” qualities, such as those belonging to the four Aristotelian species.

<sup>1176</sup> Reading *fa-inna (fa-li-anna E)* with most manuscripts, instead of *fa-ammā* (Cairo, **D**).

those and others either posit [heaviness and lightness] in the genus of capacity and incapacity, or they posit it in the genus of affective qualities and affections. Nonetheless, they all have in mind the four-fold division, so that it is absolutely certain that no quality falls out of the four genera (and this is true); then, however, they doubt with respect to the fifth species. So, reflect on their state, and their confusion.

[§2.2 *Aristotle does not refer to a fifth genus of quality, but to a certain species of the fourth genus*]

Know that the aim of what was said regarding this is not that the four [species] are not genera that comprise all of the species of quality, so that it is necessary to give a fifth or sixth [species]; but the meaning of these words is that it seems that quality has [another] species, which is a subdivision of these species which he mentioned regarding the fourth genus; since [before] he did not mention the genus, but he mentioned the species of the genus<sup>1177</sup>. And it is convenient that there fall another species of quality under this genus; this because the properties of the dispositions of number, like oddness and evenness, squareness, cubeness, triangularity, and the like, are neither numbers, nor even differences of numbers, but accidents which accidentally belong to their species, and concomitants, as is verified in the First Philosophy, and as is commonly accepted<sup>1178</sup>; and these do not belong to the category of the relative, or to the category of where, or others. Thus, they belong to the category of quality, and to this genus of it, since they are neither habits or states, nor capacity or incapacity, but not even affective [qualities] or affections. This is the species which he avoided to mention, for the reason that the beginner's apprehension of its true nature is one of those things which are extremely difficult.

[C207] As to the aforementioned<sup>1179</sup> [species], they are commonly known to beginners, since they belong to those things, the acquaintance with which is easy; and the book of *Categories* is for beginners exclusively (I reported its nature to you many times).

[§3 *Six problems which must be discussed concerning shape and its species*]

Furthermore, the problems which must be examined here are the following: [1] one of them is the notification of the notion common to this genus. [2] The second is the consideration of what has been said as the commonly accepted description of shape. [3] The third is the verification of the state concerning the fact that figure belongs to quality and not to position. [4] The fourth is the clarification of the state of the angle, in which category it falls. [5] The fifth concerns shape, or how it may belong to a single genus among the species of quality (while being simultaneously colour and figure). [6] The sixth is the state of what is like [shape], if it occurs that it belongs to two categories; so, to which of the two categories<sup>1180</sup> the only actual [aspect] of the complex is related.

---

<sup>1177</sup> Aristotle does not mention the "fifth" species after recalling the other main species of quality, but only after mentioning the sub-species of the fourth species (shape, non-shape, sum of shape and non-shape). For this reason, argues Avicenna, the fifth item is to be counted among these latter species.

<sup>1178</sup> On the qualities that belong to quantities, cf. *Ilāhiyyāt* III.8.

<sup>1179</sup> Reading *al-maḍkūrāt* with all manuscripts, instead *al-muḍakkarāt* (Cairo).

<sup>1180</sup> Reading *minhumā* with all manuscripts, instead of *minhā* (Cairo).

[§4 *First question: the common notion of the genus*]

[§4.1 *Common notion: it is the quality which accidentally belongs to substances inasmuch as they are quantified*]

As to the first enquiry, you must know that this genus is the quality that accidentally belongs to substances because of its belonging, in first place, to quantity (inasmuch as it is quantity); it is not like strength and weakness: for, although these are associated with quantity, they do not [subsist] because of the fact that quantity by itself is apt for them in the first place, and then they accidentally belong to substance by means of it. As to figure, it accidentally belongs to the extension inasmuch as it is extension. In this explanation that we mentioned, concerning the notion of this fourth genus of quantity, there fall figure, straightness, curvedness, flatness, concavity, shape, and the qualities of numbers.

[§4.2 *Objection: the “external form” does not belong to this genus, since it is not an accident of quantity in itself, but an accident of quantified things*]

But someone might object that shape differs from the others, since the others belong absolutely to quantity in first place, and by means of it<sup>1181</sup> they belong to quantified things; as to shape, it does not belong to quantity in first place, for what is not a coloured natural body is not a shape. This is like capacity and incapacity, because they also belong to quantities because of their belonging to quantified things, as they affirm with regard to depth.

However, we say that it is not so; for among things that accidentally belong to quantity, there is what belongs to quantity in itself, not under the condition that it be the quantity of a thing, and what belongs to quantity<sup>1182</sup> in itself on condition that it be quantity of a thing: [C208] so that quantity is the primary substrate of accidents in that thing. Moreover, although that accident does not belong to the thing unless it is also the quantity of what has quantity, it is not that, when there does not belong to it something unless it is the quantity of a thing, it must be true that when the thing belongs to it it does not belong to it primarily; but it belongs to that thing, and to the quantity, because of that [other] thing: for his saying that “to quantity there belongs something<sup>1183</sup> when it<sup>1184</sup> is in a thing” is not equivalent to our saying “to quantity there belongs something because it is in the thing to which that thing belonged”.

As if someone objected that the soul does not have forgetfulness unless it is in the body (or something other than forgetfulness), this does not mean that forgetfulness (or that other thing) only belongs to the body, and it is said of the soul by means of it; as for instance motion accidentally belongs to the body, and by means of it it is said of some faculties of the soul. Furthermore, the first substrate of colour is the surface, as is commonly known (and verified in natural science); and body by itself is not coloured, but

---

<sup>1181</sup> Reading *bi-tawassuṭihā* (cf. e.g. **ABDIMNYR**) instead of *yatawassaṭuhā* (Cairo).

<sup>1182</sup> Reading *li-l-kammiyyati* with all manuscripts, instead of *al-kammiyyatu* (Cairo; desunt **BG**).

<sup>1183</sup> Reading *al-kammiyyata ya 'riḍu* with most manuscripts, instead of *al-kammiyyata innamā ya 'riḍu* (Cairo, **As**).

<sup>1184</sup> Reading *takūnu*, instead of *yakūnu* (Cairo).

the meaning of its “being coloured” is that “its surface is coloured”. But the first substrate of capacity is not depth, and [capacity] is [not] said<sup>1185</sup> of the body by means of it, in such a way that the body with strength is that an extension of which has strength; but strength has as a substrate the body, whose substrates are its matter and its form; and its substrate is only matter, as its verification in another discipline will hint to you. Thus, shape is gathered from a thing whose substrate is surface in itself, and what the surface encompasses; and this thing is the figure; and from a thing whose substrate is also the surface, but according to its being the limit of a certain natural body; and this thing is colour. Therefore, shape is made of two things whose first substrate is quantity, and because of it it is said of the body.

[§5 *Second enquiry: the definition of “figure”*]

[§5.1 *Euclid’s definition is not appropriate for the figure that belongs to quality*]

[C209] As to the second enquiry, namely what has been said in the definition of figure, it seems that that commonly accepted description is not appropriate for the figure which is a quality, but it is a description of the figure employed by geometers, who say that [a figure] is equivalent to another figure, or not equivalent, and it is the half or one third of it; and they mean, by this, a figured extension. This because the thing which is enclosed by boundaries is the enclosed thing by itself; the enclosed thing by itself is the extension; extension is a quantity, whilst figure is a quality; and quality is not quantity. Therefore, what is enclosed by boundaries is not a figure which is the figure belonging to quality; but the figure [which belongs to quality] is the configuration which results from the existence of the boundary and the enclosed thing according to a certain relation.

[§5.2 *A square is different from squareness*]

What points to the correctness of what I say, and the carelessness of those people about this, is that the square is different from squareness, unless one says “square” and means, by this, squareness itself – as it may be said “white” to mean “whiteness”. Moreover, squareness undoubtedly is a shape, belonging to quality, and squareness is not said to be “that which is enclosed by boundaries”, but it is said to be a configuration of what is enclosed by boundaries; as to the square, it is meant by it the thing which is enclosed by four boundaries, so it is not said that it is a quality, but instead a qualified; and “quality” may not be predicated of it. The geometers only mean by “square”, and other figures, this [thing] which we mentioned here; for they mean by square and figure the thing in which squareness, and [qualitative] figure inhere; for this reason, their saying that “figure is what is enclosed by one or more boundaries” is correct, for the figure of the geometer is not the figure of which we are speaking here. As regards him who means, [by “square”], “squareness”, he cannot say that figure is that which is enclosed by one or more

---

<sup>1185</sup> Reading *yuqālu* with all manuscripts, instead of *wa-yuqālu* (Cairo).

boundaries. So, their saying that the description of the “figure” mentioned here is this description is adventurous<sup>1186</sup>.

**[C210]** Since this has been learned, it has been right [to say] that straightness and curvedness, flatness, concavity and the like are not shapes, but configurations of quantities which do not depend on boundaries in any manner.

[§6 *Third enquiry: figure does not belong to the category of position*]

[§6.1 *Premise: it is intrinsically difficult to define complex beings, such as figure and position*]

As to the third enquiry, you must know with regard to it that it is difficult to provide the definitions corresponding to the names of the meanings which are gathered from a collection of things; because for the mass it is difficult to distinguish them, and because they only took into account the properties of their states; since their use of the complex is like their use of the detail, in the measure which the mass needs to figure them out. Figure belongs to this group [of things]; for figure is gathered from an extension, and from certain boundaries according to a certain configuration; for instance, the square [is composed] by a surface, four boundaries, and a configuration. Thus, in the use of the mass, there was no attention for positing the name “square” as falling upon the surface, inasmuch as it has four boundaries, and upon the four boundaries [themselves], and upon the configuration. But surface and boundaries belong to quantity, so, if you take as a substrate for the accidents what belongs accidentally, then there result from them quantities with accidents, whose accidents do not prevent them from being quantities; as motion does not prevent man from being an animal, and a substance. If configuration is considered, configuration is a quality; and none of the two considerations belongs to position, nor there is in it position at all.

[§6.2 *“Position” is said in many ways*]

He was mistaken, who thought that it is right to predicate the notion of “position” of figure, in a certain manner; it only belonged to it because of his ignorance of the homonymy of position. This because position may be said in many ways:

**(a)** “Position” is said of the thing’s existence in its place, and this is the meaning of the “position” which is the same as the category of where<sup>1187</sup>.

**(b)** “Position” is said of the existence of the thing near a thing in a particular direction, as a line is positioned to the right of a line; this position is a species of the relative, and its quiddity is said with respect to something else; for the position of the thing by its neighbour is said with respect to the position of the neighbour by it, but this position is proximity; and who doubts that proximity belongs to the relative? **[C211]**

**(c)** “Position” is also said of the configuration which exists in the body because of the relation of some of its parts to one another in direction, because of the existence of “position” in the second sense in its parts; in general, [it is said] of the existence of a

---

<sup>1186</sup> I.e., the description mentioned in paragraph [§1], which characterizes “shape” geometrically as an extension enclosed by boundaries.

<sup>1187</sup> For Avicenna’s discussion of the category of where see below, chapter VI.5.



certain relation in its parts, which exists in act or in thought, so that if the parts exist according to a certain known relation, or the body is such that it is possible to imagine, in it, parts which have a certain known relation, there comes to be in the whole, because of that, a configuration which is position, and this is the category. For “sitting” is<sup>1188</sup> an attribute of the whole of the sitting [man], not of one of its parts; but this attribute only belongs to the sitting [man], if his parts have a certain relation to one another, or a relation [between them] is possible; not any relation, but the relation of the configuration of proximity; and not any relation of the configuration of proximity, but its having, together with that, a relation to the sides that enclose it, or with parts of places, or parts of things by which it is enclosed; and in general that there be, associated with the consideration regarding their mutual relation, a consideration regarding the relation between them and things distant from them. For if the disposition which the limbs of the sitting [man] have with respect to one another is established, and the sitting [man] gets up, and the disposition is established with a respect considered for the parts with one another, then he is not sitting, when the relation between them and the things outside their substance ends; although those which belong to [their substance] maintain their relation. For this reason it is said that he changed his position.

[§6.3 *Figures do not belong to the category of position*]

Who says that figure belongs to position because figure depends on boundaries, between which there is a proximity proper to the position of some of them with respect to the others, well, he is wrong in many respects.

For instance, he assumed [in his argument] “boundaries” instead of “parts”. [C212] [However,] in position it is only question of parts; in figures, only of boundaries.

He was [also] wrong since he thought that this position belongs to the proper category, and did not know that it belongs to the relative; and only the position that is a category is the position of the parts of the thing with respect to an external, different thing, not the position of the parts of the thing in itself<sup>1189</sup>.

He was [also] wrong also since he thought that, when something depends on a category, then it belongs to that category; for although figure does not come to be but because of the relation between the boundaries, or position as well, it is not necessarily a position. For the square, as well, is not realised but by virtue of a certain number of boundaries, but the square is not necessarily a number: don’t you see that the square is neither said to be a number of boundaries, nor the position of a boundary with respect to another boundary? Thus, since none of these two things is said of it, it does not belong to their categories; but it is said that the square results from such position, from such boundary.

---

<sup>1188</sup> “For ‘sitting’ is”: Cairo adopts *fa-inna l-ḡulūsa huwa* found in mss. **AsDiGIJY** (*huwa* om. **DiG**), which in all likelihood is a *facilior* correction of *wa-huwa*, attested by all the remaining witnesses. Nonetheless, I translate according to the text found in Cairo.

<sup>1189</sup> As the description of meaning (c) clarified ([§6.2]), the “position” that falls in the corresponding category is a disposition resulting from the mutual relation of the parts of a thing with respect to the position of other, external things.

[§6.4 *The defense of a group of later commentators*]

Then, there came later a group of people who defended this [thesis], since they knew that it does not follow that squareness is a position, because the boundaries it has have position; but they conceded that the state of the boundaries with respect to one another belongs to the category of position; this, to defend their distinction between the meanings of a name shared by homonyms, particularly when its meanings are similar, and particularly [when] many meanings are collected into one<sup>1190</sup>. You have learned that figure does not depend on the position which belongs to the proper category, but on the position which belongs to the relative. As to the circle, it<sup>1191</sup> does not depend on this [sort of] position, but is perfected by its boundary having a particular disposition of curvedness, the disposition of figure comes about, for the delimited thing, as a quality, because of a quality.  
[C213]

---

<sup>1190</sup>The target of this criticism is possibly Tābit Ibn Qurra: cf. the discussion in the COMMENTARY.

<sup>1191</sup>Reading *fa-innahā* with all manuscripts, instead of *bi-annahā* (Cairo; deest J).

[VI.2]

**On notifying the state of the angle, and the way in which it falls under quantity, or quality, or position and others; the notification of the state of countenance, and how it may become a species despite its composite nature; the remaining doubts concerning this genus of the four genera<sup>1192</sup>.**

[§1 *Fourth enquiry: the nature of the angle*<sup>1193</sup>]

[§1.1 *The categorial status of angles*]

[§1.1.1 *The difference between angles and shapes*]

As to the fourth enquiry, it regards the angle. Hence, we say that the difference between the angle and figures, is that the angle is an angle only insofar as the extension is considered as delimited between two boundaries, or some boundaries which meet on [another] boundary.

Let us specify our words for the plane [angle]; we say that either the thing which is enclosed by the two meeting boundaries, in plane angles, may be enclosed along with them two by a third or a fourth thing; or it may not. So, if a third thing does not enclose it along with the other two, then either its two boundaries meet upon another boundary common to them, or do not meet, but they can be imagined to go *ad infinitum*; and if they meet, it is like the state of two lines enclosing a portion of a circumference, or a lunular figure, or a curved<sup>1194</sup> figure, and so forth.

Hence, the surface that is not delimited by a third boundary, but is only delimited by two boundaries meeting on a side of its, [this surface], insofar as it is such - or as that is its state - is an angle. The [surface] which is delimited by a boundary other than these, so as to be enclosed by it, or [such] that that [third boundary] meets its boundaries so as to enclose it, [this surface], insofar as it is such (or as that is its state) is a figure. So, if its being enclosed by [the third boundary] is not considered, but its state is only considered under the respect of its two boundaries which meet upon their [common] boundary; that also is a consideration which comprises the angle. [C214] And how could it not be, since the examination of surface insofar as it is delimited by two boundaries in act sharing a boundary with which they are actually continuous, is other than its examination inasmuch as it is delimited by a third boundary, or not. How is it possible to imagine that it is not delimited by a third [boundary], but the two divaricating boundaries go *ad infinitum*, or they are cut in the surface by two points between which no line cutting the surface runs? Be it possible or not, it is [an examination] other than the examination of surface inasmuch as these two boundaries may share another boundary.

---

<sup>1192</sup> This chapter does not correspond to any section of Aristotle's *Categories*.

<sup>1193</sup> Section [§1] is quoted in its entirety in Kamāl al-Dīn al-Fārisī *Risāla fī l-zāwiyya* (edition and translation in R. RASHED 2015, 276-283).

<sup>1194</sup> Reading *atnī* (with R. RASHED 2015, p. 277) instead of *āsan* (Cairo).

[§1.1.2 *The categorial status of angles*]

So, the relation of the extension to this examination is analogous to the relation of the extension to being delimited from all sides; the analogous of the extension is the extension<sup>1195</sup>; and the analogous of the complex which is the angle, is the triangular or squared figure; and the configuration resulting for the extension, inasmuch as it is such, is analogous to the configuration of which results for the extension inasmuch as it is delimited from [all] sides, I mean, figure. Thus, as the extension with figure is a quantity, similarly the angle, insofar as the name “angle” falls upon the extension having the mentioned character, is a quantity; and as the configuration of the [extension] with figure is a quality, similarly the configuration of the angle is a quality; and as geometers, when they say “figure”, mean the extension with figure, likewise when they say “angle” they mean the extension covered by the angle: for this reason the angle is divisible and equivalent, wide or small; and as the state of the boundaries of the square with respect to one another is a position, or a relation, likewise is the state of the two boundaries of the angle.

[§1.2 *The definition of angle as “extension ending over a point”, though acceptable, does not include solid angles*]

It has been said that the angle is an extension ending over a point. This is close to what we said, except for one thing: namely that, if the bodily extension is delimited by two surfaces meeting upon one line, without being levelled to one single surface, and it undoubtedly has the specificity of a state different from figure, then its consideration has been omitted, inasmuch as one of the two surfaces is perpendicular to the other, or divaricating, or getting towards it. And the solid [extension]<sup>1196</sup> is not a figure<sup>1197</sup> insofar as it is delimited by two surfaces, so as the plane [extension] is not a figure insofar as it is delimited by two lines (like lunular figures), [but] it is an angle; so, it is convenient that this be a solid angle [C215], which was neglected, although it does not end over a point. It is convenient that there be a comprehensive notion for the angle which [results] from<sup>1198</sup> two lines, that which results from surfaces meeting over a point, and that which results from two surfaces [meeting] over a line: this comprehensive [notion]<sup>1199</sup> is “the extension having some boundaries (more than one) which end over a single boundary common to them, insofar as it is such”. So, if the name “angle” was posited for this comprehensive meaning, it would not be<sup>1200</sup> far from the truth; and the plane angle’s ending over the point would not be because<sup>1201</sup> it is an angle, for insofar as it is an angle it is delimited by, and

<sup>1195</sup> Reading *al-miqdāri l-miqdāru* with most manuscripts, instead of *al-miqdāri* (Cairo, **GJY**).

<sup>1196</sup> Reading *al-muḡassamu* with mss. **EDiDMIYG**, instead of *al-ḡismu* (Cairo).

<sup>1197</sup> Reading *bi-šaklin* with mss. **EDiMIJYAs** (also compatible with *tašakkul G*), instead of *šaklu* (Cairo).

<sup>1198</sup> Reading *‘an ḥaṭṭayni* with all manuscripts, instead of *min ḥaṭṭayni* (Cairo).

<sup>1199</sup> Reading *wa-yakūnu hādā* with Cairo and mss. **NkBJA**, instead of *wa-an yakūna* (**EIY**) and *aw yakūnu* (**DiDMNF<sub>1</sub>F<sub>2</sub>**). This latter reading is clearly found by al-Fārisī in his *Šifā’* manuscript, and he himself proposes to correct it (*Risāla fī l-zāwiyya*, 281.12-13: “Je dis que le terme «ou» dans ses propos «ou bien... est-il» n’est pas à sa place. Il est correct de le remplacer par «étant donné» ou «et»; ceci est évident”).

<sup>1200</sup> Reading *lam yakun* with all manuscripts, instead of *wa-lam yakun* (Cairo).

<sup>1201</sup> Reading *lā li-annahā* with most manuscripts (*lā li-annahū* **DDiGIMY**), instead of *li-annahā* (Cairo; *li-annahū* **E**).

ending over, a single boundary; later, it happened that these boundaries were lines, so it happened that its end was a point. But then, if someone rejects this, and the name “angle” is posited for the extension inasmuch as it ends over a point, I do not object to him about that: the notion of angle becomes then more specific than the one we mentioned, and a thing will be ruled out of the class of angles, of the class of figures, which also occurs to extensions under the respect of the boundaries. This is what I mentioned.

[§1.3 *Refutation of a predecessor, holding that the angle is a species of quantity intermediate between line and surface*]

It is not convenient to take into account what one sophist<sup>1202</sup> said, since it is not useful; namely that the angle is another genus of quantity, standing between the line and the surface. [He said that] since he held that their saying that line has length only, while surface has length and width<sup>1203</sup>, means that [surface] has a length and width which are two boundaries perpendicular to each other; and since he thought that a line is generated by the motion of a point, then the surface by the motion of a line as a whole, in the sense of width; so that, if an extreme is fixed, and another is moved, it produces something between the line and the surface, and likewise between the surface and the body. As a matter of fact, when he once made a mistake in knowing length and width, the mistake stuck to him until he lost his head<sup>1204</sup>. But the plane angle is a surface, and for this reason it is possible to suppose in it a dimension, and another one intersecting it; the solid angle, analogously, is a body, I mean, if we mean by “angle” the extension which has this sort of delimitation. As to the case where [by “angle”] we mean the configuration, then the angle is a quality.

[§2 *Fifth enquiry: the nature of external form*]

[§2.1 *The doubt*]

[C216] As to the fifth<sup>1205</sup> enquiry, someone might ask: “How is it that the external form is a single quality, and a single thing, despite being a sum of colour and figure? Provided that you allow for the species of substances being composed by substances, you insisted on the fact that the species of accidents do not have composition, although their definitions have a composition of genus and differentia; and this thing which is external form is, according to you, a single species under the accident, which is divisible into two things whose existence is realized, one of which is figure, and the other is colour”.

[§2.2 *Reply: shape/external form is a unitary accident, resulting from two distinct accidental determinations*]

We say, as an answer to this, that we do not refuse that accidents be composed by accidents: how [could we]? Ten is an accident, since it is a number (so it is a quantity), and

<sup>1202</sup> This is a doctrine that Avicenna ascribes, elsewhere, to the philosopher Abū Ḥāmid al-Isfīzārī (*Zāwiyya* 189.8-17).

<sup>1203</sup> Eucl. *Elementa*, def. I.2; 5.

<sup>1204</sup> Reading *tahawwasa* instead of *tahawwaša* (Cairo).

<sup>1205</sup> Reading *al-ḥāmisu* with all manuscripts, instead of *al-ḥāšsu* (Cairo).

it is composed by five and five; the square is an accident, and it is composed by the fact that there is a thing with boundaries and four boundaries. Rather, we mean<sup>1206</sup> that in substances what is related to the nature of their genus, and what is related to the nature of their differentia may exist as distinct parts, although the former is not the nature of the genus [itself], nor the other is the nature of the differentia [itself], as you will learn in our teaching of demonstration<sup>1207</sup>. In accidents this does not exist, and if there exist parts in them, a part of theirs is not expressed in any way by the nature of the genus (like “quality”, in this compound here), nor another part is expressed by the nature of the differentia; they undoubtedly end into elements in which one of the two ways of division exists only by their definitions, and it is not necessary that the parts of the definition be parts of the defined thing.

According to what you will learn later, if shape is associated with colour, a single thing is composed, for this reason, as a whole, by virtue of which it is said that the thing has a beautiful aspect, or a good manufacture, or it is bad and ugly. If the colour were deprived of figure, so as to be colour only, or the figure were deprived of colour, so as to be figure only, it would not have that beauty or ugliness, but another [sort of] beauty or ugliness. Therefore figure, inasmuch as it is composed with colour or something else, has a specific [C217] state [resulting] from the composition, which is not that specific [state] of one of its parts, nor the composition of the two properties inasmuch as they are together only; but, if there is the beauty of colour, inasmuch as it is beauty of colour, and the beauty of the figure, inasmuch as it is beauty of the figure, and the relation of the two beauties<sup>1208</sup> is not defined, then the beauty which is considered does not belong to the whole of the figure; but the beauty which belongs to the whole maybe needs that the two specific beauties be properly specific; but “beauty” is only said of the notion which is according to their composition, and of the notion which is according the specificity by homonymy.

[§3 *Sixth enquiry: what element is dominant in a compound?*]

As for the sixth enquiry, it consists of studying to which of the two a compound of two things is more inclined [to belong to].

Hence, we say that either one of them is worthier of being a described [thing], and the other of being an attribute; like “square”, by which it is meant: “surface having a certain disposition”, for the surface is described by the configuration, and the configuration belongs to it accidentally; so that in general [the thing] belongs to the category of the described [thing], for<sup>1209</sup> the surface having configuration is a surface, not a configuration, and the compound thing should be a surface as well.

As to the case where they differ, and one of them is not prior to the other, nor the other is secondary, caused by the first, and after it, then that composition of the two is an accidental compound, and it is not as a compound because of which there results a thing

---

<sup>1206</sup> Reading *na 'nī* instead of *yu 'nā* (Cairo).

<sup>1207</sup> A possible reference to *Burhān* IV.4.

<sup>1208</sup> Reading *al-ḥusnayni* with all manuscripts, instead of الحسنيين (Cairo).

<sup>1209</sup> Reading *fa-inna* with most manuscripts, instead of *bi-anna* (Cairo, **M**).

with a unitary nature, and it is like [the compound of] writing and length. Hence<sup>1210</sup>, writing and length do not have a composition from which there comes to be a whole unitary in itself, so they do not deserve a category, but they belong to the collection; and the collection is composed, so the categories of these things are also composed by categories; as if writing were collected together with length, the collection would be the sum of a quality, a relation and a measure without real unity.

You must know that the things that deserve to belong to the categories, as species of the categories, are not whatever thing there is; but [they are] the things and natures which are constituted<sup>1211</sup> by a generic notion, and by another notion associated [C218] with it, related to the differentia, by which the generic [notion] is constituted in the sense mentioned in the *Madḥal*<sup>1212</sup>. As for the associations that do not occur in this way, they do not entail a specificity, nor do they entail falling under a category; but you will posit for them an invented category, which is not true. Hence, if “man” is associated with a meaning that does not constitute him, nor does it follow man-ness, but [with a meaning that is] an external accident, then what is composed by them is absolutely not a species of something, inasmuch as it is composed, unless one thinks that it is a sort of qualified substance, and in this respect it was grasped<sup>1213</sup>.

---

<sup>1210</sup> Reading *fa-lā* with most manuscripts, instead of *wa-lā* (Cairo, **M**).

<sup>1211</sup> Reading *tataqawwamu* with most manuscripts, instead of *tuqawwamu* (Cairo; *muqawwamun* **M**).

<sup>1212</sup> A reference to the discussion of differentiae at *Madḥal* I.13.

<sup>1213</sup> Reading *qufiṣa* with all manuscripts, instead of *naquṣsu* (Cairo). Bäck probably reads *nafs*: “Then in this comparison [it would be] a soul” (BÄCK 2016, p. 308). The *rasm* attested by all witnesses could also be read as *faqs* or *fuqisa*, which however seem not to make much sense in this context.

### [VI.3]

## On notifying the difference between quality and qualified, and the states which subsist in between them; on the accidents of quality, and its properties<sup>1214</sup>

### [§1 *Qualities and qualified things*]

These are qualities. As to qualified things, they are those things which have them, either primarily or secondarily, be they substances or quantities; thus, they derive their name from them, so as it is derived from quantity, and so on. As to the Arabic and Persian languages, the name of the qualified is always derived, in them, from the name of the quality; and if it is [normally] said without derivation, it may be also said, together with this, with derivation, for instance it is said: “just character”, “just man”; or “white colour”, “white body”; but it may also be said, together with this, “just” or “whitened”. However it is of use, in some languages (or [perhaps] only in Greek), that [the name of certain qualified things] does not derive from certain qualities, but the qualified has a single name. For that which in Greek derives from the name posited for “excellence”, is a name for that which has excellence; but instead of “excellent”, it is a name derived from the name [C219] “virtue”: only the qualified has a name, whilst the quality has absolutely no positive name. This happens in many languages, for faculties seem to have, in Greek, a name, but of a certain faculty it is said: “boxing”, and the quality has no name, since “boxing” is the name of the act of the quality, not of the quality [itself].

It is not unlikely that this also happen in Arabic. “Healthily disposed” (*miṣḥāḥ*) in Arabic does not derive its name from the quality which is an aptitude<sup>1215</sup>, but from the perfection [of that aptitude]: as a matter of fact, this [word] is certainly derived from “health” (*ṣiḥḥa*), and perverts what is customary in forming derived names. As a matter of fact, he who does not have health as he falls sick may be “healthily disposed” (*miṣḥāḥ*) even in the state of illness, although he is not really in good health (*ṣaḥīḥ*), if he regains health quickly. “Healthy disposition” does not have a name, but one may force the Arabic language so as to derive a name, for it, from the name of the thing having the disposition, contrary to the natural canon.

### [§2 *First property: some qualities have contraries*]

#### [§2.1 *Most species of qualities have contraries*]

Among the attributes attached to quality, there is the fact that quality has contrariety, and this is clear. As to habit, it is like cowardice, for it is contrary to recklessness; and like the right conviction, for it is contrary to the wrong conviction<sup>1216</sup>. The situation in the case of states is also analogous. As for contrariety in capacity and incapacity, it is like

---

<sup>1214</sup> This chapter corresponds to Arist. *Cat.* 10 b12 – 11 a19.

<sup>1215</sup> I.e. “healthiness” (*miṣḥāḥiyya*).

<sup>1216</sup> Reading *li-l-‘aqdi* with most manuscripts, instead of *al-‘aqdi* (Cairo, **As**).



healthiness with regard to sickliness. As to contrariety in affective qualities and affections, it is like whiteness to blackness, heat to coldness<sup>1217</sup>.

[§2.2 *The fourth species does not admit of contraries*]

[§2.2.1 *Shapes and other quantitative qualities*]

As to those [qualities] which depend on quantity, shapes do not have contraries. As to straightness and curvedness, concavity and convexity, you shall learn in the sciences that they are not contrary<sup>1218</sup>.

[§2.2.2 *The fact of not being able to exist together in the same number does not suffice for positing even and odd as contraries*]

As for evenness and oddness, it is superficially believed that they are contrary, but it is not so; for evenness and oddness do not absolutely alternate on the same subject<sup>1219</sup>.

Moreover, it is not true that each two notions which cannot be conjoint are contraries, even if they are regrouped into the same genus; for horse and non-horse, whiteness and non-whiteness, heat and non-heat, [C220] each of these belongs to the things that cannot be conjoint together. Thus if one took non-whiteness<sup>1220</sup> as associated with the condition of a body being described by it, which in its nature may admit of whiteness, and gave it a name, let us say, B, and then if he took a non-square in the same way, and gave it the name C, so that the subject would be either “whiteness or B”, or “a square or C”, it would be neither necessary for B to become “blackness”, that which is contrary to whiteness, nor for C to become a contrary to “square”, which does not have a contrary. It is not the case because of the fact that non-square is one or many things that share in the fact of being non-square; and because non-whiteness is blackness and many [other] things that have in common the fact of being non-whiteness. The many and the few cannot be put forward or postponed [hierarchically] in this regard, if [the thing’s] being a contrary only occurs because of its having a definite name, and not because of another comprehensive [thing]<sup>1221</sup> facing it<sup>1222</sup>.

---

<sup>1217</sup> Reading *li-l-burūdati* with all manuscripts, instead of *wa-l-burūdatu* (Cairo).

<sup>1218</sup> Presumably in the geometry or in metaphysics of the *Šifā’*, although no such discussion is found in either sciences.

<sup>1219</sup> In the following treatise (VII.1, [§2.1]) Avicenna will make it clear that evenness and oddness rather share, as a common subject, the species “number”, but not a single individual number.

<sup>1220</sup> Reading *al-lā-bayāda* with most manuscripts, instead of *al-ibiyidāda* (Cairo, BMNk).

<sup>1221</sup> Reading *bi-ḡāmi’in* (the first stroke is undotted in most manuscripts, but see for example the similar reading *li-ḡāmi’in A*) instead of *yuḡāmi’u* (Cairo).

<sup>1222</sup> This sentence is very abstract and obscure, and my translation is a bit interpretative. By “the many and the few cannot be put forward or postponed in this regard” (literally *fa-innahū lā taqdīma wa-lā ta’hīra li-l-kaṭrati wa-l-qillati* “multiplicity and scarcity have no putting forward or postponing in this regard”) Avicenna probably means that there is no way of putting into a hierarchy the various beings referred to by the expressions “non-square” and “non-whiteness”; this means that none of them is more deserving than others of being a contrary for “square” and “whiteness”, unless it comes to have a determinate name. By “another comprehensive thing” (*ḡāmi’un āḡaru*) Avicenna means precisely a negative, comprehensive notion such as non-square and non-whiteness, which does not exist

Furthermore, if odd differs from even, it only differs from it because even is the number that is divided by equivalent [numbers]; and odd is the number that is not such. Thus its being a number that is not divided by equivalent [numbers] only entails the negation of a notion, which in the even number was associated with something other than its subject, or rather was associated only with the genus of the subject, which is number (and they<sup>1223</sup> knew that this is already enough for not imposing contrariety!). If that notion were associated with the subject shared [by odd and even], aside from the genus of the subject; and if for “oddness” another notion is understood, wider than that which is the opposite of evenness, then that notion would mostly be different, not shared, in the subject. But when we say “contrary” we do not mean this, nor do they, although [in this case] they were negligent. Therefore, evenness and oddness are not contraries, nor unity and multiplicity. This matter will be deeply examined in another discipline<sup>1224</sup>.

Therefore, the fourth kind [of quality] does not have contrariety.

[§2.3 *If one member of any given pair of contraries is a quality, its contrary is a quality as well*]

Hence, if one of the two contrary things<sup>1225</sup> belongs to quality, then the other that opposes it must inescapably belong to quality as well; for that is also **[C221]** a stable, unrelated configuration, with which it alternates [on the same subject]. This is made clear<sup>1226</sup> to you, here, by induction: see for instance blackness and whiteness, heat and coldness, and the like.

[§3 *Second property: some qualities admit of more and less*]

[§3.1 *Only those qualities whose contraries have intermediates also admit of more and less; intermediate attributes in themselves do not admit thereof in themselves, but only when individualised*]

Since some species of quality have contraries such that the subject changes from one of them to another by getting detached from a quality among them, and assuming the other, so those species of quality admit of intension and remission, like heat and coldness, dryness and wetness. They all<sup>1227</sup> certainly admit of more and less, for we find a heat that is “more” than [another] heat; a coldness which is “more” than [another] coldness. This is typical of all contraries between which there are intermediate things, such that the fact that the subject leaves one of them is not associated with the existence of the other, but [the subject] only passes from<sup>1228</sup> the extremes to the middle; so this middle, inasmuch as it is defined by the definition of intermediacy<sup>1229</sup>, does not admit of more and less, like justice

---

<sup>1223</sup> I.e. those commentators who argue that evenness and oddness are contraries.

<sup>1224</sup> Presumably a reference to the discipline of arithmetics (*Hisāb*).

<sup>1225</sup> Reading *al-muḏāddatayni* (*al-muḏāddayni*) with most manuscripts, instead of *al-mutaḏāddatayni* (**DDaM**).

<sup>1226</sup> Reading *wa-yubayyanu* with all manuscripts, instead of *wa-yatabayyanu* (Cairo).

<sup>1227</sup> Reading *kullahā* with most manuscripts (*kāna kullahā* **AsJ**), instead of *kāna* (Cairo, **BMNk**).

<sup>1228</sup> Reading *ʿan* with all manuscripts, instead of *min* (Cairo).

<sup>1229</sup> Reading *al-tawassuṭi* with most manuscripts (*al-wasāʿiṭi* **N**), instead of *al-wasaṭi* (Cairo).

(which is intermediate between two excesses) and decency<sup>1230</sup> (which is intermediate between two excesses), unless, if these intermediate things are associated with matter, and considered in individuals, their actual intermediacy is not taken into account, for that is only apprehended by the definition.

Hence, what is close to that actual [intermediate] and does not depart towards the extremes relevantly, or in such a way that its affection appears extremely clearly, may be numbered among intermediates. For this reason Zayd's justice may be "more" than 'Amr's justice, although absolute justice is not "more" than another [absolute] justice; for it is one, and does not accept of more and less. It is the same with health, which is a certain intermediate, when it is mixed and disposed as being composed [with matter], among realities that have more and less: for absolute health is one and does not admit of intension and remission<sup>1231</sup>, but there may exist a health healthier than [another] health, and this with respect to the consideration of Zayd's health and 'Amr's health.

[§3.2 *Shapes and other quantitative qualities do not admit of more and less*]

As for the things that do not have contraries, they do not admit of more and less; like square, triangle and the like. If they admitted of more and less, then squareness would turn, in decreasing, into [C222] a contrary; if it went too far, it would become it, and that in its nature would be remote from being-square, it would share the same matter with it, and it would alternate with it: thus, it would be a contrary for it. Moreover, if one wants to associate<sup>1232</sup> squareness with matter, then it is not easy to find actual squareness; but in matter there exists only a certain configuration similar to it, and its difference from [the actual square] is hidden from sensation. There exists, therefore, a squareness [that is] more correct than [another] squareness in respect of its being a sensible squareness, but not an actual squareness. As for blackness and whiteness, courage and fear, heat and coldness, this does not occur to them in respect of sensation and its mistakes; but the two things that exist in matter are, the two of them, heats, one of them "more" and the other one "less", not like the sensible square, which is not actually a square but another shape, unless its difference from the square is not perceptible; nor is it like honesty, which is not actually honesty, but either courage or fear. What is such actually admits of more and less, whereas the other is only such according to sensation. For this reason, you do not find two squares, which truly admit the definition of squareness, and then one of them is more, the other is less; but either they admit it equally, or one of them is no square. Then besides this there are other enquiries, which lie outside of the logician's capabilities.

---

<sup>1230</sup> Reading *al-iffatu* with all manuscripts, instead of *al-şifatu* (Cairo; deest **R**).

<sup>1231</sup> "Does not admit of intension and remission": *lā taqbulu l-iştidāda wa-l-tanaqquṣa*. The sentence, printed by Cairo, is only found in manuscripts **BDaMNk**.

<sup>1232</sup> Reading *qarnuhū* (cf. e.g. **AA**s**DGINY**) instead of *qurbuhū* (Cairo).

[§4 *Third property: qualities may be called “similar” and “dissimilar”*]

Among the properties of quality that we think nothing shares with them, there is the fact that [quality] admits of the “similar” and “dissimilar”. We have already explained the state regarding this in the foregoing<sup>1233</sup>. [C223]

---

<sup>1233</sup> Avicenna refers here to the discussion of the definition of quality, provided above (V.1, [§1]).

[VI.4]

On solving a doubt that depends<sup>1234</sup> on the intrusion of certain species of quality and other categories in certain species of the relative<sup>1235</sup>

[§1 *Doubt: some of the things classified under quality seem to belong also to the category of relatives*]

Someone might object: “Most of the things that you numbered in the category of quality belong to the category of the relative, for example habit, capacity, science and the like”.

The answer is that these things are not by themselves in the category of the relative, but are among those things to which relation belongs accidentally, since they have an existence other than that by virtue of which they are relative. For even though their quiddities are said with respect to something else, they do not necessarily belong – because of this – to the category of the relative; since the description entailing this, as you have learned, needed another support, and a modification attached to it, so as to become proper of the category<sup>1236</sup>. Likewise, you have already learned that it was thought, regarding certain species of substances, that they belonged to the relative because of this description; thus, when the [true] description was attained, it was known that they were not in the relative, and this because they have a determined, proper existence by virtue of which they are not in the relative, since that existence belongs to them abstractly.

[§2 *Knowledge is a quality*]

[§2.1 *Knowledge is not a relative because its species are qualities*]

You may find an example for this<sup>1237</sup> in knowledge. If the quiddity of knowledge were said with respect to something else in itself and in the existence by which it is constituted, in all respects; and if [knowledge] were not a quality accompanied by a relation, which has the existence of a quality, and to which an existence because of which it is<sup>1238</sup> relative is attached; then that would bear the effect, when science is determined and specified, that its specification should have the quiddity said with respect to [something else as well]. **[C224]** However it is not so, for the species<sup>1239</sup> of knowledge, like grammar, do not have their quiddities said with respect to something else in the definition of their specificity, but in

<sup>1234</sup> Reading *muta ‘alliqin* with most manuscripts, instead of *yata ‘allaqu* (Cairo; **AsEM**).

<sup>1235</sup> This chapter corresponds to Arist. *Cat.* 11 a20 – b38.

<sup>1236</sup> Avicenna is referring here to the “correction” of the first Aristotelian description of the relative discussed above, in chapter IV.5 (**[§3]**).

<sup>1237</sup> “An example of this”: reading *miṭla dālīka* with all manuscripts (*miṭla fī dālīka* **M**) instead of *maṭalan fī dālīka* (Cairo).

<sup>1238</sup> “Because of which it is”: reading *huwa bihī* with mss. **AA**S**BDEJ**N**k** (*hiya bihī* **DaDiGINRY**) instead of *huwīyyati* (Cairo, **M**).

<sup>1239</sup> Ar. *naw ‘iyyāt*, literally “specificities”, here in the sense of “species”.

respect of a wider notion, which is their being knowledge. Hence, it is not said: “grammar is the grammar of something”, but it is said that grammar is the knowledge of something, just as in that other place<sup>1240</sup> it was not said that this head is *this head* of something, but it was said that this head is *the head* of something.

Hence, if in that place you were reminded this, namely that this head is specifically distinguished from that head in respect of its existence, because of which it is not relative, but relation accidentally belongs to it; in such a way that this specification is deprived of the specification of relation in front of it, but it is accompanied by the relation that accompanies the common nature to which relation is attached (like head-ness); [if you were reminded this,] then similarly<sup>1241</sup> grammar here becomes a particular<sup>1242</sup> of knowledge only inasmuch as knowledge is a quality, and for this reason no relation follows it except that which is attached to its genus at first. [Moreover,] this specification is not in respect of the relation that is attached to [knowledge], but in respect of [its] proper existence<sup>1243</sup>, e.g.: a certain quality, which is a disposition in the soul and a form abstracted from matter, which corresponds to certain things in external [reality]; then, [this] is common to all the dispositions and abstract forms in the soul that share this definition, and they do not differ with respect to it. Hence, they also share in the fact of corresponding to certain things in external [reality], not by virtue of their specificity, but by virtue of the fact that this notion belongs firstly to the meaning common to them; thus if they were specified by the specificity of the relative, which does not have an existence other than being relative, then the relation should necessarily be attached to them in their specificity; and since their specifying [thing], in the definition of their specification, remains other than the relative, then [that thing] has<sup>1244</sup> a non-relative existence.

Hence, if the species do not belong to the relative by themselves, but they have a proper existence, and that which has its quiddity said with respect [to something else] is only the genus (because of which it is also said so of the species); and if it is not said in the definition of its specification [C225]; and if the species have an existence by virtue of which they are not relative, so that their genus is also such, although relation accidentally belongs to it, and it is not in the relative by itself; then, it is impossible that the genus belong by itself to the category [of the relative], and moreover its species do not belong by themselves to that category [as well]. Isn't the category but a genus of the genus, and isn't the state of the category anything but this state?

Therefore it is clear that, since grammar does not belong to the [category of the] relative, then knowledge only belongs to the relative inasmuch as the relative belongs to it as an accident or as a concomitant, but not inasmuch as it is a species of the relative.

---

<sup>1240</sup> Ar. *hunāka*, literally “there”, i.e. in the discussion of relatives carried out above in ch. IV.5 [§1].

<sup>1241</sup> Reading *fa-ka-dālika* with mss. **AsDaDiEGIJNkY**, instead of *wa-ka-dālika* (Cairo, **ABDMNR**).

<sup>1242</sup> Reading *ğuz`iyyan* with most manuscripts, instead of *ğuz`an* (Cairo, **DaD**).

<sup>1243</sup> “Proper existence” (*al-wuğūdu l-hāşşu*) is used by Avicenna, here and elsewhere, as a synonym for “essence” (see also the note at

<sup>1244</sup> Reading *fa-lahū* with mss. **DDaDiEGINKY** (*fa-lahā* **AAsBNR**), instead of *fa-innahū* (Cairo, **M**; *fa-innahā* **J**).

[§2.2 *Something may belong to different categories, but to one only as a species thereof*]

It is unquestionable that something [may] belong to two categories in two different respects: as to the first [category], it does by itself, as a species of it; as to the other, it does by accident, as a subject for [that category] accidentally belonging to it. Thus you need to understand this place<sup>1245</sup>; do not turn to the blindness of the minds of those who hold that something may be found in a genus, and its species, and in [another] genus different from it<sup>1246</sup>.

[§3 *Criticism of those commentators who argue that knowledge belongs to both quality and relatives*]

[§3.1 *The commentators do not take Aristotle's example of the head into account*]

What is astonishing is that those people already forgot that this mentioned description of the relative (namely, that whose quiddity is said with respect to something else) is a description that was already declared spurious, because it includes in the relative what does not belong to the relative, and [a description that] needs a supplement in solidity<sup>1247</sup>. Between them and this place there are nearly three folia<sup>1248</sup>, until they came and granted that science belongs to the relative in its nature, as a species of the relative, whereas its species do not fall under it. They happened to solve this doubt and to forget that a similar doubt was also mentioned previously with regard to substances. The solution of that doubt ultimately entailed that what is specified ceases to be said with respect to something else<sup>1249</sup>, which proved that it does not belong to the category of the relative, and that the second definition, convalidated and verified of the relative is not said of it.

[§3.2 *The commentators are incoherent with their own account of predication "of a subject"*]

They [also] forgot that if something is said of another thing as the "said of a subject", and this thing of which it is said is said similarly of a third [thing], [C226], the first is said of the third similarly. They forgot that they understood, of what is "said of a subject", that it must be essential and constitutive of the quiddity; thus they did not know that if the relative is a genus for knowledge, it should be constitutive of its quiddity; then knowledge is the genus of grammar and constitutive of the quiddity of grammar; and what constitutes the quiddity of what constitutes the quiddity, is constitutive of the [second] quiddity<sup>1250</sup>. Thus, how can grammar be converted from<sup>1251</sup> the side of the relative, so as to end up on

---

<sup>1245</sup> Reading *al-mawḍi'a* with all manuscripts, instead of *al-mawḍū'a* (Cairo).

<sup>1246</sup> I.e., again, as a species of this second genus.

<sup>1247</sup> See above, IV.5 [§3].

<sup>1248</sup> Ar. *Qarīb min talāṭi waraqātin*. The use of the term *waraqā* (piece of paper, sheet) suggests that Avicenna is referring, here, to his physical copy of the *Categories* (quite a rare event in his *corpus*).

<sup>1249</sup> I.e. "this head", being an individual specification of "head", does not share head's being a "head of something".

<sup>1250</sup> Thus, according to these philosophers, the relative is also constitutive of the quiddity of grammar.

<sup>1251</sup> Reading *'an* with all manuscripts, instead of *min* (Cairo).

the side<sup>1252</sup> of quality (whether or not their interpretation of “said of a subject” is true)? They also forgot that they taught – themselves – that things that have different properties are not predicated of each other; so, if quality is predicated of every grammar in itself, and its quiddity; and if the relative is predicated of no quality in such a way that [the quality] has no existence but that because of which it is relative (not in such a way that relation does not belong to it accidentally, in such a way that it follows that the relative is said of no grammar in its substance); and if according to them every knowledge is a species of the relative; then the relative is said of it in its substance, and it follows that no grammar is a knowledge. This<sup>1253</sup> is absurd.

However, you must not pay attention to those people, and you must understand that the aim of what was said in the *Categories* is what we pointed to.

[§4 *Objection*]

[§4.1 *The relative character of grammar would consist of its having a relation to a certain object of knowledge*]

However, someone might object that the character of grammar is the same as knowledge, for grammar is grammar with respect to a thing, that is ‘speaking a language correctly’<sup>1254</sup>.

The answer to this is that the quiddity of ‘speaking a language correctly’, inasmuch as it is ‘speaking a language correctly’, is not said with respect to grammar; hence, how can grammar be relative to it? As you have learned, each of the mutual relatives is said with respect to the other, but the inflection of words is said with respect to grammar insofar as it is known [by grammar]; in such a way that, if the inflection of words were existent for one thousand years without being known, it would not be said with respect to grammar. If it is so, then the opposite of “known”, inasmuch as it is “known”, is knowledge, or “he who knows”, inasmuch as it is [C227] “he who knows”; thus, since the inflection of names was attached to the known, the inflection of names becomes a known thing<sup>1255</sup>, in front of which there comes to be a certain disposition of the soul (namely, knowledge). The disposition of the soul which is knowledge, as a whole, is said with respect to this other whole; so, if the disposition is divided, so as to turn to its being disposition, not to the relation with the outside because of which it becomes knowledge, which accidentally belongs to it, [then] it is a non-relative existence.

Likewise, if one turns to the inflection of words, and separates from it the fact that a disposition of the soul corresponds to it, so that it ceases to be “known”, then it is a non-relative existence. Similarly this head: for in so far as it is a head, it is relative to the body inasmuch as it is headed.

Hence, if one considers the individual substance, and its consideration in so far as it is such must not be a consideration of its being head, it has a proper existence; likewise on

---

<sup>1252</sup> Reading *kanafi* (cf. e.g. **DaGNRY**), instead of *kayfi* (Cairo).

<sup>1253</sup> Reading *hāqā* (om. **IN**) with most manuscripts, instead of *wa-hāqā* (Cairo, **AsJ**).

<sup>1254</sup> “Speaking a language correctly”: ar. *I’rāb al-luġa*.

<sup>1255</sup> Reading *ma’lūman* (*ma’lūmatan* **DDiEGIMY**) with most manuscripts, instead of *ma’lūman mā* (Cairo; *ma’lūmatan mā* **Da**).



the side of the headed. Of course, the relation which is attached there<sup>1256</sup> is a necessary concomitant of the disposition which is in the soul, not a concomitant of the head; likewise, if head itself is determined the determination of the other is not necessary.

[§4.2 *The correct interpretation of Aristotle's principle of cognitive symmetry*]

It is not the case that, when we say “if one of the two actual relatives is known determinately, the other is known determinately [as well]”, the converse [of this statement] follows necessarily, namely “everything such that a determinate knowledge of its correlative follows as it is known determinately is an actual relative”; but this [character] may be found both in the actual relative, and in what does not separate from a relation that accompanies it necessarily. This fact was only mentioned, in that place, not in order to explain that every such thing is an actual relative, but so as to clarify that what is not such is not an actual relative. Hence, the aforementioned doubt regarding substances ceased to be; the correction and objection propounded against it pointed to the fact that if the actual relative, whose existence consists of being relative, is known determinately, its correlative is known in the same way, [but] substance and other things that were numbered [among relatives] are not such. Then, the obscurity is solved<sup>1257</sup>. **[C228]** As a matter of fact, the proof and explanation of what was mentioned by him who gave that explanation is only this; he did not go into its converse, nor did he absolutely state that this is a property of the actual relative. He did not need that, but [only] this, as we explained. He also added to [the proof] that “the head and the like are not such”<sup>1258</sup>, and he concluded that they do not belong to actual relatives. We have already explained that passage as it was necessary<sup>1259</sup>.

---

<sup>1256</sup> I.e. in the aforementioned example of knowledge.

<sup>1257</sup> Reading *tanhallu* with all manuscripts, instead of *tuhallu* (Cairo; deest **E**).

<sup>1258</sup> Arist. *Cat.* 8 b15-21.

<sup>1259</sup> Cf. above, IV.5 [§6].

[VI.5]  
On where and when<sup>1260</sup>

[§1 *The category of where and its subdivisions*]  
[§1.1 *Definition and division*]

As to [the category of] where, it is perfected by the relation of the located [thing] to the place it is in, and its essence is the thing's being in a place. It was already learned, in the foregoing, how it differs from the relative<sup>1261</sup>.

It is a genus for some species: for being "above" is a where, being "below" is a where, being "in the air" is a where and being "in water" is a where. Among [the species of] where there is what is truly proper and primary, namely the thing's being in the place truly proper to it; what is secondary and not truly proper, like the thing's being in the secondary, not truly proper place, as when you say "in the sky", "in water". Two bodies are not described<sup>1262</sup> by a where which is numerically one, if the where is primary and truly proper; but they are described by a where which is numerically one, if the where is secondary and not truly proper (like two bodies which are found together in the market-place).

Among the [species] of where there is also what is taken by itself, like fire's being upwards, insofar as it is in the internal part of the celestial surface; and what is accidental to it, like the rock's being in the air. Sometimes there may be a relation in where, like the air's being "up" with respect to water; because it is in a place which is closer to "up" than the place of water.

[C229] Among the [types of] where there is also a generic [where], namely "being in a place"; a specific [where], like "being in the air"; and among them there is also an individual [where], like this [particular] thing being, in this moment, in the air (this being a secondary place), or like this [particular] body being in this proper, individual place.

[§1.2 *Refutation of the idea that where is identical with place*]

One of the ancient [commentators] affirmed that a single where may be found in<sup>1263</sup> many substances, e.g. a number [of people] in the market-place. He was wrong, and a later [commentator] answered to him by what I [myself] declare. He said that it is not so, for in the truly proper where this thing does not exist; as to the non-truly proper where, like being

---

<sup>1260</sup> There is no correspondence for this chapter in Aristotle's text, except for the lines of chapter 9 where the categories of where and when are mentioned (11 b10-11, 13-14).

<sup>1261</sup> See above, ch. II.2 [§2].

<sup>1262</sup> Reading *mawsūfayni* with all manuscripts, instead of *mawsūfāni* (Cairo).

<sup>1263</sup> Cairo prints *fīhi* (a reading I found in mss. **BNNkR**). As it is read in Cairo, the sentence states that many substances are found in a single where; all the other witnesses I consulted have *fī*, which would make the sentence read: "a single where may be found in many substances". Although the sense is more or less the same, I think that the version attested by Cairo is *facilior*, and thus probably wrong.

in the market-place, it is not the market-place itself; for although the market-place inevitably is a stable, shared place, where is not the market-place; but Zayd’s being in the market-place is the where, and it is an attribute of Zayd by virtue of which Zayd is being in the market-place. ‘Amr is not being in the market-place because of this attribute in itself, although the market-place is one; so Zayd’s relation to [the market-place], insofar as he is Zayd, differs from ‘Amr’s relation [to it] numerically. This is like whiteness, for although it is not unitary by species, it may multiply numerically.

Then, one of the pedant [successors] backed the ancient [commentator], being not satisfied with this answer, and said: the state of where is not like the state of whiteness, for if Zayd’s whiteness disappears, it is not necessary that ‘Amr’s [whiteness] disappear [as well]; as to the market-place, it is one for the whole [of the people in there]. He thought he did something [relevant], as he showed us that the market-place is one!

Hence, if the market-place is a where, the market-place is “being in a place”, not a certain place; and if one asks, of the thing, where it is, it is correct to answer [C230] “market-place”, not “in the market-place”. So, if where is Zayd’s being in the market-place, then Zayd’s being in the market-place may be canceled from him<sup>1264</sup>, even though ‘Amr’s being in the market-place is not destroyed; hence, it is also like whiteness.

[§2 *The properties of where*]  
[§2.1 *Where admits of contraries*]

We say that where has contrariety, like the rest of the categories<sup>1265</sup>; for being in the place which is by the periphery is opposite to being in the place which is by the center, and they do not subsist together; and<sup>1266</sup> they are two notions such that there may exist for them a single subject on which they succeed each other, and there is between them the extreme disagreement.

[§2.2 *Where admits of more and less, not inasmuch as it is where, but inasmuch as it is relative*]

Since it is possible to go from one of the [contraries] to the other little by little, the two progresses are contrary, there is an intermediate where between them, there are wheres closer to the upper extreme with regard to the definition of being-up and different wheres

---

<sup>1264</sup> Cairo reads: *fa-Zaydun yabṭulu ‘anhu bi-buṭlāni kawnihī*. The reading of Cairo is the result of contamination, since two concurrent readings of this passage are mainly attested in the manuscript tradition: *fa-Zaydun yabṭulu ‘anhu kawnuhū* (AAsBJNNkR), and *fa-Zaydun yabṭulu bi-buṭlānihī kawnuhū* (DaDiEiY) or *bi-buṭlāni kawnihī* (DMG). The reading that makes most sense in this context is the first one, which I adopt by expunging *bi-buṭlāni*.

<sup>1265</sup> “like the rest of the categories”: ar. *kamā fi sār al-maqūlāt*. This remark may be interpreted, and consequently translated, in two ways: either as stating that all the remaining categories (when, position, having, acting and being acted upon) admit of contrariety, or as meaning “just as it was done with regard to the other categories”, i.e. as implying that a discussion of properties is undertaken with regard to all categories, and with regard to all of them it is inspected whether or not they admit of contrariety. I have translated according to the first hypothesis, given that some of the remaining categories surely admit of contrariety: see below, VI.6 [§1.2] (position) and [§3.3] (acting and being acted upon).

<sup>1266</sup> Reading *wa-humā* with most manuscripts, instead of *fa-humā* (Cairo, As).

the other way, then it is natural for where in a respect<sup>1267</sup> (not in the respect of its genericity, but according to the properties of its specificity and also their relation) to admit of more and less. As to being-up absolutely, or being-down absolutely, or being in whatsoever limit absolutely, or being in place absolutely, this does not admit of more and less.

[It is so] even in quality, for true quality does not admit of more and less, but the thing which is blackness with regard to a thing is whiteness with regard to another thing. Any part of blackness you may suppose, does not truly admit of more and less in itself. This needs to be left out, here, but there is a place of philosophy more suitable for it. For someone might say that blackness does not admit of more and less insofar as it is relative, but in the nature of its quality; as to where, it only admits of this because of the relation which accidentally belongs to its existence<sup>1268</sup>; namely, [C231] closeness or farness (?) to/from an extreme. Then, if you occupied yourself with clarifying the truth regarding all this, it would be a departure to another discipline.

Thus let us now concede to this speaker that where only admits [of more and less] insofar as it is relative, not in so far as it is where; and let us leave the matter of blackness and whiteness obscure<sup>1269</sup>.

[§3 *The category of when*]  
[§3.1 *Definition and division*]

As for when, it is also a certain relation of something, [but] with time; and it is [the thing's] being<sup>1270</sup> in [time] itself<sup>1271</sup> or in its extreme. As a matter of fact, many things fall in the extremes of times and do not fall in times: of them “when?” is asked, and an answer is given.

When the thing is related to time, then either it is related to a primary time corresponding to it, which does not surpass it; for instance when they say “this thing was at noon”; or [it is related to] a time more common than that, which is the analogous of the market-place in the case of where, for instance when you say “this was in the year X”, and “it was not in the whole year, but only in a part of it”. The [primary] corresponding time is not like the [primary] corresponding place in that nothing shares in [the thing's] relation with it: instead, many things are related to the one, true determinate time, so that each one of them is in it by way of correspondence. However, in spite of that each thing certainly exists in it, and that is its specific relation<sup>1272</sup> with it; if [this relation] were absent, there would remain a specific relation for the other things, although the [time] related to it was one (as we said about the relation to the market-place).

We do not need to recall lengthily what the aforementioned predecessor said about [the category of] when, nor to reply to him: for since he said what he said about place, this is [also] what he says about time<sup>1273</sup>.

---

<sup>1267</sup> Reading *ġihatin* with all manuscripts, instead of *ġihatihī* (Cairo).

<sup>1268</sup> “Existence” translates here *anniyya*, instead of the usual *wuġūd*.

<sup>1269</sup> Reading *mubhaman* (cf. e.g. **BDEIJMN**) instead of *minhumā* (Cairo).

<sup>1270</sup> Reading *kawnuhū* with all manuscripts, instead of *fī kawnihī* (Cairo).

<sup>1271</sup> Reading *fīhi naḡsihī* with most manuscripts, instead of *fī naḡsihī* (Cairo, **IN**).

<sup>1272</sup> Reading *nisbatuhū* with most manuscripts, instead of *nisbatu* (Cairo, **DaIM**).

<sup>1273</sup> Cf. the doubt discussed above, in par. [§1.2].

[§3.2 *Al-Fārābī's description of the category of when*]

[§3.2.1 *Interpreting al-Fārābī's claim that time accompanies the two ends of something's existence*]

I say: the eminent later scholar was really exaggerating about the interpretation<sup>1274</sup> of “when?”, as he said: “when is the relation of something with the time which accompanies its existence, and its ends correspond to the ends of its existence; or a definite time, of which this time is a part”. This because he mentioned the “two ends of its existence”, meaning by this either (1) the two ends of its extension, or (2) the two ends of its motion, or (3) the two ends of the time of its existence, or [C232] (4) the two ends of its when, i.e. of its relation with its time.

(1) Hence, if he means [thereby] the ends of [the thing's] extension, the ends of its time do not correspond to these.

(2) If he means the ends of its motion, then what is characterised by this is either the mobile that moves by continuous motion or motion itself, but the aim of [this distinction] does not point to this only.

(3) As for [the case where he means] the two ends of the time of its existence in actuality, the two ends of time do not “correspond” to these, but they are identical with them.

(4) As for [the case where he means the ends of the thing's] relation [with time], there it is possible to propose a way of interpretation, by saying: what he means is that [the thing's] “when” is its relation with a time, whose two ends correspond to two relations it has with the two ends of this time; then, it has no relation with it before the first end and after the other end. It is necessary to understand his discourse in this way.

[§3.2.2 *Al-Fārābī's description is incorrect, since it does not include a thing's relation with instants*]

However, it is possible to believe that the relation of something with the instant with which it is associated does not belong to the category of when in itself; for if it were so, then this description would be incorrect, and this because this definition is not predicated of the thing's being in a certain instant, but [this] belongs to the category of when. The truth is that it is not possible to have an intelligible relation with the instant, such that it is acceptable to answer the question “when?” thereby, unless one points to what is limited by that instant; so that the thing has a relation with time, not as being in it but as being in its extreme, and despite this it is an instant.

Hence, this destroys what this eminent, acute<sup>1275</sup> scholar said – unless of course he judges that the relation with the instant does not belong to the category of when; but there

---

<sup>1274</sup> Cairo prints *al-ibāra* between quotation marks, as if it were the title of a work of the “later eminent scholar” (*fāḍil al-muta'ahhīrīn*) on the *De interpretatione* (titled, in Arabic, *Kitāb al-'Ibāra*). Given that the later eminent scholar alluded to here is Fārābī, and the work cited by Avicenna is possibly one of his commentary on the *Categories*, not the *Šarḥ al-'Ibāra* (see the COMMENTARY *ad loc.*), I read the term as meaning generically “interpretation”, notably the interpretation of the particle *matā* (“when”).

<sup>1275</sup> Reading *al-fāhimu* with most manuscripts, instead of *allāhumma* (Cairo, **BDiNK**).

is no category more apt for it than this category, and we do not teach that it does not belong to any category at all.

Moreover, besides this, it is thought somehow that engaging with this<sup>1276</sup> plunges the beginner into what he is not concerned with.

[§4 *Where and when are not categorial compounds*]

Know that just as relation is not a complex notion whose composition entails its being repeated in between two things, since they are not two parts thereof, but two realities external to it, on which relation<sup>1277</sup> depends; likewise where and when must not be thought to have composition because each one of them has a relation to something. Also [know] that<sup>1278</sup>, neither [C233] the related thing, nor the thing with which it is related can be a part of the relation, in such a way that the whole is the relation, and then the relation is a part of itself; because the whole<sup>1279</sup> is realized<sup>1280</sup> as a whole made of [two] things and the connection<sup>1281</sup> itself. Hence, the connection resembles the form, the two things are like matter, the sum<sup>1282</sup> resembles the compound; and the connection is [also] a part of a compound, like form. Since this is absurd, neither where nor when is composed.

---

<sup>1276</sup> I.e. with physical doctrines such as the status of instant, tackled in the above discussion.

<sup>1277</sup> Reading *hiya* with most manuscripts (*fī R*), instead of *hīna* (Cairo, **Da**).

<sup>1278</sup> Reading *wa-anna* with most manuscripts, instead of *fa-inna* (Cairo, **DaGIJY**).

<sup>1279</sup> “the whole” (ar. *al-ḡumla*) refers to the complete attribute “relation of x with y” (where y is either a place or a time), which describes both the category of where and the category of when.

<sup>1280</sup> Reading *taḥṣulu* with all manuscripts, instead of *taḥṣīl* (Cairo, **M**).

<sup>1281</sup> “the connection” (ar. *al-ḡam*) refers to the relation that associates the thing x and the place or time y.

<sup>1282</sup> “the sum” (ar. *al-maḡmū*), i.e. a synonym for *ḡumla*.

**[VI.6]**  
**On the rest of the ten categories<sup>1283</sup>**

[§1 *The category of position*]

[§1.1 *The various meanings of “position”, and the definition of the category, have already been discussed*]

As to “position”, it has already become clear to you that it is a name which is said of [many] notions, and that that which is the category is a disposition resulting, for the perfection or the whole, because of a relation that occurs between its parts and the directions of its parts, concerning the fact that they have a relation with one another, in the respect of its being-part, not in general only, but despite this they differ with regard to realities other than the subject, considered in the respect of its having parts<sup>1284</sup> (either containing places, or localised and contained things and directions). This is like standing, sitting, being prone and being supine. I do not need to add any explanation, clarification, further detail, digression to what was said before<sup>1285</sup>.

[§1.2 *Position admits of contrariety in some cases*]

However, know that in “position” there may be contrariety, for the disposition that comes about from position may have its parts [oriented] towards directions contrary to other directions, which are a disposition contrary to the disposition different from it: for instance, supine and prone. This [happens] if the parts do not only differ by number, but by nature.

An example of this is **[C234]** that the cube, which has six faces, has no change in them if it is moved to such a position that this surface of his becomes up, this goes right and this goes left, and similarly until the last one; and then it is moved so that what was up goes down, and what was down goes up; for the state of the whole positioned thing, with regard to a certain reciprocal relation of its parts, remains one by number; and its position does not differ from the first position by species, rather it is at is was; but this position differs from that position<sup>1286</sup> by number. As to the disposition of the whole, it is maintained; and the two dispositions do not differ by definition, but by the particular specification: namely, because the faces are those that they were [before] by themselves, and the parts and the extremes which adhere to them are like they were [before], and differ not by their species, but by their number.

As to the case where, instead of the cube (whose sides are all equal), there was a tree, or a man, which were erected on their legs, and then turned their face and bent down, then

---

<sup>1283</sup> This chapter corresponds more or less to *Cat.* 11 b1-7 and 15 b17-33.

<sup>1284</sup> Reading *ḡuz`iyyatihī* instead of *بجزئيته* (sic, Cairo).

<sup>1285</sup> Avicenna already provided and discussed the various meanings of position twice, both in ch. IV.1 **[§2]** and in ch. VI.1 **[§6.2]**.

<sup>1286</sup> Reading *li-dālika l-waḍ`i* with all manuscripts, instead of *li-dālika* (Cairo).

the definition of the two things is different. For the definition of the first is a position, and a disposition, which results for the thing from its legs existing in a certain way, and its head existing in such a way; the definition of the second is different from that, not only because the legs and the head differ by number, but [because] they are also different in notion, and nature. So, if the definition of the two dispositions is different, between them there is the biggest distance, and their subject is the same, then they are contrary.

As for that other case<sup>1287</sup>, what differs mutually is only the particular specificity, not the definitions: for a certain face of [the cube] was up and then it went down, and the other [face] went up, but that surface only differs from the other surface by number, [and differs] of a difference that is not found in two definitions. Contraries are those things that have mutually different natures, whose definitions<sup>1288</sup> are different and differ by specificity, not individually. [Hence,] just as in a body the whiteness occurred yesterday<sup>1289</sup> (in so far as it is that whiteness yesterday) and the whiteness occurring today (inasmuch as it is this whiteness) do not exist together and [C235] alternate on the same subject, but they are not contrary, because there is not between them the utmost difference, and there is not a difference by something that enters [the definition of] being-colour. Hence, although that individual position and this individual position do not exist together in [the cube], and alternate in it, they are not contrary, since there is not between them the utmost distance in terms of nature, and with regard to the essence of position.

[§1.3 *Position may admit of more and less*]

Moreover, position admits of more and less in the way that [the category of] where admits thereof, but does not admit thereof in a way other than [the category of] where; since our saying “standing” and “sitting” may be said [both] of the motion directed towards the realisation of this position, and of the resulting disposition. Hence, know that the “standing” that belongs to position is the stable one among these two, not the state of standing up.

[§2 *The category of having*]

As for the category of having, it did not happen to me to understand it, so far; I do not think<sup>1290</sup> that the things that are posited as species thereof are species thereof, but they are said of it by homonymy or similarity; as something is said to *consist quantitatively of* something<sup>1291</sup>, or is said to be *in* a something, or *of* something, or *with* something. I do not know anything which might make it necessary to posit the category of having as a genus

---

<sup>1287</sup> I.e. the cube example.

<sup>1288</sup> Reading *wa-ḥudūduhā* (*wa-ḥudūduhumā wa-ḥudūduhā* **Di**) with most manuscripts, instead of *wa-ḥudūdun* (Cairo, **M**).

<sup>1289</sup> Reading *al-amsiyyu* with most manuscripts, instead of *al-amsa* (Cairo, **GR**).

<sup>1290</sup> Reading *lā aḡidu* (cf. e.g. **ABDDiJMNNkY**) instead of *lā aḡada* (Cairo).

<sup>1291</sup> “as something is said to consist quantitatively of something”: ar. *kamā yuqālu al-šay’ min šay’*, literally “as something is said to be from/of/through something”. Since the Arabic preposition *min* has a great variety of meanings and uses, it is difficult to understand what sense Avicenna is referring to in this place. Since however this discussion refers implicitly to the distinction of the senses of “having” carried out in *Cat.* 15 (see the COMMENTARY *ad loc.*), I take it to refer to the notion of “consisting quantitatively”.



for those particulars, and does not make something similar necessary regarding these mentioned things; but it seems that someone else knew that, so let this be reflected on the basis of their books<sup>1292</sup>. Furthermore, if some of them are spuriously supposed to be species and the synonymy of this category is posited with respect to some of them, but not to some others, then the equivocality of its name is also posited with respect to the whole or the other two things.

By [“having”] it was meant that it is the relation with an adjacent thing, which moves along with the motion of the thing it is related with. Hence, let it be like being armed, wearing sandals, being dressed up, wearing a shirt; and let it have some particular, some universal, some essential, like the state of the she-cat with regard to her skin; and some accidental, like the state of the man with regard to his shirt. Let us divide this obscure<sup>1293</sup> [genus] among the ten categories into what it was preferred to divide it into, for there is space in it!

[§3 *The categories of acting and being acted upon*  
[§3.1 *Definition*]

As to the category of acting and being acted upon, in their conceptualization a disposition is conceived<sup>1294</sup>, which exists in something and is such that the thing is neither before it, nor after it absolutely in the limit that comes with [that disposition] (be it [a limit] of quality, of quantity, of where or position). Rather, the thing, because of the continuity with [this disposition], does not cease separating from a certain thing<sup>1295</sup>, and being directed towards another thing as long as [the disposition] [C236] exists; like blackening, as long as the thing blackens; and whitening, as long as the thing whitens; and motion from a place to another. Hence, the thing in which this disposition is found, on the condition of continuity, is “passive” or acted upon, and its state is “being acted upon”; the thing from which this disposition [derives] on the condition of continuity, this, inasmuch as it is such, is related to it; then, its state is “acting”. As to [the thing’s] being found in quality only, or in the rest of the [categories], it is something which we investigate thoroughly, with its states and subdivisions, in the treatment of nature. For people disagreed: so, some of them specified this category insofar as it must be a change in quality alone, and what is common to it and other things belongs to those things which fall under many categories; some of them, instead, allowed it to be comprehensive of all the species in the same sense. The verification of this [will be given] to you in physics.

[§3.2 *Acting and being acted upon are not identical with, respectively, action and affection*]

Know that it was said “acting” and “being acted upon”, and it was not said “action” and “affection”, because “affection” may also be said of the thing upon which motion was

---

<sup>1292</sup> This is a probable reference to Simplicius, or a previous Arabic commentator: see the COMMENTARY *ad loc.*

<sup>1293</sup> Reading *al-mubhamu* with all manuscripts, instead of *al-muhimmu* (Cairo).

<sup>1294</sup> Reading *fa-tuwahhamu* with most manuscripts, instead of *fa-yatawahhamu* (Cairo, E).

<sup>1295</sup> Reading *šay’an* (*al-šay’a* G) with most manuscripts, instead of *ašyā’an* (Cairo, AsJM).

interrupted, for it is said: in this dress there is “burning”, when “burning” has resulted, and been established; and it is said “affection” when the thing is [also] in motion later. Likewise, the piece which is “action” may be said when [the action] is complete, and may be said when it is interrupted. As to the expression “acting” and “being acted upon”, [instead], it is specific for the state in which there is a being-directed towards the end; likewise, standing up (which is raising [oneself]), and sitting down (which is the process towards the thing being firmly [seated], so it is also named “sitting”) are those things which either belong to this category, or are related to this category. As to the firm disposition of standing, and the disposition of being seated, they belong to position; as the disposition of burning belongs to quality, the disposition of complete growth belongs to quantity, and the disposition of being firm in place belongs to [C237] [the category of] where. Only this category, [namely “being acted upon”], and what is related to it, consists of a being-directed towards one of these ends, being not stable (insofar as it is such).

[§3.3 “Acting” and “being acted upon” admit of contrariety]

This category admits of contrariety; for being directed from a contrary to a contrary, differs by definition from being directed from that [second contrary] to this [first contrary], their subject is the same and there is, between them, the most remote difference. That is like the whitening of black, and the blackening of white; like the going upwards of the lower, and the going downwards of the upper.

[§3.4 “Acting” and “being acted upon” admit of more and less]

Moreover, they may admit of more and less, not in respect of closeness to the extreme which is blackness (for closeness to that, which is a limit, is reached by blackness), but rather<sup>1296</sup> it is [accomplished] with respect to the blackening that is a rest in blackness. There is a difference between blackening, I mean, the stable and existent [blackening], and blackness: for blackening is intellected as the end of a motion; whereas blackness does not need, when intellected as blackness, that a motion towards it be intellected. Know that a becoming-black is more than another becoming-black, if it is closer [than the other] to the blackening which is the extreme; and a blackness is more than another blackness, if it is closer to the blackness which is the extreme.

Furthermore, blackening may be also “more” in respect of speed, if it blackens more quickly; and this is also perfected by its relation with blackening, for the quicker comes to it before the slower, so it is quicker because it is closer in time to blackening. But the difference between the first consideration and this consideration is that the first consideration posits two motions, apparently equal in speed, but [such] that one of them begins [its motion] from an extreme closer to whiteness, and the other from an extreme further from it; and their permanence [in motion] occurs in the same manner, with an equivalent speed. But only because [C238] one of them is closer it is said: “that one blackens more than the other”; like he who moves of a motion equivalent to another

---

<sup>1296</sup> Reading *al-sawādi bal bi-l-qiyāsi* (*al-sawādi* om. G) with most manuscripts, instead of *al-sawādi bi-l-qiyāsi* (Cairo, N).

motion, and both move upwards, but one of them starts from a higher place, and the other from a lower place; so that that one goes upwards “more” than this other, in this sense; although the comprehensive investigation of similar things in natural science forbids that, and this relation is only possible if the segment is the same, and the time is different; so the one for which it takes less time is “more”, at the expense of the other.

[§4 *The discussion of the categories is customarily followed by the treatment of opposites*]

It has become of use to let follow, after what was mentioned previously, the treatment of opposites; thus, let us say first what must be believed about them, and then let us accept the way used with regard to them in this book<sup>1297</sup>.

---

<sup>1297</sup> See below, VII.1 [§1] for Avicenna’s general division of opposites; [§2] for his critical evaluation of the classification found in the *Categories*.

[C239]

SEVENTH TREATISE

of the Second Section

of the First Part of the *Kitāb al-Šifā'*

[C241]

[VII.1]  
On opposites<sup>1298</sup>

[§1 *The scientific definition and subdivision of opposites*]

[§1.1 *Definition and division*]

We say that opposites are those two things that cannot be together in the same subject, in the same respect<sup>1299</sup> and in the same time, simultaneously. Every two things that cannot exist together in the same subject, either (1) are not together in the sense that a single thing cannot be described by both synonymously, in such a way that they are both predicated of it, and the thing is one and the other, like when a single thing is living and white together; or (2) [they are not together] in the sense that the same thing is not even described by both of them by paronymy, this because they oppose to each other also with respect to existing therein.

[§1.2 *First type of opposition: negation and affirmation*]

[§1.2.1 *Negation and affirmation can be either simple or complex*]

[According to] the first subdivision, one of them is potentially a negation of the other, like horse and non-horse. Hence, there is no alternative: either their consideration is [made] inasmuch as the negative one is merely negative, or [it is] inasmuch as there is the addition of an affirmative meaning that the negative follows<sup>1300</sup>, for example when we posit the opposites, or the two aforementioned things, even and odd, and we posit that odd's being "odd" does not merely consist of the fact that it is not even, but it is something additional with respect to that.

Thus let the first [type] be the opposition of negation and affirmation, either simple, like [the opposition] of "horse" to "what is not a horse", insofar [C242] as it is not a horse; or<sup>1301</sup> complex, as when you say "Zayd is a horse" and "Zayd is not a horse". In the first there is no truth and falsehood, in the second there are truth and falsehood; they share in the fact that in both of them there is no indication of exterior existence, but the consideration of intellectual judgements. For if "non-horseness", in so far as it is not "horseness", were something that has a certain kind of existence, then in heaven<sup>1302</sup> there would be infinite actually existing negations; for there would be non-stones, non-triangles, non-doubleness, non-fourness, the negation of any of the realities which are infinite; and

---

<sup>1298</sup> This chapter and the following correspond to *Cat.* 10, 11 b17 – 13 b35.

<sup>1299</sup> "In the same respect": *min ḡihatīn wāḥīdatīn* is only found in mss. **BNNkR** (transp. **NR** post *fī zamānin wāḥīdin*) and omitted by the other witnesses. However, it is also found – without variations – in Fārābī's *Epitome* of the *Categories*, as well as in the parallel definition of opposition provided by Avicenna at *Ilāhiyyāt* VII.1; cf. below the COMMENTARY.

<sup>1300</sup> Reading *yalmazuhū* with most manuscripts, instead of *lazimahū* (Cairo, **B**; *bal fīhi M*).

<sup>1301</sup> Reading *aw* with all manuscripts, instead of *wa-immā* (Cairo).

<sup>1302</sup> Reading *al-samā'* with all manuscripts, instead of *al-mā'* (Cairo).

infinite negative relations would come to exist in them, not only once but on multiple occasions, without an end or a limit, since for each group a renewed negation is supposed. But this thing is [only existent] in the consideration of intellect, and in speech.

[§1.2.2 *Properties of affirmation and negation*]

Among the properties of this subdivision, there is the fact that it does not prevent the opposites upon which it falls from being regrouped into a single subject inasmuch as they exist in it, but [only] inasmuch as they are [said] of it. This because [for instance] smell is not taste, and it is opposed to taste insofar as it is not taste; they are together in the same subject according to existence in a subject. Hence everything which is not together [with its opposite] in a subject according to existence in it, is then not together [with it] according to being said of it; but not *vice versa*. Moreover, the opposites that we mentioned differ in that in the opposition of “horseness” and “non-horseness” there is no truth or falsehood, whilst in the opposition of “Zayd is a horse” to our saying “Zayd is not a horse” there are truth and falsehood.

[§1.3 *Second subdivision*]

As for the other subdivision, it is like hotness and coldness, motion and rest, and the like<sup>1303</sup>.

[§2 *The notion common to opposites*]

[§2.1 *Things that are customarily called “opposites” seem to differ greatly from one another*]

Let us say firstly that horse and non-horse are undoubtedly numbered among opposites, and similarly [C243] our saying “Zayd is a horse” is opposite to our saying “Zayd is not a horse”. Likewise, odd and even are numbered among opposites; likewise, sight and blindness are numbered among opposites; likewise, motion and rest are numbered among opposites; likewise, hotness and coldness are numbered among opposites; likewise, fatherhood and sonship are numbered among opposites.

The things to which these states belong accidentally<sup>1304</sup> are judged to be opposite because of them; the forms of these things are mutually different, for “horse” is a substance, and is undoubtedly opposite to “non-horse” with regard to the opposition of horseness, if [horseness] is an accident. Let this be granted for non-horseness; but take, instead of it, “soul” and “non-soul”, or another thing that is a substance, which does not take its name from an accident. As for the proposition, it is an accident; and “horse” and “non-horse” are not opposite<sup>1305</sup> as contradictories are, since<sup>1306</sup> there is no truth nor falsehood; nor are they opposite in the manner of relation, nor in the manner of contraries, if the opposition of

---

<sup>1303</sup> Expunging *uḥrā* (Cairo) with all manuscripts.

<sup>1304</sup> Reading *ta'riḍu* with all manuscripts, instead of *tata'arraḍu* (Cairo).

<sup>1305</sup> Reading *tataqābalu* with all manuscripts, instead of *yataqābulā* (Cairo).

<sup>1306</sup> Reading *iḍ* (in G) with most manuscripts, instead of *iḍā* (Cairo).

contrariety is that in which there is the possibility of alternating on the same subject, on certain conditions that have been mentioned<sup>1307</sup>. As to even and odd, they do not have a single subject on which they alternate; but a single genus, common to their subjects, from which they do not separate<sup>1308</sup>. As to blindness and sight, they have something in common with motion and rest: for blindness is not a notion opposite to sight, but it is its privation, and likewise is rest for motion. But rest alternates with motion on the same subject, while blindness does not alternate with sight<sup>1309</sup>. As for mutual relatives, there must not be in them alternation on a subject, or their sharing in a subject in such a way that the subject, which is the cause for something, is undoubtedly accompanied by the possibility of there being, in it, an effect, or there being a shared subject, if being-cause and being-effect belong to the relative.

[§2.2 *Primary opposition is logical opposition*]

The first thing that should be searched for is whether we may find for all [opposites] a comprehensive notion, [C244] even according to ambiguity in priority and posteriority (if not by pure synonymy), or we cannot find a comprehensive notion for them. However, “opposition” is said of them [all].

Thus it seems that the primary opposition is analogous to that of horse and non-horse, which prevents the two extremes from being together according to being said of a subject, although it does not prevent that according to existence in a subject<sup>1310</sup>. For a single thing is not smell and non-smell, but in a single thing there may be smell and there may be non-smell. I do not mean that in something there may be, together, having smell and not having smell; for these cannot be regrouped, and saying “X has smell”, “X does not have smell” differs from saying that “X has ‘smell’ and ‘non-smell’”, and it is not said to be ‘smell’”. Therefore, the opposition between “X has smell” and “X does not have smell” belongs to the first subdivision, that [of opposition] according to predication; for this reason, “has smell” is predicated of the apple, and so it is said that the apple has smell, but smell is not predicated of the apple, in such a way that the apple is [itself] a smell; therefore, [smell] is existent “in”, not said “of”.

Hence, all those things that differ greatly by nature are opposite, insofar as each of them is not the other: this is a primary opposition.

[§2.3 *The secondary notion of opposition*]

Later on, [the term] “opposition” was transferred from the consideration of “being predicated of a subject” to the consideration of “existence in a subject”: thus the state of

---

<sup>1307</sup> Probably a reference to III.3 [§3] and IV.2 [§2.3].

<sup>1308</sup> Even and odd may not be found together in a single, individual number: number two is definitely even, and can never become odd. However, “number” in general is potentially susceptible of being “even” and “odd”; in a same number.

<sup>1309</sup> A same subject may be, alternatively, moving and resting; a man who becomes blind, instead, never regains his sight.

<sup>1310</sup> I.e. the first type, according to the division presented in par. [§1].

things sharing in a common or specific [thing], which are potentially existent in it simultaneously, but cannot do so actually, was posited as opposition.

[a] Some of these are characterized by speech, inasmuch as it is a judgment: e.g. that affirmation and negation whose subject are predicates and subjects, on which they alternate without being together simultaneously. This [is] by the rules of speech, but in existence there is no predicating nor being-subject.

[b] Some others are extrinsic: among these there are [ba] those where the sharing occurs in<sup>1311</sup> something common, and [bb] those where the sharing occurs in<sup>1312</sup> something specific and determinate<sup>1313</sup>. The shared thing is a nature that is in potency both things, but they cannot be regrouped therein: they rather alternate on it.

[C245] Hence, “opposites” is said of these that come after the primary meaning, in the sense that they are notions sharing a subject in which they can exist, though they cannot be together in it. The meaning of this opposition is like a genus for the subdivisions, which are like species to it: either verified subdivisions, or subdivisions [made] according to what is correct for the beginner, and easier for the student of the *Categories*.

[§3 *The non-scientific division of opposites made in the Categories*]

[§3.1 *The division*]

Let us now divide according to the way [of dividing] that is convenient for the use made in the *Categories*, which is not the one used in the sciences; and those who made an effort<sup>1314</sup> to keep the two things together tormented themselves<sup>1315</sup>. As to the division made in the *Categories*, it results as follows: the opposite either [a] has its quiddity said with respect to what it is opposite to, or [b] it is not such. Then, if its quiddity is said with respect to something else, it is the opposition of the relative (like fatherhood and sonship). As to its being opposition, it is because fatherhood and sonship, and the like, undoubtedly share a subject, either universal, like humanity and substantiality, but also “existent” and so forth; or specific<sup>1316</sup>, like “this man” which is to the right of Zayd, and then goes to his left. As to its having, together with opposition, the quiddity said with respect [to something else], it is something undoubted. As to what does not have its quiddity spoken of with respect to something else, [ba] either the subject is capable of moving from one of the extremes in itself to the other, and not vice versa, or [bb] it is not such, but it is capable of moving from each of them to the other, or not from one of them to the other, since one follows from it.

---

<sup>1311</sup> Reading *fīhi fī ‘āmin* (*fī ‘āmin G*) with most manuscripts, instead of *fīhi ‘āmun* (Cairo; deest **D**).

<sup>1312</sup> Reading *fīhi fī ḥāṣṣin* (*fihā fī ḥāṣṣin I*) with most manuscripts, instead of *fīhi ḥāṣṣun* (Cairo).

<sup>1313</sup> Respectively, opposites that alternate on a “common” or universal subject (e.g. odd and even, which alternate on the genus “number”) and opposites that alternate on an individual subject (e.g. possessions/privations, contrary accidents).

<sup>1314</sup> Reading *taḡaṣṣama* with all manuscripts, instead of *taḡaṣṣama* (Cairo).

<sup>1315</sup> It is not clear to whom Avicenna is referring here: the sentence might simply display a rhetorical device designed to underscore the incompatibility between the two accounts of opposition.

<sup>1316</sup> Reading *ḥāṣṣiyyun* with all manuscripts, instead of *ḥāṣṣun* (Cairo).



[§3.2 *First subdivision: privation and possession*]

[§3.2.1 *What Aristotle meant by privation/possession in the Categories*]

Hence, the first subdivision **[ba]** is named opposition of privation and possession. By “possession”, we do not mean something like vision in act, nor do we mean something like the primary potency that has the capacity of having sight, but [we mean] possessing the fact that the capacity of seeing, when its possessor wants, exists. For the loss of the primary capacity is neither blindness, nor the loss of vision in act; but seeing in act, and not seeing in act but in potency, are two realities that alternate on the subject just as motion and rest alternate [on theirs]. That only is the loss of what we have named possession: therefore, [the possessor] cannot absolutely see, but **[C246]** that<sup>1317</sup> blindness is such that the subject in its presence never returns to seeing again.

Hence, the privation [considered] here is not the privation opposed to any existential notion, but the one opposing possession, for privation is spoken of in many ways and here we do not mean to enumerate them all, but only what we are concerned with in this place<sup>1318</sup>.

[§3.2.2 *Some common meanings of “privation”*]

(1) Hence, we say that one may call something “privation of X”, and point thereby at a certain state that matter has in its being deprived of<sup>1319</sup> the thing that leaves it, and the thing having an existential notion, regardless whether there is – associated with matter – [the notion] that opposes that existential thing; like the privation of blackness in what is black by nature, regardless whether there is a whiteness that opposes blackness in its subject or there is not, but for instance [the subject] only becomes diaphanous and there remains absolutely no colour. For if there is whiteness, then whiteness and the privation of blackness are not one and the same thing in that receptacle; even if they were accompanying each other necessarily; but whiteness is a notion that subsists opposite blackness. This is one of the ways in which privation and its opposite are regarded.

(2) Another [way] is privation, considered on the condition that the existential notion ceases to be and nothing substitutes it, like rest. For what descends is said to be “resting” and deprived of motion in another time; when it is not descending it is not exclusively ascending, but [also] as it does not absolutely have local motion; so, this is truly the privation opposed to the genus, which is here absolute local motion<sup>1320</sup>.

(3) “Privation” may [also] be said on the condition that what gets lost is something that naturally belongs to a certain subject that loses it, at a time when it is natural for it to belong to [the subject]; in such a way that it is not said that in a certain sperm there is a privation of humanity, according to this type [of privation]; nor is it said, of a young boy, that he is capable of procreating.

---

<sup>1317</sup> Supplying *dālika* with all manuscripts after *bal* (Cairo).

<sup>1318</sup> Reading *al-mawḍi‘i* with all manuscripts, instead of *al-mawḍū‘i* (Cairo).

<sup>1319</sup> Reading *‘an* with all manuscripts, instead of *min* (Cairo).

<sup>1320</sup> For the generic opposition of motion and rest see below, VII.4 [§3.5].

(4) Among privations there is also what is said before [the appropriate] time, like beardlessness, for it is not said, of him who has no beard in the time of growth because of alopecia, that he is beardless<sup>1321</sup>;

(5) what is said after [the appropriate] time, like the baldness that occurs after the time [C247] of plenty<sup>1322</sup> and abundance of hair<sup>1323</sup>;

(6) there is also [privation] with respect to the genus, not with respect to the species (like barbarity with regard to “rational”);

(7) or [privation with respect] to the species and not the individual, like the state of woman with respect to man;

(8) or [privation] by the individual, according to the mentioned subdivisions.

### [§3.2.3 *The exact sense of privation meant here by Aristotle*]

All these [meanings of “privation”] are not taken into account in this book; the only privation sought for [here] is the privation that is a loss of possession in the appropriate time, namely the loss of the capacity that makes the action possible because the subject has become deprived of the capacity, and thereafter it is not possible that the privation cease to be (like blindness); as for possession, it will cease and become privation. Hence, this is the privative opposition mentioned in the *Categories*.

### [§3.3 *Second subdivision: contrariety*]

As for the second [bb] among the two subdivisions that we recalled earlier<sup>1324</sup>, and what belongs to it, it is all called in the *Categories* “contraries”: one of them is existential and the other is privative, in the ways recalled for privative [opposition]<sup>1325</sup>, or they are both existential, and likewise<sup>1326</sup> the subject moves from each one of them to the other, or one of them is natural and does not move, neither from the other nor to the other, like the whiteness of chalk.

Regardless whether the subject is one by itself, like water for heatening and coldening, or a universal notion, like number for oddness and evenness (for it is related to them insofar as it is an absolute number, not insofar as it is a determinate number; and insofar as it is a determinate number, it is only associated with one of them; insofar as it is an indeterminate number, it must not admit of one of them rather than the other); [regardless] whether between the two things there is an intermediate thing and it is not necessary that, if the subject misses one of them, the other exists therein, or it is not so, but the subject is either natural and inseparable or such that if it misses one of them the other follows it

---

<sup>1321</sup> Alopecia is a case of privation (3), since it provokes a loss of hair at a time when it is natural to possess it; the beardlessness of young boys, instead, is itself natural, since it comes before the appropriate time for having a beard.

<sup>1322</sup> Reading *al-wufūri* (e.g. **ABIJMNNkY**; *wufūrin* **DDiE**) instead of *al-wuqūri* (Cairo).

<sup>1323</sup> It is natural to be (or become bald) after a certain age.

<sup>1324</sup> I.e. Aristotle’s division of opposites, as found above in [§3.1].

<sup>1325</sup> A reference to the meanings of “privation” listed above ([§3.2.2]).

<sup>1326</sup> Expunging *in* (Cairo, **AA**s**B**) with most manuscripts (del. **Nk**). *Wa-ka-dālika* should probably be read *wa-li-dālika*, but I have not found this reading in any consulted manuscript.

necessarily (like health and sickness): well, in this place we call all of them “contraries” according to [this] comprehensive notion. [C248] Hence we call “contraries” hot and cold, health and sickness, odd and even, motion and rest, and we do not care about one of them being existential and the other privative, or according to which way of privation it is [such], if it is not privation in the mentioned way<sup>1327</sup>.

Hence, the teacher of the book of the *Categories* must not commit himself to positing privation as different from contrary, by saying that contrary is an essence that differs according to the existential meaning in the subject, and that privation is not an essence, but consists of the absence of an existential meaning; so, the subject is simply missing it. For the contrary that is spoken of in this book does not mean this; in fact, motion and rest are no contraries, nor are odd and even contraries, nor good and evil, nor science and ignorance, nor most of those mentioned here.

[§4 Refuting the corrections for Aristotle’s division provided by a commentator]

[§4.1 First objection: Aristotle should have included the opposition of motion and rest as a separate species]

No sophist must undertake a correction, as one critic<sup>1328</sup> did by saying that the division is not exhaustive, for there is an opposition other than the opposition of contrary, and that which belongs to the recalled [way of] privation, like the opposition of rest and motion; for among them there is no contrariety<sup>1329</sup>, and rest does not have the same state as the privation recalled in this book.

This sophist should know that the contrariety mentioned in the book of the *Categories* is not that which he thought of, and that the First Teacher did not ignore what he does not ignore; he should consider definitions, not names, and know that the beginner cannot afford<sup>1330</sup> a conceptualization that distinguishes too subtly between close meanings, for in the teaching of opposites he contents himself with being granted a certain conceptualization, in any way, although for some of them the conceptualization is made as a general conceptualization; nor does he disdain to understand the difference between an essence opposite to an essence, and the privation of essence opposite to essence.

[§4.2 Second objection: Aristotle left out the oppositions substance/accident, form/matter]

What this sophist says in some of his deliria, namely that the First Teacher<sup>1331</sup> left out the opposition between substance and accident and between form and matter, also belongs to those things that must not be paid attention to. [C249] Know that he<sup>1332</sup> does not mean, by “opposition”, the state of any two mutually different things whatsoever; but, as to the

<sup>1327</sup> I.e. the privation described by Aristotle in the *Categories* (see right above, [§3.2.3]).

<sup>1328</sup> An unknown previous commentator. See the discussion below, in the COMMENTARY *ad loc.*

<sup>1329</sup> Expunging *wa-l-ḥarakatu id lā taḍādda baynahumā wa-lā l-sukūnu* (Cairo, **M**) with all manuscripts. This addition is only found in manuscript **M**, and clearly is an accidental dittography of the previous sentence.

<sup>1330</sup> Reading *yukallifu* with all manuscripts, instead of *yakuffu* (Cairo, by printing mistake).

<sup>1331</sup> I.e., Aristotle.

<sup>1332</sup> Again Aristotle.

first [type] of opposition, it is the opposition of “is” and “is not”<sup>1333</sup>, and this is found in substance and accident; for substance is not an accident, and accident is not a substance. Moreover, a condition for opposites is that they be in a subject, one by genus or by species, as being *in* it, not [said] of it; and this condition does not subsist between substance and accident, so there is no opposition between them. As for being attached and concomitance, they are a relation that either follows one of the two [related things], so that [this one] becomes attached to the other but not inseparably, as is the state of some things having relation which have already been explained and clarified, or follows both, so that they are, because of it, mutually relative in respect of concomitance.

Hence, the opposition mentioned here must be understood in this way.

---

<sup>1333</sup> I.e., the opposition of contradiction.

[VII.2]  
On doubts attached to what was said about opposition<sup>1334</sup>

[§1 *Three doubts concerning opposition, and some of its species*]

Furthermore, there are problems here that must be mentioned and solved.

(1) This because someone might say that heat alone is not a contrary, but heat simply, and only becomes a contrary with respect to coldness; and, if it is taken as a contrary with respect to coldness, then it is relative; for although it is not, inasmuch as it is heat, among relatives, and then it is not contrary, but if it is with respect to [coldness] it is a contrary, and if it is related and contrary, then it is also relative<sup>1335</sup>, then, inasmuch as it is a contrary, has its quiddity said with respect to something else; inasmuch as its quiddity is said with respect to something else, it belongs to the relative; then, inasmuch as it is a contrary, it is also among relatives. Thus, either contrariety and the relative are the same thing, [C250] or contrariety is a thing which belongs under the relative, so as not to be under opposition as something which divides it [directly].

(2) There is another doubt, namely: opposition, inasmuch as it is opposition, belongs to the relative; then, the relative is below opposition, and more specific than it; but this is impossible, whether it be a generic or non-generic way of being “below”, like the way of concomitants, or things with ambiguous names.

(3) Also, among the things<sup>1336</sup> that we need to inspect, there is [the question] whether opposition is a genus for these [things] or not; and if it is a genus, whether it as a highest genus, or it is not a highest genus; these enquiries belong to those which the logician may afford to search, since the effort of examining them is more suitable for this branch of science.

[§2 *Solution of the first doubt: contrary things are not relative, but contrariety itself is*]

We say then that heat and coldness are considered together: heat, inasmuch as it is<sup>1337</sup> heat, is contrary to coldness; then [heat] exists another time inasmuch as it is a contrary, and thus [in this other respect] it is relative to coldness. Thus heat, according to the same consideration of it along with coldness, is such that the meaning of the definition of contrariety, which is such-and-such<sup>1338</sup>, applies to both, and the notion of mutual relation does not apply, since none of them has the quiddity spoken of with respect to the other, and each of them removes the other in the subject. You may correctly say that of heat and

---

<sup>1334</sup> This chapter corresponds roughly to *Cat.* 11 b33 – 13 b35.

<sup>1335</sup> Reading *muḍāfatan* with all manuscripts, instead of *muḍāfan* (Cairo).

<sup>1336</sup> Reading *wa-mimmā* with most manuscripts (*mimmā* G) instead of *wa-mā* (Cairo).

<sup>1337</sup> Expunging *ḥarāratun ḍiddan li-l-burūdati tumma tūḡadu min ḥaytu hiya* (Cairo, M) with most manuscripts. The addition is only found in manuscript M, and it is in all likelihood an accidental dittography of the preceding sentence.

<sup>1338</sup> I.e. the description of contrariety provided above in chapter VII.1.

coldness, are such that each of them removes the other in a subject, if it is shared; but you may not say that each one of them (heat and coldness) has the quiddity spoken of<sup>1339</sup> with respect to the other<sup>1340</sup>. However, you may say: heat, inasmuch as it removes and opposes coldness, and is contrary to it in its subject, has its quiddity said with respect to the other thing<sup>1341</sup>. Therefore, the subject in the predication of contrariety is one thing, and the subject in the predication of relation is another; it is either the same first predicate<sup>1342</sup>, or the subject, taken together with the first predicate<sup>1343</sup> [C251], in such a way that it is clearly observable as having been taken with the first predicate. Contrariety in itself is one thing, contrary things another; contrary things are the subjects of the thing which is by itself contrariety, and contrariety itself is a subject for the relative. You might say: if the subjects of contrariety are taken as contraries, they become - by virtue of this - relative; but you may not say that if the subjects of contraries are taken as contraries, they become because of this contrary.

Thus “contrary” is different from “relative”, and the thing which is contrariety is not the thing which is a relative, although contrariety accompanies the relative, inasmuch as it is contrariety; and this is the solution of the [first] doubt.

[§3 *Solution of the second doubt*]

As for the solution of the second doubt, you must know that relation accidentally belongs to opposites, but they are not, in their essence, relatives; for every opposition, inasmuch as it is an opposition is relative, but not every opposition is relative. There is a difference between our saying: “every opposition, inasmuch as it is an opposition, is a relative” and our saying<sup>1344</sup> “every opposition is relative”. This because contrariety, [for instance], belongs to opposition; and it has been known that its subject is not the subject of the relative, as we clarified. But its subject, in respect of opposition<sup>1345</sup>, becomes a subject for the relative. Therefore, contrary things do not have their quiddity said with respect to something else, unless they are said inasmuch as they are contrary; nor possession and privation belong to the relative. If the relative were something said absolutely of opposition, then every two opposites would be mutually relative absolutely, not on condition of attaching to them their being such in so far as they are in this or that state. But every relative is opposite, and also every contrary, and every possession and privation; but not every opposite is relative, therefore the mutually relative is not more general than the opposite, so relation is not more general than [C252] opposition.

Despite this, what is specific may belong accidentally to all that has the nature of the common, on the condition because of which the common becomes more specific: notably, here, the consideration of [the thing] inasmuch as it is opposite. This consideration specifies it and forbids its being-genus for all that stands below it, and prohibits being

<sup>1339</sup> Reading *maqūlu* with all manuscripts, instead of *maqūlatu* (Cairo).

<sup>1340</sup> Reading *al-āhara* with most manuscripts, instead of *al-uhrā* (Cairo, MNk).

<sup>1341</sup> Reading *al-āhara* with all manuscripts, instead of *al-uhrā* (Cairo).

<sup>1342</sup> Reading *al-mahmūli* (*al-ḥamūli* G) with most manuscripts, instead of *al-mahṣūli* (Cairo; المح abbr. R).

<sup>1343</sup> Reading *al-mahmūli* with all manuscripts, instead of *al-mahṣūli* (Cairo).

<sup>1344</sup> Expunging *inna* (Cairo, DE; fort. G) with most manuscripts.

<sup>1345</sup> Expunging *huwa* (Cairo, AsJ) with most manuscripts.

predicated of it. For this reason you do not say that contraries are opposites inasmuch as opposites are opposites; and if you say that contraries are opposites, then that is false. But their being – in so far as they are opposites – a prerequisite, is assuming them with the notion that is a subject for the universal “opposition”; and assuming them with that meaning is like assuming animality, in so far as it is animality, with its specificities suppressed (on the condition of suppression). Therefore, animality is only accompanied by what you do not predicate, with it, of all the particulars of animality; for if animality is such, it is accompanied by being devoid of rationality, whereas not every animal is devoid of rationality; or like taking animality as not being enmattered, when it is considered inasmuch as it is not in matter, and not every animality is such.

[§4 *Solution of the third doubt: “opposition” is not truly a genus for these species*]

As for opposition, it is absolutely not a genus for that which stands below it; this because the mutually relative has its quiddity said with respect to something else; then, the fact of being opposite is attached to this quiddity, although it is not constituted by that. For this notion<sup>1346</sup> does not belong to those [notions] that must precede [others] in mind; so that it is established in mind that something has its quiddity said with respect to something else, but if the thing becomes related<sup>1347</sup>, it follows in mind necessarily that it is by way of opposition. Thus essentiality, with its conditions, does not exist in between opposition and the things that are like species of opposition in such a way that their being opposites enters, in potency or in act, the definitions of them all. The useful rules concerning these accidents will be explained to you in other places<sup>1348</sup>.

[§5 *Differences between contraries and relatives*]

[§5.1 *First difference: whereas relatives have their quiddity said with-respect, contraries do not*]

Now, it behoves that we resume everything from the beginning and say: as to the difference between the contrary and the relative, it is that the relative has the quiddity said with respect, contraries are not such. For this reason we do not say that the good is only good because of its relation with evil, so as we say that the double [C253] is only double because of its relation with half; but we say that good is contrary to bad, and therefore later we add: inasmuch as it is a contrary, it is relative.

[§5.2 *Second difference: contraries may have intermediate attributes, or not*]

Among the differences between the contrary and the relative there is also the fact that the subject, in contraries, one of the two: **[a]** either it does not depart from one of the

---

<sup>1346</sup> I.e. the fact of being opposite.

<sup>1347</sup> Reading *muḍāyifan* (cf. e.g. **ABDDiEIJNkY**) instead of *muḍāyiqan* (Cairo).

<sup>1348</sup> Probably a reference to the discussion of opposites carried out in metaphysics (*Ilāhiyyāt* VII.1).

extremes, in such a way that there is no intermediate between them, **[b]** or it may<sup>1349</sup> do so, in such a way that there is an intermediate in them.

**[a]** An example of the first [type] is health, namely a certain habit in the animal body, from which, in virtue of [health itself], its natural actions – and so forth – come about undamaged; regardless whether you relate it with body as a whole or with a single organ, and regardless whether it is actual [health] or only with regard to sense-perception (for what is with regard to sense-perception has its description with regard to sense-perception); and sickness is a state or habit opposite to [health], such that [the body's] actions are not similar in all respects, but there is some damage in the action, and the subject cannot absolutely be deprived of both; likewise<sup>1350</sup>, oddness and evenness.

He who thought that there is an intermediate between health and sickness, which is neither a healthy nor a sickly state, thought that because he forgot the conditions that should be observed in the state of what has an intermediate and what does not have one. Those conditions are: (1) that the subject be supposed as one, in itself, in a time one in itself, (2) that the part be one in itself and (3) the way of considering it be one in itself. If [the subject] is supposed as such<sup>1351</sup>, and it may be deprived of both things, then there is an intermediate: for if a single man is supposed, and a single organ of his is considered, or some determinate organs, in a single time, and it is possible that it have no balanced complexion without composition so that all the acts perfected by that organ or organs come about from it intact, [and it is also possible] that it be not such; then there is an intermediate. If on the contrary it is inevitable for it to have a balanced complexion without composition, or not to have a balanced complexion without composition, either because it is one of the two states and not the other, or because it is none of them, then there is no intermediate.

**[b]** An example of the second [type] is pure blackness, and pure whiteness; for between them there are intermediate colours, such that the subject may<sup>1352</sup> pass from **[C254]** them to the intermediate ones, and perhaps passes to privation by becoming diaphanous, so that the intermediate is an absolute negation of the extremes without the affirmation of a mixed intermediate between the extremes. This mixed intermediate sometimes has a definite<sup>1353</sup> name, like when you say “blackish” or “grey”, and sometimes it does not, but only a negation of the extremes is used to express it, without meaning by the negation of the extremes the negation that has no positivity below it, but meaning an affirmation thereby, as when it is said: neither just nor unjust. If by the negation something is meant, which does not point to affirming an intermediate, it is expressed with a non-mixed intermediate, such as: the sky is neither thick nor thin; the air is neither black nor white.

Thus contraries are subdivided into these two kinds.

---

<sup>1349</sup> Reading *aw qad* with most manuscripts, instead of *wa-qad* (Cairo, **M**; fort. **As** a.c.).

<sup>1350</sup> Reading *wa-ka-dālika* with most manuscripts, instead of *fā-ka-dālika* (Cairo).

<sup>1351</sup> I.e. as satisfying conditions (a), (b) and (c).

<sup>1352</sup> Reading *qad* with most manuscripts (*id qad* **AsBJNk**), instead of *wa-qad* (Cairo, **Da**).

<sup>1353</sup> Reading *muḥaṣṣalun* with most manuscripts (*yuḥaṣṣalu* **R**), instead of *muḥallun* (Cairo).



[§6 *The difference between contraries and privation/possession*]

For the same reason, contrariety differs from the opposition of possession and privation. As a matter of fact, opposites by privation and possession have a single subject where each of them naturally inheres, so that possession is therein and privation is therein, but not in whatever manner; privation is therein only inasmuch as the possession is absent from the subject, at a time when it is natural for it to exist therein; just as the subject is deprived of sight, at a time when it is natural, for it, to have the habit of sight; and [just as] teeth drop at a time when it is natural for them not to drop, but to remain. Thus, in these two cases one of them is blind and the other is toothless: for the puppy that has not yet opened its eyes is not called blind, nor is a baby at the time of his birth called toothless, but if it is the right time for them to have sight and teeth, and they do not have them, then they are [respectively] blind and toothless<sup>1354</sup>.

This condition is not found in the two subdivisions of the opposition of contrariety<sup>1355</sup>, for the subject shared by contraries that have no intermediate between them may move at any time from one of them to the other, unless it is a natural, unseparable character of it (e.g. the whiteness of *quqnu*<sup>1356</sup>). [C255] The subject shared by contraries that have an intermediate, instead, may move from them together to the intermediate, if one of them is not natural for it; and there is no intermediate between possession and privation, nor is there motion from privation to possession, but only from possession to privation.

[§7 *Privation and possession are not identical with possessing and being deprived*]

Further, understand that when we said “privation and possession”, or other opposites, we did not mean, among privations and possessions and opposites, anything but their natures; not themselves, inasmuch as their existence is in the subject, or the subject is described by them. Hence, “blindness” and “to be blind”, “sight” and “to see” are not the same<sup>1357</sup> thing. Likewise it is said: Zayd is blind, it is not said: Zayd is blindness, and blindness is also, for Zayd, a notion that requires the relation of blindness with Zayd. As for blindness, it is a notion intelligible in itself, or intelligible because of what it is a privation of, I mean sight, because [blindness] is a privation of sight. Thus, these are not the primary opposites, but realities attached to opposites: then, they have the fact of being opposite accidentally.

Likewise is the rule as regards affirmation and negation: for “*that upon which affirmation and negation fall*”<sup>1358</sup> is a reality or a notion, not a statement; rather it is the subject, e.g. “Zayd” when you say “Zayd is sitting” or “Zayd is not sitting”. As for what is itself affirmed or negated, it is also not a statement, but a predicate in a statement, e.g. “sitting” and “non-sitting”. Therefore, the thing that has the opposition of affirmation and negation is not affirmation and negation. This [occurs] if we assume contradiction as its

---

<sup>1354</sup> Cf. the classification of the meanings of privation above, VII.1 [§3.2.2].

<sup>1355</sup> I.e., contraries that have intermediates and contraries without intermediates: see above, [§5.2].

<sup>1356</sup> *Quqnu*: see the note at I.5 [§2.2] above.

<sup>1357</sup> Reading *wāḥidan* with all manuscripts, instead of *wāḥid* (Cairo).

<sup>1358</sup> Arist. *Cat.* 12 b5-6: see the COMMENTARY *ad loc.*

affirmative and its negative<sup>1359</sup>; hence, if we assume it as affirmation and negation, then what is somehow the subject for that and the thing described by it (as it was the case with blindness and sight) is the proposition: for it is [the proposition] where affirmation is found, so that it derives its name from it and is said “affirmative”; [C256] or where negation [is found], and it is said “negative”. Hence, the two opposites in affirmation and negation are not themselves affirmation and negation. Since affirmation is affirmation in a proposition, then the proposition is not an affirmation.

[§8 *The difference between the opposition of relatives and possession/privation*]

[§8.1 *Whereas privation is conceptualized with respect to possession, possession is not conceptualized with respect to privation*]

For this reason, if this has been known, and the state of contrariety has been known, as well as the state of possession and privation, and the difference between the relative and contrariety, then let us say the difference between the opposition of the relative and the opposition of possession and privation.

So we say: as for privation and possession, one of them is not said with respect to the other. As for possession, it does not absolutely require privation in its conceptualization, for its quiddity is conceptualized by itself; as to privation, like blindness, although it is not conceptualized but because of the conceptualization of possession, it has not its quiddity said with respect to possession; so, it does not become blindness with respect to sight, so as to be blindness only because of its relation with sight; although blindness is the privation of sight.

[§8.2 *Refutation of the view according to which blindness may be relative, whereas sight may not*]

Some people held, in this place, that the meaning of this is that blindness is related to sight in respect of its genus, so that it is like what was said of grammar, namely that it is relative in respect of its genus<sup>1360</sup>; likewise, blindness is relative in respect of its genus, or what resembles its genus, namely privation: for privation is intelligible by accident, and in virtue of<sup>1361</sup> that of which it is privation.

What [this man] said is absolutely not right: for the privation that is the genus of blindness has not its quiddity spoken with respect to anything, nor with respect to possession; since privation is not privation only because it is related to a form posited in mind, of which it is said privation – as a counterpart; so that, for instance, blindness be blindness because possession is possession, like the father is father because the son is son (so that this may be said the other way, as you learned). [It is so] since the meaning of “quiddity said with respect” is the state of a thing insofar as another thing exists as a counterpart of it, and is taken as a counterpart of it insofar as it is such, for the very fact

---

<sup>1359</sup> I.e., if we assume the contradiction as contradiction of two affirmative or negative things (either the subjects of contradictory statements, or their predicates).

<sup>1360</sup> For the example of grammar see above, chapter VI.4.

<sup>1361</sup> “and in virtue of”: reading *wa-bi-sababi* (cf. e.g. **ABDDiGIJNNkY**) with most manuscripts, instead of *wa-yusabbibu* (Cairo).

that this other thing is in front of it. The state of possession with regard to privation is not such [C257], since privation removes possession; and privation is not privation only by virtue of the fact that possession is possession: rather, it is only privation of the possession not insofar as it posits possession in a certain state, but insofar as it is related to it in such a way that the ceasing, and the destruction of [that possession] is not the destruction of another thing whatsoever. For this reason, a possession need not have its quiddity<sup>1362</sup> said with respect to the privation taken as a counterpart of that possession.

[§8.3 *Second argument: even if possession may be said the possession of its privation, the opposite does not hold*]

Thus since relatives have their quiddity said with respect [to something else], and similarly what equals relatives with regard to the reciprocity proper of the relative, whereas privation and possession are not this way, it is not said that sight is the sight of blindness, nor is it said that sight is only sight because of blindness, just as we say – sometimes – that blindness is the blindness of sight.

[§9 *Again on the difference between privation/possession and contrariety*]  
[§9.1 *First argument*]

Hence it is clear that privation and possession are not relatives. It has been known, [only] by means of a kind of indication, that they are not contraries<sup>1363</sup>; for the contraries that do not have intermediate things have one of the two following rules: either one of them is natural to the subject and such that the subject may not exist without it, like oddness for three and heat for fire; or one of them is not natural, so that the subject – in a certain time – is not completely devoid of one of them, like health and sickness in the body of man. Then, [as for] privation and possession, the subject may be devoid of them both, before the time when it should be found in it, like the puppy that has not yet opened its eyes, for it is neither seeing nor blind; and one of them is not natural by itself for the subject at the time when it inheres in it, so in this opposition there is none of the two rules mentioned for contraries (without intermediates).

As for the contrariety in which there is intermediacy, in the time when the subject may accept the two extremes, it may miss them both to the advantage of the intermediate; but this does not happen in the opposition of privation and possession, for in the time when the subject may accept them both it does not miss any one of them.

[§9.2 *Second argument*]

Moreover, when the extremes of contraries are not natural they may move from each one of them to the other; for what is said, namely that he who has the habit of

---

<sup>1362</sup> Reading *māhiyyatuhā* with all manuscripts, instead of *māhiyyātuhā* (Cairo).

<sup>1363</sup> See above par. [§6].

viciousness<sup>1364</sup> cannot change to the habit of pious people is worth nothing; as a matter of fact, since when he becomes intimate with pious people he changes to [adopting] their uses, albeit by little, then he is on the point of moving (with practice) to perfection, or to approach perfection, [C258] if he is not destroyed. The state of privation and possession is not such, for possession moves to privation, but privation does not move to possession, neither by little nor by much; for he who does not see and then begins to see little by little is not blind, but is equivalent to someone whose eye is veiled, or covered, or wrapped up [in cloth], and needs the obstacle to cease or vanish<sup>1365</sup>: hence, the habit which is the capacity of seeing is established and existent in him, [whereas] blindness only consists of the habit having ceased to be; thus, if [sight] was only veiled or covered, that is not blindness.

Thus the opposition found in privation and possession and the one found in contraries have been distinguished.

[§10 *The difference between contradiction and the other kinds of opposition*]

[§10.1 *General difference: contradiction admits of a truth-value, while the other kinds of opposition do not admit thereof*]

As for the opposition that is contradiction, it differs from all [other kinds] in so far as contradictories may have truth and falsehood; whilst there is truth and falsehood neither in blindness and its opposite, nor in heat and its opposite, nor in “brother” and its opposite<sup>1366</sup>. Moreover, if contradictories are conditional<sup>1367</sup>, it follows that one of them is true necessarily, and the other is false, but this does not happen in what is not contradictory.

[§10.2 *Contradiction and contrariety*]

This does not happen if propositions are formed by such things, so that there be instead of “healthy” and “non-healthy” one of the contraries that have no intermediates. For instance “healthy” and “sick”: although if Zayd is existent, so it is said that he is healthy and he is sick, one of the two is necessarily true, while the other is false. Hence, it is not convenient to believe that this subdivision of contrariety is opposed in the same way as contradiction; this because if we associate “healthy” and “not healthy” with any subject<sup>1368</sup> you want and with what does not exist, as contradictories, then the opposition of contradiction is realized, and one of them is true, the other false.

<sup>1364</sup> All manuscripts read here الرداء (الرداء). Cairo specifies in the note *ad loc.*: “plural of *rādin*, meaning *hālik* (perishable) or *fāsīd* (corruptible)”. This reading is interesting, since it works well as a counterpart for the following plural participle *al-ṣāliḥīna* (“pious people”); however, it does not work as well as an opposite for *ṣāliḥ*, for the root *r-d-y* has no moral acceptations. I prefer to understand it as a defective orthographic variant for الرداءة (“viciousness”), as is made perhaps clearer by some vocalized manuscripts (cf. e.g. **As**: الرداءة)

<sup>1365</sup> Reading *wa-yunaḥḥā* with most manuscripts (*wa-yanḥamī* **E**), instead of *wa-yanmaḥī* (Cairo).

<sup>1366</sup> I.e. none of the other species of opposition, respectively privation and possession (blindness and its opposite), contrariety (heat and its opposite), and relatives (“brother” and its opposite) ever admits of truth and falsehood.

<sup>1367</sup> Reading *al-ṣarā’iṭi* with all manuscripts, instead of *ṣarā’iṭi* (Cairo).

<sup>1368</sup> Reading *mawḏū’in* with manuscripts **AsBNkDJNR** (fort. p.c. **G**), instead of *mawḏi’in* (Cairo, **ADaDiEIMY**).

For if you say “the stone is healthy”, and “the stone is not healthy”, the negative one is true; and if you say “the stone is healthy”, “the stone is sick”, both are false.

Likewise if you make the predication of Zayd when he is non-existent: it is false that he is healthy, false that he is sick, but it is not false that he is not healthy.

As a matter of fact, all negations hold true of non-existing things, and that [C259] because the affirmation of existing notions holds false of them (unless in a certain state and condition, that should not be clarified in this place). As a matter of fact, affirming is judging that a notion belongs to another notion, or that an attribute belongs to something; and the notion does not belong to what is not existent; that it does not exist, is a negation. Hence, if a contrary that has no intermediates<sup>1369</sup> is different from a contradictory, how will [not] those [contraries] that have an intermediate between them, whose two extremes may be false simultaneously, together in the existent subject that admits of them (e.g. when it is said of the decent [man] that he has quiet appetites, or he is intemperate<sup>1370</sup>), [differ from contradictories as well]?

On the whole, it is clear that if you consider contrariety insofar as it is contrariety, it does not entail what contradiction entails; [a character] similar to this belongs<sup>1371</sup> to some contraries by accident, particularly in some subjects, not because they are contrary but because they have no intermediates.

### [§10.3 *Contradiction and privation/possession*]

From all this, the difference becomes clear between the opposition of contradiction and the opposition of privation and possession. As a matter of fact, the two speeches composed by means of privation and possession hold false of an alien subject (like a stone)<sup>1372</sup>, and of what is non-existent (like the deceased Zayd): for instance when we say: “the stone sees”, “the stone is blind”; or we say: “the non-existent Zayd sees”, “the non-existent Zayd is blind”. And the two contradictories are not false together, when we say “the stone or the absent Zayd see”, “the stone or the absent Zayd do not see”.

Moreover, privation and possession may be false in the subject which is not non-existent, if it is not the time when it is natural for them to be therein: like when we say of the puppy that has not yet opened its eyes that it is “seeing” or “blind” (and it is not false that it is not seeing). [C260]

---

<sup>1369</sup> Reading *mutawassīta* with most manuscripts, instead of *yutawassātu* (Cairo, **As**).

<sup>1370</sup> Both predicates (“having quiet appetites” and “intemperate”) are falsely predicated of the decent man, whose appetites are perfectly moderate.

<sup>1371</sup> Expunging *lahū* (Cairo) with all manuscripts.

<sup>1372</sup> “Alien”: ar. *ḡarīb*. For the meaning of “alien” in this context, see the COMMENTARY.

[VII.3]  
On interpreting rules and properties regarding contraries<sup>1373</sup>

[§1 *First rule: the contrariety of good and bad things*]  
[§1.1 *Explanation of Aristotle's text*]

Absolute bad, inasmuch as it is bad, is thought to be a contrary of absolute good; hence, each one of the particulars of bad is a contrary to one particular of good, just as sickness [is contrary] to health, injustice is contrary to justice, cowardice is contrary to recklessness, depravation is contrary to decency; so, this is how bad is contrary to good. As for the contrariety of another bad to bad, what is contrary to bad may be another bad. This because to the habits intermediate between the extremes of immoderation and deficiency, in things depending on desire and wrath, and depending on the particular behaviour for attaining the good, those virtues are related that are like courage and decency, and that good demeanour that is called wisdom; and these are virtues; while on immoderations and remissions there depend vices, or they are themselves vices<sup>1374</sup>: for cowardice and recklessness, idleness and depravation, malice and stupidity are vices. The intermediate is contrary to the extremes, and each one of the extremes is contrary to the other because of its remoteness from it; and this intermediate contrary to the extremes only exists in few of the things we have mentioned. For the most part, good is contrary to bad absolutely, and bad does not have a bad [thing] contrary to it: like health and sickness, knowledge and ignorance, life and death. Among them there is that which, if immoderate, is always bad (for instance sickness); and that which, if immoderate, is always good (for instance knowledge); and that is it.

[§1.2 *Criticism of a commentators' opinion regarding Aristotle's exception to the first rule*]

A commentator<sup>1375</sup> said, when explaining his saying: “this [occurs] in few [C261] things that deviate from this rule”<sup>1376</sup>, that he who said that meant that some of the intermediates between excesses and deficiencies are not good, like killing: for the middle, in it, is not good, but it is always bad; as to not killing, it is always good. Here the vice is not only found in the extreme itself.

But the aim in this book is not this; rather, the aim is [to understand] that among bad things there is what has a good contrary to it, and also a bad contrary to it; and this [occurs] when there is a nature subject to excess and deficiency, going from the first limit of excess to the last limit of deficiency continuously. So, there exist by nature an intermediate and

---

<sup>1373</sup> This chapter corresponds to Arist. *Cat.* 13 b36 – 14 a25.

<sup>1374</sup> “or they are themselves vices”: supplying *aw takūnu hiya (huwa AsMNR) raḍā'ila (al-raḍā'ila DaDiJJY; ka-l-ra-ḍā'ili G)* with all manuscripts.

<sup>1375</sup> Unknown: cf. the COMMENTARY below.

<sup>1376</sup> A paraphrase of Arist. *Cat.* 14 a4-5.

two extremes; the intermediate is a good which is contrary to the extremes, each one of which is contrary to the other. This only happens in few things. However, it is not so for all things: for knowledge is good, ignorance is bad, and the bad here has no contrary other than the good. There is not, here, a middle that is good, and two extremes that are bad; and it is so with many other things. Hence, this is the meaning of those words of the First Teacher, and this<sup>1377</sup> he held; he did not take into account an intermediate between two conventional extremes<sup>1378</sup> of excess and deficiency, as this commentator held. If he thought of these, then he would have explained to us that bad is that which has no contrary, but his aim was not to explain this to us; rather, his aim was to explain that the bad to which good is contrary may have a contrary<sup>1379</sup> bad, or may not have it; and this is not found in what they mentioned regarding intermediacy.

As for the mention of killing, moreover, it is not a good example for this because killing the convenient person, at the convenient time, in the convenient way is a courageous action, it is necessary in defending the city and it is good; just as neglecting to kill the convenient person, in the convenient time, in the convenient way is bad.

[§1.3 *Good and bad are not contraries*]

After this, we must return to what is customarily investigated. We say that you should know that good is not contrary to every bad thing in itself; since courage is not contrary to cowardice inasmuch as [C262] it is cowardice, but inasmuch as cowardice has something in common with recklessness. This because [cowardice] is a vice that debases<sup>1380</sup> the soul, and courage is a virtue; therefore, the contrary by itself to one thing is one. The determination of this is that the consideration of these habits occurs in two ways.

(1) [The first one is] a consideration of their natures and notions as unrelated to their subjects, [and not] inasmuch as they provide them with a state that accompanies their subjects because of them, [either] praise, blame, usefulness, or harm<sup>1381</sup>; namely, a consideration of all the natures found in between cowardice and recklessness, including courage, inasmuch as they are habits from which certain actions derive. Therefore, we do not find courage to be contrary to one of the extremes, but to be [merely] an intermediate thing; it is the extremes that alternate on a single subject, and between them there is the utmost distance: hence, they are the only contraries.

(2) The second [consideration] is a consideration of them in respect of the state that results because of them in their subjects, and this according to their being things related to the righteousness of the human soul or the human species, or unrelated to it. This is a consideration of something that accidentally belongs to qualities in respect of relations that

<sup>1377</sup> Reading *wa-ilayhi* with all manuscripts, instead of *ilayhi* (Cairo).

<sup>1378</sup> Cairo reads *al-ṭarafayni li-l-ifrāṭi*, attested only by manuscript I. The other consulted manuscripts in this passage read either *ṭarafay li-l-ifrāṭi* (AAsBDNk) or *ṭarafayni li-l-ifrāṭi* (DaDiEGJMNRy). I adopt and translate the second reading, since otherwise it is difficult to explain what the following adjective *waḍ'iyayni* (“conventional”) specifies.

<sup>1379</sup> Reading *rubbamā ḍāddahū (yuḍādduhū Da) l-širru* with most manuscripts, instead of *yuḍādduhū l-širru* (Cairo).

<sup>1380</sup> Reading *muḥassisatun* (محسسى R) with most manuscripts, instead of *muḥissatun* (Cairo).

<sup>1381</sup> I.e. a consideration of the natures of these attributes in themselves, not in so far as they provide their subjects with some sort of moral quality.

they have, not in their essence. For example, the thing's being hot or cold is different from its being concordant, or healthy; and the natural body's being in a certain state is other than its being a useful medicine, or a toxic poison; so, goodness and badness are two concomitants of these qualities, in respect of their relation with human nature; for this reason, they are not concomitant for them in respect of their relation with other animal bodies.

Since what we said has already become clear to you, you have learned that the quality of which it is said that is courage, and the other [quality] of which it is said that is cowardice are not contrary in their substances; but you have learned that courage is contrary to cowardice only in respect of a thing that belongs accidentally to both of them, because of which – since it was associated with them – one of them was named “courage” and the other was named “cowardice”; and [you have learned] that courage is not contrary to anything in itself, in respect of its nature, but its nature is intermediate. However, since this book is built<sup>1382</sup> upon commonly accepted and commonly used notions, not reconducted to the conditions because of which they become truthful, for this reason in it you must not take this sort of verification into account.

[§1.4 *Some intermediates are not contrary to their extremes, in any respect*]

Know that there are [C263] other things between which there are intermediates, and the intermediate [thing] in them does not exist as a contrary to any of the extremes, in any way; for they do not have this relation, since the tepid and the blackish are not contrary to anything; rather, their extremes<sup>1383</sup> are the contraries, and if the tepid, as is believed, is not like courage, it is held with regard to it that it is a mixture of the extremes; as to courage, it is a purity from the extremes. Besides this, this commonly accepted division results in the opposition of contrariety, but does not result in the opposition of privation and possession.

[§2 *Second rule: the existence of a contrary does not entail the existence of its opposite*]

Among the rules concerning contraries, there is also the fact that the simple existence of one of them does not entail the existence of the other, in any way (as happens, instead, with mutual relatives); for if we imagined all men to be healthy, this fantasy would not prevent us from contrasting the necessity of sickness, and it would not be unlikely that there be no sickness at all. Nonetheless, we meant [that] the existence of one of them in a thing by itself hinders from the simultaneous existence of the other; as if we said “Zayd is healthy”, it would be impossible for him to be sick. Mutual relatives are either absolute, so that the existence of one of them entails the other, or in a single thing, so that it is not impossible that what is a father be also a son; and the clarification of this was already pointed to previously<sup>1384</sup>.

---

<sup>1382</sup> Reading *binā`u* with most manuscripts (Cairo has *ءل*, probably in virtue of a printing mistake).

<sup>1383</sup> Reading *tarafāhumā humā* with most manuscripts (*tarafāhumā DNR*) instead of *ṭarafan humā* (Cairo).

<sup>1384</sup> Possibly a reference to the treatment of mutual relatives above, in chapters VII.1-2.



[§3 *Third rule: contraries alternate on the same subject*]

Among<sup>1385</sup> the [properties] of contraries there is also the fact that their receptacle is one [thing] on which they alternate, and which they contend with one another; that one [thing] sometimes is a notion more general than one species, like the case of blackness and whiteness; for their subject is the body, insofar as it is a natural, elementary<sup>1386</sup>, composite body: namely, a material composite body that belongs to what may admit of them. [However,] even more species may admit of this, and this may not be a single species. Sometimes, instead, it belongs to a single species, like justice and injustice: for their subject is not every soul, nor is it souls which fall in numerous species, but the human soul. Sometimes, the subject of the two contraries is a genus, so [the contraries] are distributed without contending, like number for evenness and oddness<sup>1387</sup>.

[§4 *Fourth rule: contraries and genera*]

[§4.1 *Contraries may be found either in the same genus, or in different genera, or they may be themselves genera*]

Contraries are sometimes found in a genus, like whiteness and blackness in colour, and sometimes in different genera, like decency and depravation, one of which belongs to the genus of virtue, the other to the genus of vice; sometimes they are themselves two genera, like good and bad.

[§4.2 *Good and bad are not genera*]

It seems that the meaning of their saying “good and bad are two genera”<sup>1388</sup> is not that good and bad, in so far as it is said of the substantial good [or bad], the quantitative good [or bad], the qualitative good [or bad] [C264] and so on, is said as a genus; rather, in so far as it is said of the habits while being synonymous in this respect, and not [said] by homonymy. Then, there has been [too much] indulgence regarding [the issue whether] they are essential for them, or accidental and concomitant to these habits; for the truth is that goodness or badness accompany them, and do not constitute them; for if it were so, good and bad would belong to quality.

It seems that the intention<sup>1389</sup> was different from what we disputed about, but in this regard there has been a constant dwelling, in common opinion, upon the issue of good and bad; for what is commonly believed about them is that they are universal [attributes] of things. Hence I conform my judgment to that, no matter what follows from it, since this book<sup>1390</sup> is not the book of rigorous inquiry. As for the rigorous inquiry, it requires the way that courage is<sup>1391</sup> contrary to cowardice to be close to the way that the sharp sword is

---

<sup>1385</sup> Reading *wa-mimmā* with all manuscripts, instead of *wa-mā* (Cairo).

<sup>1386</sup> “Elementary”: ar. *‘unṣurī*.

<sup>1387</sup> Reading a full stop at 263.17 (after *al-fardiyya*), instead of a comma (Cairo).

<sup>1388</sup> I.e. Aristotle (*Cat.* 14 a23-25).

<sup>1389</sup> “The intention”: ar. *al-murād*, i.e. what Aristotle actually means here.

<sup>1390</sup> I.e. the *Categories*.

<sup>1391</sup> “the way that... is”: reading *kawna* with most manuscripts, instead of *takūna* (Cairo, **AsR**).

contrary to the blunt sword; this if “sharp sword” is taken as a name for a sword with sharpness, “blunt sword” as a name for a sword with bluntness, and so there is only contrariety on account of the fact that they include contrary things<sup>1392</sup>, and then it is said that there is contrariety between them only by virtue of two genera, which are the sharp and the blunt. Likewise with bravery, it is as if it were the name of the quality along with the mentioned relation; the same with cowardice, and the same with silliness. However, we do not debate such things in a book like this: as for the verification regarding these things, it will be provided to you in a determinate place<sup>1393</sup>.

[§5 *The difference between contrariety and privation/possession*]

Hence, it behoves that we now briefly indicate what contrariety, privation and form properly<sup>1394</sup> share, besides common opinion, so that the student is not left perplexed. We say, then: truthful contraries are the things that share in one subject, such that each one of them is a notion, like whiteness and blackness, but unlike rest and motion; the two opposite things among them are not regrouped simultaneously, but they alternate, [C265] and between them there is the utmost difference, not as [it happens] between tepid and hot. As for privation and possession, what is true of privation is that something is absent in the subject that admits of its existence in its nature, in so far as it is such; regardless whether the absent thing is what I have called here “possession” or something else, whether it returns or does not return, whether it is before the right time, thereafter, or therein. Among privations there is what is more general<sup>1395</sup> than this, namely the privation of something from what it is in a certain nature of the subject to be associated with, be that nature individual, specific, like dumbness from birth, or generic, like femininity.

Good and bad, in most cases, are actually contrary as privation and possession are contrary, for bad is the privation of a certain perfection which should naturally belong to the thing when it is not there. Rest, darkness, ignorance and the like are – all of them – privations. Even sickness, inasmuch as it is sickness truly, is a privation (I do not mean inasmuch as it is a complexion or a pain); and also oddness, being the state of the genus taken along with the negation of an accident it may have: that genus is number, it may be divided by equal numbers and this notion may be absent from it; so if the fact of not being divided by equal numbers is associated with it, in that respect it is odd, and it includes a certain privation that naturally exists in that genus. Let us limit ourselves to this, for the time being.

---

<sup>1392</sup> Reading *muḍāddatayni* with most manuscripts (*muḍāddayni* **J**, *mutaḍāddatayni* **Da**), instead of *mutaḍāddayni* (Cairo).

<sup>1393</sup> Possibly a reference to the discussion of good and evil in *Ilāhiyyāt* IX.6-7.

<sup>1394</sup> Reading *al-ḥāṣṣiyyu* with all manuscripts, instead of *al-ḥāṣṣu* (Cairo).

<sup>1395</sup> Reading *a‘ammu* with all manuscripts, instead of *ahammu* (Cairo).

[VII.4]  
On the prior and the posterior<sup>1396</sup>

[§1 *Priority and posteriority*]

[§1.1 *The verification of priority and posteriority must be postponed to the science of metaphysics*]

It has become customary to mention, after opposites, the prior and the posterior. The state, regarding these, is the same as the state concerning opposites, I mean that the exhaustive completion of their investigation does not belong to the introductory teachings; therefore we must limit ourselves to mentioning common opinion, and to run parallel [Aristotle's] first teaching<sup>1397</sup>. As for the verification, you will find its details in the appropriate place<sup>1398</sup>.

[§1.2 *Priority in respect of time*]

[C266] Thus, the first way of priority is that with regard to time, for he who is older of age is prior to the younger.

[§1.3 *Priority by nature*]

The second way is that of which it is said “prior by nature”, and it has been defined as that which does not convert with respect to the concomitance of existence, like the state of one with respect to two; for if duplicity is existent, then unity is existent, but they do not convert, so it is not true that if unity is existent, then duplicity undoubtedly exists. It is commonly accepted that what is such is prior by nature, and according to common opinion it does not have conditions. As to the determination of how things are in this respect, it is postponed to [the treatment of] another discipline<sup>1399</sup>.

[§1.4 *Priority by order*]

[§1.4.1 *Definition and examples*]

As to the third way, it is that which is prior in order absolutely; it is that thing to which other things are related in such a way that some of them are closer to it, whilst others are

---

<sup>1396</sup> This chapter corresponds to Arist. *Cat.* 14 a26 – 15 b33.

<sup>1397</sup> “to run parallel [Aristotle's] first teaching”: ar. *wa-‘alā muḥādāti l-ta‘līmī l-awwali*. As in other parallel cases, the “first teaching” of which it is question here might be interpreted either as Aristotle's *Metaphysics* (like elsewhere in Avicenna's *corpus*), and the verb *ḥādā* in the sense of “imitating”. Here I take the expression as meaning “to follow closely what Aristotle said about this in the *Categories*”; see the parallel example above at V.6 [§2], 198.6 (and the note *ad loc.*).

<sup>1398</sup> I.e., the discussion of priority and posteriority found in metaphysics (notably *Ilāhiyyāt* IV.1).

<sup>1399</sup> I.e., metaphysics.

further; like the highest genus with respect to genericity, and the lowest species with respect to specificity. As to that [which comes] after the absolute, it is the closest to it among the two things related to it, for that of the two which is closer to that thing is prior in order; like “body”, for it is prior to “animal” if one takes the beginning from the highest genus, and “animal” is prior to “body” if one takes the beginning from the lowest species. The prior by order does not need to be prior by itself, but only with respect to the aforementioned relation; for this reason the “prior” may be reverted, and then it becomes more susceptible of changing<sup>1400</sup>. As the ordering may occur, in things, by nature, like in the ordering of species and genera (of which some are below others) and in the ordering of the positions of simple bodies; and it is sometimes conventional, like the ordering of rows in space, related to the beginning, [which is] conventional, like the village X and the house X, so the prior by order may be found in natural things, or in conventional things. [C267]

Prior in place, in this group, may be conventional, like the first row among rows of seats, and it may also be by nature, like fire established in its place with regard to the air.

The prior in order may also be found in the demonstrative sciences, for premises are before syllogisms and conclusions, letters are before the alphabet, the beginning of a speech is before the conclusion.

[§1.4.2 *Doubt: in syllogisms, the premises seem to be prior to the conclusions by nature, not by order*]

However, there are doubtful points: for instance, someone might say that the examples mentioned in this place belong to the first type [of priority]; for premises before the syllogism do not belong to ordering, but to nature, for if there is the syllogism then there are premises, but it is not true that if there are premises there is the syllogism; such is also the state as regards letters and alphabet.

So we say, as an answer to this, that even though things are such, it is not impossible that the prior by nature be prior in order in another respect; this because our consideration of the premise, here, is not with regard to itself, but with regard to the use we make of it in teaching. We take the premise once by way of analysis, another time by way of composition; thus if we follow the way of composition then premisses are before syllogisms, and if we follow the way of analysis by supposing at first a conclusion, and then searching for a middle term, as you will learn later<sup>1401</sup>, then we are gathering the syllogism after the conclusion; also because taking the middle between the extremes as shared by them, in places like this, comes before specifying it by means of one of them, in order for one of the two premises to be realized with a certain character; and [before] specifying it by means of the other [extreme], in order for the other [premise] to be realized with a certain character. Thus the syllogism is firstly what we clarified; then one progresses from it to considering, about each premise, what its state is.

Similarly with the alphabet, and letters: for it has already become apparent that the same order is a subject for composition and analysis; the beginning of composition is other than the beginning of analysis, and the prior being according to analysis is different from

<sup>1400</sup> “More susceptible of changing”: ar. *ašaddu taḥallufan*.

<sup>1401</sup> I.e. the chapter on analysis (*taḥlīl*) in *Qiyās*; see our Commentary *ad loc*.

the prior [being] according to composition. This also with regard to [C268] the use we make of the premise: for although it is prior by nature in respect of itself, it is not prior by nature in respect of the fact that we end up the analysis with it.

However, the conclusion may be among other premises, and in considering priority in order we do not take into account the state of something in itself, nor do we [take into account] its state in the respect of our use; but we only take into account the state of the thing's relation with an extreme upon which it terminates. The premises ordered from the principles, and the like, until the remotest desired conclusion are ordered in between extremes, one of which is the conclusion and the other of which is the first principle. Thus, what is closer to the conclusion is farther from the first principle, and what is closer to the first principle is farther from the conclusion. Two premises may differ with respect to their closeness to one side and their distance from another side, so that one of them becomes closer to it and the other further, and their state with regard to the other extreme is different, or the farthest among them from the first extreme is the closest among them to this other extreme, and [vice versa] the closest among them to that extreme is the farthest among them from this extreme.

#### [§1.5 *Priority by distinction*]

As to the fourth subdivision of the prior, the prior by distinction, it is like saying: Abū Bakr is prior to ‘Umar<sup>1402</sup>.

#### [§1.6 *Priority by causality*]

There is another subdivision of “prior”, which we mention here in a certain way and which we shall verify in the discipline of [first] philosophy<sup>1403</sup>: it is the prior by causality.

For the cause is prior to the caused thing<sup>1404</sup>, although one of them only exists when the other exists, and one of them is not prior by nature according to the way of being prior by nature that we mentioned here; although “prior by nature” has been said of the prior by causality, and also by essence.

This priority is like the existence of man in itself, and the verification of the words of he who says that he is existent; for everything of which it is truly said that it exists is existent; and everything that exists is such that saying this is true. But people do not abstain from saying that first [C269] it was existent, then the statement “it exists” is true; or as long as the statement saying, after this, that he is existent is true; and they avoid saying that first comes the statement “he exists”, and then he is existent, or [the statement exists] as long as he is existent. Likewise, the motion of Zayd’s hand: when he chooses [to produce] it, then he moves what [the hand] touches, or<sup>1405</sup> moves the pen; for people conceptualize, because of their saying “Zayd moves his hand firstly, thus what the hand touches moves, or the pen moves” a notion which they prevent from being true as they say “Zayd moves what

---

<sup>1402</sup> As the eulogy found after these names in ms. **Di** seems to confirm, the names correspond to the first two Rightly Guided Caliphs, Abū Bakr (m. 573-634) and ‘Umar ibn al-Ḥaṭṭāb (584-644).

<sup>1403</sup> *Ilāhiyyāt* IV.1.

<sup>1404</sup> Reading *al-musabbabi* with all manuscripts, instead of *al-sababi* (Cairo).

<sup>1405</sup> Reading *aw ḥarraka (yuharriku M)* with all manuscripts, instead of *wa-ḥarraka* (Cairo).

touches his hand, or moves the pen, as long as he moves his hand". This notion is the causal prior.

Although inasmuch as the cause is [understood as] an essence, and its effect is [also understood as] an essence they are neither prior, nor posterior, nor<sup>1406</sup> simultaneous; and [although] inasmuch as [the cause] is a cause a relation follows it necessarily, whereas the other is an effect accompanied by a relation, and none of them is also prior or posterior, but they are simultaneously; [in spite of all that] the first [thing]<sup>1407</sup>, in so far as its existence does not derive from the other, and the existence of the other derives from it, is prior [to the second]<sup>1408</sup> in respect of the state of existence; and it has a relation to existence where the existence of the other does not play the role of an intermediary, whereas the other has no relation with existence but by intermediation of the existence of the first.

You will find that this notion results, in a sense, from the remaining ways of priority, from each [of them] in its own respect.

## [§2 *Simultaneity*]

### [§2.1 *Definition of "simultaneously"*]

Since priority and posteriority have already been understood, it becomes easy to focus on knowing the simultaneous: for two things, each of which is neither prior to the other, nor posterior to it, are simultaneous.

## [§2.2 *Types of simultaneity*]

### [§2.2.1 *Simultaneity in respect of time*]

Thus, "simultaneously" is said with respect to time, since one of them is neither prior nor posterior with regard to it.

### [§2.2.2 *Simultaneity in respect of nature and order*]

"Simultaneously" is [also] said by nature for the thing that has no priority nor posteriority in nature [with regard to another]. Hence, the two [simultaneous things] are either inseparable in the reciprocity of existence, like a brother with his brother, or mutually exclusive with regard to it, so that one of them does not follow the other necessarily, like the species under the same genus: not only because they are simultaneous by nature, but also because they are simultaneous in order, and with respect to a certain principle. For these, in respect of the relation to the nature of the genus, are posterior by nature [C270] to<sup>1409</sup> the genus; in respect of their relation to the genus, inasmuch as it is supposed as principle, they are posterior to it by order; in respect of their natures, there is in them no anteriority nor posteriority by nature, so they are simultaneous with regard to nature. Since the state of each one of them with regard to the other is different from the

---

<sup>1406</sup> Reading *takūnu* with most manuscripts, instead of *yakūnāni* (Cairo, **DaDi**).

<sup>1407</sup> I.e. the cause.

<sup>1408</sup> I.e. the effect.

<sup>1409</sup> Reading *'an* with all manuscripts, instead of *min* (Cairo).

state belonging to its nature with respect to the nature of the genus, and [belonging] to the nature of the genus with respect to its nature; then for this reason they are<sup>1410</sup> simultaneous by nature.

If they are related to a state of posteriority with respect to a genus, by order, they exist simultaneously by order; of course, they also share in the fact that their natures are posterior by nature to to nature of the genus, so if they are posited together in this co-participation they are absolutely not simultaneous in nature, but simultaneous in being posterior by nature; and their being simultaneous by nature is not identical with their being simultaneous in posteriority, but “simultaneous” by nature are the things that are neither prior by nature nor posterior, in so far as they are neither prior nor posterior in their essences, not in so far as they are such with respect to another notion.

Hence, the simultaneity of the species – understood as different from the priority of the genera over them, and their own posteriority to [the genera] – must be considered only with regard to the state of separability and inseparability. As a matter of fact, in the posterior there exists the fact of accompanying and not accompanying, in the prior there does not exist the fact of accompanying and not accompanying, and what reciprocates in existence is either a whole that accompanies (like adjacent things) or consists of being a whole that does not accompany. In both cases, “simultaneous” is like the mutually different things, for they are simultaneously and it is existence, and in both cases it is simultaneously and they are related in two ways. The species in this respect are “simultaneously” according to a simultaneity found in between them, in front of the priority and posteriority that exist in between them and the genus. As for their simultaneity in order, it is because they are equivalent in being close and far from the principle which is the genus, if the relation is with it.

Things that are simultaneous in order are also either such that they are in a conventional order, like those people who sit in the same row (for they are in a conventional order), or in a natural order, like the species [that fall] under the same genus. [C271]

### [§2.2.2 *Simultaneity by distinction and causality*]

You should know, after this, the state as regards “simultaneously” according to distinction. as for “simultaneously” with regard to causality, to verify how things are with regard to is hard<sup>1411</sup>.

### [§3 *Motion*]

#### [§3.1 *The six species of motion are neither species, nor six*]

Motion may be mentioned in this place; so it is said that motion has six “species”, [regardless] whether they are true species (if motion is a genus) or things resembling species, despite being in themselves different notions of which motion is said by ambiguity

---

<sup>1410</sup> Reading *fa-takūnu* with most manuscripts, instead of *fa-yakūnā* (Cairo, As[p.c.]NR).

<sup>1411</sup> Reading *‘asirun* with most manuscripts, instead of *‘asīrun* (Cairo; *‘asīrun* **Da**). Although the form is different, the meaning of the two adjectives is identical.

or homonymy, according to what we will verify<sup>1412</sup> to you in natural science<sup>1413</sup>. These species are not like divisive species under a unitary genus, but like species that differ in order, so some of them are contiguous, some others are posterior; the reason for this is that some of the proximate species do not have a common name, so they were left out and instead of them its two named species were taken; since this is not the place where this thing is verified, but its appropriate place is natural science.

[§3.2 Aristotle's six kinds of motion]

Hence, the six things are [the following].

[1] [The first is] generation, namely the motion towards the being of a substance, like the generation of the embryo.

[2] [The second is] corruption, namely the motion towards the destruction of a substance, and it is like the death of the animal. These two have in common something without a name, which will be verified in the sciences; there it is also known that they are not motions, according to the verification.

[3] The third is augmentation, like the growth of a child and the rise of a tree.

[4] The fourth is diminution, like the decrease of the old man in [the dimension of] his limbs. These two are also [found] under the notion of motion from a quantity to a quantity, and they are its two species.

[5] The fifth is alteration, namely change from a quality to a quality, and actually it is the third: for the first among these is change from a substance to a substance, namely “generation” of the thing to-which [the change is directed] and “corruption” of the thing from-which [the change departs]; the second is change from a quantity to a quantity, either from deficiency to excess, or from excess to deficiency; hence, there remains as third [the motion found] in quality.

[6] The sixth among the mentioned [types], namely local motion, is change from a place to a place, and it is actually [C272] the fourth. These four are clearly different from one another.

[§3.3 A doubt concerning alteration]

What is doubtful is only the issue of alteration: if alteration is associated in most cases with motion, it is thought to be local or something else; but something may change in its colour or complexion without having moved in place, grown, diminished, been generated or destroyed; likewise, something may move locally and have its quality stable. As a stroke<sup>1414</sup> is added to a square it grows, but the form is maintained in the whole because squareness does not change; although this is not the actual augmentation, but something that resembles actual augmentation.

---

<sup>1412</sup> Reading *nuḥaqqiqūhū* instead of *نحقة* (Cairo).

<sup>1413</sup> A reference to *Samā' tabī'ī* II.2-3.

<sup>1414</sup> Reading *al-'alamu* with all manuscripts, instead of *al-qalamu* (Cairo).



[§3.4 Aristotle left aside motion with respect to position]

It seems that there is here a further motion, namely motion in position, like the motion of the sphere in itself that changes its position, but not its where; for maybe it does not have a where, in such a way that its where can change, and if it does have a where with respect to which it moves in itself, then this does not change for it because of its motion. For this there is another place<sup>1415</sup>.

[§3.5 Motions and their contraries]

Then, the contrary of absolute motion is absolute rest, according to what it seems and to the manner [of investigation] employed in this book; and it has no contrary other than rest. So, it is not a mystery that the contrary of motion in place absolutely is rest in place absolutely; in quantity and quality, and the particular motions of all types that were mentioned, also particular motions opposite to them are contrary to them, for corruption is [contrary] to generation<sup>1416</sup>, diminution is [contrary] to augmentation. However, alteration has already been taken as specified, so it is difficult to find a contrary for it inasmuch as it is alteration. [It is] neither alteration nor rest, apparently: for it seems that rest in quality cannot be conceptualized. Similarly it would be with regard to generation and corruption, if they had not been mentioned as specified. The appearances oblige us not to find a contrary for alteration, unless we associate with the appearances a certain reflection and a comparison with local motion, so that the contrary of absolute motion with regard to quality is rest with regard to quality, by generic contrariety, just as [the contrary] of local motion is rest in place, or the particular qualitative motions have particular contraries. [C273] Hence, just as motion upwards is contrary to motion downwards, so motion from blackness to whiteness is contrary to motion from whiteness to blackness, I mean that whitening is contrary to blackening, and they are both species of alteration.

Let us now establish conventionally that the contrary of absolute motion is absolute rest, and that the contrary of each of the four proximate species [of motion] is rest with regard to that notion, be it substance, or quality, or quantity, or where. As for the most particular specified contraries, the contraries of motions among them are motions.

As to [the questions] whether all those that were mentioned are motions, whether there are no motions other than them, how rest is the opposite of motion and which rest [is opposite] to which motion, the worthiest place<sup>1417</sup> to ascertain them is natural science<sup>1418</sup>.

[§4 Function of the Ante- and Post-*praedicamenta*]

However, the utterances “prior” and “posterior”, “opposite”, “simultaneous” and “motion” were utterances that have been used in teaching the categories, and they were close to having a common usage that might have made the student imagine what he learnt

---

<sup>1415</sup> I.e. natural philosophy.

<sup>1416</sup> Reading *fa-li-l-kawni* with all manuscripts, instead of *fā-li-kawni* (Cairo, probably in virtue of a printing mistake).

<sup>1417</sup> Reading *al-mawāḍiʿi* with all manuscripts, instead of *al-muwāḍiḥi* (Cairo).

<sup>1418</sup> Another reference to the physical discussion of motion (*Samāʿ ṭabīʿī* II.1-4).

in the beginning; therefore, it was fine to expound after that<sup>1419</sup> theory a commonly accepted division of these utterances. As for the consideration of the state of homonymy and synonymy, what is [said] of a subject and what is in a subject<sup>1420</sup> and so forth, it was necessary to posit it before the categories, because it was inevitable to use them in teaching the categories and in common usage they have no well known or somehow imaginable meanings.

[§5 *Conclusion*]

Let what we said about the *Categories* be sufficient: adding [something] to that would be an excess, and it is not improbable that the amount [of things] that we have mentioned be excessive as well.

END

of the second Section  
of the first Part  
concerning Logic

---

<sup>1419</sup> Supplying *dālīka* with all manuscripts.

<sup>1420</sup> “and what is in a subject”: supplying *wa-mā fī mawḍūʿin* with most manuscripts (*mā wa-fī mawḍūʿin* **Di**).



Scuola Normale Superiore  
Classe di Lettere e Filosofia

Sorbonne Université – Faculté des Lettres  
École doctorale V: Concepts et Langages  
Centre Léon Robin (UMR 8061)

Avicenna (Ibn Sīnā)

*Book of the Cure, Categories (al-Maqūlāt)*

Part II: Commentary

by

Niccolò Caminada

Supervisors:

Prof. AMOS BERTOLACCI (IMT Lucca / SNS)

Prof. MARWAN RASHED (Sorbonne Université)

2018/2019



## PART II

### SUMMARY

<b>COMMENTARY .....</b>	<b>5</b>
PREMISE .....	7
I.1 .....	8
I.2 .....	16
I.3 .....	27
I.4 .....	37
I.5 .....	47
I.6 .....	57
II.1 .....	61
II.2 .....	68
II.3 .....	72
II.4 .....	77
II.5 .....	86
III.1 .....	93
III.2 .....	99
III.3 .....	106
III.4 .....	115
IV.1 .....	125
IV.2 .....	131
IV.3 .....	138
IV.4 .....	145
IV.5 .....	150
V.1 .....	156
V.2 .....	165
V.3 .....	169
V.4 .....	173
V.5 .....	176
V.6 .....	180
VI.1 .....	184
VI.2 .....	190
VI.3 .....	194
VI.4 .....	198
VI.5 .....	201
VI.6 .....	207
VII.1 .....	212
VII.2 .....	218
VII.3 .....	225
VII.4 .....	228



## COMMENTARY





## Premise

Each section of the Commentary corresponds to a chapter of the English translation. The analysis of every chapter is preceded by a short summary and structured according to the same *divisio textus* as the translation. For each structural unit (paragraph, subparagraph, subsubparagraph) the corresponding pages of the Cairo edition are reported between round brackets in the beginning of every section.

The bibliographical conventions are the same adopted for the Introduction (cf. above, Introduction, par. 1): other passages from the Cairo edition of Avicenna's *Maqūlāt* are simply referred to by chapter number and structural unit, occasionally by page and line numbers (e.g. VII.3 [§2]; VI.4 [§5.2.3], 67.9-10); Avicenna's works are simply referred to by abridged title of the work, chapter and page number (e.g. *Ilāhiyyāt* III.1, 94.1-4); other primary sources, Aristotle included, are referred to by author's name, abridged title of the work and page number (e.g. Arist. *Cat.* 5 a1-9); secondary literature is referred to by author's surname and year of publication (e.g. VAN ESS 1986).

## I.1 ON THE GOAL OF THE *CATEGORIES*

The Alexandrian exegetes used to present some key-points of discussion, before their treatment of Aristotle's *Categories*: they tackled at first ten general κεφάλαια concerning Aristotle's philosophy in general, the tenth of which comprised six more specific κεφάλαια regarding the *Categories*. These were the goal of the treatise, its usefulness, its title, the order of reading, its authenticity, its structure, its position within philosophy<sup>1</sup>. To these, the Arabic tradition apparently added a further point: the mode of teaching employed by Aristotle in the book. The prologue to Avicenna's commentary leaves aside any general consideration on Aristotle, and only discusses four of the seven "specific" κεφάλαια: the goal, the usefulness, the position within philosophy and the mode of teaching. This chapter is not as rigorously structured as the late ancient *prolegomena*, but is rather a continuous discussion which touches these four points indirectly. The structure of late ancient *prolegomena* is also reprised by Avicenna in other works, for example in the first treatise of the *Ilāhiyyāt* of the *Šifā'* (I.1-4).

[§1] Avicenna provides, at first, a link with the treatment of universals carried out in the previous section of the *Šifā'* (the *Madḥal*): he stresses the usefulness of that treatise with regard to the aim of logic, since its core topics (universal and particular, accidental and essential) are "states" of simple expressions which allow the construction of definitions and syllogisms. [§2] There are, however, other states of simple expressions that are of no usefulness for logic. These are expressions considered inasmuch as they express existent things, whether they be individuals, species or genera (in which case they are the highest genera, called "categories"). Even though Aristotle devoted an entire book to these latter in the beginning of logic, they should rather be examined by other sciences, but certainly not by the logician; especially insofar as they are expressions. [§3] The knowledge of these states might at least be of use in cases of controversial definitions; the knowledge of the quiddity of things, effectively, may help posit each thing in its proper genus. However, this is not a real advantage, and the student does not need to spend much time in learning them. [§4] The *Categories* was written as a treatise allusively discussing topics that can only be fully appreciated, and understood by way of demonstration, in First Philosophy. [§5] The previous exegetes were wrong, as they refused to admit that the *Categories* is concerned primarily with beings; their insistence on the fact that it focuses on expressions signifying beings was erroneous and sophistical. [§6] Though the study of the *Categories* is useless in logic and even harmful for students, Avicenna will follow the usage of his predecessors in dealing with it.

[§1] (3.8 – 4.14). The first chapter is opened by a brief summary of the main issues discussed in the preceding section of the *Kitāb al-Šifā'* (the *Madḥal*, Avicenna's paraphrase of Porphyry's *Isagoge*). These amount firstly to the knowledge of the definition of simple expressions (*al-alfāz al-mufrada*) and complex expressions (*al-alfāz al-murakkaba*): the latter being the expressions whose parts may signify parts of a complex notion, whereas the former have parts which do not signify anything independently (*Madḥal* I.5)<sup>2</sup>. Now, simple expressions have certain properties or "states" (*aḥwāl*) that allow us to classify them, and to form more complex expressions: these states amount to two couples, essentiality/accidentality and universality/particularity. As to universality and particularity, the universal expression has been defined by Avicenna, in *Madḥal* I.5, as that whose meaning may be shared equally by a

---

<sup>1</sup> For a classic study of these late ancient *prolegomena*, see HADOT 1990; for a focus on the issue of the goal of

<sup>2</sup> See *Madḥal* I.5, 24.13-14: "The complex [expression] is that for which there may exist a part expressing a meaning, which is a part of the meaning intended in general, by itself" (*wa-l-murakkabu huwa llaḍī qad yūḡadu lahū ḡuz'un yadullu 'alā ma'nā huwa ḡuz'un min al-ma'nā l-maqṣūdi bi-l-ḡumlati dalālatan bi-l-qāti*); I.5, 25.4-5: "As to the simple expression, it is that a part of which does not express a part of the complex intended meaning by itself" (*wa-ammā l-mufradu, fa-huwa llaḍī lā yadullu 'alā ḡuz'in min-hu 'alā ḡuz'in min ma'nā l-kullī l-maqṣūdi bihi dalālatan bi-l-qāti*).

multiplicity of things, whereas the particular expression is that whose meaning cannot be shared by anything else<sup>3</sup>. As to the other pair, in a long discussion throughout *Madḥal* I.5-6 Avicenna has defined the essential universal as that thing whose non-existence in the mind entails the non-existence of the essence of the particular thing of which it is said; the accidental, on the contrary, as that universal whose non-existence in the mind does not entail such non-existence of the essence of the particular thing<sup>4</sup>. The combination between universality, on the one hand, and essentiality/accidentality, on the other hand, allows us to divide universals into five types (the five Porphyrian predicables, which here are not mentioned): essential universals, such as genus, species and *differentia*, and accidental universals, such as property and common accident. The division of predicables carried out by Avicenna in *Madḥal* I.8 is actually more complex, since it further subdivides essential universals according to their being or not significant of the quiddity<sup>5</sup>; here, however, just the basic notions are recalled.

These states then, argues Avicenna, are useful for the composition of complex expressions, whilst there are other states that are useless; the former must be studied by the logician, insofar as they provide useful criteria for the composition of complex expressions, in accordance with the goal of logic. This distinction between useful and useless states reminds of a passage of *Madḥal* I.4, where Avicenna mentions two different ways of knowing simple notions: either inasmuch as they can be composed to form more complex notions, or inasmuch as they are quiddities. The usefulness of the former is illustrated, there, by means of an image: the builder of a house needs rather to know that his wood is solid, in order to build well, than to know the nature and substance of his materials<sup>6</sup>. The composition of expressions is useful for the logician inasmuch as a correct composition of words and concepts aids the two mental operations of “assent” (*taṣḍīq*) and “conceptualization” (*taṣawwūr*), whose knowledge is – according to Avicenna – the goal of the discipline of logic. “Assent” is a judgment concerning the truth-value of a proposition, being defined as the knowledge of the relationship between a composition of concepts and the actual state of the things corresponding to them; “conceptualization” is the acquisition of the notion or concept of a thing<sup>7</sup>. As the follow-up of the text clarifies, universality, essentiality/accidentality and the predicables are all useful in the composition of the complex tools which make these operations possible, both [a] assent and [b] conceptualization:

[a] Assent is exercised in arguments, such as inductions, syllogisms, and so forth; here Avicenna focuses on the syllogism, which – in its demonstrative form – is the most solid way of reasoning. Well, the aforementioned properties of simple expressions are definitely employed in the composition of demonstrative syllogism, since universality is necessarily a property of the premises of syllogism and demonstrations (Arist. *An. Post.* 75 b21-22),

<sup>3</sup> See *Madḥal* I.5, 26.10 – 27.7: “The simple expression is either such that it is not impossible, in the mind, under the respect of its conceptualization, that the single meaning it signifies be equally shared by a multiplicity, [...] or it is such that it is impossible to posit, for the meaning, a share in it [...]. The first subdivision is called ‘universal’, the second is called ‘particular’.” (*al-laḥẓu l-mufradu immā an yakūna ma‘nā-hu l-wāḥidu llaḍī yadullu ‘alay-hi lā yamtani ‘u fī l-dihni, min ḥaytu taṣawwuri-hi, ištirāku l-kaṭrati fī-hi ‘alā l-sawīyyati [...] wa-immā an yakūna ma‘nāhu bi-ḥaytu yamtani ‘u fī l-dihni īqā‘u l-širkati fī-hi [...] Fa-l-qismu l-awwalu yusammā kullīyyan, wa-l-tānī yusammā ġuz‘īyyan*). The same definition is also found in *Ilāhiyyāt* V.1

<sup>4</sup> *Madḥal* I.5, 31.17 – 32.7.

<sup>5</sup> See *Madḥal* I.8, 46.6-9: the genus and the species signify the quiddity (respectively, a more general or more specific quiddity), whereas *differentia* signifies the “quality” (*ayyīyya, innīyya* in the text of the Cairo edition). For the necessity of correcting *innīyya* into *ayyīyya* with regard to the status of *differentiae*, see BERTOLACCI 2012a (pp. 301-304) and DI VINCENZO 2015 (in particular p. 144, n. 41).

<sup>6</sup> *Madḥal* I.4, 21.17 – 22.12.

<sup>7</sup> See the descriptions of *taṣawwūr* and *taṣḍīq* given by Avicenna at *Madḥal* I.3, 17.7 ff. For a classical study on the notions of *taṣawwūr* and *taṣḍīq* see WOLFSON 1933.

whereas premises in general are built according to relations of essential or accidental predication.

[b] Conceptualization, namely the acquisition of concepts, corresponds to the acquisition of complex items such as definitions (*hudūd*) and descriptions (*rusūm*). To build definitions and descriptions a knowledge of predicables is necessary, since the former are composed of genus and *differentiae*, and given mostly of the species; the latter are composed of genus and properties or common accidents<sup>8</sup>. We should relate to conceptualization also Avicenna's mention of division (*qisma*), since - according to his analysis in *Burhān* IV.7 - although division is not comparable to definition, it is definitely useful for it<sup>9</sup>. This because division: (1) provides us with a knowledge of what is more common and what is more particular, (2) allows us to connect the *differentiae* to their genera and (3) if done properly, it gives us a comprehensive picture of the essential *differentiae* of a genus<sup>10</sup>. The two sorts of division mentioned here in *Maqūlāt* by Avicenna are division by *differentiae*, which helps compose definitions, and division by properties and accidents, which helps compose descriptions; there are, however, other types of division (recalled for instance by Hillī in the corresponding section of his commentary)<sup>11</sup>.

In conclusion, these "states" of simple expressions are said by Avicenna to be "necessary" (*darūrī*) or "quasi-necessary" (*ka-l-darūrī*) for the study of logic. It must be noted, however, that not all the properties of universals *qua* universals are profitable for the logician: as it was already made clear in the *Madḥal*, the logician must not be concerned with universal meanings insofar as they are existent, nor with the particular manner of existence they have<sup>12</sup>. This is also true, as we shall see, for the aspects of simple expressions which constitute the subject-matter of Aristotle's *Categories*; every subject of research involving or implying existence must be studied by the science of the existent insofar as it is existent, namely metaphysics<sup>13</sup>.

[§2] (4.15 – 5.17). After recalling the necessity of knowing certain states of simple expressions, Avicenna develops a point shortly made above (*Maqūlāt* 3.12-13): there are other states of these expressions which are all but useful in logic.

[§2.1] (4.15 – 5.5). These other "states" amount to the fact that simple expressions signify things which exist according to one of the two types of existence: in the mind and outside the mind (these are the "two sorts" of existence mentioned here and in *Madḥal* I.4, the chapter devoted to the subject-matter of logic<sup>14</sup>). Avicenna's formulation ("according to one of the two sorts of existence", *aḥada l-wuḡudayni*) might let us think that he is referring to *one only* of these two sorts, but the examples he makes include both things existing in concrete reality and things having mental existence, such as universals. If he were referring to one sort only, then he would probably be speaking about extra-mental existence (thus rather insisting on the

---

<sup>8</sup> Definition and description are briefly discussed and distinguished by Avicenna in *Madḥal* I.9, 48.1 – 49.10; the complete treatment of definition, however, is given in the fourth treatise of the paraphrase of the *Posterior Analytics* (*Burhān*).

<sup>9</sup> *Burhān* IV.7, 312.4: "We say that, although division does not compare to definition, it is useful in definition" (*naqūlu inna l-qismata, wa-in kānat lā taqīsu 'alā l-ḥaddi, fa-hiya nāfi 'atun fī l-ḥaddi*).

<sup>10</sup> *Burhān* IV.7, 312.6 – 313.7; see also *Naḡāt* 152.9 – 153.9.

<sup>11</sup> Hillī, *Kaṣf* II.1, ff. 2v – 3r.

<sup>12</sup> *Madḥal* I.5, 27.10-14.

<sup>13</sup> On this point, and on the foundational role of metaphysics with regard to logic, see BERTOLACCI 2006, pp. 272-284.

<sup>14</sup> The distinction appears, in *Madḥal* I.4, in the context of a refutation of those who held the subject-matter of logic to be "expressions, insofar as they signify notions" (*Madḥal* I.4, 23.5 – 24.2).

potential, concrete existence of universals)<sup>15</sup>. I take however this formulation to be more inclusive, since the point here is not the distinction between the two types of existence, but existence as such (which is never taken into account by the logician). As a matter of fact, continues Avicenna, the knowledge of these states is useless for the logician, under three respects: inasmuch as the things expressed are individual (since the scientific knowledge of individuals *qua* individuals is impossible and useless), inasmuch as the things expressed are species and inasmuch as they are genera. Existent genera, commonly called “predicates” or “categories” (*maqūlāt*) are here said by Avicenna to constitute the subject-matter of the treatise placed at the beginning of logic. In the following paragraph, Avicenna destroys a classic argument of the previous commentators for the place of the *Categories* at the start of the *Organon* (and all philosophy): according to this standard argument the *Categories*, being a treatise about simple terms, must be studied at first in order to gain the knowledge of propositions, being compositions of simple terms (knowledge which is acquired in the *De interpretatione*), and syllogisms, being compositions of propositions (which are studied in the *Prior* and *Posterior Analytics*). Arguments variously resembling this are found in the commentaries of Ammonius, Simplicius, Philoponus, Olympiodorus, and Elias/David, and are reprised in the Arabic tradition by Ibn al-Ṭayyib<sup>16</sup>. Avicenna argues here, instead, that the student of logic may move on directly from universals to the knowledge of the couple noun/verb and of propositions (*De interpretatione*), and then to learning about syllogisms and definitions (*Prior* and *Posterior Analytics*): knowledge of the fact that there are ten categories is totally irrelevant for the composition of concepts and arguments.

[§2.2] (5.6-17). The following section insists, again, on the uselessness of categories in logic, and reaffirms paradoxically what the Alexandrian commentators had expressly denied in their discussion of the goal. Porphyry refuted the theses of those who held the *Categories* to focus exclusively on words (such as the Stoics Athenodorus and Cornutus) and those who held it to be a treatise about beings (such as his teacher Plotinus), to support his semantic interpretation of the subject-matter of Aristotle’s book as “simple expressions, insofar as they signify things” (περὶ τῶν ἀπλῶν λέξεων [...] καθὸ σημαντικαὶ τῶν πραγμάτων εἰσι)<sup>17</sup>. The later commentators added concepts to the picture, by mentioning and refuting a third, “conceptualist” position (the *Categories* is only about concepts). The discussion of the goal has, in the Alexandrian commentaries, a canonic structure: a description of the three conflicting theses, that are (1) the *Categories* focuses on expressions alone, (2) on beings alone, (3) on concepts alone, and the conciliatory resolution: the *Categories* deals with all of these aspects, its goal being “simple expressions, insofar as they signify things by means of concepts” (περὶ φωνῶν σημαίνουσῶν πράγματα διὰ μέσων νοημάτων, in Ammonius’s formulation<sup>18</sup>). Simplicius clearly employs this discussion of the goal to define the epistemological status of the categories: he rejects the “verbalist” position, since expressions alone are the subject-matter of grammar; the “ontologic” position, since beings alone are the subject-matter of metaphysics; the “conceptualist” position, since concepts alone are the subject-matter of psychology; the tripartite σκοπός is dealt with by the science of logic<sup>19</sup>. Ibn al-Ṭayyib, besides reprising in full the commentators’ discussion and conception of the goal, refutes a further position: that of those people who hold that the *Categories* is just a *memorandum* (*taḍkira*) having no goal at all, since it tackles disparate issues of logic, physics,

<sup>15</sup> In *Ilāhiyyāt* V.1, a chapter specifically devoted to the existence of universals, Avicenna argues that universals exist in act in the mind, whilst under a certain another respect they exist in concrete reality (*Ilāhiyyāt* V.1, 206.4-7).

<sup>16</sup> Amm. *In Cat.* 11.1-11, 13.6-11; Simpl. *In Cat.* 14.33 – 15.16; Phil. *In Cat.* 11.15-33; Olymp. *In Cat.* 21.14-25; Elias, *In Cat.* 132.10-18; Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 26.12-21. See GRIFFIN 2016.

<sup>17</sup> Porph. *In Cat.* 58.19-20 Busse. For Porphyry’s semantics, see EBBESEN 1990, LLOYD 1990 (pp. 36-75).

<sup>18</sup> Amm. *In Cat.* 9.17-18.

<sup>19</sup> Simpl. *In Cat.* 9.5 – 10.8. For an analytical discussion of this passage, see HOFFMANN 1987, pp. 68-71.

metaphysics and ethics<sup>20</sup>. This position clearly mirrors a criticism of the *Categories* mentioned by Simplicius, and attributed to the Stoic commentators Athenodorus and Cornutus<sup>21</sup>.

Against this exegetical scheme, Avicenna argues that words signifying things by means of concepts should be taken into account by sciences other than logic: under the respect of existent things, by metaphysics or First Philosophy; under the respect of concepts by psychology (called, here, a “border-line section”, *ḥadd*, of natural philosophy adjacent to metaphysics); under the respect of significant words, by the discipline of linguists (*ṣināʿat al-luġawiyyīn*). The categories are of no interest for the logician especially under the respect of their being expressed by words, since knowledge of them under this respect can only amount to knowing that utterances fall upon them (actually or potentially). This is totally irrelevant, since utterances are also used to signify, for instance, the species of the categories (here “the proper universals”), and a student of logic does not need to know this about the genera more than about the species. This critical remark directed against a “verbalist” interpretation of the *Categories* partially anticipates the more extended criticism of the past commentators found in [§5].

[§3] (5.17 – 6.8). The *Categories* is not, it seems, totally useless for the knowledge of logic: the student may at least acquire two advantages from their study. The first, says Avicenna, is a certain comprehensive knowledge of things (*iḥāṭatun mā bi-l-umūr*), the second is the ability to “mention the paradigms” (*īrād al-amṭīla*).

As to the first advantage, it depends on the classificatory character of the table of the categories. Porphyry, for instance, had already made it clear that, insofar as Aristotle proposes a classification of words and beings, he reduces the totality of things to ten simple items<sup>22</sup>; this makes the infinite particulars of reality knowable.

As to the second advantage, it is not immediately clear from Avicenna’s brief formulation. The Arabic term *amṭīla* (plural of *mitāl*) may be understood in two ways, a weaker one and a stronger one. The weak sense is that of “example”: according to this interpretation, the logician would be able to present examples of the things he knows (given the comprehensive knowledge granted by the *Categories*). The stronger sense is that of a “paradigm”, in a sense close to the παράδειγμα which Aristotle treats as a pseudo-inductive rhetorical argument<sup>23</sup>. In the *Rhetoric*, Aristotle describes the paradigm as a sort of induction, or an argument which establishes the truth of a particular proposition on the basis of the truth of similar, more familiar cases<sup>24</sup>. In *An. Pr.* II.24, he formalizes the argument in syllogistic terms, by means of the following example: we can prove that the war Athens moved against Thebes is deplorable, from a major universal premise (war against neighbours is deplorable) which is proved by a syllogism concerning a similar, more familiar case (the war of Thebes against its neighbours)<sup>25</sup>. In the discussion of *tamṭīl* found in the *Prior Analytics* of the *Šifāʿ*, Avicenna provides the same example and doctrine, without introducing particular innovations<sup>26</sup>. I argue in favour of the “stronger” interpretation: Avicenna might be suggesting that a sort of

---

<sup>20</sup> Ibn al-Ṭayyib, *Tafsīr al-maḳūlāt* 15.13-15; 20-31.

<sup>21</sup> Simpl. *In Cat.* 19.1-3 (Tr. CHASE 2003, p. 34): “These people also think that there is a division of names into homonyms, synonyms, and paronyms, and suppose that the book is a motley heap of logical, physical, ethical, and theological speculations” (οἱ καὶ διαίρεσιν τῶν ὀνομάτων οἴονται ποιεῖσθαι εἰς ὁμώνυμα καὶ συνώνυμα καὶ παρώνυμα καὶ εἶναι τὸ βιβλίον παντοδαπῶν θεωρημάτων σωρείαν ὑπολαμβάνουσιν λογικῶν τε καὶ φυσικῶν καὶ ἠθικῶν καὶ θεολογικῶν). For a discussion of this argument see GRIFFIN 2015.

<sup>22</sup> Porph. *In Cat.* 57.19 – 58.20.

<sup>23</sup> For a discussion of paradigm in Aristotle and al-Fārābī, see LAMEER 1994, pp. 177-203.

<sup>24</sup> Arist. *Rhet.* B 20, 1393 a26 – 1394 a18.

<sup>25</sup> Arist. *An. pr.* B 24, 68 b38 – 69 a19.

<sup>26</sup> *Qiyās* IX.23, 568.4 – 569.8.

paradeigmatic procedure may be used, once the categories are known, in the case of controversial definitions (as the follow-up of the discussion clarifies). As a matter of fact, if one already knows that a familiar thing having certain properties belongs to a certain category, and a thing whose definition is difficult has the same properties, he may deduce that the second thing belongs to the same category as the first. Another possibility for *al-amṭila* is to interpret “paradigms” in the - slightly weaker - sense, of “paradeigmatic notions” of things, being the notions of the categories themselves (comprising, for each genus, a definition and a set of properties).

The example made here by Avicenna concerns relatives: he might be referring to the controversy concerning those accidents which seem to belong both to the category of relatives and to other categories (for instance quality, in the case of knowledge: see *Maqūlāt* VI.4). He also mentions the properties of quality and quantity, which are exclusive of their category (according to the standard definition of “property”): once a thing has one of these exclusive properties, it is unequivocally identified as belonging to the correspondent category. As a consequence of this “definitional” use, the brief section on the *Categories* in the *Logic* of the *Kitāb al-Naḡāt* is found not at its standard place, between the treatment of universals and that of propositions, but in the middle of a treatment of definitions<sup>27</sup>.

[§4] (6.8 – 7.9). The student, however, should not be too interested in this procedure, and content himself with learning the useful part of logic: the doctrine of the categories is ultimately “intruded”, or “alien” (*daḥīl*) with respect to the discipline. Moreover, the book was written by Aristotle not as a demonstrative teaching regarding something, but according to the way of convention (*wadʿ*) and unconditioned acceptance (*taqlīd*). This latter term is particularly interesting: in the Arabic legal tradition, it refers to the practice of following acritically the views of an expert interpreter of the law (*muḡtahid*), and it often has a negative connotation; Avicenna employs it to qualify knowledge acquired without having been verified independently<sup>28</sup>. *Taqlīd* could refer, here, either to Aristotle’s acceptance of a previous tradition or to the student’s acceptance of Aristotle’s doctrines. Though the second solution is more probable, the first is not at all unlikely, since Avicenna had access to sources that clearly ascribed the doctrine of the categories to more ancient thinkers (see for instance Simplicius, who read Archytas’ pseudo-pythagorean treatises on the categories as authentic<sup>29</sup>). By remarking that in the *Categories* nothing is demonstrated, Avicenna does not mean necessarily that other logical works expound their contents by way of demonstration, but rather that the *Categories* treats non-demonstratively issues which should instead be studied in their appropriate context, with the appropriate method. This is confirmed by the follow-up of the text. However, the statement that in the *Categories* there is no demonstration evidently contradicts the exegesis of such commentators as Ibn al-Ṭayyib, who argue explicitly that Aristotle demonstrates many issues discussed in the treatise<sup>30</sup>.

After stating that the *Categories* is a “conventional” work, Avicenna presents a list of some of the main issues tackled by the commentators. This list includes: (1) the number of the ten categories; (2) the fact that there is no thing common to them, namely that there is no genus above them (such as “being”); (3) the fact that in them there is no intrusion, namely that

<sup>27</sup> In the *Naḡāt*, the chapter devoted to the ten categories is found between a short chapter on the usefulness of division in definitions and a chapter on the common properties of definitions and demonstrations (*Naḡāt* 153.10 – 157.2).

<sup>28</sup> For the classical usage of *taqlīd*, see N. Calder’s entry *Taqlīd* in *EL*<sub>2</sub>; for a discussion of Avicenna’s interpretation, see GUTAS 2014, pp. 217-219.

<sup>29</sup> Simpl. *In Cat.* 2.15-20.

<sup>30</sup> See Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 31.12-31 (ed. Ferrari), where the commentator presents a long list of all the places where Aristotle would make use of the “demonstrative way [of teaching]” (*al-naḥwu l-mubarhinu*), employed in this treatise along with division and definition (whereas Aristotle does not use analysis, *al-taḥlīl*).

their number is complete and sufficient; (4) the properties of the categories; (5) the fact that nine of them are accidents, whereas the first is substance. These are, all of them, enquiries which should be carried out by other disciplines; in the end of the first paragraph, the “plural” disciplines are reduced to one of them, namely First Philosophy.

The goal (*ğaraḍ*) of the book is then to make the reader aware, without providing him with demonstrations, of the fact that there are ten categories of beings, signified by expressions, and that nine of them are accidents. After all, Avicenna himself will treat these issues himself in *Maqūlāt*: the number of the categories, for instance, and all the questions related to the sufficiency of Aristotle’s table, will be widely discussed in *Maqūlāt* II.2-5 (whereas in *Ilāhiyyāt* III.2-10 he is going to demonstrate the accidental existence of the three main accidental categories, namely quantity, quality and the relative)<sup>31</sup>.

[§5] (7.9 – 8.9). Once the goal of the book has been ascertained, Avicenna returns to the previous interpretations. He addresses the opinions of the “validating” or “well-discerning” logicians (*al-mantiqiyyūn al-muḥaṣṣilūn*)<sup>32</sup>, who defended – all of them – the standard, semantic reading of the treatise: the *Categories* is a book about expressions, insofar as they signify beings (directly or indirectly, by means of concepts). This is the common doctrine of Porphyry and the Alexandrian commentators, which Simplicius also lent to previous, illustrious Peripatetic exegetes (such as Boethus of Sidon and Alexander of Aphrodisias)<sup>33</sup>; it is also attested by some subsequent Arabic scholars (notably al-Ḥasan ibn Suwār and Ibn al-Ṭayyib<sup>34</sup>) and shared, to a certain degree, by al-Fārābī, who nonetheless seemed to insist more on the conceptual aspect of the tripartite goal (as witnessed by a hebrew fragment of his *Long Commentary* on the *Categories*, and by his definition of “category” in the *Kitāb al-Ḥurūf*)<sup>35</sup>.

Avicenna’s point, in criticizing the totality (*kāfa*) of his predecessors, is that there is no way to demonstrate something about beings, inasmuch as they are signified by expressions. For instance, to demonstrate – as the commentators try to do – that the nine categories other than substance are accidents, is to prove something about their way of existence (notably, that they exist in a subject, and cannot subsist independently of their substrate of inherence)<sup>36</sup>; their being signified by expressions is totally irrelevant to this scope. What very likely pushed the commentators to commit this mistake is the fact that, for every existing being, there is a corresponding word: which apparently made them put together, inappropriately, the consideration of beings and the consideration of words expressing them. The “natural” correspondence between beings and words is a classic Aristotelian theme from the *De interpretatione*, also reprised by Avicenna in the beginning of his paraphrase<sup>37</sup>. If the commentators thought that there is a way to know something about words expressing things, without that the thing’s being existent be directly implied, they would be saying something utterly obscure and sophistical.

---

<sup>31</sup> *Ilāhiyyāt* III.2-10.

<sup>32</sup> For the notion of *taḥṣīl* and the “validating” philosophers, see GUTAS 2014, p. 214. Curiously enough this term, which normally has a positive connotation, is employed here by Avicenna to introduce a refutation of his predecessors’ position.

<sup>33</sup> Simpl. *In Cat.* 13.15-18.

<sup>34</sup> al-Ḥasan ibn Suwār, *Glosses* 361.1-10 (ed. Georr); Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 18.5-8 (ed. Ferrari).

<sup>35</sup> For the fragment, see ZONTA 2006, p. 195: “The intention of the *Categoriae* is to enumerate the single notions related to sense-objects, as far as single expressions signify those notions”. The definition of “category” in *Ḥurūf* I.3 (62.21-22) reads: “We call ‘category’ every intelligible notion signified by an expression, by which a certain individual thing among these is described”.

<sup>36</sup> This is Avicenna’s definition of “accident”, drawn from the *Categories* and also found in the *Ilāhiyyāt* (*Ilāhiyyāt* II.1, 57.8-10).

<sup>37</sup> Arist. *De int.* 16 a3-9 (*Ibāra* I.1).



According to Avicenna, the only way to make the “semantic” interpretation work would be, apparently, to cut out the expressions. The commentators could say that the categories are “collections of beings”, which are certainly signified by expressions, but can be thought of as pure, simple concepts whose combination may produce complex notions (without any mention or consideration of the words expressing them): this could be meaningful. The commentators’ mistake consists, again, of their insistence on the side of expressions, which makes them think that the study of the categories is a logical enquiry. This criticism seems not only to be oriented against a semantic conception of the categories, but also against a semantic conception of logic: a doctrine which identifies significant expressions as the subject-matter of logic, such as the one rejected by Avicenna himself in the *Madḥal* (which might echo the “verbalist” conception of logic attested, for instance, by Yaḥyā ibn ‘Adī’s *Tabyīn al-faṣl* and by some passages of Ibn al-Ṭayyib’s *Tafsīr al-maqūlāt*)<sup>38</sup>. Though Avicenna does not totally dismiss expressions, he is rather inclined to consider them secondary with respect to notions, which are the actual subject-matter of logic<sup>39</sup>.

[§6] (8.10-15). In the conclusion of the chapter, Avicenna restates the uselessness of a study of the categories within logic. Nonetheless, he argues for the necessity of dealing with these topics, necessity that is evidently motivated by the encyclopedic character of the *Šifā’* as such. Before concluding, Avicenna describes in rather emphatic terms the negative effects produced by the study of the *Categories* on some previous readers and commentators. What is particularly interesting is the fact that the confusion of readers on these topics appears to be irremediable, as suggested by the tablet-metaphor: among other possibilities, this image might be seen as a reference to a direct debate with contemporary scholars on issues related to the *Categories*, where Avicenna’s corrections (the “second drawing”) do not manage to beat the obstinate stupidity of his opponents – but instead confuse them even more. The tablet-metaphor is interesting also to the extent that it possibly conveys a non-innatist account of knowledge.

---

<sup>38</sup> Yaḥyā ibn ‘Adī, *Tabyīn al-faṣl* 423.16 - 424.3 (ed. Khalifat); Ibn al-Ṭayyib’s *Tafsīr al-maqūlāt*, 18.8-10 (ed. Ferrari): “You understand, from this, that the subject-matter of the discipline of logic is only simple expressions signifying universal things” (*wa-anta tafhamu min hādā anna mawḍū‘a l-ṣinā‘ati l-mantiqiyiyati innamā huwa l-alfāzu l-basīṭatu l-dāllatu ‘alā l-umūri l-kulliyati*).

<sup>39</sup> On Avicenna’s conception of the subject-matter of logic, see SABRA 1980; INTRODUCTION, 3.1.3.

## I.2

### ON THE UTTERANCES OF HOMONYMS, SYNONYMS, HETERONYMS, PARONYMS, AND THE LIKE

The second chapter of the first treatise tackles the first twelve lines of Aristotle's *Categories*, devoted to the distinction between homonyms, synonyms and paronyms. The reference to "heteronyms" in the title shows that Avicenna also takes into account heteronyms and paronyms, which later commentators added to the Aristotelian classification of realities according to the possible relations between their names and their definitions. Avicenna's discussion of these notions is quite orderly, being structured as follows: paragraphs [§1 - §5] deal with things having the same name (synonyms and homonyms), whereas paragraph [§6] deals with things bearing different names (heteronyms, paronyms, polyonyms). This scheme interestingly resembles Speusippus' division of names into two classes, as reported by Simplicius: "tautonyms" and "heteronyms", the former including synonyms and homonyms, the latter including heteronyms, polyonyms and paronyms<sup>40</sup>.

[§1] Things bearing the same name are either synonymous, or non-synonymous. [§2] Synonymy occurs when two things have the same name, and the same essential formula corresponding to the name: for instance, "animal" is said of man and ox by synonymy, for they are both rightly said to be "animals" and they share the definition of animal. [§3] Non-synonymous things are either such that their essential formula is one, though differentiated under a certain respect; or such that the essential formula is different, but the two things bear a certain resemblance to each other; or such that the essential formula is different, and the two things do not have any resemblance to each other. Things of the first class have a unitary meaning which differs either by priority and posteriority, by greater and lesser worthiness, or by intensity and fabledness. An example for the first two criteria is existence (*wuġūd*); an example for the third criterion is a quality, such as whiteness (*bayād*). Things belonging to the second class correspond to the Aristotelian example for homonyms in the *Categories*: "animal" is said of the real animal and the drawing by virtue of a certain resemblance between them. Things of the third kind have no mutual resemblance, and they share the same name either by chance, or by virtue of other, contingent causes. [§4] After defining synonyms and homonyms, and their types, Avicenna provides some examples of particular, related cases (simultaneous homonymy and synonymy, etc.). [§5] A last section elaborates shortly on synonymous predication, which is not only proper of genera, species and differentiae, but also of the accidental predicables. [§6] Things with different names are either such that they also have different meanings (heteronyms), or such that they have the same meaning (polyonyms). Among heteronyms there are paronyms and related names, namely things whose names derive from the name of something with which they have a certain, essential relation.

[§1] (9.4–5). Avicenna gives no preliminary indication about the utility of the Aristotelian classification of –onyms, and about the reason for its presence in the *Categories*. He will however clarify later, at the end of chapter VII.4, that their knowledge is inescapable for the student, since they are repeatedly employed in the treatment of the single categories; they are dealt with right in the beginning because, unlike other notions such as opposites, priority, simultaneity and motion, they are technical terms without any common usage, which therefore must be explained before the ten categories<sup>41</sup>. As to their "being employed" (*isti'māl*) Avicenna provides, there, no concrete example, but a list of cases would be obviously quite long, especially in Avicenna's own exegesis. This position resembles

---

<sup>40</sup> Simpl. *In Cat.* 38.19–24.

<sup>41</sup> See below, VII.4 [§4]. This also applies, according to Avicenna, to the distinction between "being said of a subject" and "being in a subject", developed by Aristotle in *Cat.* 2. Opposites and the like, on the contrary, are commonly employed in one or more basic meanings, and their semantic analysis carried out by Aristotle in *Cat.* 10–15 would serve the scope of clarifying retrospectively their "philosophical" use in the treatment of the ten categories.

Porphyry’s idea that homonymy and synonymy, before the treatment of the categories, are as necessary as definitions and axioms in the works of geometers<sup>42</sup>; Avicenna’s explanation for this fact, however, is definitely less specific than Porphyry’s, as reported by Simplicius (relying on the fact that homonymy and synonymy allow us to decide whether things bearing the same name belong to the same category, or to different ones)<sup>43</sup>.

Thus, Avicenna’s direct exegesis of the *Categories* starts *in medias res*, with a distinction between synonyms and non-synonyms. These are presented as the two ways in which things (*al-umūr*) that differ from one another (*al-muhtalifa*) and have some sort of multiplicity (*al-mutakattira*) may share the same name: either as having the same definition (synonymy), or as not having the same definition.

[§2] (9.6 – 10.3). Unlike Aristotle and the other commentators, Avicenna presents synonymy in the first place<sup>44</sup>. He does not justify this choice, presumably depending on his preference for synonymy as the “simplest” notion; given that in [§1] he prefers to speak of homonyms as of “non-synonyms”, maybe due to their particular variety, he obviously focuses on the positive determination first, before elucidating its negation<sup>45</sup>.

Synonyms are those things whose name is the same, and whose “essential account” (*qawl al-ḡawhar*, being Ishāq b. Ḥunayn’s literal rendering of the Greek λόγος τῆς οὐσίας) is the same. Like the other commentators, Avicenna explains “essential account” as either definition (*ḥadd*) or description (*rasm*), since synonymy applies both to definable things (such as species and intermediate genera) and non-definable things, which can only be described (such as individuals). “Animal”, as a matter of fact, is said synonymously of things defined as animals – such as “man” and “ox” – and things described as animals endowed with certain properties and accidents – such as individual men and animals (Zayd, °Amr, this horse, this ox). That synonymy applies both to species and individuals is not explicit in Aristotle’s words, where the only example made involves, generically, “man” and “ox”<sup>46</sup>.

[§3] (10.4 – 14.14). The section of this chapter devoted to homonyms is undoubtedly the longest, and the most articulate. Aristotle’s ambiguous use of the notion of “homonymy” in works other than the *Categories*<sup>47</sup>, along with its doubtful relation with the notions of πρὸς ἓν λέγεσθαι (also known, in the literature, as “focal meaning”<sup>48</sup>) and πολλαχῶς λέγεσθαι (to be said in many senses), pushed the late ancient commentators to produce wide classifications of homonyms which tended to include all possible typologies. Avicenna’s discussion in this place essentially reworks these former classifications, by re-organising them on a different basis<sup>49</sup>.

[§3.1] (10.4-7). All Greek commentators (Porphyry, Simplicius, Ammonius, Philoponus, Olympiodorus, David/Elias) used to subdivide homonyms at first into two main groups:

<sup>42</sup> Porph. *In Cat.* 60.1-10.

<sup>43</sup> Simpl. *In Cat.* 21.2-21; On this argument, see LUNA 1990, pp. 43-45.

<sup>44</sup> As a consequence of this, no trace is found, in Avicenna’s commentary, of the traditional discussions aiming to decide why Aristotle dealt with homonyms before synonyms (see for instance Porph. *In Cat.* 61.6-12; Simpl. *In Cat.* 23.19 – 24.5).

<sup>45</sup> According to BÄCK 2008, p. 47, Avicenna does so “presumably because synonymy is for science while homonymy is for sophistry”.

<sup>46</sup> That homonymy, synonymy and paronymy apply both to universals and individuals is also an idea defended by recent interpreters (cf. e.g. OEHLER 1984, pp. 162-163).

<sup>47</sup> For some accounts and discussions on Aristotle’s theory of homonymy, see HINTIKKA 1959; ANTON 1968, 1969; IRWIN 1981.

<sup>48</sup> The notion of “focal meaning”, current in the literature to describe the πρὸς ἓν homonymy of being, was first introduced in OWEN 1960.

<sup>49</sup> For the quality and the extent of Avicenna’s reworking, see also BÄCK 2008.

homonyms “by chance” (ἀπὸ τύχης, κατὰ τύχην) and homonyms “by intention” (ἀπὸ διανοίας, κατὰ προαίρεσιν καὶ διάνοιαν). As C. Luna has well shown, these two categories are very likely derived from a parallel reading of two Aristotelian passages: *Eth. Nic.* I 4, 1096 b26-28, where Aristotle opposes homonyms “by chance” to homonyms ἀφ’ ἐνός, πρὸς ἓν and κατ’ ἀναλογία, and *Phys.* II 5, 197 a2-3, where he opposes what is “by chance” to what is “by intention” (ἀπὸ διανοίας)<sup>50</sup>. The same subdivision is found in Ibn al-Ṭayyib’s classification of homonyms, which distinguishes in the first place between homonyms “by chance” (*allatī hiya kayfa ittafaqa*) and homonyms “by choice and intention” (*allatī innamā ḥasalat muttafiqa asmā’uhā bi-rawiyya wa-fikr*)<sup>51</sup>. Homonymy by chance usually has no subdivisions, whereas intentional homonyms do: every commentator shows a different scheme of subdivisions<sup>52</sup>. However, among the Greeks, all the commentators list homonymy ἀφ’ ἐνός, πρὸς ἓν and κατ’ ἀναλογία, besides homonymy “by resemblance” (καθ’ ὁμοιότητα); Ammonius, Philoponus, Olympiodorus and David/Elias also listed homonyms “by memory” (κατὰ μνήμην), “by hope” (κατ’ ἐλπίδα), “by participation” (κατὰ μέθεξι, omitted in Philoponus’ commentary). Ibn al-Ṭayyib’s classification of intentional homonyms lists eight kinds of homonymy: homonymy by analogy (*bi-l-nisba*), by resemblance (*bi-l-tašbīh*), “from the same agent” (*min fā’il wāḥid*), “to the same scope” (*ilā ḡāya wāḥida*), “from the same agent and to the same scope” (*min fā’il wāḥid wa-ilā ḡāya wāḥida*), “by way of good omen” (*alā ṭarīq al-istibṣār*), “by way of remembrance” (*alā ṭarīq al-taḍkira*), “by way of good omen and remembrance” (*alā ṭarīq al-istibṣār wa-l-taḍkira*)<sup>53</sup>.

Whereas the traditional criterion for the classification is, then, the cause of homonymy, Avicenna proposes in I.2 a tripartite subdivision based on the difference between the meanings of homonymous things (regardless of any external factor). Homonymy (*ittifāq al-ism*), as a matter of fact, includes three sorts of relations: (1) that of things which have the same name, and a meaning that is one by itself but differentiated under another respect; (2) that of things whose meanings, though different, have a certain degree of resemblance; (3) that of things whose meanings are different and have no mutual resemblance. A. Bäck has suggestively described this tripartition as a “continuum”, ranging from the status of quasi-synonymy to that of complete homonymy<sup>54</sup>. Though being, in its content, genuinely Avicennan, a similar tripartition is already sketched in a passage of *Physics* H 4, where Aristotle says: “of homonymies, some are very distant, some others have some kind of resemblance, some are close by genus or analogy; that is why these do not seem to be homonymies”<sup>55</sup>. In *Maqūlāt* I.2 the order is inverted, but this short remark might have been of inspiration to Avicenna’s reorganization of the previous exegetical material.

**[§3.2] (10.8 – 11.7).** The first sort of homonymy, namely the closest to complete synonymy, is found in things that share the same name, and a meaning which is one by itself (*bi-‘aynihī*) but becomes differentiated in certain other respects. An example of such a notion is existence (*al-wuḡūd*), which is found in numerous things as a single notion, but may differ in them in some respects:

**(1)** The first respect is priority and posteriority (*ṭarīq al-taqaddum wa-l-ta’ahḥur*): existence belongs primarily to some things, secondarily to some other things. It is clear by Avicenna’s examples in the follow-up that the sort of priority he envisages here is not

<sup>50</sup> LUNA 1990, p. 83.

<sup>51</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 37.13-16.

<sup>52</sup> See the graphs in LUNA 1990, p. 82 (Porphyry and Simplicius), pp. 98-99 (Ammonius, Philoponus, Olympiodorus, David/Elias).

<sup>53</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 37.20 – 38.17.

<sup>54</sup> BÄCK 2008, p. 47.

<sup>55</sup> Arist. *Phys.* H 4, 249 a23-25: εἰσὶν τε τῶν ὁμωνυμιῶν αἱ μὲν πολλὰ ἀπέχουσαι, αἱ δὲ ἔχουσαι τινα ὁμοιότητα, αἱ δ’ ἐγγὺς ἢ γένει ἢ ἀναλογίᾳ, διὸ οὐ δοκοῦσιν ὁμωνυμία εἶναι οὔσαι.

chronological priority, but logical or natural (=existential) priority<sup>56</sup>. For example, substance has a natural priority of existence with regard to accidents (labelled here “the rest of what follows it”, *sā`ir mā yatba`uhū*), for substance is the cause for the existence of the accidental properties that inhere in it; and some substances are prior in existence with regard to some others, notably primary substances (concrete individuals) with respect to secondary substances (the genera and species of individual substances), or form and matter with respect to their compound.

(2) The second respect is that of greater worthiness and deservingness (*tarīq al-awlā wa-l-aḥrā*, literally “the way of the worthier and the more deserving”). Some things have existence by themselves, whereas some other things have existence by virtue of something else. What has existence by itself is worthier (*awlā*) than what derives its existence from something else: this second criterion may apply, once again, to the example of substance (existent by itself) with respect to the accidents (existent by virtue of the substance that they qualify), but also to any relation between a cause and its effect<sup>57</sup>. What is worthier, argues Avicenna, is also prior (*mutaqaddim*), but the contrary does not hold necessarily: for one thing can be worthier than another, in a certain respect, and be simultaneous with it.

Avicenna mentions, then, a third possible criterion of differentiation that, however, is not applicable to existence, namely the criterion of intensity (*tarīq al-šadda wa-l-ḍu`f*). To exemplify intensity it is necessary to recur to accidents that admit of more and less, such as qualities: Avicenna presents therefore on the one hand the intuitive example of “whiteness”, which may obviously present a variety of shades (for instance, the whiteness of snow and the whiteness of ivory); on the other hand, the strange example of “philosophy”, that apparently varies in degree when applied, for instance, to Peripatetic and Stoic philosophy. Avicenna himself recognizes the oddity of this latter example, that he presents as “well-known” or “commonly accepted” (*mašhūr*) and only useful to understand the notion of intensity more easily.

A name whose meaning is abstractly unitary, but presents any of the aforementioned differentiations in the things that are called thereby, is called “ambiguous name” (*ism mušakkik*). An ambiguous name may be:

- (a) Absolute (*muṭlaq*), as in the previous examples;
- (b) Corresponding to the relation with the same principle (*bi-ḥasabi l-nisba ilā mabda` wāḥid*), for instance “medical” (*tibbī*) said of a medical book, a dissecting-knife and a medicine;
- (c) Corresponding to the relation with the same goal (*ilā ḡāya wāḥida*), for instance “healthy” (*šihḥī*) said of an ointment, of physical exercise and of venesection;
- (d) Corresponding to the relation with the same principle and the same goal, for instance “divine” (*ilāhiyya*) said of all worldly things.

Now, Avicenna organizes under this comprehensive notion of “ambiguity” (*taškīk*) all the sorts of homonymies that the former commentators held to be somehow intermediate between homonymy and synonymy (πρὸς ἕν, ἀφ` ἐνός, πρὸς ἕν καὶ ἀφ` ἐνός). As to the term *mušakkik*, it derives very likely from the Greek ἀμφίβολος, as hypothesized in the first place by H. A. Wolfson and recently confirmed by A. Treiger: it is attested quite early as a translation of ἀμφίβολος in Ibn Nā`ima’s version of the *Sophistici Elenchi*<sup>58</sup>. *Ism mušakkik* came already to signify an intermediate notion between homonymy and synonymy in some works of al-Fārābī, who also applied it, in some passages, to the notion of existence<sup>59</sup>. Fārābī is almost certainly a source for Avicenna’s usage of *taškīk*; according to Treiger, however, Avicenna’s innovation

<sup>56</sup> For Avicenna’s reprise of Aristotle’s classifications of priority and posteriority see below, VII.4 [§1].

<sup>57</sup> This is suggested by A. Treiger (TREIGER 2010, p. 357).

<sup>58</sup> Cf. WOLFSON 1973b; TREIGER 2010, pp. 342-345.

<sup>59</sup> Cf. TREIGER 2010.

would consist of applying *taškīk* not only to the “horizontal” level of the ten categories, as Fārābī did, but also on the “vertical”, transcendental level, as expressing the relation between the existence of God, the Necessary Existent, and the existence of created being, the Possible Existent; such an innovation is effectively attested in a passage of Avicenna’s *Mubāḥaṭāt*<sup>60</sup>. Another novelty of Avicenna’s appropriation is the distinction between absolute and relative *taškīk*, and the enumeration of the three main criteria for absolute *taškīk*, which nonetheless he seems not to have fully exploited, or systematically employed, in the rest of the *Šifā’* (and in other works). The *taškīk* of being (“existent”) with respect to the ten categories will be more thoroughly discussed below, in chapter II.1<sup>61</sup>. In *Maqūlāt*, Avicenna applies *taškīk* also to some meanings of inherence (I.4, 28.6 [§2]); in the *Ilāhiyyāt* of the *Šifā’*, this category is expressly applied to the One (III.2, 97.4) and to the different meanings of anteriority and posteriority (IV.1, 163.8).

[§3.3] (11.8 – 12.12). The second sort of homonymy is homonymy “by resemblance”, strongly reminiscent of the homonymy καθ’ὁμοιότητα mentioned by the commentators. Avicenna proposes two examples for this type: (1) Aristotle’s standard example for homonyms in *Cat.* 1, namely “animal” as said of a real animal, for instance horse, and a drawn animal<sup>62</sup>; (2) “leg” (*qā’ima*) as said of the leg of an animal and the leg of a bed. In both cases, one may easily see that the definitional account of the two compared things is different, though the name is the same. What justifies their identity in denomination is the fact that they have a certain mutual resemblance, which concerns their “figure” or “external form” (*šakl*) or other, unspecified “states”. This resemblance may appeal someone to give the name of a first thing (for instance, a real animal) to the second thing (a drawing). However, not all resembling homonyms seem to have been named metaphorically, for Avicenna distinguishes between “resembling” (*mutašābih*) and “transferred” (*manqūl*) names: the former referring to the case of homonyms whose common name “was related to both things together” (*qīsa dalika l-ism ilā l-amrayni ḡamī’an*), the latter to cases where the name “was related to the second of them” (*qīsa ilā l-tānī minhumā*). Though the formulation is a bit obscure, Avicenna is probably pointing to the difference between cases where a same name was imposed simultaneously to two similar things, and cases where the second name was imposed to the second thing metaphorically. This distinction seems a reaction to the distinction between metaphor and homonymy found in Porphyry’s shorter commentary on the *Categories*, which aims to range metaphors out of the domain of homonyms.

[§3.4] (12.12 – 14.14). The example of the Dog Star, where homonymy is too “remote” and “metaphorical” to be motivated by resemblance, allows Avicenna to introduce the third sort of homonyms, exemplified by the word *‘ayn* (as said, for instance, of an eye and a coin). Before coming to the subdivision of these remote homonyms, Avicenna devotes a lengthy discussion to the cause of this type of homonymy, targeting the wrong opinion of an unspecified predecessor.

[§3.4.1] (12.12-14). The opinion is the following: the same name happens to be imposed to a number of things, on virtue of the fact that while things are infinite, utterances are finite. That things are infinite and utterances are finite, in a sense, is stated by Aristotle himself in the preamble of the *Sophistici Elenchi*<sup>63</sup>. Avicenna’s target, however, could be not necessarily

<sup>60</sup> *Mubāḥaṭāt* §§688, 690, 692, pp. 231-232 (analysed in TREIGER 2010, pp. 360-361).

<sup>61</sup> See below, II.1 [§4.3].

<sup>62</sup> Since the word ζῶον, in ancient Greek, also came to signify generically “drawing” or “picture”, not necessarily of animals (LSJ; see ACKRILL 1963, p. 71; OEHLER 1984, p. 158), it is not unlikely that Aristotle’s example be an example of “pure” homonymy, rather than of “resembling” homonymy. Given the

<sup>63</sup> Arist. *Soph. El.* 165 a10-13 (tr. Pickard-Cambridge, p. 278): “[...] for names are finite and so is the sum-total of accounts, while things are infinite in number. Inevitably, then, the same account and a single name signify several things” (τὰ μὲν γὰρ ὀνόματα πεπεράνται καὶ τὸ τῶν λόγων πλῆθος, τὰ δὲ πράγματα τὸν ἀριθμὸν ἄπειρά ἐστιν. ἀναγκαῖον οὖν πλείω τὸν αὐτὸν λόγον καὶ τοῦνομα τὸ ἐν σημαίνειν).

(or exclusively) Aristotle, since the same argument is found in Elias/David's and in Ibn al-Ṭayyib's commentaries on the *Categories*. As a matter of fact, before defining and classifying homonyms, both Elias/David and Ibn al-Ṭayyib undertake a proof of their existence, which rests on the assumption that while things are infinite, names are finite (because their constitutive elements, i.e. letters and syllables, are finite, and so should be their combinations)<sup>64</sup>. In Elias/David's discussion the focus is on "things" (πράγματα), and their infinity depends on their being generated constantly and many times (τῷ πολλάκις καὶ ἀεὶ γίνεσθαι)<sup>65</sup>; in Ibn al-Ṭayyib's discussion, instead, the focus is on "individuals" (*al-aṣḥāṣu*), which are infinite because, as is said in the books of natural philosophy, the corruption of an individual always gives rise to another individual. Homonymy only occurs, then, in individuals, since "species, intermediate [genera], genera of the genera are finite" (*al-anwā'u wa-l-mutawassitātu wa-aḡnāsu l-aḡnāsi mutanāhiyatun*)<sup>66</sup>.

[§3.4.2] (12.14 – 13.6). To these commentators, it may be objected (a) that words composed of letters are not finite, but potentially infinite; (b) that only individuals are infinite, but species are not (as was argued by Ibn al-Ṭayyib, apparently not in order to refute this doctrine). By Avicenna's own admission, these two objections are insufficient for refuting the opponent's view.

Against objection (a) it may be argued that words are potentially infinite but actually finite, for the conventions of human language always fix a maximum length for words<sup>67</sup>.

Against objection (b) it may be argued firstly that species are also infinite, in a certain respect: in the *Madḥal*, Avicenna has argued that whereas the *species specialissimae* found in nature are finite, they are in themselves potentially infinite, since the *species specialissimae* of the categories are infinite<sup>68</sup>. Moreover, names are given to realities in general, not to individuals only; since realities in general comprise both individuals and species, and realities are infinite, then species are infinite too.

[§3.4.3] (13.6-14). To clarify the commentator's error Avicenna proposes, tentatively, the following explanation: things are certainly infinite by themselves, *qua* things, but certainly finite for those who give names to them; for nobody would ever undertake the disheartening task of imposing names to every single thing, among an infinite number of things. Instead, insofar as one seeks names for them, things are finite: for each one of the things which share the same name can be named differently, even by the reader, if he wishes to do it. This objection may stand as a refutation of the commentator's view, but does not provide an answer as to the reasons for homonymy.

[§3.4.4] (13.15-14.5). Avicenna divides, then, "pure homonymy" into its three species, in order to argue that it is caused either by a remote, metaphorical resemblance, or by certain other contingent causes. The species are the following:

(1) "Pure" homonymy by metaphor: the example is that of the word *'ayn*, which – being primarily said of the eye – is also said of cash money either by virtue of an extended chain of similarities, or because cash money is as "precious" as the eye.

(2) "Pure" homonymy by remembrance and blessing: this second class regroups the Greek commentators' homonyms κατὰ μνήμην and κατ'ἐλπίδα.

(3) Homonymies "by chance", whose cause is either the disagreement between two imposers of names, who imposed the same name on two different things; or a single imposer

<sup>64</sup> Elias/David, *In Cat.* 135.12-24; Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 23.17 – 24.15.

<sup>65</sup> Elias/David, *In Cat.* 135.18-19.

<sup>66</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 23.32.

<sup>67</sup> At *Madḥal* I.5 (27.17 – 28.2), however, Avicenna states that particular utterances are not to be taken into account in logic precisely because they are not finite.

<sup>68</sup> *Madḥal* I.12, 70.4-7.

of names who changed his mind, or gave the same name to two different things in two different times.

Avicenna calls here homonymy in its purest form *ištirāk al-ism*, and the name shared by pure homonyms *ism muštarak*.

**[§4] (14.15 – 15.10).** After presenting homonyms, Avicenna argues – as the previous commentators did – that things may be both synonymous and homonymous, with regard to different names and in different respects. For instance, the leg of a man and the leg of a bed are certainly homonymous with respect to the name “leg” (see above, **[§3.3]**), but synonymous with regard to another notion which bears another name, namely “body”: for both legs share the definition of body synonymously. This does not make them synonymous in all other respects, for homonymy and synonymy are only such *κατὰ τοῦνομα*, in Aristotle’s words: with respect to a certain name. Avicenna then presents four other cases of simultaneous homonymy and synonymy, which remind us of the four-fold classification of the late ancient commentators<sup>69</sup>:

(a) A coloured man named *Aswad* (“black”) and pitch are said “black” by homonymy and synonymy, in different respects: for if the man’s proper name is considered, “black” is said of him and of pitch homonymously; if the colour is considered, they are black synonymously.

(b) The name *‘ayn* is said synonymously when referred to an eye and another eye, but homonymously when said of an eye and a source of water. This example perfectly reflects Simplicius’ case with the Greek word *κόραξ*, which may signify either the animal “raven” or a “hooked door-handle” (LSJ)<sup>70</sup>.

(c) “Black” is said of two coloured men named *Aswad* by synonymy, in two respects (inasmuch as both are named *Aswad* and insofar as both are coloured); by homonymy, in two respects (inasmuch as one is named *Aswad* and the other is coloured). This example is similar to one proposed by Simplicius, concerning two black men named *Μέλας*<sup>71</sup>;

(d) “Black” may be said by homonymy of the same person in two respects: inasmuch as he is called *Aswad* and his colour is black.

**[§5] (15.4-6).** Then, Avicenna presents two further considerations on homonymy. (1) The first relates to cases of homonymy where a same name is given to things that differ in specificity: for instance, the same name is given to a thing, and to a species (or a quasi-species) of its<sup>72</sup>. This case is not to be confused with Aristotle’s standard example for synonymy: a man has the same name as his genus “animal” according to its essence, but not by itself. The example mentioned here by Avicenna is that of the word “possible” (*mumkin*), said in itself both of what is not impossible (more universal) and of what is not necessary (more specific). An extensive discussion of this example will be provided below, in chapter IV.5 (with regard to the word “relative”)<sup>73</sup>.

**[§6] (15.7-11).** The second consideration regards the relation between remote, metaphorical homonymies and homonymy by resemblance. Once the name of a certain thing has been transferred to another, by virtue of the alleged resemblance between the two things (we could say, for instance: the name “dog” is transferred to the Dog Star), and the convention is established, the two things become purely homonymous - except for him who

---

<sup>69</sup> LUNA 1990, pp. 113-115.

<sup>70</sup> Simpl. *In Cat.* 35.18-20.

<sup>71</sup> Simpl. *In Cat.* 35-31 – 36.1.

<sup>72</sup> Cf. also Fārābī, *Bārī Armīniyās* 142.16-20 for names said “in a wider and a narrower sense” (according to ZIMMERMANN 1981, p. 230).

<sup>73</sup> See below, IV.5, **[§3.2]**; *Ilāhiyyāt* I.5, 35.2-36.1.



understands the resemblance, and knows how and why the name of the first was transferred to the second: in that case, for him the name “dog” belongs to the things that are “resembling and transferred” (*al-mutašābihāt al-manqūla*)<sup>74</sup>.

**[§7] (15.12-15).** This short section is devoted to synonymous predication. The fact that also non-essential predicables (property and common accident) deserve to be predicated synonymously is a crucial standpoint of Avicenna’s interpretation of Porphyry’s theory of the predicables and Aristotle’s *Categories*; it is already at stake in Avicenna’s paraphrase of the *Isagoge* (*Madḥal*), and Avicenna will elaborate on it in detail in the following chapter<sup>75</sup>. All predicables are predicated synonymously of their particulars, even the accidental ones, since the only necessary condition for synonymy is not the essentiality of the predicated notion, but its fundamental unity.

**[§8] (15.16 – 17.14).** The final pages of chapter I.2 are devoted to the properties of things having different names, which include heteronyms, polyonyms (not discussed by Aristotle) and paronyms.

**[§8.1] (15.16 – 16.11).** Heteronyms (*al-mutabāyina asmā’uhā*) are things bearing different names and different essential accounts; polyonyms (*al-mutarādifa asmā’uhā*) are things bearing one and the same essential account, and a number of different names (“synonyms” in the modern sense but also in the ancient, Stoic sense)<sup>76</sup>. Then, with regard to heteronyms, Avicenna expounds a sort of rhapsodic classification that has no clear parallel in the preceding tradition; it might however be inspired by Simplicius’ remark that things with different names and different definitions should be more properly called “other” (ἕτερα), whereas “heteronyms” should rather be those things that have different names and at least a substrate (ὑποκείμενον) in common, as in the odd example of “mounting” (ἀνάβασις) and “descending” (κατάβασις), whose common substrate is the ladder<sup>77</sup>. Avicenna regards things having different subjects all the same as heteronyms, whereas he presents examples of heteronyms with the same subject that are nearly cases of polyonymy:

- (1) Heteronyms whose subjects (*mawḍū’āt*) are different, such as “stone” (*ḥaḡar*) and “horse” (*faras*);
- (2) Heteronyms whose subject is the same, for instance a single thing whose attributes and considerations bear different names:
  - (2.1) Subject and attribute: a single sword can be called *sayf* and *šārim*, *sayf* inasmuch as it is a sword, *šārim* inasmuch as it is a sharp sword.
  - (2.2) Attribute and attribute: a single sword can be named with respect to a quality of its, *šārim* (again, with regard to its sharpness), or with respect to its material origin, *muhannad* (“made of Indian steel”).
  - (2.3) Attribute and attribute of the attribute: a single person can be called by an attribute of his, *nāṭiq* (here “capable of speaking”), and by an attribute of its attribute such as *faṣīḥ*, “eloquent”.

**[§8.2] (16.12 – 17.14).** Aristotle describes paronyms as things that take their denomination from something else (ἀπό τινος) and differ in inflection (πτώσει): as γραμματικὸς is derived from γραμματική, ἀνδρεῖος from ἀνδρεία<sup>78</sup>. Avicenna makes

<sup>74</sup> On the difference between metaphorical terms and actual homonyms see also Fārābī, *Bārī Armīniyās* 141.15-18 (tr. ZIMMERMANN 1981, pp. 228-229).

<sup>75</sup> See below, I.3, [§5-7]; CAMINADA 2016, DI VINCENZO 2016.

<sup>76</sup> See the discussion, found in some commentaries, about the double meaning of the word συνώνυμον (the second being also employed by Aristotle himself, for instance in the *Rhetoric* and the *Poetics*): for example Simpl., *In Cat.* 36.8-31. Cf. also Fārābī’s discussion of heteronyms and polyonyms at Fārābī, *Bārī Armīniyās* 142.20 – 143.4.

<sup>77</sup> Simpl. *In Cat.* 22.30-33.

<sup>78</sup> *Cat.* 1 a10-15 (tr. ACKRILL 1963, p. 3): “When things get their name from something, with a difference of ending, they are called *paronymous*. Thus, for example, the grammarian gets his name from grammar, the brave

paronyms (*al-muštaqqa asmā'uhā*)<sup>79</sup> and “related names” (*al-mansūba*) not an independent species, but rather a species of heteronymy. This idea is not originally Avicennan: that paronyms are to be listed among heteronyms was already suggested by Olympiodorus, who nonetheless made a slight correction by arguing that they are rather intermediate between synonyms and heteronyms<sup>80</sup>. Avicenna adopts this view and totally adheres to it: what qualifies paronyms primarily is their having names and definitions fundamentally different from those of their eponymous item, and this is undoubtedly a characteristic of heteronyms. However, the names of paronyms and related names are derived from a certain primitive, eponymous thing, with which they have a certain commonality of signification: consequently, the names and notions of paronyms have a certain “resemblance” (*mušākala*) to the names and notions of those primitive things, which prevents them from being perfectly synonymous.

Avicenna describes, then, paronyms as things X having a certain relation (*nisba*) to a primitive notion Y, that in the examples he makes is either a quality of X (eloquence), or something owned by X (money), or a thing subject to a certain action of X (iron, with regard to the act of forging). Now, to signify the ambiguous relation subsisting between X and Y, X is called by a name which derives from that of Y, but presents a “difference” or “alteration” (*muḥālaḥa*) in terms of morphology (*šakl*) and inflection (*taṣrīf*), for instance “Y-ed” or “Y-ful”. Such a name may be derived from the primitive name in two ways: either by changing the structure of the original word (a verbal name, *maṣdar*), as in the case of the words *faṣīḥ*, *mutamawwil*, *ḥaddād*; or by adding the ending *-ī/-iyy*, a suffix which Arabic grammarians call *nisba* and which produces “related names” (*asmā' mansūba*), as is the case for Aristotle’s example in the *Categories* (γραμματική → γραμματικός, in Arabic: *naḥw* → *naḥwī*). If on the contrary the name of Y is simply used for X as well, as in the case of the Arabic word ‘*adl*’ - which may stand in Arabic both for “justice” and “just” - there is no derivation or paronymy, but simple resemblance (*ištibāh*) and homonymy (*ittifāq*), and the name is only said to be “transferred” (*manqūl*). Avicenna mentions, then, the conditions required for the existence of paronymy, that amount ultimately to four:

- (1) Y has a certain name
- (2) X has a relation with Y
- (3) The name of X is similar to the name of Y
- (4) The name of X is altered with respect to the name of Y.

The enumeration of the conditions required for paronymy is also a commonplace of the previous commentaries<sup>81</sup>. Porphyry and Simplicius mention three conditions; Ammonius, Philoponus, Olympiodorus and Elias/David mention four conditions; Ibn al-Ṭayyib reports a disagreement between two schools of unspecified commentators, arguing respectively that the conditions are three and five<sup>82</sup>. Avicenna’s four-fold enumeration seems not to depend directly on the accounts of previous commentators.

In the end, Avicenna presents a possible distinction between “paronym” and “related name”, which nonetheless seems to be already presupposed by his previous account of the two notions: “related” being something whose name is derived by the addition of a certain

---

get theirs from bravery” (παρόνυμα δὲ λέγεται ὅσα ἀπὸ τινος διαφέροντα τῇ πτώσει τὴν κατὰ τοῦνομα προσηγορίαν ἔχει, οἷον ἀπὸ τῆς γραμματικῆς ὁ γραμματικός καὶ ἀπὸ τῆς ἀνδρείας ὁ ἀνδρεῖος).

<sup>79</sup> The Arabic translators of Aristotle’s *Categories* chose, as an equivalent for παρόνυμον, the grammatical term *ism muštaq* (“derived name”). For a discussion of this grammatical category and its relation to the notion of paronymy, see SCHÖCK 2008.

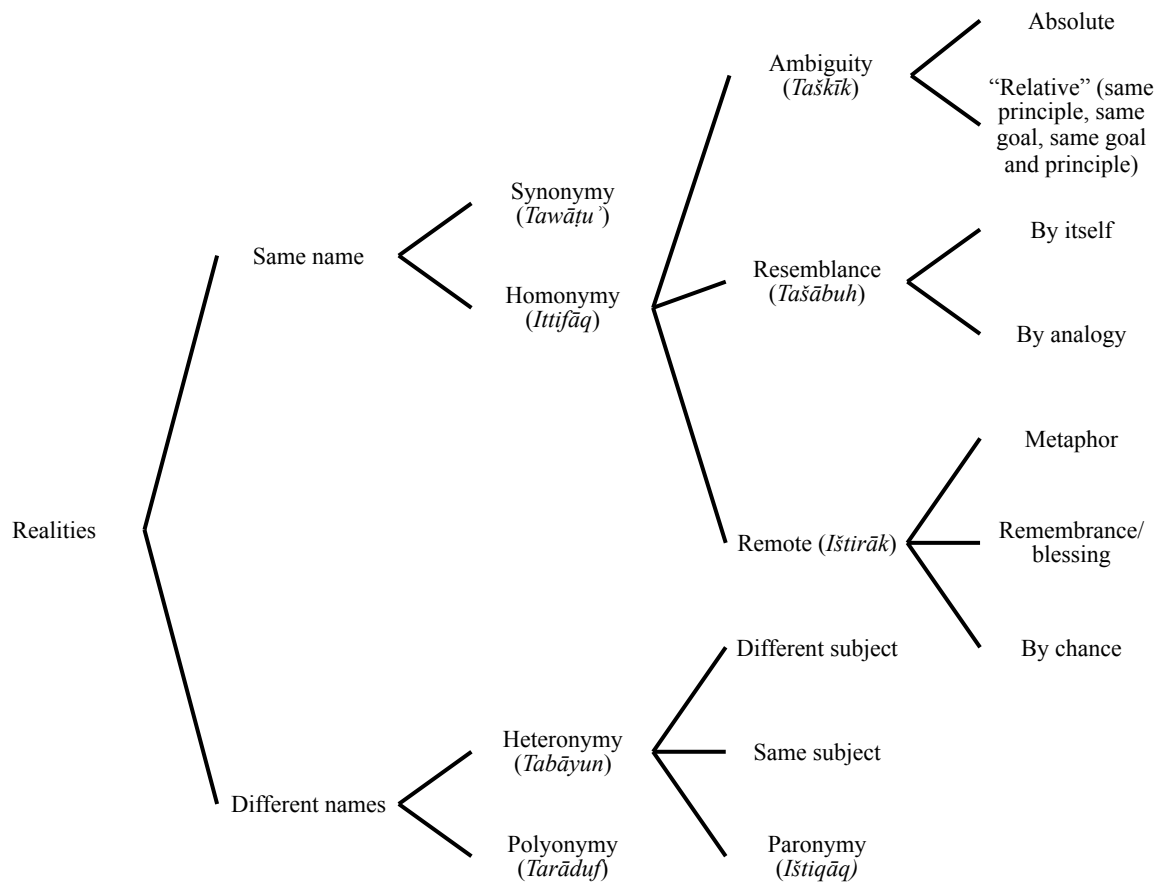
<sup>80</sup> See Olymp., *In Cat.* 39.23 – 40.13 (discussed by LUNA 1990, pp. 118-119).

<sup>81</sup> See LUNA 1990, pp. 117-121.

<sup>82</sup> Ibn al-Ṭayyib, *Tafsīr al-maḥūlāt*, 49.8-25.

relative suffix, “paronym” being something whose name is derived by means of an alteration of the primitive noun.

I.2.1 Avicenna's classification of homonyms, synonyms, heteronyms, polyonyms (*Maqūlāt* I.2)



### I.3

#### ON EXPLAINING THE MEANING OF WHAT IS SAID OF A SUBJECT OR IS NOT SAID [OF A SUBJECT], AND [WHAT] EXISTS IN A SUBJECT OR DOES NOT EXIST [IN A SUBJECT]

This section opens a long series of four chapters (including I.3-6) elaborating on very few lines of Aristotle's *Categories*, namely those where Aristotle introduces his famous ontological square (ch. 2) and the beginning of the following chapter (ch. 3). The importance which Avicenna attaches to these lines is not surprising at all, given the number of relevant philosophical issues they entail. Among these four chapters, the first two are strictly exegetical: the first (I.3) introduces the distinction between “being said of a subject” and “existent in a subject”, and deals mostly with the properties of predication *de subiecto*; the second (I.4) is completely devoted to the accident (“existent in a subject”) and its definition. The remaining two chapters (I.5-6) focus both on related problems, stemming from *aporiae* set forth by the ancient commentators. As for chapter I.3, it runs as follows:

[§1] Avicenna warns at first the reader about the necessity the philosopher has, sometimes, of disregarding common opinion. [§2] He then presents a five-fold list of the types of “attributes” (*ṣifāt*), meaning here “predicates” in a loose sense; this preliminary section aims to define the word “subject” (*mawḍūʿ*), found in Aristotle's text, on the basis of the type of attributes which can be said of it. “Subject” is defined, in the end, as that thing whose attributes are not – in the same time – extrinsic and constitutive. [§3] Avicenna presents thereafter the distinction between being-said-of and being-in a subject: the former being a property of a thing X such that it can be said “the subject is X”, the latter being a property of a thing X such that it can only be said that “X is in the subject”, or “the subject has X”. [§4] A proof is set, then, to show that what is meant by “said-of-a-subject” is actually the universal, since only universals can be properly said of a subject. Whereas “being-in-a-subject” corresponds *as a definition* to the word “accident”, “said-of-a-subject” is a bizarre and uncommon synonym for “universal”; this difference makes Aristotle's distinctions in *Cat.* 2 strained and confusing, even more so because the same word “subject” is employed in two different meanings (being actually “subject of predication” in one case, “substrate of inherence” in the other). [§5] Avicenna cites then some wrong opinions about “being-said-of”, regarded by some previous commentators as being equivalent to “essential universal”, by presenting a short literal quotation of an anonymous predecessor. A long refutation follows, focusing first [§6] on the fallacious logical form of the commentator's argument, and then [§7] on its philosophical deficiencies. [§8] In the end, Avicenna presents Aristotle's complete ontological square, without proposing substantial modifications for it.

[§1] (18.4-6). The very first lines of this chapter, exhorting the reader or the student to refrain, when necessary, from common opinion (*al-maṣhūr*), sound like a proem introducing to a text dense of philosophical novelties; and the follow-up, here and in chapters I.4-6, substantially confirms this first impression. *Maṣhūr*, an Arabic equivalent for the Greek ἔνδοξον, does not stand here for the opinion of the mass, but rather for the doctrines commonly accepted by philosophers: notably, the exegetical canons of the previous commentators of Aristotle's *Categories*, and the customary understanding of the related philosophical issues. These remarks say much about both Avicenna's personality as a thinker, and his non-passive attitude towards his predecessors (Aristotle included)<sup>83</sup>.

A first innovation presented by this chapter is both structural and doctrinal. Whereas ch. 2 of the *Categories* is notoriously opened by a division of “things that are said” (τὰ λεγόμενα) into things said “by combination” (κατὰ συμπλοκὴν) and things said “without any combination” (ἄνευ συμπλοκῆς), Avicenna seems here to ignore this distinction, and to tackle directly the following division of beings (τὰ ὄντα)<sup>84</sup>. The omission is certainly not haphazard, and probably depends both on the fact that Avicenna has already treated the distinction

<sup>83</sup> BERTOLACCI 2006, pp. 403-406; GUTAS 2014, pp. 252-255.

<sup>84</sup> The division of λεγόμενα is found at Arist. *Cat.* 1 a16-19.

between simple and complex utterance in the *Madḥal*<sup>85</sup>, and on the uselessness of such a distinction to the scope of the present chapter. He will reprise it, instead, straight after his division of accidental categories in II.5, when commenting upon Aristotle’s remark that none of the ten categories “is said just by itself in any affirmation, but by the combination of these with one another an affirmation is produced” (ἕκαστον δὲ τῶν εἰρημένων αὐτὸ μὲν καθ’ αὐτὸ ἐν οὐδεμιᾷ καταφάσει λέγεται, τῇ δὲ πρὸς ἄλληλα τούτων συμπλοκῇ κατάφασις γίγνεται [...])<sup>86</sup>.

[§2] (18.6 – 20.8). Instead of paraphrasing directly Aristotle’s text, Avicenna presents at first a list of types of “attributes” (*ṣifāt*), compiled on the basis of the relation entertained by these attributes with the thing they are said of (“the described thing”, *al-mawṣūf*), and the intrinsic characters of the *mawṣūf* itself. The immediate aim of the division seems to be the definition of the criteria according to which a *mawṣūf* can be said a “subject” (*mawḍū*), not absolutely, but with regard to the distinctions proposed by Aristotle in *Cat.* 2 and discussed in this chapter<sup>87</sup>.

[§2.1] (18.6 – 19.10). The criteria taken into account by Avicenna are mostly two: (1) the attribute’s essentiality, namely its being either constitutive or extrinsic to the essence of the *mawṣūf*; (2) the being-established (*istiqrār*) of the *mawṣūf*, namely its being either existing by itself or needy for something to make it exist as such. The combination of these two criteria produces five sorts of attributes:

(a) Attributes that are extrinsic (*ḥāriḡa*) and accidental (*‘āriḡa*) to an already established *mawṣūf*. Examples of this first typology are non-essential predicates, such as “white” or “risible” with respect to “man”.

(b) Attributes that are not extrinsic, but participate in the subsistence (*qiwām*) of a given *mawṣūf*, that is taken – in itself – as being already established. An example of this second typology is the predicate “animal” with regard to “man”: “man” is by itself stable and existent, but nonetheless “animal” is a part of its quiddity (therefore, it is essential to it).

(c) Attributes that make a non-established *mawṣūf* exist, without being parts of its essence. Avicenna’s example for this third typology is “form” as an attribute of “prime matter”: form is an extrinsic attribute, which nonetheless makes prime matter subsist in act in a certain way.

(d) Attributes whose *mawṣūf* is not established, but are parts of its “existence” (*wuḡūd*). Example: “substance”, inasmuch as it is an attribute of the animal body. A “body” as such does not exist without certain extrinsic attributes (quantity, quality and the like), but it displays intrinsic attributes - such as substantiality.

(e) Attributes that are said of a non-established *mawṣūf*, not directly, but of some primary attributes of its (be them constitutive or extrinsic). Example: “whiteness” and other qualities with regard to prime matter, “capable of motion and rest” with regard to body.

To understand these distinctions it is important, first of all, to set the exact meaning of “attribute” (*ṣifa*). The word, notoriously employed in the *kalām*-tradition to refer to the attributes of God, is probably to be understood here as “predicate”, though in a loose sense; i.e., as an entity that can be referred to another by a certain kind of predicative relation, independently of the ontological relation that actually holds between them<sup>88</sup>.

[§2.2] (19.11 – 20.8). The second sub-section presents a definition of “subject” (*mawḍū*) based on the previous classification of attributes, and a methodological justification of these preliminary distinctions. Avicenna defines “subject” as that sort of *mawṣūf* which, be it existent or not, accepts either purely extrinsic attributes or purely constitutive attributes.

<sup>85</sup> *Madḥal* I.5; see also above, the commentary on I.1 [§1].

<sup>86</sup> Arist. *Cat.* 2 a4-7. See below, II.5 [§5].

<sup>87</sup> This classification is extensively dealt with in KALBARCZYK 2018, pp. 74-115.

<sup>88</sup> See CAMINADA 2016, pp. 205-206.

Among the previous examples, the only case that does not suit this description is case (c), namely that of prime matter with respect to form.

As for the usefulness of the distinction (*tafsīl*), it consists first [α] of gaining knowledge of “this difference” (*hādā l-farq*), namely the difference between the various types of attributes. [β] In the second place, the distinction provides “a sort of common notion” (*ma nā ka-l-ġāmi*) for the word “subject”, which can be applied both to “being-said-of” and “being-in”. This point is not trivial at all, since Avicenna interprets “being-said-of” as a purely predicative relation, and “being-in” as a purely ontological notion: as he claims below [§4.2], the same word “subject” was employed here by Aristotle in two completely different meanings. Therefore, Avicenna’s definition of “subject” in this place should not be regarded as an independent theoretical acquisition, but rather as a complex exegetical tool designed to maintain the Aristotle’s formulation, despite its ambiguity. [γ] Thirdly, insofar as it allows us to distinguish accidents from forms, this distinction also saves us from the danger of mistaking forms and *differentiae* for accidents, an error already made by some commentators before Avicenna. This specific point will be the subject of chapter I.6, to which Avicenna clearly refers in the end of this paragraph.

[§3] (20.9-18). The description of “being-said-of” presented in this paragraph already hints at the main specificity of Avicenna’s interpretation. The two expressions “being said of a subject” (καθ’ ὑποκειμένου λέγεσθαι) and “being in a subject” (ἐν ὑποκειμένῳ εἶναι), used by Aristotle to build his ontological square, seem to have different meanings in Aristotle’s text: the former appears to signify an ontological status (being in such a way as to be inherent in a subject without being a part of it, and not being able to subsist without it), whereas the latter seemingly denotes a kind of predication. This ambiguity has suggested different interpretations in modern scholarship: some of them reaffirm this difference, others try instead to propose a unitary account of predication and inherence, by identifying both of them either as ontological or as logical determinations<sup>89</sup>. However, regardless whether “being in” is understood as accidental predication or as the way in which accidental properties exist, it is generally agreed that it is a condition that concerns non-constitutive attributes, whereas “said of” expresses an essential relation; the examples provided by Aristotle, here and elsewhere, seem to confirm this interpretation, along with the rule of transitive predication which is expounded in *Categories* 3 (1 b10-15): if man is said of the individual man and animal is said of man, then animal is said of the individual man, which implies that “said of” has an essential connotation<sup>90</sup>. Also the previous Greek and Arabic commentators, despite a number of slight differences, tendentially agree on the essentiality of “said-of” predication, to the exception of Andronicus of Rhodes, who - according to Simplicius - recognized that some non-essential properties may be said of their subjects<sup>91</sup>.

After having defined in par. [§2] a provisional, comprehensive notion of “subject” (*mawḍū*), Avicenna goes on to present “being said of a subject” and “existent in a subject” as the two “relations” (*nisbatuhū*) that a reality can entertain with a certain *mawḍū*. He does so,

---

<sup>89</sup> See for instance CHEN 1957, who sharply distinguishes between the logical/grammatical meaning of “subject” and the metaphysical one; that of ACKRILL 1963, who provides instead a substantially unitary interpretation by holding that, being this passage concerned with things, the relation represented by “being said of” should also be understood as having an ontological meaning; on the other hand, he deems it unnecessary to discuss the meanings of “subject”, since it “is a mere label for anything ‘said of’ it or ‘in’ it” (p. 76); or MORAVCSIK 1967, who holds that Aristotle is here discussing predication in a linguistic sense, but that the two alternatives “being in” and “said of” specifically refer to its different ontological counterparts (p. 85).

<sup>90</sup> For Avicenna’s interpretation of transitive said-of predication, see below, I.5 [§1].

<sup>91</sup> For a detailed account of the late ancient and Arabic exegesis see LUNA 2001, pp. 131-300; CAMINADA 2016, pp. 199-204.

apparently, in purely formal-linguistic terms. “Being said of a subject” is a predication of the following type (Y being a certain subject, X being a certain attribute):

Y is X,

where X, when predicated, remains morphologically identical (i.e., it does not undergo any sort of verbal modification), for instance in the sentence “man is an animal” (*al-insān ḥayawān*). Avicenna mentions no supplementary condition as to predication “of a subject”, neither the essentiality of the predicate with respect to the subject, nor its being universal. “Being-in-a-subject”, on the contrary, is a predication of the type:

X exists in Y, Y is X-ful,

where “X-ful” is a modified, paronymous form of the primitive attribute. For instance, being X the attribute “whiteness”, we do not say that a dress or a piece of wood are whiteness, but rather that whiteness exist in them, or that they are “whitened” (*mubayyaḍ*) or “white” (*abyaḍ*). Not even in the case of “being-in”, Avicenna provides an account of the underlying ontological relation.

**[§4] (20.18 – 23.3).** After presenting in formal terms the two sorts of predication, Avicenna moves on to determine the logical/ontological relations that correspond to each one of them.

**[§4.1] (20.18 – 22.7).** Most part of this section is devoted to the explanation of “being said of a subject”, whose characters must be clarified further. This meaning is set by means of what Avicenna will later call a “proof” (*ḥuḡḡa*, 22.19), whose actual consistency as an argument is nonetheless disputable. The form of the proof echoes the arguments by distinction of which the *Ilāhiyyāt* of the *Šifāʾ* provides many interesting examples<sup>92</sup>.

The subject of something “said-of”, taken by itself (that is, without any quantification), can be either **[a]** universal, or **[b]** particular. If **[b]** it is particular, then its predicate may be either **[ba]** universal or **[bb]** particular. Now, **[bb]** in the case of a particular predicate, no true predication “of” the subject subsists, since between the subject and the predicate there is a relation of pure identity. This is a predication acceptable in linguistic terms (*bi-ḥasab al-qawl wa-l-lisān*), but not in “natural” terms (*bi-ḥasab al-ṭabʿ*). A predication such as “Zayd is the son of ‘Amr” displays two names of the same individual (unless ‘Amr has many children, which however would make “son of ‘Amr” a predicate said of many things, i.e. a universal); the same for a predication such as “this white (man) is this writer”, where none of the two attributes is worthier of being subject than the other. Now, the white thing’s and the writer’s being “this man” could look like a more appropriate predicate, for both of them: we could say “this white thing is this man”, “this writer is this man”. Still, with regard to this abstract, individual consideration, none of them is really worthier of being subject or predicate than the other. This also holds for negative predications, namely for the cases where the two abstract considerations do not refer to the same thing, but to different things. For instance, with regard to “this writer” and “this long [thing]”, which are not identical, we can say indifferently “this writer is not this long [thing]” and “this long [thing] is not this writer”.

Whereas this problem seems to be absent from the Greek tradition, a discussion of the same issue is found in Ibn al-Ṭayyib’s commentary. In reply to a doubt concerning the fact that Aristotle does not mention individual predicates in the *Categories*, Ibn al-Ṭayyib<sup>93</sup> argues that an individual may only be predicated either of itself, either of another individual, either of a universal. Now, predication is an act that connects the universal forms impressed in the soul

---

<sup>92</sup> See BERTOLACCI 2006, pp. 611-612.

<sup>93</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 71.1-3 (exposition of the doubt), 71.4-21 (solution).



(the predicates) with their perceptible counterparts (the subjects), in such a way as to “confirm” or “ascertain” (*haqqaqa*) the existence (*wuġūd*) of the predicate. Thus, an individual cannot be predicated of himself, for the existence of an individual is already evident by sense-perception and need not be ascertained; and it is neither predicated of another individual, nor of a universal notion. If something individual is said of itself, the name (*al-ism*) only is predicated, but not the meaning (*al-ma'nā*)<sup>94</sup> – which means that they are predicated accidentally.

Solution **[bb]**, then, is impossible; even though Avicenna does not make it explicit, this seems to entail that solution **[ba]** is correct.

**[a]** As to the case where the subject is universal, its predicate cannot but **[aa]** be universal, for a universal could **[ab]** accept a particular predicate only when quantified as a particular (“some men are white”).

Now, this proof is designed to demonstrate that be the subject universal or particular, a predicate “said of” is necessarily accompanied (*yalzamuhū*) by the fact of being universal, without being by itself equivalent to “universal”. As a matter of fact, Avicenna’s sketchy account of “said-of” predication in **[§3]** may well suit identity-statements such as “this white is this writer”, for it does not explicitly require the predicate to provide certain, additional information about the subject; however, it is clear that a worthier form of predication (“according to nature”) is attained only when universals are predicated. The weakness of this argument lies in the absence of a satisfying explanation for what is meant by predication “according to nature”: the criteria which define this worthier form of predication remain unexpressed, and the proof as a whole is biased by its substantial circularity.

If this is the case, however, “universal” is not a synonym for “said-of-a-subject”, identical with it *tout court*, but a necessary concomitant of it; whereas, if it were taken as a perfect synonym, Aristotle would have invented a confusing and useless notion, and compared as equal – in this place - two different meanings of the same word, *mawḍū'*: “subject of predication” (in the case of “said-of”) and “substrate of inherence” (in the case of “being-in”). Be as it may, Avicenna apparently decides to treat “said-of-a-subject” as a sort of synonym of “universal”, since this is the real point of Aristotle’s distinction (which gives rise to the ontological square, based on the double opposition universal-particular, substance-accident).

**[§4.2] (22.8 – 23.3)**. The argument continues in the second subsection: here Avicenna concludes that “said of a subject” may be used as an equivalent for universal, whereas “existent in-a-subject” may be understood as an equivalent of “accident”. Existence in-a-subject does not posit the same problems as the notion of “said-of”, since existence in-a-subject is what actually defines or describes the accident: this definition will be analysed and clarified in its parts in chapter I.4 (see also *Ilāhiyyāt* II.1, where this definition is reprised<sup>95</sup>). It is therefore proper to use this expression to refer to the accident, since it perfectly converts with the word “accident” (*'araḍ*); whereas, on the contrary, the actual definition of “universal”, being “said of many things”, is not equivalent to “said of a subject”.

**[§5] (23.4-17)**. Paragraphs **[§5-7]** contain a long refutation of the traditional view according to which predication “of” a subject is identical with essential predication.

In paragraph **[§5]** Avicenna presents some wrong views advocated by a group (*qawmun*) of anonymous predecessors: his opponents hold that what is “universal” is necessarily essential (*dātiyyan*) and constitutive of something’s quiddity (*muqawwiman li-l-māhiyyati*), and that what is existent in a subject is accidental (*'araḍī*), in so far as it is not essential. This is a mistake, according to Avicenna, since between “existent in a subject” – namely “accident” (*'araḍ*) – on the one hand, and “accidental” (*'araḍī*) on the other hand, there is a difference the previous commentators were not aware of. For instance, they said that the predicate

<sup>94</sup> Ibn al-Ṭayyib, *Tafsīr al-maḳūlāt* 71.16-18.

<sup>95</sup> *Ilāhiyyāt* II.1, 57.8-10.

“white” (a common accident) is not said-of a white thing, but existent in the white thing as in a subject. This is incorrect, since the predicate “white” – in ontological terms – corresponds to a white substance, a compound of a substance and an accident; whereas an accident, on the contrary, is the abstract property from which “white” derives its name, namely whiteness. This error was very likely induced by the commentators’ misleading interpretation of Aristotle’s καθ’ ὑποκειμένου λέγεσθαι as essential predication, and by the conviction that Aristotle meant, by the apparently opposite notion of ἐν ὑποκειμένῳ εἶναι, accidental predication. For this reason they even came to conclude that *any* universal as such is essential, and *no* non-essential predicate is universal. In order to better explain this mistake, Avicenna quotes literally the words (*lafz*) of an anonymous, prominent representative (*ba’du muqaddamihim*) of this group of commentators. The commentator’s words resemble quite closely, despite some remarkable differences, a passage from Porphyry’s shorter commentary on the *Categories*:

Porphyry, <i>In Arist. Cat.</i> , 80.4-8	Avicenna, <i>Maqūlāt</i> , 23.11-17
<p>[α] Καθ’ ὑποκειμένου φησὶν ἐκεῖνο κατηγορεῖσθαι τινος, ὅταν ἐν τῷ τί ἐστι κατηγορηται ἐκεῖνο &lt;ὁ&gt; ἀποδίδοται.</p> <p>[Aristotle] says that something is predicated of something as of a subject when it is stated as belonging to the essence.</p>	<p>[1] wa-inna-mā qultu [qulta?] inna l-kulliyya huwa llaḍī yuḥmalu ‘alā ḡuz’iyyātihī ‘an ṭarīqi «mā l-šay’u», wa-huwa llaḍī yuqālu ‘alā mawḍū’in, li-annahū qad yuḥmalu ‘alā l-mawḍū’i ašyā’u ‘alā ḡayri hādihī l-ḡihati;</p> <p>But I said that the universal is what is predicated of its particulars according to the way of “what [is] the thing?”, and that it is what is said of a subject, because sometimes some things are predicated of their subject in a way [which is] different from this;</p>
<p>[β] οἷον τὸ περιπατεῖν κατηγορεῖται κατὰ Σωκράτους·</p> <p>For example, ‘walking’ is predicated of Socrates.</p>	<p>[2] miṭālu ḍālika annā naḥmalu ‘alā Zaydin annahū yamšī, fa-naqūlu: inna Zaydan yamšī;</p> <p>an example of that is the fact that we say of Zayd that he walks, and so we say: “Zayd walks”;</p>
	<p>[3] lākinna ma’nā yamšī laysa yuḥmalu ‘alā Zaydin ‘alā annahū amrun kulliyyun wa-Zaydun ḡuz’iyyuhū; li-annahū laysa yuḥmalu ‘alā Zaydin ‘inda l-mas’alati ‘anhu mā huwa;</p> <p>but the meaning of “walks” is not predicated of Zayd according to [the fact] that it is a universal thing, and Zayd a particular of its; because it is not said of Zayd when [one] asks, about him, “what is he?”.</p>
<p>[γ] ἀλλ’ ἐὰν ἀποδιδῶμεν, τί ἐστὶν Σωκράτης, οὐκ ἂν εἴποιμεν αὐτὸν τὸ περιπατεῖν, ὥστε οὐ καθ’ ὑποκειμένου κατηγορεῖται τοῦ Σωκράτους τὸ περιπατεῖν.</p> <p>But if we were to give the essence of Socrates, we would not say that he is walking, because</p>	<p>[4] li-annahū in sa’ala sā’ilun: mā huwa Zaydun? fa-aḡābahu l-mas’ūlu bi-annahū yamšī, kāna ḡawābuhū lahū ḥaṭa’an wa-kiḍban; li-anna ma’nā yamšī laysa yadullu ‘alā māhiyyati Zaydin, bal huwa fi’lun min af’alihī.</p> <p>Because if someone asked: “What is Zayd?”, and the respondent answered: “he walks”, his answer to him would be</p>

'walking' is not predicated of Socrates as of a subject <sup>96</sup> .	a mistake, and a lie; because the meaning of "walks" does not express Zayd's essence, but is only a certain action of his.
---	--

It is possible that this passage be either a reworked Arabic translation of Porphyry's short exposition on the *Categories*, or a rephrasing of Porphyry's words found in some previous Arabic commentary. One manuscript (E) presents before the quotation, straight after the expression "a protagonist among them", the insertion of a short gloss that runs *ya 'nī Mattā* ("namely, Mattā"); this interesting reference suggests us that the 10<sup>th</sup>-century logician Abū Bišr Mattā Ibn Yūnus might have been a direct or indirect target of Avicenna's refutation<sup>97</sup>.

[§6] (23.17 – 24.16)<sup>98</sup> The refutation begins immediately after the quotation: Avicenna's first objections are directed against the logical inconsistency of the commentator's argument.

[§6.1] (23.17-22). Avicenna presents, first, two objections related to the logical-linguistic form of the argument. (1) Firstly, what the commentator wishes to demonstrate (his "problem" or *quaesitum*, *maṭlūb*<sup>99</sup>) is that "a universal is what is predicated according to the way of 'what is it?'" Indeed, the commentator's argument in the quoted passage does not come to this conclusion directly. Avicenna formalizes it by means of the following syllogism:

Every non-predicate according to the way of "what is it?" is non-universal;  
 "Walks" is a non-predicate according to the way of "what is it?"

---

"Walks" is non-universal.

The major premise of this syllogism is nothing but the contradictory converse (*'aks al-naqīd*) of the problem<sup>100</sup>. Since a proposition implies its contradictory converse, and the two propositions affirm the same thing, the problem would immediately follow from the position of the first premise. Therefore, the commentator's proof evidently begs the question. (2) The second objection has to do with the commentator's choice of the predicate "walks" as an example, in this place. According to Avicenna, "walks" seems used by the commentator only to better hide his error, since it is a verb; however, he should have more properly used a noun, such as "walker" (being an active participle, *māšīn*), and in that case the wrongness of his doctrine would have been much more evident.

[§6.2] (24.1-13). Thereafter, Avicenna insists again on the circularity of the commentator's proof. If he held the problem to be somehow deducible from its contradictory converse, rather than immediately following from it, then there are two possibilities: since the problem is doubtful, either he held the contradictory converse to be clear by itself; or - since the premises of syllogisms are clearer than the conclusions they aim at - he held that, by clarifying the contradictory converse, the problem itself would become clear. Both

---

<sup>96</sup> Tr. STRANGE 1992, p. 63.

<sup>97</sup> For a detailed discussion of the quotation and the main hypotheses, see CAMINADA 2016, pp. 208-222.

<sup>98</sup> Sections [§6-8] of the commentary are a revised version of CAMINADA 2016, pp. 222-227.

<sup>99</sup> *Maṭlūb* is defined, in the logical section of the *Naḡāt*, as the conclusion a syllogism is directed to: "As long as the deduction is not deduced, but is something towards which the syllogism is directed, it is called a problem (*maṭlūb*). When it is deduced, it is called a conclusion (*natīḡa*)" (*Naḡāt* 53.7-8; English translation in AHMED 2011, p. 44).

<sup>100</sup> I adopt here the terminology used by A. Ahmed in his English translation of the logical section of the *Naḡāt*, where every conclusion is said to imply both its converse and its contradictory converse (*Naḡāt* 95,11; AHMED 2011, p. 76). Avicenna discusses more in detail contradictory converses in the section of the *Šifā'* which paraphrases the *Prior Analytics* (*Qiyās* II.2, 93.10 – 94.9): here he describes *'aks al-naqīd* as "taking the contradictory of the predicate, and positing it as the subject, and positing the contradictory of the subject as the predicate" (93.10-12). In the case of universal affirmative propositions, such as the one we are concerned with here, "Every C is B" implies that "Everything which is not B is not C".

alternatives, however, are untenable: in the first case, this syllogism would be useless, since, in order to deduce the problem, it would suffice to assume the contradictory converse alone. In the second case, by using the contradictory converse as a premise in this syllogism, he does not demonstrate it, but took its clarity for granted, which again goes back to the first case.

[§6.3] (24.13-16). In fact, for Avicenna “walks” has no other utility, since he holds it to be a mere substitute for the expression “every non-essential predicate”; if it is so, then the commentator is deducing “every non-essential predicate is not universal” from “every non-essential predicate is not universal”.

[§7] (24.17 – 27.9) The “doctrinal” refutation follows two main lines of argumentation. Avicenna aims, first, to establish a correct way of understanding predication “of” a subject; in the second place, he aims to clarify the distinction between accident and accidental, taking respectively “accident” as an ontological item and “accidental” as a non-essential predicable (such as common accident and property). The two lines are actually intertwined, and both are related to the quotation of the commentator: by proposing a reasonable interpretation of synonymous predication, Avicenna wishes to reintegrate properties and common accidents (i.e. non-essential predicates) among universals; by distinguishing between accident and accidental, he wishes to remove any possible confusion about the nature of non-essential predicates, and to show why his own account of predication of-a-subject is suitable for them as well.

[§7.1] (24.17 – 25.20) The commentator deems it impossible that Zayd be a particular of “walks”, since “walks” does not express Zayd’s essence. This depends on the fact that he interprets any relation of a universal to its particular as an essential relation, where the definition of the universal is shared by the particular. This error can be a consequence of a superficial opinion regarding the universal; if Zayd is intuitively thought of as an individual of the species “man”, it may also be thought that he cannot be a particular of any other thing. Avicenna then provides here a more correct definition of “particular”, which entails that of “universal” as well. “Particular” is said to be the subject of a description (*waṣf*) which may be predicated of it and something else, therefore of many things, in act or in potency. The attribute, which is said of many things, as was clarified above, is the universal. The specification “in act or in potency” aims to include in the notion of universal attribute sketched here all the kinds of supposable universals (those which are predicated actually of their many subjects, those which are such only in potency)<sup>101</sup>. The case where the attribute is predicated of its subject exclusively is that of the particular itself: if “Zayd” is only predicated of a certain man, this man cannot be a particular of Zayd, since Zayd is a particular itself<sup>102</sup>. Avicenna then recalls that being “essential” is an additional condition, for a universal, since there are universals (recognized as such by all scholars) that may not constitute the quiddity of their particulars. These are properties, such as “risible”; they may be essential for the particulars of their own genus (“risible” as a species with respect to “this individual risible”),

<sup>101</sup> See *Ilāhiyyāt* V.1, 195.5-12 (tr. MARMURA 2005, p. 148, slightly modified): “We say that the universal is spoken of in three ways: ‘Universal’ is said of the meaning by way of its being actually predicated of many – as, for example, the human being. Universal is [also] predicated of a meaning if it is permissible for it to be predicated of many, even if it is not a condition that these should exist in actuality – as, for example, the heptagonal house. [...] ‘The universal’ is [also] said of the meaning whose very conception does not prevent its being predicated of many. It is only prevented if some cause prevents it and proof indicates [such prevention]. An example of this is [the case of] the sun and the earth” (*fa-naqūlu inna l-kulliyya qad yuqālu ‘alā wuḡūhin talāṭatin: fa-yuqālu kulliyyun li-l-ma’nā min ḡihati annahū maqūlun bi-l-fi’li ‘ala kaṭīrīna, miṭla l-insani. Wa-yuqālu kulliyyun li-l-ma’nā idā kāna ḡā’izan an yuḡmala ‘alā kaṭīrina wa-in lam yuṣṭaratu annahum mawḡūdūna bi-l-fi’li, miṭla ma’nā l-bayt al-musabba’ [...]. Wa-yuqālu kulliyyun li-l-ma’nā llaḡī lā māni’a min taṣawwurihī an yuqāla ‘alā kaṭīrīna innamā yumna’u minhū in mana’a sababun wa yudallu ilayhī dalīlun, miṭla l-šams wa-l-‘ard*).

<sup>102</sup> See *Naḡāt* 10.14-11.1.

but for sure they are not essential for the particulars of other genera (such as “man”), of which they are predicated accidentally.

Avicenna’s insistence on the non-essentiality of universals being widely agreed upon by logicians suggests a blame for incoherence at his opponents’ address; near the end of the chapter ([§8]), he will qualify the fault of these commentators as “negligence” (*iġfāl*).

[§7.2] (26.1-17) The following part of the refutation is based upon a wrong assumption that Avicenna presumably ascribes to the commentator: “‘White’ [said of] man (and ‘walks’ said of Zayd) does not belong to what is said of a subject, so it is an accident”. This statement is not found, in such a formulation, neither in the commentator’s words, nor in Porphyry’s commentary; it seems to be, however, entailed by them. If one holds that every universal is essential – as the opponent does – then he should rule non-essential predicates out of the domain of universals; since these predicates do not take part in the quiddity of their subjects, they must be predicated in such a way as not to give their definition; but this corresponds to how Aristotle describes the predication of accidents, therefore they must be accidents.

According to Avicenna, there are two options here: he who holds this is either referring to “accident” as something which is said, by pure homonymy, of accident and accidental; or he holds accident and accidental to be actually the same thing, which would imply that both accident and accidental are “in a subject”. In the former case, the division of beings should actually be made by combining six elements instead of four: universal and particular, substance and accident, substantial and accidental, taking accident and accidental as distinct items. Avicenna silently dismisses this hypothesis, very likely on account of its absurdity<sup>103</sup>. In the latter case instead, since the accident is predicated paronymously, in such a way as to give the subject its name, but not the definition, then also accidental predicates like “white” and “walks” should not grant Zayd their definition. However, this is false: the definition of “walks” and “white” are both applied, in some sense, to Zayd, when he is said to be walking or to be white; for they are predicated of him, although they do not amount to his own definition.

[§7.3] (26.17 - 27.9) In the following section, Avicenna blames the commentator’s incoherence even more explicitly. To understand how the accident may be predicated synonymously, it is necessary to recall what “these people” themselves said, namely that all universals are predicated synonymously, including even the *proprium*, which is not essential. Avicenna then implicitly refers to a passage from the second part of the *Isagoge*, where the common features of genus and property are discussed: there Porphyry expressly says that “common [...] is the fact that a genus is synonymously predicated of its own species, and a property of that of which it is a property”<sup>104</sup>.

This point is reprised, though not acritically, by Porphyry’s Greek and Arabic commentators; to some of them Avicenna is for sure referring here, when he speaks of all those who agreed on this point. Avicenna himself discusses this point in *Madhal* II 2, and there refers to a judgment of Porphyry’s “regarding the book of the *Categories*”, namely that being predicated of a subject, and synonymously, means being essentially predicated<sup>105</sup>. These parallel passages in Avicenna are then to be read together: they point at Porphyry’s apparent contradiction with regard to the interpretation of synonymous predication, on the one hand, and his conception of essential and accidental universals, on the other.

It is now necessary, for Avicenna, to recall the correct interpretation of “synonymous predication”, which does not entail that the definition of the predicate corresponds, as a whole

---

<sup>103</sup> This confirms Avicenna’s agreement with Aristotle’s division of beings (along with the fact that, in the end of the chapter, he will propose it again integrally as a result of these discussions; see below, Appendix [§4]).

<sup>104</sup> Porph. *Isag.* 16.6-7 (Tr. BARNES 2003, p. 14): κοινὸν δὲ καὶ τὸ συνωνύμως κατηγορεῖσθαι τὸ γένος τῶν οἰκειῶν εἰδῶν καὶ τὸ ἴδιον ὧν ἂν ἦ ἴδιον.

<sup>105</sup> *Madhal* II.2, 100.14-18. For an English translation of this passage, along with the discussion of the Greek and Arabic commentators’ attitude towards *Isagoge* 16.6-7, see DI VINCENZO 2016, pp. 175 ff.

or as a part, to the definition of the subject; it only means that the subject is “described” (*yūṣafu*) by that definition. It is therefore possible to say that Zayd is “risible” and “white”, in the same way as he is said to be “man” or “animal”; i.e. inasmuch as the definition of all these predicates describes him, regardless whether they take part in his constitution as Zayd or not.

[§8] (27.10-21). Avicenna’s refutation ends with another critical remark: he blames the previous commentators for their negligence, and sums their mistakes up. He finally provides, thereafter, a division of beings, corresponding exactly to Aristotle’s “ontological square”. Things (*al-umūr*) may be:

(1) said of a subject and not existent in a subject, being the universals of substances (*kulliyāt ašyā’ hiya ḡawāhir*);

(2) existent in a subject and not said in a subject, like particular accidents (*ḡuz’iyyāt al-a’rād*);

(3) said of a subject and existent in a subject, like universal accidents (*kulliyāt al-a’rād*), like universal whiteness (*al-bayād al-kullī*);

(4) neither said of a subject nor existent in a subject, like particular substances (*ḡuz’iyyāt al-ḡawāhir*), such as Zayd, ‘Amr, a particular matter, a particular form, a particular soul.

The list of substances Avicenna gives as examples for the fourth member of the division (compound, form, matter, soul) mirrors the list of substances given in *Ilāhiyyāt* II.1, to the only exception of the intellect<sup>106</sup>.

---

<sup>106</sup> *Ilāhiyyāt* II.1, 60.9-14.

## I.4

### ON EXPLAINING THE DEFINITION OF “ACCIDENT”, THAT IS “EXISTENT IN A SUBJECT”

The extended chapter that Avicenna devotes to Aristotle’s description of “being-in-a-subject” draws heavily on the discussions of the previous exegetes, which are nonetheless reassessed and reworked in a peculiar fashion. Like his predecessors, Avicenna analyzes Aristotle’s definition (“what is in something, not as a part, and cannot exist separately from what it is in”) into three parts: “existence in something” (inherence), “not as a part” and “cannot exist separately from what it is in” (inseparability). For the first and the third part of the definition he presents a set of doubts and replies, that become especially complex and variegated in the case of inseparability.

[§1] Firstly, Avicenna quotes literally Aristotle’s description; [§2] he then presents the nature of this description, which is in fact neither an actual definition (*ḥadd*) nor a proper description (*rasm*), but an explanation of the notion of “accident” in common terms, with no particular philosophical technicalities. Since the first part of the definition, “existent in something”, is common to many things, the description as a whole aims to specify the inherence of an accident in its subject, so as to distinguish it from other types of inherence. [§3] Some doubts concerning the first part, “existent in something”, are recalled and solved: they regard the inherence of relatives in their subject, the inherence of things in time and place, the inherence of the whole in its parts, the inherence of form in matter. [§4] Also the second part of the description, “not as a part of what it is in”, is presented as a criterion for distinguishing the inherence of accidents from other sorts of inherence; curiously enough, Avicenna mentions no particular doubts in this regard. It is rather after having presented the third part of the description, the requisite of inseparability ([§5]), that he engages in a lengthy discussion of doubts, subdivided into two main groups. [§6] The first group comprises: a doubt related to the inherence of substances in “absolute” accidents, such as absolute time (i.e., time as such, and not a particular time), absolute place (i.e., space), absolute accidents in general; a doubt related to the inseparability of certain substances, such as the celestial bodies, from their fixed place; a doubt related to the inseparability of form from matter, and one about the inseparability of certain matters from their forms. [§7] The second group comprises doubts that concern constitutive accidents, which are apparently inseparable, and accidents that are apparently separable, such as the fragrance of an apple or the heat produced by fire. The chapter ends with Avicenna’s solution to the last doubt.

[§1] (28.4-5). In this chapter, Avicenna’s exegesis follows quite closely the previous Greek and Arabic commentaries in terms of structure, whereas the philosophical content presents some interesting novelties. In chapter I.3, “existent in a subject” has already been identified with the accident<sup>107</sup>; Avicenna now enunciates the complete definition, which he did not mention before, and goes on to determine the character of Aristotle’s description and to expound progressively the meaning of its different parts<sup>108</sup>.

[§2] (28.5 – 29.5). The first part of the definition, “existent in something” (*al-mawǧūd fi šayʿin*, corresponding to Aristotle’s ὃ ἐν τινί), does not apply to accidents only, but to many other things. To some things it applies by synonymy, that is, certain things are inherent in something in exactly the same manner (for instance, Zayd and ‘Amr in a market, for they both exist locally therein); to others it applies by ambiguity (*taškīk*) or resemblance, meaning that certain things have related or similar kinds of inherence (it is not clear what examples Avicenna is envisaging here; we could maybe think, for instance, of the existence of Zayd *in* the market and that of wine *in* a jar). As a whole, however, inherence is homonymous, since its multiple meanings are not reducible to a unique essential determination: this prevents us from conceiving of it as of a genus. This point stands as an indirect reply to those

---

<sup>107</sup> See above, I.3, [§4.2].

<sup>108</sup> Arist. *Cat.* 1 a24-25; *Manṭiq Aristū* 34.9-10.

commentators who treat Aristotle’s description as a standard definition, where “in something” plays the role of the genus, and “not as a part of it” and “inseparable from what it is in” play the role of actual specific *differentiae*. In the Greek commentary tradition, as remarked by C. Luna, there is no universal agreement on this point<sup>109</sup>: whereas Porphyry and Philoponus qualify Aristotle’s description squarely as a “definition” (respectively as ὄρος and ὀρισμός)<sup>110</sup>, Ammonius rather calls it “akin to a definition” (ἀνάλογον [...] ὀρισμῶ)<sup>111</sup> and Olympiodorus and Elias/David a “description” (ὕπογραφή)<sup>112</sup>; Simplicius treats the parts of the description expressly as a genus and its *differentiae*<sup>113</sup>. Avicenna, on his part, despite always referring to it by the name “description” (*rasm*), says here that it is neither an actual definition nor an actual description: it is only a way of explaining a noun by means of a more familiar, polysemous expression, being “existent in something”, which needs to be gradually precised for the exact meaning to be grasped. Each part of the description, as a matter of fact, distinguishes the way of inherence proper of accidents from other sorts of inherence; Avicenna’s prevalent lexical choice for “distinguishing”, here and elsewhere in this chapter, is *faraqa* or *farraqa*, stemming from a root more neutral than *f-ṣ-l*, which in turn is associated with the notion of *differentia specifica* (*faṣl*).

Before discussing specifically the inherence of accidents, the ancient commentators - as well as Ibn Suwār and Ibn al-Ṭayyib - present a list of the possible meanings of “inherence” (ἐνεῖναι in Greek) based on a passage of the fourth book of Aristotle’s *Physics*<sup>114</sup>. Whereas Porphyry, however, presents a nine-fold list (Porphyry’s List = PL) - by adding one meaning to Aristotle’s eight-fold enumeration - Simplicius and the Alexandrine commentators present eleven items (Long List = LL), later reprised by some Arabic commentators - at least, Ibn Suwār, Ibn al-Ṭayyib and Avicenna himself, in his *Muḥtaṣar al-awsaṭ fī l-manṭiq* (LL<sub>2</sub>). A comparative scheme of these lists is the following:

Porphyry <sup>115</sup> [PL]	Simplicius, Ammonius, Philoponus, Olympiodorus, Elias/David <sup>116</sup> [LL]	Ibn Suwār, Ibn al-Ṭayyib, Avicenna ( <i>Muḥtaṣar al-awsaṭ</i> ) <sup>117</sup> [LL <sub>2</sub> ]
[1] ἐν τόπῳ (in a place)	✓	✓
[2] ὡς ἐν ἀγγείῳ (as in a recipient)	✓	✓
[3] ὡς τὸ μέρος ἐν τῷ ὅλῳ (as a part in the whole)	✓	✓
[4] ὡς τὸ ὅλον ἐν πᾶσι τοῖς αὐτοῦ μέρεσιν (as the whole in its parts)	✓	✓

<sup>109</sup> See LUNA 2001, pp. 181-190.

<sup>110</sup> Porph. *In Cat.* 79.35; Phil. *In Cat.* 32.3-6.

<sup>111</sup> Amm. *In Cat.* 26.31.

<sup>112</sup> Olymp. *In Cat.* 46.26; Elias/David, *In Cat.* 148.35 – 149.2.

<sup>113</sup> Simpl. *In Cat.*, 46.4-5.

<sup>114</sup> Arist. *Phys.* Δ 3, 210 a14-25.

<sup>115</sup> Porph. *In Cat.* 77.18 – 78.5.

<sup>116</sup> Simpl. *In Cat.* 46.5-14; Olymp. *In Cat.* 47.2-21; Elias/David, *In Cat.* 149.16-33.

<sup>117</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 57.25 – 58.23; Ibn Suwār, *Glosses; Muḥtaṣar al-awsaṭ* 328-329.



[5] ὡς ἐν τῷ γένει τὸ εἶδος (as the species in the genus)	✓	✓
[6] ὡς γένος ἐν τῷ εἶδει (as the genus in the species)	✓	✓
[7] ὡς ἐν τέλει (as in the goal)	✓	✓
[8] ἐν τῷ κρατοῦντι (as in him who rules)	✓	✓
[9] ὡς ἐν τῇ ὕλῃ τὸ εἶδος (as form in matter)	✓	✓
	[10] ἐν χρόνῳ (in time)	✓
	[11] ἐν ὑποκειμένῳ (in a subject)	✓

Despite presenting the same list of eleven in the *Muḥtaṣar al-awsaṭ*, in *Maqūlāt* I.4 Avicenna does not introduce it: he rather takes directly many of these sorts of inherence (together with many others, that are not contemplated in the list; see table I.4.1 in the appendix to this chapter) as terms of comparison for the inherence of accidents, when discussing the single parts of Aristotle’s description. Avicenna’s procedure in the *Maqūlāt* is less schematic and more thoroughly deductive: instead of choosing the appropriate item from a given list, a practice which presents a risk of circularity (especially in the case of LL and LL<sub>2</sub>, that already display inherence “in a subject” as a category *ad hoc*), he engages with a step-by-step discussion of Aristotle’s description of the accident, on the basis of which he becomes gradually able to exclude any other sort of inherence.

As Avicenna remarks in this paragraph, for instance, the first part of the description - “existent in something” - already marks a distinction: if understood as meaning “existent in *one* thing”, it sets a difference between inherence in a single thing, proper of accidents, and inherence in multiple things, which is proper - for instance - of the inherence of the whole (*al-kull*) in its parts (item [4] of Porphyry’s list). Now, a certain whole (for instance a set of ten, *ašariyya*) is realized as existing “in” the sum of its parts, not in each one of them: for this reason it cannot be said that the whole is an accident in its parts. This is the standard solution of an aporia discussed by some ancient commentators (Dexippus, Simplicius, Philoponus and Elias/David) who, though presenting different arguments, substantially agree upon the fact that the whole differs from accident in that it is ἔν τισιν (in some *things*), not ἔν τινι (in something)<sup>118</sup>. Avicenna seems to endorse here the standard view, though it will become clear (near the end of the following paragraph) that he holds the problem in itself to be useless, and a source of confusion and mistakes.

**[§3] (29.6 – 31.11).** After having presented the first part of the description, Avicenna mentions and solves a series of doubts concerning “existence in something”.

<sup>118</sup> Dex. *In Cat.* 24.19 – 25.7; Simpl. *In Cat.* 47.24-28; Phil. *In Cat.* 34.3-4; Elias/David, *In Cat.* 151.16-18. Actually, Dexippus’ discussion of the aporia is more complex, and the solution slightly different, since the commentator ultimately argues that the whole does not inhere in a single part of its, but in all of (ἐν ἅπασι) its parts. See LUNA 2001, pp. 219-225.

[§3.1] (29.6-13). Avicenna dismisses a first group of doubts very quickly, by referring to further, more detailed discussions of the same subjects.

(1) The first doubt goes: how is it that the relative (*al-muḍāf*, Aristotle’s πρὸς τι) is an accident, since it exists in two things instead of one? Avicenna does not reply here, nor will he do in the section on relatives. In chapter II.2 and in the discussion of relatives in the *Ilāhiyyāt*, Avicenna will clarify that relatives are singular properties that exist in single subjects: the relation of fatherhood holds between two properties, being-father and being-son, which exist separately in the father and in the son<sup>119</sup>.

(2-3) The second and the third doubt are similar, and Avicenna’s reply is identical: how is it that time and place are accidents, but apparently do not exist in anything? Avicenna’s reply is that time and place exist in something, and this will be accurately explained in natural philosophy. As a matter of fact, in the *Physics* of the *Šifā*’ Avicenna identifies place with the surface which is the extremity of the body containing a certain other body (*al-saṭḥ alladī huwa nihāyat al-ḡism al-ḥāwī*)<sup>120</sup>: being a surface, thus, place is a quantity inhering accidentally in the containing body. As for time, it is an accident inhering in an accident, since it is an extension (*miqdār*) belonging to an “unstable configuration” (*hay’a ḡayr qārra*) of a substance, namely its motion (*ḥaraka*); through the intermediacy of motion, time inheres in matter<sup>121</sup>. In the end, Avicenna strictly forbids the logician from arguing anything in detail about physical problems: his particular competence only allows him to take such and such premise (“time is in something”, “place is in something”) as granted, in order to prove that the opponent is wrong. An identical remark will be made in the end of this chapter, with regard to the aporia of separable accidents<sup>122</sup>.

[§3.2] (29.14 – 31.7). The following doubt is related again to the matter of the whole (*kull*), and concerns more specifically the notion of wholeness (*kulliyya*). According to this objection, wholeness is an accident that exists in many things: a set of ten has a certain wholeness, that exists in its components as in many things (which should prevent it from being an accident, according to the common interpretation of Aristotle’s description).

Avicenna replies that a “sum” (*ḡumla*) of things can in fact be conceived, insofar as it is a sum, as a unitary subject; however, he did not argue for this in the case of the whole ([§2]), and this he reports as a further potential objection. He then answers by explaining the difference between “whole” and “wholeness”. “Whole” (*kull*) is the sum *itself* of a number of elements, whereas “wholeness” is a certain accident or configuration (*hay’a*) belonging to that sum. When it is said that “the whole is in the sum of the parts”, it is clearly by metaphor, since the whole is identical with that sum; what this formulation implies, is rather that the parts of which the whole is made have a certain configuration or “wholeness”<sup>123</sup>. In the follow-up, Avicenna criticizes the commentators’ use of discussing this aporiae with regard to the whole and the parts, since Aristotle (“the first descriptor”, *al-rāsīm al-awwal*) probably did not mean, by his words “existent in something”, to make a distinction between the inherence of accidents and that of the whole in its parts.

Then, Avicenna reprises and criticizes the standard view of the commentators on the subject (which he seemed to endorse himself above<sup>124</sup>), according to which accidents inhere in one thing only, whereas the whole inheres in many things. The truth, says Avicenna, is that the whole as such is neither existent in one thing, nor in many things; that the accident is an

<sup>119</sup> Cf. the complete discussion below, II.2 [§3.2].

<sup>120</sup> Cf. *Samā’ ṭabī’ī* II.9, 137.10 (esp. ll. 8-9); *Naḡāt* 243.14 – 244.10.

<sup>121</sup> For the fact that time inheres in matter mediately, cf. *Samā’ ṭabī’ī* II.11, 156.11-17; *Naḡāt* 226.10 – 227.6.

<sup>122</sup> See below, par. [§7].

<sup>123</sup> There is no trace of such a distinction in Avicenna’s discussion of the whole in *Ilāhiyyāt* IV.3, 189.12 – 190.17.

<sup>124</sup> See par. [§2] above.

accident inasmuch as it inheres in something, and if it does in many things it is an accident inasmuch as those multiple things have a certain unity. If that standard answer is true, however, the inherence of accidents in one single thing marks a distinction between their inherence in the subject, on the one hand, and the inherence of a universal in its particulars (the genus in the species, item [6] of Porphyry’s list, and the inherence of a species in the individuals below it).

**[§3.3] (31.8-11).** This section does not exactly display a doubt, but rather a corollary to the discussion of the first part of Aristotle’s description. The term “something” (*šay*’), in Aristotle’s expression “existent in something”, might be understood as “thing whose thingness (*šay*’*iyya*) is achieved independently of what inheres in it”. The notion of *šay*’*iyya* is quite difficult to interpret, and in this passage it seems to signify something wider than “quiddity”, namely “the fact of being a complete quiddity accompanied by existence”<sup>125</sup>. Be as it may, such a reading would allow us to make a distinction between the inherence of accidents in substances, on the one hand, and the inherence of form in matter: for substances make their accidents subsist in act, whereas in the case of form and matter the relation is inverted. However – as it will be made clear below<sup>126</sup> – Avicenna seems not to be fully persuaded by this interpretation, for he holds Aristotle’s description of the accident to be fundamentally ambiguous (in that it may be applied to accidents as well as forms).

**[§4] (31.12-16).** In the discussion of the second part of Aristotle’s description, Avicenna limits himself to mentioning a list of things that inhere in something as parts, from which accidents are distinct in virtue of this specification. The list comprises: (1) the part in the whole (item [3] in PL); (2) the nature (*tabī’a*) of the genus in the nature of a single species; (3) the wholeness (*kulliyya*) of a species in the wholeness of the genus; (4) the particular in the universal; (5-6) form and matter in the compound.

Case (1) is self-explanatory. Case (2) can be explained, if we take “nature” as meaning “essence” and “definition”, by the fact that the essence of the genus takes part in the essence of the species (and not vice versa). Case (3) refers to *kulliyya* not in the sense of “universality”, but rather in the sense of “wholeness” or “totality”: if we understand genera and species as classes of elements, the species are subsets and parts of their genera. A similar interpretation of universality seems to be implied by case (4) as well. Cases (5) and (6) are quite clear: form and matter inhere in sensible substance just as parts in wholes, and for this reason neither of them can be deemed an accident.

**[§5] (31.17 – 32.10).** The third part of the description postulates the inseparability of accidents, meaning that accidents cannot exist independently of their subjects. This requirement marks a distinction between the existence of accidents, on the one hand, and on the other hand (1) the existence of things in time (item [10] in LL), (2) the existence of things in place (item [1] in PL), (3) the existence of things “in” their goal (item [7] in PL), (4) the existence of substance “in” the accident, (5) the existence of matter “in” form, (6) the existence of the nature of the genus in the nature of the species. All of these inhering things are, as a matter of fact, separable from their substrates, in that they can be thought of as existing without them. For instance (1), whereas Zayd is in a certain time, he can be thought of as Zayd even when supposed to be in a different time; (2) the same for place, since Zayd is physically and conceptually separable from the place where he is (for instance, the market). (3) Things can exist independently of their goal as well: a man is conceivable without happiness (unhappy men exist), a body is conceivable without health (body may be sick), a politician is conceivable without politics (being a common man). (4) Substance is inseparable

---

<sup>125</sup> On the notion of *šay*’*iyya*, see WISNOVSKY 2000; WISNOVSKY 2003, pp. 145-172.

<sup>126</sup> Cf. par. [§6.4] below.

from accidents, but not in the sense that its existence depends on them. (5) Matter can subsist without a certain form: a piece of bronze portraying a horse can be moulded differently, so as to depict a man.

**[§6] (32.11 – 36.19).** Concerning inseparability, Avicenna presents and solves two distinct groups of doubts: the first (found in par. **[§6]**) relies directly on the discussion found in par. **[§5]**.

**[§6.1] (32.11-17).** Against Avicenna’s distinctions in par. **[§5]** these objections argue, firstly, that things may be inseparable from (1) time and (2) place, if time and place are understood not as being a particular time, but as “absolute” time and “absolute” place. As a matter of fact, nothing ever exists out of time and out of place<sup>127</sup>. (3) The same might be said for substances with respect to their accidents, for substances are inseparable from accidents – in the sense that no substance ever exists without accidents. This seems to hold true of bodies only, since the aporia is not applicable to other substances – such as form, matter, and incorporeal substances like the intellect and the soul. (4) Moreover, some bodies are apparently inseparable from their place, but – being bodies – are certainly not accidents: for instance, the body of the moon is inseparable from its sphere, as well as the other heavenly bodies. (5) There are also some matters that apparently cannot quit their forms, notably the matters of the celestial spheres. (6) The last doubt concerns the inseparability of form from matter, for no corporeal form apparently exists without its matter, namely prime matter.

**[§6.2] (32.17 – 33.9).** Avicenna’s strategy to solve the first doubts (1-3) consists of advocating for absolute time, place and accident the status of “necessary concomitants” (*lawāzim*) of the things that seem to inhere in them inseparably. In other words, the inseparability between bodies and time, place, accidents is not ontological, but logical: for this reason Avicenna recalls the distinction between “said of a subject” and “being in a subject”, and argues that the former relation only holds in utterance and conceptualization, whereas the latter concerns existence. This formulation may remind us of a passage of Porphyry’s *In Cat.*, where the commentator makes a distinction between “said-of” and “being-in” in very similar terms; a possible paraphrase of this passage is found in Ibn Suwār’s glosses on the Parisian ms. 2346<sup>128</sup>.

In the *Physics* of the *Šifā’*, Avicenna will prove that this holds true, with regard to place and other accidents, of a specific kind of substance – i.e., corporeal substance. As for absolute place, it will be made clear, in the discussion of the “space” (*ḥayyiz*) of natural bodies in *Samā’ ṭabī’ī* IV.10-11, that even though there exists no body deprived of a *ḥayyiz*, be it a place (*makān*) or a certain ordered position (*waḍ’u tartībin*)<sup>129</sup>, if a body were physically inseparable from it no local motion would be possible; and no change whatsoever would be possible if a body were inseparable from its changeable attributes (quantity, quality and the like)<sup>130</sup>.

**[§6.3] (33.9-15).** With regard to the moon, it is true that a celestial body never quits its natural place, as Aristotle says in the *De caelo* and Avicenna argues in *Samā’ wa-l-‘ālam* 4<sup>131</sup>; (4) Avicenna contends nonetheless that its place – i.e., its sphere (*falak*) – is a sort of extrinsic necessary concomitant (*amrun lazimahū min ḥāriḡin luzūman*), logically inseparable but not

<sup>127</sup> A similar doubt, concerning the inherence of particular substances in place, is discussed and solved by Ibn al-Ṭayyib: cf. Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 66.6-15.

<sup>128</sup> Porph. *In Cat.* 75.24-29; for Ibn Suwār’s reprise, see GEORR 1948, 378.3-4.

<sup>129</sup> *Samā’ ṭabī’ī* IV.11, pp. 308.10-11.

<sup>130</sup> Cf. *Samā’ ṭabī’ī* IV.10, 305.4-14.

<sup>131</sup> *Samā’ wa-‘ālam* 4, 28.9-10: “For this reason [the body that has the principle of circular motion] does not need a body to define its direction, but rather defines the directions itself; and it does not quit its place” (*wa-li-ḡalika lā yaḥtāḡu ilā ḡismin yuḥaddidu ḡihatahū, bal huwa yuḥaddidu l-ḡihāti, fa-lā yazūlu ‘an ḥayyizihī*).

constitutive of the moon as such. The nature of the moon does not exist by virtue of the moon's being-in-a-place, whereas any accident exists by virtue of its inherence in a subject.

[§6.4] (33.16 – 35.6). The case of form and matter (6), if understood with regard to the relation between corporeal matter (namely prime matter, ὕλη or *hāyūlā*) and corporeal form (*ṣūrat al-ḡismiyya*), does not pose any problem with Aristotle's account of separability. Form is not existent in matter as in a subject, for it makes matter exist in act: the contrary does not hold, for the existence of form has undoubtedly another cause. According to the discussion of corporeity found in *Ilāhiyyāt* II.2-4 the form of body as such (equivalent to its potential tridimensionality and divisibility) and prime matter are fundamentally dependent on a common cause – the so-called Giver of Forms (*wāhib al-ṣuwar*), which is responsible for the production of form and for its connection with matter<sup>132</sup>. If the form of corporeity is inseparable from its matter, therefore, it is not because matter is a cause for the existence of form, but rather by virtue of a certain logical necessity: the inseparability of form from matter, once again, is something that accompanies form necessarily, a necessary concomitant of its<sup>133</sup>.

Thereafter, Avicenna mentions the solutions of some previous commentators, who foreshadow the cluster of doubts he will attempt to solve later, in chapter I.6<sup>134</sup>. This solution is based on the notion of “being a part of”: these commentators argue that, [a] since form is part of the compound of matter and form, whereas the accident is neither a part of the subject, nor of the compound, this is sufficient to distinguish the two notions from each other. Such a consideration apparently bore the conclusion, drawn by other commentators, [b] that form is a substance in a respect (with regard to the compound), an accident in another respect (with regard to matter)<sup>135</sup>. The discussion of statement [b] is postponed to chapter I.6, whereas in these lines Avicenna reacts mainly to argument [a]. Nowhere, indeed, Aristotle says that the accident is a part of nothing, or that it is a part of the compound: he only says that the accident exists in *something*, namely in its subject, not as a part of *it*. This certainly marks a distinction between the existence of accidents in substance, on the one hand, and the existence of form in the compound (identical to the existence of a part in the whole: see above, par. [§4]), but does not prove anything about the difference between the inherence of accidents and the inherence of form in matter. Moreover, this argument is false, for accidents can certainly be parts of compounds without necessarily being forms, as is proved by many sensible examples: a chair, being made up by a substance (wood) and a number of accidents; or the “snubnosed”, where an accident “concavity” exists in the nose.

The next point is very interesting, for many reasons. Avicenna exhorts the reader to believe that, in a way, the description of accidents found in the *Categories* is more general than the proper notion of “accident”, and rather describes a state that may apply both to accidents and forms. “Existent in something”, then, is meant to describe something that was not precisely distinct from form, before *al-insān* progressed in philosophy (*taḡalḡala [...] fī l-falsafa*) so as to understand the difference between them. The Arabic text is perhaps ambiguous here: *al-insān* might be understood either as a reference to Aristotle (“that man”), or as “man” in the generic sense of “people, humanity”. If the first hypothesis is true, Avicenna is arguing that Aristotle was unaware of the difference between accident and form as he wrote the *Categories*, but he realized it later; if the second one is correct, then Avicenna is contending that Aristotle never understood this difference perfectly, and that the distinction was explained by later philosophers.

---

<sup>132</sup> *Ilāhiyyāt* II.3, 64-65; On the notion of corporeal form, and the distinction between the substantial and the quantitative body, see also below, III.4 [§2.2]. On the Giver of forms, see JANSSENS 2012.

<sup>133</sup> *Ilāhiyyāt* II.3-4.

<sup>134</sup> See also the INTRODUCTION, 3.2.3.

<sup>135</sup> This resembles one of the two syllogisms presented by Avicenna above, in *Fī ḥaṭa'* [§1].

The first solution is more plausible, since in other works (most notably the *Metaphysics*) Aristotle is certainly aware of the difference between accident and form<sup>136</sup>. Be as it may, the notion that is applicable to accidents and forms is the same: “being in a receptacle, and [being] what provides it with a configuration, whether that receptacle be a matter or a subject” (*al-kawn fī l-maḥall, wa-l-ḥāsil hay’a lahū, sawā’ a kāna dālīka l-maḥall mādda aw mawḍū’an*). Both accidents and forms inhere in a “receptacle” (*maḥall*), a notion that stands for “substrate” in a generic sense, and both of them provide it with some sort of qualification. Despite this resemblance, Avicenna says that the confusion between them is not unescapable: as he will clarify below, they differ as to the nature of the existential relation they have with their receptacle<sup>137</sup>.

**[§6.5] (35.6 – 36.19).** The inseparability of the matter of celestial bodies from their forms (5) is the only case that seems to make Aristotle’s description defective, or at least equivocal. If the matter of celestial bodies cannot leave its form, for celestial bodies are not subject to coming-to-be and corruption, and form is what makes matter exist in act, the state of celestial matter seems to be fundamentally indistinct from that of the accident.

In reply to this doubt, Avicenna invokes the particular status of the *Categories* as a book for beginners: since beginners in philosophy belong, in a certain sense, to the mass of common people (*al-ḡumhūr*) Aristotle employed here, to describe the accident, a commonly used utterance (*lafẓ muta’ārif*) such as “existing in something”<sup>138</sup>. Now, the common usage of such an expression does not include the relation of matter to form or form to matter, but rather the inherence of substances in accidents (for one may say in ordinary language *Zayd fī rāḥa*, “Zayd is in rest”, to say “Zayd is resting”), that of accidents in substances (“whiteness is in the body”), the inherence of something in time, in place or in a container, the inherence of a part in the whole and the like. Therefore, once Aristotle’s various specifications of “existent in something” (“not as a part of it”, “inseparably”) have progressively ruled out the alternative senses of inherence, no other inherence remains except for the inherence of accidents in substances (according to the procedure outlined in paragraph **[§2]**); for this reason the student tends to argue immediately that form inheres in matter, and matter inheres in form, as the accident does, whereas it is not true.

In order to remove the ambiguity of celestial matter, one should probably add another specification to the description: he should say “what exists in something, in such a way as to provide it with an attribute and a qualification” (*al-mawḡūdu fī šay’in ḡā’ilan iyyāhu bi-ṣifatin wa-na’tin*). This description is still equivocal, being applicable – again – to accidents and forms, since form as well provides its receptacle with an attribute, a configuration, a qualification (see **[§6.4]** above, I.5 **[§6]** below); however, it is sufficient to dismiss celestial matter, for matter is always incapable of qualifying its form.

Someone might provide another explanation for the difference between accident and celestial form, by saying that in the case of celestial bodies matter is inseparable from its form by accident, only because of the particular form it is associated with; but else it is naturally capable of changing form, whereas an accident is always incapable of moving away from its substrate. Such a solution is untenable for Avicenna, since in natural science it is made clear that the matter of celestial bodies is inseparable in its own right, due to a specific character of its – not due to the nature of its form. The interpretation that, according to Avicenna, comes the closest to settle a correct criterion for the difference (*mawqi’ fī l-farq*, literally “a place for the difference to fall into”) is nothing but a slight correction of this first solution: it consists of saying that matter is not inseparable from its form in itself, inasmuch as it is matter, but it comes to be inseparable by virtue of a certain specific attribute of its, proper of a certain

<sup>136</sup> In *Metaph.* Z-H, form is clearly held to be a substance.

<sup>137</sup> See below, I.5 **[§6]**.

<sup>138</sup> On the fact that the *Categories* is a work for beginners see the INTRODUCTION, 2.1 [c-d].

species of matter (namely, celestial matter). On the contrary, the inseparability of accidents is essential, and dependent on its most universal determination (*li-a 'ammi ma 'ānīhi*), namely its being accident.

[§7] (37.1 – 38.5). The final series of doubts tackled by Avicenna in this chapter is related, again, to inseparability. The two cases taken into account in this section concern firstly (1) inseparable accidents, namely those accidents that constitute somehow the essence of a substance, and without which the substance in question cannot exist; secondly (2) separable accidents, namely those accidents that seem to persist and endure the corruption of their substrate.

[§7.1] (37.1-6). Among the previous commentators, only Dexippus and Simplicius deal with the doubt concerning inseparable accidents: it is what C. Luna has called “the aporia of the constitutive properties of essence” (*aporie des propriétés constitutives de l'essence*)<sup>139</sup>. The status of inseparable accidents, namely the accidents that constitute the essences of their subjects, is certainly problematic with regard to Aristotle’s definition of the accident, since some substances seem to be existentially dependent on some properties of theirs (e.g. whiteness for snow, heat for fire). This question will be dealt with more in detail in chapter I.6; here Avicenna argues simply that if substance is inseparable from those accidents, it is not because its existence is caused by them, but because it is inseparably accompanied by them. Nonetheless, the estimative faculty is well capable of distinguishing what is accident and what is substance.

[§7.2] (37.7 – 38.5). As for separable accidents, two cases are taken into account by Avicenna: (2.1) accidents that separate from their substance by virtue of their own corruption, (2.2) accidents that seem to separate from their substance to inhere in another subject, for instance the scent of an apple, or the heat of fire in the air. Case (2.1) does not imply any difficulty with regard to the definition of the accident: if these accidents separate from substance inasmuch as they are themselves destroyed, and their substance remains, then Aristotle’s description is fundamentally confirmed (for once they separate from substance, which is the cause for their existence, they perish). Case (2.2), on the contrary, is possibly problematic, and it is a standard point of debate of the previous exegetical tradition, stemming from a doubt set forth by Plotinus (the scent of the apple being also the canonical example of the preceding commentators)<sup>140</sup>. J. Ellis and C. Luna have identified five main standard solutions for this problem:

- (a) *Verbal times*. The doubt may be explained away by arguing that Aristotle held accidents to be inseparable from the thing they *are* in, not from the thing they *were* in.
- (b) *Emanation*. The fragrance may separate from the apple, inasmuch as some particles of the apple are present in the air.
- (c) *Diosmosis*. The fragrance is transmitted through the air, as sounds and colours are.
- (d) *Alteration*. A new fragrance is generated in the air, other than that of the apple.
- (e) *Essential properties (Simplicius’ solution)*: it consists of saying that fragrance is an essential property of the apple, and for this reason it cannot separate from the fruit.

Avicenna substantially refuses to solve the aporia in this place, because the competences of a logician are inadequate for such an inquiry: the appropriate place to discuss this issue is

---

<sup>139</sup> LUNA 2001, pp. 225-256.

<sup>140</sup> Plot. *Enn.* IV 4 [33], 29.25-27: “What then prevents sweetness and sweet scent from not perishing with the destruction of the sweet or sweet-scented body, but passing into another body [...]?” (Τί γὰρ κωλύει φθαρέντος τοῦ σώματος τοῦ γλυκέος τὴν γλυκύτητα μὴ ἀπολωλέναι καὶ τοῦ εὐώδους τὴν εὐωδίαν, ἐν ἄλλῳ δὲ σώματι γίνεσθαι [...]); English translation by A.H. Armstrong. For more detailed accounts of this debate in the ancient commentaries, see ELLIS 1990, LUNA 2001, pp. 256-276; for Ibn al-Ṭayyib’s interpretation, see FERRARI 2004, pp. 97-106.

natural philosophy. He only argues that it is not correct to say that the fragrance of the apple, and the heat of fire, really separate from their subject: it is true instead that when this seems to happen, either an entirely new scent or heat comes to exist in the air (solution (d)), or scent and heat subsist in particles of their original subjects, spread in the air (solution (b)). This is enough, in Avicenna's opinion, to show that none of the possible physical interpretations implies that the accident be indeed separate from its subject, and therefore enough to prove that this doubt does not manage to invalidate Aristotle's description of the accident. Avicenna's detailed opinion on this subject is expounded in *Nafs* II.4, in a chapter devoted to the senses of taste and smell (corresponding to *De anima* B 9-10). Now, in his *De anima* Aristotle only says that smelling takes place through a medium<sup>141</sup>: the exact way in which this happens is subject to debate. Avicenna presents three conflicting accounts for the propagation of fragrances: (1) dissolution or evaporation of the odorable body, (2) an alteration of the medium (air or water) that does not imply the evaporation of odorable bodies, (3) an action of the odorable body on a non-odorable body by means of a third unaffected body<sup>142</sup>. After expounding the main arguments for each of the three possibilities, Avicenna argues for an intermediate solution between (1) and (2): it is not impossible that what is smelt be vapour, and that vapour be able to produce an alteration in the medium<sup>143</sup>.

As in paragraph [§3.1], Avicenna argues again for the logician's incompetence with regard to physical questions. The only thing a logician can do, with respect to this issue, is to ascertain that if the opponent's premise were acceptable, the objection would be acceptable, but since the opponent's premise cannot be accepted, the objection does not hold. The premise is by and large the following: it is possible that scent and heat move away from their subjects, in such a way as to disappear from them and appear in another subject in which they were not previously (the air). The logician cannot however ascertain the falsehood of this premise, for this lies beyond the limits of his competence; he must content himself with knowing that it is false.

---

<sup>141</sup> *De an.* B 9, 421 b9: "Also smelling occurs through a medium, for example air or water" (ἔστι δὲ καὶ ἡ ὄσφρησις διὰ τοῦ μεταξύ, οἷον ἀέρος ἢ ὕδατος).

<sup>142</sup> *Nafs* II.4, 66.7-14.

<sup>143</sup> *Nafs* II.4, 67.15 – 69.5. See also *Dānešnāme* II, p. 57: "L'olfaction se produit par l'intermédiaire d'un corps qui porte les odeurs ou qui se mêle aux vapeurs odorantes, et qui grâce à sa subtilité arrive par voie nasale à la partie antérieure du cerveau [...]".



## I.5

### ON THE COMBINATIONS OCCURRING BETWEEN “TO SAY OF” AND “TO EXIST IN”, AND WHAT THEY LEAD TO

After his long exposition of Aristotle’s distinction between “being said of” and “being in” a subject, Avicenna tackles the first five lines of *Cat.* 3 (1 b10-15), that focus on the transitivity of predication καθ’ ὑποκειμένου. According to Aristotle, this sort of predication is transitive: if “animal” is said of “man” and “man” is said of Socrates, “animal” is said of Socrates. In the late ancient commentaries, the exegesis of these lines used to be an occasion to discuss in detail the properties of said-of predication, and some aporiae related to its transitivity. Having already expounded the notion of said-of predication (I.3), Avicenna limits himself to examining the four possible combinations (*muzāwaḡāt*) of said-of and being-in in multiple (double) predications, and their results.

[§1] The first case he takes into account is Aristotle’s example of a double said-of predication. In this regard he mentions and solves the aporia of the genus, being a standard topic of discussion in the previous commentaries: if “genus” is said of “animal”, and “animal” is said of man, why isn’t it said that “man is a genus”? [§2] The second case is that of a said-of+existent-in predication: “colour” is said of “white”, “white” exists in the swan, so what is “colour” with respect to the swan? [§3] The third case is that of existent-in+said-of predication: for instance, whiteness exists in the (universal) swan, the universal swan is said of the individual swan. [§4] Before tackling the last case, which no more involves “being said of”, Avicenna argues shortly that his own account of predication “of” as non-essential predication does not prevent it from being transitive, and tries to prove it by means of an example. [§5] The fourth case is the combination between being-in and being-in: against some previous commentators who deem this case impossible, Avicenna argues that an accident may most naturally inhere in another accident. [§6] The last section is a conclusive remark, presumably referring not to this chapter, but to the whole discussion of chapters I.3-5: here Avicenna presents a distinction between accident and form .

[§1] (38.10 – 40.11). The discussion of the possible “combinations” deriving from Aristotle’s two types of predications is not a standard topic of the exegetical tradition, but is in fact developed systematically by few known commentators. The occasion for such a discussion is given by Aristotle’s proof for the transitivity of καθ’ ὑποκειμένου predication, expounded in the first lines of *Cat.* 3; against this claim, some doubts were presented by early critics of Aristotle (for instance, Nicostratus) that also involved cases of accidental predication, and that apparently gave rise, in some later commentaries, to systematic treatments of this topic. We find enquiries about these combinations in Elias/David and Ibn al-Ṭayyib: the latter also employs the Arabic term *muzāwaḡāt*, the same found in the title of this chapter<sup>144</sup>. Avicenna adheres to this scheme, most probably like his contemporaries and recent predecessors, and explores the results of all possible combinations. Before doing this, in the very first section of chapter I.5, Avicenna presents an account of the transitivity of “being said of a subject”, and a long discussion of the standard aporia of the predicate “genus”.

[§1.1] (38.10-16). The example made here by Avicenna is the same found in *Cat.* 1b 10-15: “animal” is said of “man”, “man” is said of Zayd (i.e. a particular man), therefore “animal” is said of Zayd. As Avicenna remarks right in the beginning, such a combination of predicates presents somehow two extremes (*tarafāni*) and a middle term (*awsaṭ*). This means that it may be read, in fact, as a syllogism of this form:

---

<sup>144</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 80.8 ff. In her *Kommentierende Zusammenfassung*, C. Ferrari chooses to translate this term as “mixtures” (Mischungen; Ferrari 2006, p. 131).

Man is an animal  
 Zayd is a man  


---

 Zayd is an animal

where “animal” is the major extreme, “man” the middle term, and “Zayd” the minor extreme. This analysis is not an Avicennan invention, since it is found in Simplicius<sup>145</sup> and is systematically employed by Elias/David to analyze the other possible combinations<sup>146</sup>.

Curiously enough, despite having defended in I.3 the non-essentiality of “being said of” Avicenna argues that the reason for the transitivity, in this example of double predication, is the fact that both Zayd and “man” share the definition of “animal”. However, he will clearly contend that transitivity also applies to the case of accidental predications “of”, both in the case of common accidents [§1.2] and in the case of properties [§4].

[§1.2] (38.17 – 40.11). The discussion of the aporia of the predicate “genus” is a commonplace of late ancient exegesis, and the commentators provide different replies to the difficulty<sup>147</sup>.

[§1.2.1] (38.17-18). The puzzle, directed against the transitivity of being-said-of, consists of presenting one of the following syllogisms (the two are both used by the commentators and substantially interchangeable, for the doubt is always the same):

Animal is a genus Man is an animal <hr style="width: 20%; margin: auto;"/> Man is a genus.	Man is a species Socrates is a man <hr style="width: 20%; margin: auto;"/> Socrates is a species.
--	---

where the three predications are, all of them, “of” a subject. Now, the conclusion of the two syllogisms is patently false, and seems to invalidate the claim that predication “of a subject” is transitive. If we take predication “of” to be equivalent to essential predication, we may quite easily solve this difficulty by saying that “genus” or “species” does not correspond to the essence of its first subject (animal, man), for the subject, despite being – in a certain sense – a genus or a species, is not actually defined by its being a species or a genus. If anything, what posits a problem is rather to define more precisely in what way we say that “animal is a genus”, “man is a species”. With respect to this latter question, we have two alternative possibilities: we can contend either that “genus” is an accident, or that it is a third sort of predicate that Aristotle did not contemplate in his summary classification (*Cat.* 2).

As regards the ancient tradition, we have important pieces of evidence to reconstruct the solutions of the previous exegetes: besides the preserved Greek commentaries, we luckily dispose of an Armenian fragment of Alexander of Aphrodisias’ lost commentary on the *Categories* and of a fragment of Porphyry’s commentary *Ad Gederalium*, both dealing with this issue<sup>148</sup>. A certain Peripatetic tradition, represented by Boethus of Sidon, apparently dismissed the aporia on the ground that such a thing as “man”, being a species, cannot properly be deemed a subject: for this reason, a sentence like “man is a species” does not truly display a said-of predication<sup>149</sup>. Alexander, on the contrary, claimed that “genus” is not said of “animal” as of a subject since it is not said of every single animal, but it is said of all

---

<sup>145</sup> Simpl., *In Cat.* 52.7-9. See LUNA 2001, pp. 406-7.

<sup>146</sup> Elias, *In Cat.* 153.15-26.

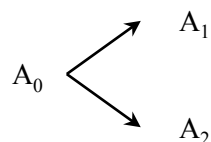
<sup>147</sup> LUNA 2001, pp. 413-426.

<sup>148</sup> See SCHMIDT 1966, for a German translation of Alexander’s fragment; CHIARADONNA, RASHED, SEDLEY 2013 for an edition and English translation of Porphyry’s fragment.

<sup>149</sup> CHIARADONNA, RASHED, SEDLEY 2013.

individual animals as something common to them, inasmuch as it is a universal notion (*Allgemeinbegriff*, in Schmidt’s German translation)<sup>150</sup>. Porphyry’s solution seems to reprise this point: according to his view in the shorter commentary on the *Categories*, (1) “species” is not predicated of “man” by synonymy, because “man” does not share its definition; (2) “species” is predicated of “man” in another way: being said under the respect of commonness or universality (*κατὰ κοινότητα*) it is rather a sort of improper accident, similar to a *differentia* (*συμβεβηκότος δὲ οὐ τοῦ κυρίως ἀλλὰ τοῦ ἐοικότος διαφορῶ τι*), in that it marks a distinction between the individual man and the universal man<sup>151</sup>. This solution to the puzzle is found in almost identical terms in the fragment preserved in the Archimedes Palimpsest<sup>152</sup>.

[§1.2.2] (38.18 – 40.2). As regards Avicenna, we have already said that he rejects the essential character of predication “of a subject” (I.3, [§4-5]): therefore, to dismiss the puzzle he cannot rely on the commentators’ standard response and argue that “genus” is said of “animal” accidentally, but he is obliged to characterize its predication differently. Still, his first remark in I.5 [§1.2] is identical with Alexander’s point: it is not true that “genus” is said of “animal”, for it is not true that every animal is a genus. Avicenna goes further, however, by arguing that the “animal” of which “genus” is said is not the same “animal” which is said of “man”: it is rather a nature (*tabī’a*) understood under a certain consideration (*i’tibār*) and condition (*ṣart*), namely its being abstracted in such a way that a certain number of things may be thought to participate in its essential properties. Hereafter, the reader is presented with an unusual distinction and a strange proof. The simple nature of animality ( $A_0$ ) may be understood under two different conditions, being the condition of “abstraction” (*tağrīd*,  $A_1$ ) and the condition of “mixture” (*ḥalat*,  $A_2$ ): the former corresponds to an animality deprived of all its specifying and individualizing properties, the latter to an animality associated with a set of specifying and individualizing properties. Now, whereas  $A_0$  may be understood under each one of the other conditions,  $A_1$  cannot: it cannot be understood under  $A_1$ , for it is itself  $A_1$ ; it cannot be understood under  $A_2$ , for  $A_2$  is its contrary. This should prove, according to Avicenna, that  $A_1$  and  $A_2$  are “more specific” (*aḥaṣṣ*) than  $A_0$  (which however seems to be already implied by the fact that simple animality is unconditioned, whereas the two other animalities are, themselves, conditioned).



Now, according to Avicenna “genus” is only predicated of  $A_1$ , which in turn is not predicated of “man”: rather, what is predicated of man seems to be animality *simpliciter*,  $A_0$ . It is the shift between these two different considerations of animality that invalidates the doubtful syllogism, since the middle term “animal” in the two cases is not understood in exactly the same sense.

The result is that “genus” is existent in man - the last link of the chain - as an accident, whereas it is said of  $A_1$  not as a universal accident in a universal subject (as “whiteness” inheres in “man”), but rather paronymously, as a compound of accident and substrate is said of its individual subject:

Zayd is [a] **white** (= **substance** + **whiteness**)  
 $A_1$  is a **genus** (= **mentally existing substance** + **generality**)

<sup>150</sup> SCHMIDT 1966, pp. 281-282.

<sup>151</sup> Porph. *In Cat.* 81.3-22; LUNA 2001, pp. 414-415.

<sup>152</sup> CHIARADONNA, RASHED, SEDLEY 2013, p. 144, 3.1-16 (Greek text), p. 145 (translation), pp. 172-173 (commentary).

This means that “A<sub>1</sub> is a genus” is still to be understood as a case of “said-of” predication, though by means of an accidental predicate. As a matter of fact, Avicenna argues that if A<sub>1</sub> were also said of man, it would not be ultimately impossible to say “genus” of “man”: for said-of predication does not require necessarily the essentiality of the predicate. What happens in the puzzling example of the genus is due to the fact that “genus” is only said partially of the “animal” said of man. This, contends Avicenna, amounts fundamentally to a quantification mistake: since A<sub>1</sub> is different from A<sub>0</sub>, it is as if the original syllogism **(I)** were in fact equivalent to an invalid syllogism with a particular major premise **(II)**:

$$\begin{array}{ccc}
 \textbf{(I)} & & \textbf{(II)} \\
 \text{Animal is a genus} & & \text{Some animal (A}_1\text{) is a genus} \\
 \text{Man is an animal} & = & \text{Every man is an animal (A}_0\text{)} \\
 \hline
 \text{Man is a genus} & & \hline
 & & \text{Every man is a genus,}
 \end{array}$$

where “some animal” in **(II)** actually means “a certain consideration of animal”. For this reason, argues Avicenna, the predications of these examples must always be understood as universal (*kulliyyan*), for similar errors of quantification may result in invalid syllogisms. In this regard, he makes the following example: from two premises such as

Some animals are rational  
Every horse is an animal

one cannot infer the absurd conclusion that “every horse is rational”. If the major term were, instead of “genus”, another equivalent (i.e. accidental) predicate X, said of the middle term Y as a whole, then it would certainly be said of the minor extreme Z, for then there would still be a perfect BARBARA-syllogism of the form:

$$\begin{array}{c}
 \text{Every Y is X} \\
 \text{Every Z is Y} \\
 \hline
 \text{Every Z is X.}
 \end{array}$$

**[§2] (40.12 – 42.21).** The second case discussed by Avicenna is that of the combination between “said-of” and “being-in”.

**[§2.1] (40.12-15).** Without presenting himself an example, he firstly engages with refuting two answers presented by the previous commentators: thereafter, he will expound his own solution.

**[§2.2] (40.15 – 41.8).** The first solution consists of saying that, given the two following premises:

White is a colour  
Swan has white,

where “colour” is said of white and “white” exists in the swan, it does not follow neither that “swan is a colour”, nor that “colour” exists accidentally in the swan. The combination between “said-of” and “being-in”, thus, does not lead – according to this school of thought - to any result. Now, according to Avicenna it is perfectly legitimate to infer, from two such premises, that

Swan has colour,

but the commentators apparently reject this conclusion because of their wrong account of accidental predication. As a matter of fact, they apparently argued that “colour” is not said of a swan because it does not take part in the essence of the swan, and that “colour” is not existent in a swan because the swan is not called by the name “colour” at all (so, one cannot say that “swan is colour”). Now, the reason for this absurd argument is a banalization of the standard distinction between essential and accidental predication: whereas essential predicates provide the subject with their name and their definition, accidental predicates only provide it with their name. However, claims Avicenna, this only applies to very few cases: the name of an accident is practically never said of its subject, since we never say “Socrates is philosophy”, “stone is hardness”, and so on: rather, an accidental predicate is paronymously derived from the name of the abstract accident. As we say that “Socrates is philosopher” and “a stone is hard”, so we may well say that “swan is coloured” (and this is equivalent to our saying that “swan has colour”, “colour exists in swan”).

It is difficult to determine the sources of such a doctrine: among the previous commentators, only Simplicius and David/Elias<sup>153</sup> discuss this case. Simplicius brings forth a similar example, very likely as an aporia formulated against Andronicus’ inclusion of non-essential attributes among “said-of” predicates; with an argument similar to Avicenna’s, he argues that the syllogism works because the body is “coloured” (κεχρωσμένον) and not “colour” (χρῶμα)<sup>154</sup>. As remarked by C. Luna, a parallel discussion of this aporia is found in John Philoponus’ commentary on *Prior Analytics* I 33, where the example is perfectly identical with the one found in the Arabic tradition (at least in *Maqūlāt* and Ibn al-Ṭayyib)<sup>155</sup>; however, Philoponus’ solution does not match the reply refuted by Avicenna. Elias/David

[§2.3] (41.9-17). The other answer, apparently developed as a sort of correction of the first one, argues that the conclusion that nothing follows from such premises only holds in some cases, whereas in other cases it does not. The tenants of this doctrine seem not to have formulated a rule to determine the cases in which the syllogisms are valid, but they have empirically provided a counterexample of this form:

A particular white is white
A certain white man has a particular white
-----
A certain white man is white,

a syllogism whose conclusion is certainly valid (if understood, obviously, as “a certain egg has white”). However, Avicenna objects that the commentator’s use of the term “white” is ambiguous: it might refer either to the abstract accident “whiteness” (a), or to the qualified substance “white thing” (b).

(a) If by “white” he meant “whiteness”, then the syllogism may be reformulated as follows:

Particular white is whiteness
Some white men have a particular white
-----
Some white men have whiteness,

which is certainly correct, but displays a case that is almost identical with the one proposed by the first school of commentators (where the valid conclusion is the same: the major term also exists in the minor term).

<sup>153</sup> Elias, *In Cat.* 153.24-26.

<sup>154</sup> Simpl. *In Cat.* 54.16-21.

<sup>155</sup> LUNA 2001, pp. 441-447; Phil. *In An. Pr.* I.33, pp. 325.33 – 326.4.

(b) If by “white” he meant “white thing”, then the syllogism runs:

A particular white is a white thing
A certain white man has a particular white
-----
A certain white man has a white thing

This deduction is incorrect, but since the commentator holds “white thing” to be an accidental attribute (*wasfun ‘aradiyyun*) he is proposing, again, an example that does not substantially differ from the one discussed above in [§2.2]. Therefore, this second answer is partially true, but also partially false, since there are no cases at all where the absurdity claimed by the first group of exegetes holds effectively.

[§2.4] (41.17 – 42.21). Avicenna contends, ultimately, that in all such cases the major extreme is existent in the minor: for all the universal determinations of the middle (being the major extreme, i.e. the predicate of the major premise) are also contained in the minor extreme, if the middle itself is contained in the minor. This is the same solution found in Ibn al-Ṭayyib’s commentary<sup>156</sup>. However, Avicenna also presents – thereafter - a particular case, where the major extreme, said of the middle, is also said somehow of the minor, so that in the conclusion the major is somehow simultaneously said-of and existent-in the minor, though under different respects. Avicenna’s example takes into account the predicate “one” (*wāhid*):

Whiteness is one
X has whiteness
-----
X is one/has one.

In this syllogism, “one” is said-of and existent-in the subject X under two different respects. Inasmuch as X has whiteness, and whiteness is one, “one” is accidental to X (it is the classical example made in the previous paragraphs); inasmuch as X is itself one, on the contrary, “one” is also said of X.

[§3] (42.21 – 43.11). The third combination, “being-in” + “said-of”, plainly inverts the terms of the second. According to Elias/David, this combination does not imply – again – any valid conclusion<sup>157</sup>; according to Ibn al-Ṭayyib, instead, it does imply a valid conclusion in some cases only, whereas in some other cases it does not<sup>158</sup>. To prove this, as a matter of fact, he presents the following two examples:

<p><b>(I)</b></p> <p style="margin-left: 40px;">Swan has colour</p> <p style="margin-left: 40px;">A certain swan is a swan</p> <p style="margin-left: 40px;">-----</p> <p style="margin-left: 40px;">A certain swan has colour</p>	<p><b>(II)</b></p> <p style="margin-left: 40px;">Animal is a genus</p> <p style="margin-left: 40px;">Man is an animal</p> <p style="margin-left: 40px;">-----</p>
--	---

Syllogism (I) is valid, whereas syllogism (II) – again, the paradox of the genus (see above, [§1.2.1]) – is not. Now, Ibn al-Ṭayyib’s explanation, here, is exactly what Avicenna presents as “the commonly accepted answer” (*al-ġawāb al-mašhūr*) of the previous commentators in [§3]: the argument and the examples are perfectly identical. If it is not drawn

<sup>156</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 81.13-18 (see especially lines 16-18: “it is well-known that the first [term is said] of the third by predication ‘in’, like ‘colour’ of the swan, for ‘colour’ is said of the swan inasmuch as its essence [exists] in it, not [inasmuch as] its essence is its essence”).

<sup>157</sup> Elias, *In Cat.* 153.22-24.

<sup>158</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 81.19 – 82.5.

directly from Ibn al-Ṭayyib’s *Tafsīr al-maqūlāt*, it comes very likely from a common source – presumably, another commentary of the Baghdad school.

Now, against this solution Avicenna replies what he has already replied against the aporia of the genus [§1.2.2-3]: syllogism (II) is invalid since “genus” is said of “animal” according to a certain consideration only. In cases like (I), where the major extreme is predicated of the middle integrally, the major is existent in the minor, and this holds for any other “being-in”+“said-of” combination.

[§4] (43.11-14). Before analyzing the last combination, which does not include any “said-of” relation, Avicenna quickly presents another case of transitive “said-of” predication, comprising an accidental predicable. The accidental predicable in question is property, the example being centred around the predicates “risible” (*ḍahḥāk*) and “capable of walking” (*māšīn*):

Every risible is capable of walking  
 Man is risible  
 -----  
 Man is capable of walking

This example is used by Avicenna, once again, to prove that said-of predication is transitive even if it is not understood as necessarily essential.

[§5] (43.14 – 44.20). The last combination comprises a double “being-in” relation; against the *mašhūr* answer of the previous commentators, who deemed this combination invalid, Avicenna claims that nothing prevents it from working.

[§5.1] (43.14-17). Among the known commentators only Elias/David and Ibn al-Ṭayyib discuss this last case: Elias/David holds it to be invalid, but provides no detailed explanation<sup>159</sup>; Ibn al-Ṭayyib, on the contrary, expounds a complicated argument to prove that in most cases such a combination does not hold, for an accident can very rarely inhere in another accident<sup>160</sup>. He distinguishes, in fact, three sorts of accidental inherence, which he designates by the expressions “essence” (*ḍāt*), “relation” (*nisba*), “relation of universality/particularity” (*nisba ‘umūm wa-ḥuṣūṣ*). The first type comprises accidents that inhere in their subjects as essences, for instance qualities; the second type comprises accidents that inhere in their subjects as relations, for instance similarity; the third type corresponds to accidents that inhere in their subjects as logical relations, such as generality and specificity. Now, in his *Tafsīr* Ibn al-Ṭayyib seems to present and discuss all the possible combinations between these sorts of inherence, which can be synthetized in the following table (each column represents the cases where the major premise displays respectively a *ḍāt*, *nisba*, *universal/particular nisba* inherence, whereas each row represents cases where the minor premise displays one of the three relations):

	M- <i>Ḍāt</i>	M- <i>Nisba</i>	M- <i>Nisba</i> U/P
m- <i>Ḍāt</i>	✗	✓	✗
m- <i>Nisba</i>	✗	✗	✗
m- <i>Nisba</i> U/P	✗	✗	✗

All M-*Ḍāt* syllogisms are invalid (first column), because an accident (i.e. the middle, being existent by hypothesis in the minor extreme) cannot be predicated of another accident

<sup>159</sup> Elias/David, *In Cat.* 153.19-21.

<sup>160</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 80.18 – 81.12.

by *Dāt*-inherence; the reason for this is that an accident, being incapable of subsisting by itself, cannot be fully predicated “as an essence” (*dātan*)<sup>161</sup>. The same holds for the remaining *m-nisba* syllogisms, since no relation can be properly said to exist in another relation: in Ibn al-Ṭayyib’s words, “every category has a relation which characterizes it, and of which no other relation can be said but by accident; otherwise, that would proceed *ad infinitum*” (*li-kulli maqūlatin nisbatun taḥuṣṣuhā wa-lā tuḥmalu ‘alayhā nisbatun uḥrā illā bi-l-‘araḍ, wa-illāmtadda dālika bi-lā nihāyatin*)<sup>162</sup>).

The only combination that Ibn al-Ṭayyib holds to be valid, apparently, is a particular *M-Nisba* + *m-Dāt* predication of this form:

Whiteness is similar (*ṣabīh*)  
Man is white

---

Man is similar,

whereas he qualifies a hypothetical *M-dāt* + *m-nisba* case as something whose existence is “unadmissible” (*lā yasūgu wuḡūdu dālika*)<sup>163</sup>. As he states in the conclusion, then, “this combination does not subsist, on account of the fact that an accident cannot be a subject for another accident, except in the way that we said” (*hādīhi l-muzāwaḡatu lā qiwāma lahā min qibali anna l-‘araḍa lā yaṣluḡu an yakūna mawḍu‘a* [sic] *li-l-‘araḍi illā ‘alā l-waḡhi llaḍi qulnā*)<sup>164</sup>; the only exception is apparently the case of relation, which can be a proper accident of a certain category (similarity in the case of quality, equivalence in the case of quantity, etc.).

[§5.2] (44.1-20). It is certainly against such an opinion that Avicenna contends, in *Maqūlāt* I.5 [§5.2], that nothing prevents any kind of accident (even a *dāt*-accident) from existing in another accident. (1) He argues firstly, as a matter of fact, that this is not expressly stated in Aristotle’s description of accidents: Aristotle spoke about inherence “in something” (ἐν τινι, *fī ṣay‘in*) without specifying whether the subject should effectively be a substance or an accident. (2) Secondly, he says that these commentators did not even attempt to demonstrate it, neither in logic nor in other sciences, for actually no demonstration is possible: the truth is the contradictory (*al-naqīḍ*) of their claim. He then engages with a sort of “empirical” proof of this contradictory, basically by exhibiting cases of accidents that undoubtedly inhere in other accidents. It is the case of smoothness (*malāsa*), an attribute belonging to the category of position, which inheres in a body by the mediation of its surface; of a quality, such as triangularity (*taṭlīl*), which is also existent in a quantity in the first place, and in a body by means of that quantity; of a quantity, such as time (*zamān*), that also exists in another accident, namely in motion (belonging in the category of passion). The reader should not expect a proper proof, here, since all these subjects must be enquired specifically in other sciences, as Avicenna remarks twice, in the space of these few lines: “in the appropriate place” (44.7), “in other places” (44.14)<sup>165</sup>. In sum, the subject of both “said-of” and “being-in”

---

<sup>161</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 80.24-26: “As to the case where the first [term] is an accident which is an essence, the second [term] does not admit it, because [the first] is not subsistent by itself, in such a way as to be predicated as an essence” (*fa-ammā matā kāna l-awwalu ‘araḍan huwa dātun lā yaqbuluhū l-tānī, li-annahū laysa qā‘iman bi-nafsihī ḥattā yuḥmala dātan*).

<sup>162</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 81.4-6.

<sup>163</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 81.10.

<sup>164</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 81.10-12.

<sup>165</sup> The category of position will be dealt with in chapter VI.6 ([§1]), figures and shapes in chapter VI.1, quantities in chapters III.4 – IV.2. That an accident may well exist in another accident will be reaffirmed by Avicenna in *Ilāhiyyāt* II.1, 58.5-7: “As to [the question] whether an accident may be in an accident, it is not strange, for speed is in time, straightness is in the line, flat figure is in the surface, and also because accidents are related to unity and multiplicity, and all these, as we shall clarify to you, are accidents” (*wa-ammā annahū hal yakūnu ‘araḍun fī ‘araḍin, fa-laysa bi-mustankarin, fa-inna l-sur‘ata fī l-ḥarakati, wa-l-istiḡāmatu fī l-ḥaṭṭi, wa-*



predications can be either a substance or an accident: since also accidental categories have genera and species it is possible, for instance, to say “colour” of accidents such as whiteness, blackness and many other shades by predication “of”.

[§6] (45.1-7). The last section of this chapter seems to have nothing to do with what precedes. It is in fact introduced by the locution “let us go back to the beginning” (*wa-l-narġa ‘a ilā l-ra’si*), which certainly refers to one of the preceding chapters. Since in these lines Avicenna sets out the exact distinction between accident and form in terms that resemble quite closely the discussion of I.4 [§6.5], I take it as going back to that sub-section.

Now, Avicenna characterizes here the compounds of accidents and substances and the compounds of form and matter as items that present two common characters:

C<sub>1</sub>: One of the two essences that constitute them is realized (=exists) in the other.

C<sub>2</sub>: The two essences that constitute them are sensibly indiscernible (*lā yatamayyazu minhū šay’un min al-āḥar*): if someone points at one of the two, his designation comprises necessarily the other.

C<sub>3</sub>: One of the two essences provides the other with an attribute (*šifa*), a configuration (*hay’a*) and a qualification (*na’t*).

C<sub>1</sub> is clear: one of the two essences of the compound exists in the other, in a certain – unspecified – way. As to C<sub>2</sub>, Avicenna contrasts it with the case of a peg stuck in a wall: the peg certainly exists in the wall, but the two elements of the compound are discernible by sense-perception. Now, in such compounds (C<sub>3</sub>) one of the two essences provides the other with an attribute (*šifa*), a configuration (*hay’a*) and a qualification (*na’t*): this element, which we shall call “qualifier”, is accident in one case, form in the other case. What marks the distinction between accident and form is, ultimately, the nature of its companion (i.e., the second essence), which is in both cases called “receptacle” (*maḥall*): if the qualifier exists in a receptacle that is already subsistent, and makes the qualifier subsist, then the qualifier is called “accident” and the receptacle is called “subject”; if on the contrary the qualifier constitutes the receptacle, and the receptacle in turn contributes to the constitution of the qualifier, then the qualifier is called “form” and the receptacle is called “matter”.

A perfect parallel for this distinction, where the example of the peg in the wall is also at stake, can be found in the beginning of the metaphysical section of another Avicennan *summa*, the *Elements of Philosophy* (*‘Uyūn al-ḥikma*)<sup>166</sup>: in the first chapter, after claiming that the subject-matter of metaphysics is the existent inasmuch as it is existent, Avicenna formulates the following distinction:

The existent may be existent as something which makes a certain thing (*šay’an min al-ašyā’*) a certain reality in act (*amran min al-umūr*), by means of its existence in it: like whiteness in a dress, and the nature of fire in fire; this because its essence is realized in another essence while coming across it completely, and being established in it (unlike the peg in the wall, since [the peg] has a separate essence, detached from [the wall]); [but] among existents, there is also what is not such. Among what is such, there is what comes over the other essence after that [this essence] has been constituted in act, either by itself or by what constitutes it, and this is called “accident”; and there is that thing which is associated with the other essence as something that constitutes it in act, and this is named “form”. Both the associated [essences] are said “receptacle”, one of them “subject” and the other “prime matter” and “matter”. Everything which is not in a subject – whether it be in prime matter or matter, or not in prime matter or matter – is called “substance”<sup>167</sup>.

---

*l-šaklu l-musaṭṭaḥu fī l-basīṭi, wa-ayḍan fa-inna l-a’rāda tunsabu ilā l-waḥdati wa-l-kaṭrati, wa-hāḍihi, ka-mā sa-nubayyinu la-ka, kulluhā a’rāḍun).*

<sup>166</sup> For the structure and the contents of the *‘Uyūn al-ḥikma* see GUTAS 2014, pp. 417-419.

<sup>167</sup> *‘Uyūn al-ḥikma* 47.15 – 48.6: *wa-l-mawġūdu qad yakūnu mawġūdan ‘alā annahū ġā’ilun šay’an min al-ašyā’ bi-l-fī’li amran min al-umūri bi-wuġūdihi fī dālika l-šay’, miṭlu l-bayāḍi fī l-ṭawbi wa-miṭlu ṭabī’ati l-nāri*

The *‘Uyūn al-ḥikma* shows the same approach to the distinction between accident and form, and the same conception of their resemblance, owing to the fact that they both build, along with their companions, a sensibly indiscernible compound (more on this also in Faḥr al-Dīn al-Rāzī’s commentary on the *‘Uyūn*)<sup>168</sup>; what marks a distinction between them, ultimately, is the specificity of the relation they have with their companion. However, in the *‘Uyūn* matter has a completely passive function, whereas in *Maqūlāt* Avicenna seems to suggest that it has a more active role in the constitution of the compound (being a receptacle that somehow takes part in the constitution of its own qualifier).

These two passages show quite clearly an attempt, on Avicenna’s part, to fill a gap of Aristotelian ontology, and to solve a problem which cannot be solved in completely Aristotelian terms: the ambiguity of the notions of accident and form. Avicenna’s solution is interesting and original, because it is intuitive and because it brings into discussion some non-Aristotelian notions, such as “configuration” (*hay’a*) and “qualification” (*na’t*), that play an important role in his ontology. Noentetheless, I have already underscored above the limits of such an interpretation.<sup>169</sup>

---

*fī l-nāri; wa-hādā bi-an takūna dātuhū ḥāṣilatan li-dātin uḥrā bi-annahā mulāqiyatun lahū bi-l-asri wa-mutaqarriratun fīhi lā ka-l-watadi fī l-ḥā’iṭi, id lahū infirādu dātin mutabarri’un ‘anhū. wa-minhū mā lā yakūnu hākaḍā. wa-llaḍī yakūnu hākaḍā: minhū mā yaṭra’u ‘alā l-dāti l-uḥrā ba’da taqawwimihā bi-l-fī’li bi-dātihā aw bi-mā yuqawwimihā – wa-hādā yusammā ‘araḍan. Wa-minhū mā muqāranatuhū li-dātin uḥrā muqāranatu muqawwimin bi-l-fī’li wa-yuqālu lahū šūratun, wa-yuqālu li-l-muqārinayni kilay-himā: maḥallun, wa-li-l-awwali minhimā mawḍū’un wa-li-l-ṭānī hayūlā wa-māddatun. Wa-kullu mā laysa fī mawḍū’in – sawā’a kāna fī hayūlā wa-māddatin, aw lam yakun fī hayūlā wa-māddatin – fa-yuqālu lahū: ḡawharun.*

<sup>168</sup> Rāzī, *Šarḥ ‘Uyūn al-ḥikma*, III, 9.17 – 17.17 (especialy p. 10.7-18).

<sup>169</sup> Cf. above the INTRODUCTION, 3.2.2.

## I.6

### ON REFUTING THE CLAIM OF THOSE WHO SAID THAT ONE THING MAY BE AN ACCIDENT AND A SUBSTANCE IN TWO RESPECTS

Chapter I.6 bears no specific references to Aristotle's text, but develops an independent digression that focuses on the following absurdity, held by some previous commentators (most notably, Porphyry and some Arabic followers of his): some things, if viewed under two different respects, may be deemed substances and accidents at the same time. This applies, according to Avicenna's opponents, to form (accident with respect to the matter it inheres in, substance with respect to the compound of matter and form), to *differentia specifica* (substances with respect to the species, accidents with respect to the genera they inhere in) and even to some accidents existing in substances (accidents with respect to their subject, substances with respect to the accident-substance compound they are a part of). In this chapter, Avicenna deploys a complete refutation of these previous scholars.

[§1] Avicenna recalls, in the first place, the absurd theory held by the preceding commentators, and makes some hypotheses concerning its genesis: mostly, a confusion about homonymous terms, such as "subject" and "quality". [§2] He then sets forth the main assumption whereupon his three following refutations rest: given the essence and the definitions of substance and accident, and their nature of contradictories, nothing can possibly be – in itself – substance and accident simultaneously. [§3] The first refutation quickly shows that form is by no means an accident in matter; [§4] the second refutation proves the same for *differentiae*. [§5] The third refutation is the longest: it reconstructs the opponents' argument to highlight the fallaciousness of its premises, to prove that even if accidents may be parts of substantial compounds, they are not – by themselves – substances.

[§1] (45.11 – 46.7). First of all, Avicenna expounds the absurdities held by his predecessors. This section must be compared with the first paragraph of the short treatise *Fī ḥaṭa'*, where Avicenna presents the syllogisms that prove the substancehood and accidentality of forms and *differentiae*, and the reactions of various schools of commentators<sup>170</sup>. The doubtful cases expounded here by Avicenna are basically three: [a] forms, [b] *differentiae*, and [c] accidents in substance-accident compounds.

[a] Avicenna presents here a possible explanation for his opponents' "relativist" mistake regarding forms. The first is the homonymy of the word "subject" (*mawḍū'*): as a matter of fact, "subject" is said of four things at least: (1) the concrete substance in which accidents inhere, (2) matter, (3) "substrate" (*ḥāmil*), i.e. a notion common to accident and form<sup>171</sup>, and (4) the grammatical "subject" of a predicative sentence<sup>172</sup>. Now, this led some of them to mistake matter for a subject, and to argue that form would exist in matter as in a subject – thus, form would be an accident. Subsequently, they came to know that form is a substance, in a certain state; Aristotle's claim, in the *Metaphysics*, that one of the various meanings of "quality" is "the *differentia* of substance"<sup>173</sup>.

Having known that *differentiae* are substances, and having known in Aristotle's *Metaphysics* that *differentiae* are qualities, they came to uphold the relativist idea that forms and *differentiae* can be substances and accidents in different respects.

[b] The second doubtful case is that of the substance-accident compound "white" (= substance having whiteness). It may be said even in this case that whiteness – an accidental quality – is a substance and an accident in two respects, if we maintain Alexander's principle that "the parts of substances are substances": as a matter of fact, it may be said that whiteness

---

<sup>170</sup> See the INTRODUCTION, 3.2.3, *Fī ḥaṭa'* [§1].

<sup>171</sup> Right above (I.5 [§6]), Avicenna called such a notion "receptacle" (*maḥall*).

<sup>172</sup> Cf. Avicenna's definition of "subject" at I.3 [§2.2], which excludes meaning (2).

<sup>173</sup> Arist. *Metaph.* Δ 14, 1020 a33 – b2.

is an accident insofar as it inheres in its subject, and a substance insofar as it is part of a substance (i.e. the compound as a whole). Such an argument, which extends the onto-relativist consideration to the case of non-constitutive accidents, sounds paradoxical and provocative: it certainly attests to the high degree of sophistry that this debate evidently attained before coming down to Avicenna. It is not surprising that Avicenna will mostly focus, in the rest of this chapter, on this particular issue.

**[§2] (46.8-19).** This general refutation of onto-relativism must be read in parallel with the more detailed argument expounded in the treatise *Fī ḥaṭa*<sup>174</sup>. Given the way in which substance and accident are defined, it is clear that something must inescapably belong to one or the other category: for something is either such as to exist in a subject only, or it is not such.

**[§3] (46.20 – 47.7).** As is clarified in the *Fī ḥaṭa*, the onto-relativist argument on form consists of claiming that form is a substance inasmuch as it is a part of the compound, and an accident inasmuch as it exists in matter<sup>175</sup>. Now, form is undoubtedly a part of the compound, and this does not prevent it from being a substance; as for its existence in matter, it was explained above – with respect to the various meanings of inherence – that the inherence of form in matter is other than the inherence of accident in substance. Since there is no other thing where form can possibly be imagined to inhere as an accident in its subject, then it is proven that form is not an accident in itself.

**[§4] (47.7-18).** Unlike Aristotle, who suggests in *Cat.* 5 that differentiae are not substances, Avicenna believes that they are indeed substances, inasmuch as they are “simple” differentiae (i.e. differentiae considered as equivalent to forms)<sup>176</sup>. As it is better explained in the treatise *Fī ḥaṭa*, onto-relativists argue that differentiae are substances inasmuch as they are part of the species, and accidents inasmuch as they inhere in genera<sup>177</sup>. Against such a view, Avicenna contends here that they are certainly substances inasmuch as they are parts of the species, but they do not inhere in genera as in matter; as will be made clear in the *Ilāhiyyāt*<sup>178</sup>. However, even if someone argued that the genus has the same ontological status as matter, the differentia would inhere therein as form does, and form is undoubtedly a substance.

The final remark refers to the discussion that will be carried below in chapter V.1, concerning in particular the fact that Aristotle’s definition of quality (“that which is said in reply to the question ‘how?’”) is an equivocal description that may refer to many beings outside the category of quality<sup>179</sup>.

**[§5] (48.1 – 51.8).** Eventually, Avicenna turns to refuting the commentators’ claim that the accident that builds a compound of substance and accident, inasmuch as it exists as a part therein, is a substance.

**[§5.1] (48.1-3).** Avicenna formalizes his opponents’ position about accidents in compounds by means of the following complex syllogism:

- P1. An accident in the compound inheres in something not-not as a part of it  
 P2. Everything that inheres in something not-not as a part of it is not an accident

<sup>174</sup> See above, *Fī ḥaṭa* [§4], especially [§4.2].

<sup>175</sup> See above, *Fī ḥaṭa* [§1].

<sup>176</sup> See below III.2 [§6.1-2] for Avicenna’s discussion of the ontological status of differentiae. Cf. also Arist. *Cat.* 3 a21-32.

<sup>177</sup> See above, *Fī ḥaṭa* [§1.1].

<sup>178</sup> *Ilāhiyyāt* V.3, 213-219.

<sup>179</sup> Arist. *Cat.* 8 b25-26; See below, V.1 [§2].

<C1. An accident in the compound is not an accident>

P3. Everything that is not an accident in something is a substance therein

<C3. An accident in the compound is a substance>

which counts three premises (P1, P2, P3) and two hidden conclusions (C1, C3).

**[§5.2] (48.4 – 49.12).** Avicenna turns thereafter to examine the syllogism, in order to prove its fallaciousness.

Premise P1 is acceptable, since any accident is undoubtedly a part of the compound substance-accident.

Premise P2 can be interpreted in two ways, but it is only acceptable (case P2.2) if that which inheres in the compound as a part is actually – in itself – not an accident, i.e. if it does not inhere in the compound as in a subject (and, we should add, if it does not absolutely need to inhere in a subject in order to exist).

Premise P3 can be interpreted in two ways as well, and it is only acceptable when (P3.1) it is understood as implying that what is not an accident in itself is necessarily a substance, even though it inheres in something (evidently, not as in a subject). (P3.2) This premise may also be interpreted as implying that if a thing X inheres in another thing Y not as an accident in a subject, then X is a substance with respect to Y. This is false because – as was claimed above, but also in the *Fī ḥaṭa*<sup>180</sup> – the substancehood and accidentality of something is absolute and depends to the thing's way of existence, whereas it must not be evaluated with regard to what the thing exists in. The fact of inhering in a certain thing X not as in a subject does not imply that the thing inheres not-in-a-subject in everything; but substances are such as not to exist in a subject absolutely, not with respect to a certain thing. When a certain X is found to inhere in Y not as in a subject, before concluding that it is a substance one must verify whether there exists absolutely no other thing where X inheres as in a subject. If no such thing exists, then X is certainly a substance.

**[§5.3] (49.13 – 50.9).** The following paragraph reprises the general topic of the distinction between substance and accident/accidental, in close connection with the refutation carried out in par. **[§2]**. What is an accident or a substance necessarily partakes in the distinctive character of accident and substance, i.e. respectively, needing to inhere in a certain subject in order to exist and not needing that subject absolutely. Being “substantial” or “accidental” is something different, i.e. bearing a certain relation to the constitution or existence of something. In this example, accident and accidental are closely related, for whiteness is in itself an accident, and it is not essential with respect to the coloured substance it exists in. Nonetheless, they must be considered as distinct things: as a matter of fact, they have distinct opposites or quasi-opposites. Whereas the “opposite” of accident is substance<sup>181</sup>, the opposite of “accidental” is “substantial” (*ḡawharī*), which means “essential” (*dātī*).

**[§5.4] (50.10-17).** The conclusion of the whole argument set forth in pars. **[§5.2-3]** is that the accident, inasmuch as it is part of a compound, is not a substance, but only substantial/essential to it. The confusion of “substance” and “essence” explains the errors of the opponents, for they clearly mistook “substantial” in its logical sense (i.e., as equivalent of “essential”) for “substantial” in its ontological sense (i.e., as referred to the being that is the opposite of accident).

---

<sup>180</sup> See above, **[§2]**; *Fī ḥaṭa*’ **[§4.3-4]**.

<sup>181</sup> At VII.1 **[§4.2]**, in reply to the objections moved by an anonymous commentator against Aristotle’s classification of opposites, Avicenna will clarify that between substance and accident holds the opposition of contradictories.

**[§6] (51.1-8).** In the general conclusion, Avicenna resumes his main argument against onto-relativists. Onto-relativists would be right if it had been said, when describing substance and accident, that substancehood and accidentality are defined merely with regard to the thing's particular substrate of inherence: if X inheres in Y as in a subject, it is necessarily an accident; if it does not inhere in Y as in a subject, it is necessarily a substance. However, it is not so, for the accidentality and substancehood of X are always necessarily defined with regard to the "absolute" way of existence of X, i.e. with respect to its needing or not a subject in order to exist.

## II.1

ON THE STATE OF THE MUTUAL RELATION OF GENERA AND THEIR DIVISIVE AND CONSTITUTIVE DIFFERENTIAE; ON MAKING KNOWN THESE TEN HIGHEST GENERA, AND THE STATE OF THE RELATION OF “EXISTENT” TO THEM; BEGINNING OF THE TREATMENT OF THE FACT THAT THEY ARE TEN, THEY DO NOT FALL UNDER A GENUS, NONE OF THEM BELONGS TO ANY OTHER, AND THERE IS NO GENUS OUTSIDE THEM.

II.1 inaugurates a long series of chapters (covering the whole second treatise) essentially devoted to the sufficiency of Aristotle’s table of the categories. In this first chapter, after briefly discussing some properties of specific differentiae, Avicenna enumerates the ten categories and presents five inquiries to be carried out about their number. He then goes on to tackle the first enquiry, concerning the status of being (“existent”, *al-mawǧūd*) with respect to the categories.

[§1] At first, Avicenna comments on Aristotle’s principle according to which genera subordinate to one another may have the same specific differentiae. Avicenna’s analysis elaborates on Aristotle’s principle, relying on the post-Aristotelian distinction between constitutive and divisive differentiae (in Arabic, respectively, *fusūl muqawwima* and *muqassima*). [§2] Following the order of Aristotle’s text, which presents an enumeration of the ten categories (1b 25 – 2 a10), Avicenna expounds Aristotle’s list and briefly discusses the examples mentioned for each category, which in nine cases out of ten (leaving substance aside) refer to things bearing the attributes, not to the attributes themselves. [§3] Avicenna moves on, thereafter, to enumerate five enquiries that need to be carried out, in order to ascertain that the highest genera cannot be but ten. [§4] The first enquiry concerns the status of existence with regard to the categories, notably the question whether existence can be deemed the highest genus, and the categories its species. Avicenna refutes firstly those previous commentators who held that the existent is completely homonymous; then, he moves on to refute the opposite view, i.e. the one according to which the existent is perfectly synonymous, and thus a genus. Avicenna proves then that the existent cannot be a genus because it is not a predicate that constitutes the essence of the categories, but rather an attribute extrinsic to them (a necessary concomitant, *lāzim*).

[§1] (55.8 – 57.9). The first section of the chapter elaborates on the second half of *Categories* 3, where Aristotle formulates the following two principles:

[α] The differentiae of genera which are different and not subordinate are different (e.g. the differentiae of animal, found in the category of substance, are different from, and cannot be applied to, the differentiae of knowledge, belonging to the category of quality)<sup>182</sup>.

[β] Genera subordinate one to the other may have the same differentiae; then, all the differentiae of the higher genera are also differentiae of the lower genera, so that all the differentiae of the predicate are also differentiae of the subject (τὰ γὰρ ἐπάνω τῶν ὑπ’ αὐτὰ γενῶν κατηγορεῖται, ὥστε ὅσαι τοῦ κατηγορουμένου διαφοραὶ εἰσι τοσαῦται καὶ τοῦ ὑποκειμένου ἔσονται)<sup>183</sup>.

Principle [α] is also presented in the *Topics* as a criterion to identify equivocal expressions, together with the example of the word ὀξύ: this term provides different senses of “sharp”, depending on whether it is taken as a differentia of bodies, or as a differentia of musical notes (notes and bodies being different, non-subordinate genera)<sup>184</sup>. Principle [β] is not easy to interpret as it stands, for Aristotle gives no examples, and it may even sound a bit strange: for it is certainly not true that all the differentiae of a higher genus (for instance, “body”) may also be said of a lower genus (for example, “animal”), most notably all the differentiae that divide the higher genus: if the differentiae that divide body are “animate” and

---

<sup>182</sup> Arist. *Cat.* 1 b16-20

<sup>183</sup> Arist. *Cat.* 1 b20-24.

<sup>184</sup> *Top.* A 15, 107 b19-21. See ACKRILL 1963, pp. 76-77; OEHLER 1984, p. 194.

“inanimate”, “inanimate” is certainly not predicated of any animate species (“animal”, and its subgenera). To sort out the issue without making emendations, one might suppose that Aristotle was obviously not referring to all the differentiae of the higher genus, but more probably to its constitutive differentiae and to the particular divisive differentia that produces the lower genus.

This text was deemed problematic by the ancient commentators as well, since Boethus of Sidon, as Simplicius reports, suggested to emend the last sentence by interchanging the words κατηγορουμένου and ὑποκειμένου, so as to say that all the differentiae of the subject (being more specific) are certainly said of the predicate as well<sup>185</sup>. Porphyry, despite mentioning Boethus’ solution, which he does not endorse, argues rather that only some differentiae of the higher genera are also predicated of the lower ones. As a matter of fact he recalls a distinction, already found in the *Isagoge*, between “specific” (εἰδοποιῶν) or constitutive differentiae, that are “productive and constitutive” (γεννητικαὶ καὶ ἀποτελεστικαὶ) of the genus as parts of its definition, and “divisive” (διαρρηκτικαὶ) differentiae, that merely divide it into its subordinate species<sup>186</sup>; now, Aristotle’s principle is valid only when applied to specific differentiae, since all the constitutive differentiae said of a higher genus (for instance, “animate” and “sensitive” for “animal”) are also said of the lower subordinate (“man”)<sup>187</sup>.

In his commentary on these Aristotelian lines, Avicenna overlooks principle [α] and focuses exclusively on [β], concerning the status of subordinate genera; he discusses the problem without making any explicit reference neither to Aristotle’s text, nor to the difficult sentence emended by Boethus.

[§1.1] (55.8-12). Avicenna gives apparently no indication as to why such problems concerning *differentiae* should be dealt with in the *Categories*, but he is probably attempting to establish a connection with the doctrine of the categories by beginning the discussion with the highest genera. Porphyry’s distinction between constitutive and divisive differentiae has been already reprised by Avicenna in the *Madḥal*: constitutive differentiae (*al-fuṣūl al-muqawwima*) have been defined as “those [differentiae] that divide the genus and constitute it as a species” (*fa-hiya llatī qassamat ḡinsahū wa-qawwamathū naw’an*), whereas divisive differentiae (*al-fuṣūl al-muqassima*) as “those [differentiae] that divide [the genus] and do not constitute a species below it” (*fa-hiya llatī tuqassimuhū wa-lā tuqawwimu l-naw’a tahtahū*)<sup>188</sup>. Being the highest genera, the ten categories clearly have no constitutive differentiae, since they are not produced by the specification of a notion more universal than them<sup>189</sup>; the species infimae, on the contrary, have constitutive differentiae but not divisive ones, for no differentia produces any species below them: the “divisive accidents and properties” (*a’rād wa-ḥawāṣṣ muqassima*) that they have are those accidental attributes that give rise to the multiplicity of individuals<sup>190</sup>.

<sup>185</sup> Simpl. *In Cat.* 58.27-32 (tr. CHASE 2003, p. 73): “Now, Boethus gave in to this problem, and suggested emending the text as follows: ‘so that however many differentiae there are of the subject, the predicate will have the same number.’ For the differentiae of the more particular shall also belong to the more universal, since the latter contains the more particular, even though the differentiae are not said as universally in the case of the predicate as they are in the case of the subject” (ἀλλ’ ὁ μὲν Βόηθος ἐνδοῦς τῇ ἀπορίᾳ μεταγράφειν ἡξίου τὴν λέξιν οὕτως ὥστε, ὅσαι τοῦ ὑποκειμένου διαφοραὶ, τοσαῦται καὶ τοῦ κατηγορουμένου ἔσονται αἱ γὰρ τοῦ μερικωτέρου διαφοραὶ καὶ τοῦ ὀλικωτέρου ἔσονται ἅτε τὸ μερικώτερον περιέχοντος, εἰ καὶ μὴ ὁμοίως καθόλου ἐπὶ τοῦ κατηγορουμένου, ὡς ἐπὶ τοῦ ὑποκειμένου λέγονται [...]).

<sup>186</sup> Porph. *In Cat.* 85.11-13; for the distinction between differentiae that divide the genus and differentiae that constitute the species, cf. *Isag.* 10.1-21.

<sup>187</sup> Porph. *In Cat.* 85.14-28.

<sup>188</sup> *Madḥal* I.13, 78.10-11.

<sup>189</sup> Cf. also *Madḥal* I.13, 78.8-9: “If the genus is a *summum genus*, then it has “nothing but divisive differentiae” (*wa-in kāna l-ḡins ḡinsan ‘āliyan, lam yakun lahū illā fuṣūl muqassima*).

<sup>190</sup> Avicenna tackles the distinction between specifying differentiae and specifying accidents or properties in *Ilāhiyyāt* V.4.



**[§1.2] (55.12 – 56.13).** The genera to which Aristotle’s principles apply, here, are only intermediate genera and species, which have both constitutive and divisive differentiae<sup>191</sup>. The constitutive differentiae of the higher genera constitute these genera primarily, but also the lower ones – secondarily; for divisive differentiae it is rather the opposite, since what divides a lower genus normally divides the genera above, though – again – secondarily. This is also not always true, as the example made with the word “barbaric” (*a‘ġam*) proves: it may be used as an equivalent for “irrational”, but it is so proper of man that it doesn’t obviously divide the upper genus “body” (as “irrational” does). Therefore, the divisive differentiae of a lower genus may (though not necessarily) divide an upper one, whereas the constitutive differentiae of upper genera always constitute the lower ones (but do not divide them).

**[§1.3] (56.14 – 57.4).** There is nonetheless an exception to this rule, at least according to common opinion (*bi-ḥasab al-mašhūr*), since certain divisive differentiae may divide higher and lower genera simultaneously: it is the case when a same genus has many “proximate, interpenetrating differentiae” (*fuṣūl qarība mutadāḥila*), for instance the genus “animal”. As a matter of fact, the genus “animal” may be divided according to different sets of differentiae, that are not only “proximate” (in the sense that they may all divide “animal” directly and primarily), but also “interpenetrating” (in the sense that they are not mutually exclusive, and some of them may include some other): the couples rational-irrational and mortal-immortal, the triplet walking-swimming-flying. Now, it is possible to start dividing the genus “animal” by the couple rational-irrational, and then divide the subgenus “rational animal” by the couple mortal-immortal; or to start dividing “animal” by walking-swimming-flying, and then divide the subgenus “walking animal” by rational-irrational. In all these cases, what divides (potentially) the higher genus also divides (actually) the lower one, and Aristotle’s principle [β] becomes valid for divisive differentiae as well.

**[§1.4] (57.5-9).** However, as Avicenna suggests, this commonly accepted example might be deemed not valid: mortal-immortal and walking-swimming-flying might not be actual differentiae of “animal”, but such things as necessary concomitants (*lawāzim*) of its. Still, whether these attributes are actual differentiae or not is a matter to be inspected by another discipline, namely by metaphysics: it is in the fifth treatise of the *Ilāhiyyāt* that Avicenna makes a distinction between differentiae and other notions that may enter the nature of genera, without actually specifying them<sup>192</sup>.

**[§2] (57.10 – 58.16).** Avicenna’s reprise of Aristotle’s enumeration of the ten categories<sup>193</sup> is accompanied, as in the previous exegetical tradition, by a short discussion of the manner of presentation adopted by Aristotle.

**[§2.1] (57.10-20).** After claiming – again – that there is no genus higher than the categories, Avicenna proceeds to enumerate them: he presents them, as Aristotle does, as the total possible significations of simple utterances<sup>194</sup>. The list follows the same order as Aristotle’s; the terminology basically follows Ishāq’s Arabic translation, except for the names of two “small” categories, having (*an yakūna laḥū* Ishāq, *al-ġida wa-l-mulk* Avicenna) and position (*al-mawḍū‘* Ishāq, *al-waḍ‘* Avicenna), and a few differences in the examples<sup>195</sup>.

**[§2.2] (58.1-16).** The manner of presentation adopted by Aristotle was also a subject for discussion in some late ancient commentaries, most notably Simplicius’. Simplicius

<sup>191</sup> Cf. also *Madḥal* I.13, 78.9-10.

<sup>192</sup> Cf. *Ilāhiyyāt* V.4.

<sup>193</sup> Arist. *Cat.* 1 b25 – 2 a4.

<sup>194</sup> Arist. *Cat.* 1 b25-27 (tr. ACKRILL 1963, p. 5): “Of things said without any combination, each signifies either substance or quantity or qualification or a relative or where or when or being-in-a-position or having or doing or being-affected” (Τῶν κατὰ μηδεμίαν συμπλοκὴν λεγομένων ἕκαστον ἤτοι οὐσίαν σημαίνει ἢ ποσὸν ἢ ποιὸν ἢ πρὸς τι ἢ ποῦ ἢ ποτὲ ἢ κεῖσθαι ἢ ἔχειν ἢ ποιεῖν ἢ πάσχειν).

<sup>195</sup> Compare *Manṭiq Aristū* 6.2-11 and *Maqūlāt* II.1, 57.14-20.

expounded three possible modalities of expression (σημασία) for the categories: according to denomination only (κατὰ τὴν ὀνομασίαν μόνην), by means of examples (ἀπὸ τῶν ὑποδειγμάτων) and on the basis of common, not yet technical notions that tend already to precision and perfection (κατὰ τὰς προχείρους ἐννοίας καὶ μηδέπω τεχνικάς, σπευδούσας δὲ ἤδη πρὸς τὴν ἀκριβῆ τελειότητα), i.e. easily comprehensible definitions and descriptions. According to Simplicius, Aristotle only opted for denominations and examples, and postponed the determination of the “notions” (ἐννοιαί) to the examinations of the single categories; on the contrary, Archytas added to the list of names and examples a sort of description for “the property expressed by the notion” (τὴν κατὰ τὴν ἐννοίαν ιδιότητα) of each category<sup>196</sup>.

Like his predecessors, Avicenna takes into account how the meanings of the categories are expressed: however, unlike them, he does not focus on the expression of the categories in general, but on the misleading manner in which the categories are presented by Aristotle’s examples. In these lines a distinction is implicit between the following ways of signification (*dalāla*):

1. In such a way that the noun signifies the meaning (*dalālat al-ism ‘alā l-ma ‘nā*): this sort of signification is found, for instance, when a certain utterance is referred to a category as an abstract notion.

2. In such a way that the noun signifies something having the meaning (*dalālat al-ism ‘alā dī l-ma ‘nā*): e.g. an utterance is referred to an example, or instantiation of the categories.

3. In such a way that a meaning signifies a meaning, or a reality signifies a reality (*dalālat al-ma ‘nā ‘alā l-ma ‘nā / dalālat al-amr ‘alā l-amr*): e.g., so as the notion of a property existing in substance is referred to the abstract notion of that same property.

Now, substance has been exemplified properly, since Aristotle’s examples in that regard (“man” and “tree”) have a type-1 signification: these nouns signify directly the essences that belong in the category. The examples provided for the nine accidental categories, on the contrary, only refer to substances that have properties (type 2), since these are “more easily knowable” (*a ‘raf*) than the abstract properties; still, this only leads our mind to understand the properties indirectly, insofar as sensible examples bear a reference to their abstract notions (type 3). For this reason a further, direct enumeration of the accidental categories is necessary, and Avicenna carries it out by substantivizing Aristotle’s examples.

By presenting such an analysis of Aristotle’s list, Avicenna implicitly suggests – again – that the *Categories* are a book for beginners in philosophy<sup>197</sup>. Furthermore, his insistence on the fact that accidents actually are the abstract properties, and not the substances qualified by them, seems to be fundamentally aimed at avoiding a confusion between accident and accidental, such as the one reproached to Porphyry and his followers in the previous treatise<sup>198</sup>.

**[§3] (58.17 – 59.5).** The list of issues to be solved about the categories partially anticipates the division and contents of the following chapters. Question (1), concerning the existent, will be examined right away (**[§4]**); question (2), concerning the notion of “accident”, will be dealt with in chapter II.2; question (3), regarding other numerical arrangements of the table of the categories, will be discussed in chapter II.3; question (4), concerning the existence of isolated beings, will be tackled in chapter II.4; question (5), concerning the actual way of division of the existent into the ten categories, will be solved in chapter II.5 **[§1-4]**.

**[§4] (59.5 – 62.17).** The first question examined by Avicenna is also a major problem of Aristotelian ontology, namely the question whether being, or existence (*al-wuġūd*), is a genus

<sup>196</sup> Simpl. *In Cat.* 60.23-34.

<sup>197</sup> On this issue see the INTRODUCTION, 2.1 [c-d-e].

<sup>198</sup> See above I.3 [§5-7] and the INTRODUCTION, 2.2 [c].

for the ten categories or not. That it is not a genus, according to Avicenna, has already been alluded to implicitly in chapter I.2, in the discussion of predication *bi-l-taškīk*; in II.1, however, Avicenna tackles the same issue directly and systematically.

[§4.1] (59.6-11). Avicenna begins by criticizing the procedure adopted by previous commentators to decide the issue, namely the recourse to a classification of “ways of dividing the one into the many” (*wuḡūh qismat al-wāḥid ilā l-kaṭra*). This may be a reference either to Simplicius’ commentary on the *Categories*, or to some Greek or Arabic commentary on the *Isagoge*, notably to the exegesis of the famous passage where Porphyry denies to being the nature of a genus<sup>199</sup>. As shown by C. Luna, Porphyry’s commentators (Ammonius, Elias, David and the Pseudo-Elias) used in this regard to enumerate some types of division (of a genus into species, of a whole into parts, of a species into individuals, etc.) in order to identify, by exclusion, the way of division properly applicable to the notion of being<sup>200</sup>. Quite the same approach is attested in both Ibn al-Ṭayyib’s commentaries on the *Isagoge* and the *Categories*<sup>201</sup>: it is therefore very likely that Avicenna’s polemical target is probably to be found amongst the Baghdad logicians.

Avicenna’s description of this method, here, implicitly alludes to its intrinsic circularity: the commentators discard all the unsuitable ways of division, until there remains what they prefer to remain (*mā yu ṭirūna baqā’uhū*). However, Avicenna’s point is that it is useless to choose among all those sorts of “multiplication” (*takṭīr*), for it is evident that “existent”, with regard to the categories, is first of all a predicate, not a whole with respect to its parts, nor a substance with respect to its accidents. Therefore, one must inspect whether “existent” is predicated of its subjects (= the categories) by homonymy, by synonymy, or by ambiguity (*bi-l-taškīk*). As is clear, such an inquiry is not irrelevant as to the question about the genericity of being, for if one finds that it is predicated synonymously, then it may be a genus; if not, it is not a genus.

[§4.2] (59.12 – 60.13). The first option refuted by Avicenna is that according to which *al-mawḡūd* is perfectly homonymous: if it were so, then the categories would only share in the name “existent”, but not in its definition. In the previous exegetical tradition, this solution is held by Ammonius, Elias and Ibn al-Ṭayyib<sup>202</sup>.

The argument mentioned and criticized by Avicenna here is the following: the categories clearly do not all exist in the same manner, for substances exist by themselves, whereas accidents exist because of something else; substances do not need the existence of something else, in order to exist, whilst accidents do. Now, Avicenna remarks, the very way in which the argument is formulated implies that the commentator unwillingly presupposes the unity of “existent”: he makes a distinction between two different sorts of existence that by necessity presupposes a comprehensive concept of existence, for “by itself” and “by something else” are clearly additional qualifications of the same notion. For this argument to be correct, one

<sup>199</sup> Porph. *Isag.* 6.5-11 (tr. slightly modified: BARNES 2003, p. 7): “For being is not a single genus common to everything, nor are all things cogenetic in virtue of of some single highest genus – as Aristotle says. Let it be supposed, as in the *Categories*, that the first genera are ten – ten first principles, as it were. Thus even if you call everything being, you will do so, he says, homonymously and not synonymously. For if being were a single genus common to everything, all things would be said to be existent synonymously. But since the first items are ten, they have only the name in common and not also the account which corresponds to the name.” (οὐ γὰρ ἔστι κοινὸν ἐν γένος πάντων τὸ ὄν οὐδὲ πάντα ὁμογενῆ καθ’ ἐν τὸ ἀνωτάτω γένος, ὡς φησιν ὁ Ἀριστοτέλης. ἀλλὰ κείσθω, ὡσπερ ἐν ταῖς Κατηγορίαις, τὰ πρῶτα δέκα γένη οἷον ἀρχαὶ δέκα πρῶται· κὰν δὴ πάντα τις ὄντα καλῆ, ὁμωνύμως, φησί, καλέσει, ἀλλ’ οὐ συνωνύμως. εἰ μὲν γὰρ ἐν ἧν κοινὸν πάντων γένος τὸ ὄν, συνωνύμως ἂν πάντα ὄντα ἐλέγετο· δέκα δὲ ὄντων τῶν πρῶτων ἡ κοινωνία κατὰ τοῦνομα μόνον, οὐκέτι μὴν καὶ κατὰ τὸν λόγον τὸν κατὰ τοῦνομα).

<sup>200</sup> Amm. *In Isag.* 81.7 – 83.22; Elias *In Isag.* 67.15 – 69.18; David *In Isag.* 154.13 – 156.32 (cf. LUNA 2001, pp. 587-591)

<sup>201</sup> Ibn al-Ṭayyib, *Tafsīr Ḍāḡūḡī* 95.1 – 99.15; *Tafsīr al-maqūlāt* 98.8 – 99.5.

<sup>202</sup> Amm. *In Isag.* 83.19-22; Elias, *In Isag.* 69.17-18; Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 99.2-3.

should rather suppose that “existent by itself” and “existent in virtue of something else” are notions that differ in themselves, and that “by itself” and “by something else” are qualifications that modify, somehow, the intrinsic nature of their subject. However, argues Avicenna, this was probably not intended by the previous commentators: the truth is that they could not find a word other than “existent” (*al-mawǧūd*) for the other predicate, in such a way that the additions “by itself” and “by something else” would only be extrinsic. This, however, does not depend on their incapacity, but rather on the fact that everything shares somehow in “being established” (*tubūt*) and existence, and this existence is unitary: this is “clear by itself, and cannot be clarified” (*bayyin fi nafsihī lā yumkinu an yubayyana*). Now, the fact that existence is clear by itself, and incapable of being clarified, depends on its being one of those primary concepts, common to all things, that in *Ilāhiyyāt* I.5 are said to be conceptualized by themselves (*mutaṣawwara li-anfusihā*): “existent” (*mawǧūd*), “thing” (*šay*), “one” (*wāhid*) and the like<sup>203</sup>. There, Avicenna says that these notions cannot be clarified by means of an absolutely non-circular explanation, nor they can by explaining something more [easily] known than them ([...] *laysa yumkinu an yubayyana šay`un minhā bi-bayānin lā dawra fīhi al-battata, aw bi-bayāni šay`in a`rafa minhā*)<sup>204</sup>.

[§4.3] (60.13 – 62.17). The last section of the chapter contains a proof for the non-synonymy of “existent”, and a proof for the fact that, even if it were synonymous, it could not be a genus.

[§4.3.1] (60.13 – 61.2). Avicenna’s argument for the non-synonymy of “existent” perfectly recalls what has already been said in chapter I.2 about the notion of *taškīk*<sup>205</sup>. Despite being a fundamentally unitary notion, “existent” may be modulated and differentiated at least in three respects: (1) it may belong to some things before some others, for instance to substances before and to accidents later (priority and posteriority); (2) it may be “worthier” (*aḥaqq*, to be compared with *awlā* in I.2) in some things, less worthy for others, for example worthier in things existing *per se*, less worthy in things existing by something else; (3) it may be stronger (*aḥkam*) or weaker (*aḍ`af*), in the sense of “more or less stable”: it is more stable in such accidents as quantity and quality, less stable in such accidents as motion.

[§4.3.2] (61.2 – 62.6). Avicenna goes on to argue that, even if the existent were synonymously predicated of the categories, it would not be a genus, since the conditions for something to be a genus are two: firstly, that it be predicated synonymously of its subjects, namely that its notion be undifferentiated in them; secondly, that it be constitutive of their quiddities (according to Avicenna’s understanding of synonymous predication, as we saw before, the two conditions are necessarily distinct). Now, the predicate “existent” does not take part in the quiddity of anything, for it is only a necessary concomitant of its subjects. Avicenna presents then, as a proof for this claim, an example concerning the conceptualization of a triangle: this section has been regarded by A. Bertolacci as an anticipation of *Ilāhiyyāt* I.5, and as the first “comprehensive formulation” of the essence-existence distinction in the Logic of the *Kitāb al-Šifā*<sup>206</sup>. When one tries to form the concept of a triangle, he may associate two determinations with it: its being a shape, and its being existent. These determinations certainly belong to the triangle, but not in the same way: its being a figure (its “figure-ness”, *šakliyya*) is constitutive of its quiddity, whereas its existence is not. A triangle cannot be understood as a triangle unless it is conceptualized as a figure: for “figure” takes part in the definition of triangle, a triangle being a three-sided figure<sup>207</sup>. On the

<sup>203</sup> *Ilāhiyyāt* I.5, 29.5 – 30.4.

<sup>204</sup> *Ilāhiyyāt* I.5, 30.4-5.

<sup>205</sup> See above, I.2 [§3.2].

<sup>206</sup> See BERTOLACCI 2012b, pp. 284-286, for an English translation of this passage and a commentary. This text was also translated into German and discussed by KOUTZAROVA 2009, pp. 247-258.

<sup>207</sup> Eucl. *Elem.* I, def. 20-21; *Handasa* I, 17.15.

contrary, it is not necessary to understand the triangle as existent, in order to know it: for one may well know the quiddity of an equilateral triangle and be in doubt about its existence, for instance, before it is constructed in Proposition I.1 of Euclid's *Elements*<sup>208</sup>. This proves that existence is a sort of extrinsic attribute, which substantially prevents it from being a genus.

**[§4.3.3] (62.6–11).** Then, Avicenna mentions and refutes another proof, presenting it simply as one of the “commonly accepted answers” (*al-aḡwibat al-mašhūra*) of the commentators.

This proof resembles the famous Aristotelian argument of *Metaphysics* B 3 against the genericity of being and one. Aristotle's argument is the following: if being and one were genera of all beings, then they would have *differentiae* that would be necessarily “being” and “one” themselves; but in that case, the *differentia* would be the same as the genus and the species, and neither the species nor the genus can be predicated of their *differentiae*. For this reason, the *differentiae* could be neither “being” nor “one”, and consequently neither being nor one would be genera<sup>209</sup>. The proof presented here by Avicenna sounds like a slight banalization of Aristotle's argument, since it is restricted to the predicate “existent” and goes as follows: if existent were a genus, then its *differentia* would be either existent or non-existent: if it were existent, then the *differentia* would substitute the species (*makāna l-naw*); if it were non-existent, then it could not divide any genus. For this reason, “existent” is by no means a genus. A similar presentation of the proof is found in Yahyā Ibn 'Adī's short treatise *On the fact that accident is not a genus of the nine accidental categories*, which might be another source for this passage<sup>210</sup>. The absurdity of this solution, says Avicenna, lies in the fact that nothing prevents the *differentiae* of a genus from participating, somehow, in the essence of the genus: for instance, the *differentiae* of the genus “substance” are substances, and *differentiae* all the same. Avicenna will argue for the substantiality of *differentiae* later on, in chapter III.2 ([§6]); it is not clear, however, why he should mention the “quality of form” (*kayfiyyat al-ṣura*) and postpone its treatment to another discipline, as he does here: he might be referring to forms, understood as abstract *differentiae* (III.2, [§6.1])<sup>211</sup>. If the polemical target is really Aristotle, however, this might be a direct reference to the text of the *Metaphysics*, since in Uṣṭāṭ's translation the Greek εἶδη (for “species”) is translated *ṣuwar* (“forms”)<sup>212</sup>.

**[§4.3.4] (62.11–17).** In the end, Avicenna presents a doubt that might well disprove his account of the non-genericity of being. According to this objection, there seem to be some genera whose species are prior and posterior: quantity, for among its species discrete quantity is prior to continuous quantity; number, for some of its species (two) are prior to some others (three and four); substance, since it falls upon primary and secondary substances, simple and compound substances. In the *Maqūlāt*, Avicenna will tackle and solve this issue only with regard to the case of substance, in chapters II.4 [§5.2] and III.1 [§1-2].

<sup>208</sup> Eucl. *Elem.* I prop. 1.

<sup>209</sup> Arist. *Metaph.* B 3, 998 b22-27. See ROSS (p. 235), LOUX 1973 (pp. 225-226) for an analysis of this argument. AERTSEN 2012, pp. 60-75.

<sup>210</sup> Yahyā Ibn 'Adī, *Maqāla fī anna l-'araḍ*, 145.14-25.

<sup>211</sup> Cf. also *Ilāhiyyāt* V.6, 230.

<sup>212</sup> *Tafsīr mā ba 'da l-ṭabī'a* I, 220.2-8 Bouyges.

## II.2

### ON THE FACT THAT ACCIDENT IS NOT A GENUS FOR THE NINE [ACCIDENTAL CATEGORIES], AND THE EXAMINATION OF WHAT WAS SAID ABOUT THIS

Chapter II.2, the shortest of *Maqūlāt*, deals with the opinion according to which the highest genera are only two: substance, on the one hand, and a vast genus “accident” embracing all accidental genera on the other hand. Avicenna refutes the arguments provided by some anonymous predecessors to demonstrate that “accident” is not a genus, despite agreeing with the substance of their view; the *pars construens* of the chapter, where he argues for the same opinion, is comparatively quite short.

[§1] Avicenna’s predecessors claimed that “accident” is not a genus for the ten categories, since its definition (existent in a subject) does not apply to many of them. It does not apply, for example, to the category of when, because “yesterday” and other temporal determinations inhere in numerous subjects, not only in one. Avicenna refutes this thesis by saying that each subject has a proper, individual relation with time. [§2] The argument of the predecessors also applies to the category of where, and Avicenna’s reply is identical: every single subject has an individual relation with its place, even though that place is shared with other subjects. [§3] According to the commentators, the definition of accident does not comprise the categories of relatives and having, for these are notions that inhere in two subjects. To refute them, Avicenna proves that relatives, as well as having, belong to one subject only. [§4] In the end, Avicenna expounds a theory according to which “accident” is not a genus, because it expresses a certain relation with the subject that is not intrinsic to the definition of any accident. This is congruent with Avicenna’s own view: accidentality is not a constitutive character of accidents, but rather a necessary concomitant of theirs. For this reason, it cannot be deemed an actual genus for the nine accidental categories.

[§1] (63.4 – 64.2). The objection according to which Aristotle’s list of the categories is redundant, because it may be reduced to two *summa genera*, is mentioned and refuted by many previous commentators. Simplicius states that the followers of Xenocrates and Andronicus of Rhodes “seemed to encompass” all beings under two categories, *per se* (τὸ καθ’ αὐτό) and relatives (πρὸς τι); he also mentions “other” unspecified “people” (ἄλλοι) who divided being into substance and accident, by attributing to the genus ‘accident’ a relative nature, on account of the fact that all accidents are “always of other things” (ἄλλων ἀεὶ ὄντων)<sup>213</sup>. The same doctrines are cited and refuted by Dexippus<sup>214</sup>: Dexippus and Simplicius use, against this categorial dualism, counter-arguments that derive very likely from Porphyry’s lost commentary *Ad Gedalium*, or from Iamblichus<sup>215</sup>. Olympiodorus and Elias/David ignore the distinction between *per se* and relative, and only focus on the division into substance and accident<sup>216</sup>. The issue was a subject of discussion in the Arabic tradition as well: Yaḥyā ibn ‘Adī composed a dedicated short treatise, where he provided an original refutation of the dualist thesis (notably, of the genericity of accident with regard to the nine accidental categories)<sup>217</sup>; Ibn al-Ṭayyib cited the doctrine in his commentary on *Cat.* 4, and refuted it by means of five counter-arguments<sup>218</sup>. All commentators agree upon the falsehood of this doctrine, but they provide a number of different proofs for it. Avicenna, despite being himself convinced that “accident” cannot be a genus of the accidental categories, concentrates

---

<sup>213</sup> Simpl. *In Cat.* 63.22-26.

<sup>214</sup> Dex. *In Cat.* 31.11 – 32.8.

<sup>215</sup> For a comparative discussion of Simplicius’ and Dexippus’ arguments see LUNA 2001, pp. 132-140.

<sup>216</sup> Olymp. *In Cat.* 55.1-18; Elias/David, *In Cat.* 161.6-12.

<sup>217</sup> *Maqāla fī anna al-‘araḍ laysa huwa ġinsan li-l-tis ‘ al-maqūlāt al-‘araḍiyya*, edited in Yaḥyā Ibn ‘Adī, *The Philosophical Treatises*, pp. 144-147.

<sup>218</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 99.13 - 102.25.

firstly on refuting some arguments of his predecessors in favour of the same thesis. These arguments are all based on the same principle: the Aristotelian description of “accident” (“existent in something, not as a part of it, such that its existence is impossible without what it is in”) does not apply to all accidental categories, for some accidents apparently exist in more than one thing: either in two, like relatives and the category of having, or even in more things, like the categories of when and where.

The argument derives from a sophistical banalization of the idea according to which many accidents have a – more or less – relational nature: Avicenna finds it unsatisfactory because it depends on a misconception of the nature of these accidents.

The first claim refuted by Avicenna concerns the category of when. According to Avicenna’s opponents, such temporal determinations as “yesterday” and “the year before last year” cannot be deemed accidents, for they inhere in numerous subjects simultaneously despite being one by number. A similar objection will be discussed with regard to the category of where: Avicenna’s reply consists of saying, there, that the categories of where and when are not identical with time and place, but should rather be identified with the relations entertained by substances with the time and place they are in<sup>219</sup>. Therefore, Avicenna says here in II.2, if by “yesterday” and “the year before last year” one means the relation with time, it is clear that each subject may have a proper relation, one by number, with time and space. The relation of a certain individual (let us say, Zayd) with the time interval qualified as “yesterday” is other than the relation of another individual (let us say, ‘Amr) with it, even if the time interval is the same.

If on the contrary they meant to demonstrate that time itself is not an accident, they still miss the point. The reason is the following: time is understood as a quantity, being the number of motion<sup>220</sup>. Now, it is evident that its subject will be the same subject as that of the motion it numbers. However, there are different theories regarding the proper subject of time: some people hold that this subject is one, some other people hold that it is many things.

**[§2] (64.2-11).** With regard to the second case, concerning the category of where, Avicenna’s point is basically the same. The commentators attempted to deny to where the status of an accident because an instantiation of where, such as “being in a market”, is one by number, but apparently it is shared by many subjects simultaneously. However, if the commentators are thinking of the proper category of where, which is the relation with place, then different subjects may well have different individual relations to the place they find themselves in. Market is a common place (*makānun ‘āmmun*), not the actually proper place (*al-makānu l-ḥaqīqiyyu*) that cannot be shared by anything else, i.e. the natural place of a body. Avicenna will deal in more detail with this doubt when discussing the category of where in chapter VI.5<sup>221</sup>.

**[§3] (64.12 – 65.11).** The commentators also mentioned, to support their thesis, the cases of the category of relatives and that of the category of having.

**[§3.1] (64.12-14).** Relatives seem to inhere in two things, instead of one. This doubt was already been mentioned above, in chapter I.4 (but there Avicenna left it unsolved)<sup>222</sup>. The same seems to hold true of the category of having, for a species of having like “being armed” or “having arms” (*tasalluh*) seems to exist both in the armour and in him who wears it.

---

<sup>219</sup> See below, VI.5 [§1.2].

<sup>220</sup> Arist. *Phys.* Δ 12, 220 a24.

<sup>221</sup> See below, VI.5 [§1].

<sup>222</sup> The doubt was mentioned as an objection moved against Aristotle’s description of accident as “existent in something”: see above, I.4 [§3.1], 29.6-7.

**[§3.2] (64.14 – 65.6).** Avicenna’s response on the issue of relatives is not conclusive. The commentators hold that a single relative property must inhere in two subjects, and that this prevents it from being properly “in something” as the description of accident would require. Now, this is not true for Avicenna: though it is true that a relative inheres in two subjects, it may well inhere separately (and properly) in each one of them without getting split or diminished. Moreover, Aristotle did not prevent an accident from inhering in more than one thing: that is why he did not say “in one thing only” (*fī šay’ wāhid faqaṭ*), but only “in something” (ἐν τινι, *fī šay’*)<sup>223</sup>. The relation “fatherhood”, for example, can be related with more than one sonship, for the same man can be the father of two sons; the relation of genericity applies to all of the species, since “animal” is equally and separately related to man, fish, bird, and the like. There are cases where a certain comprehensive attribute may not be equally predicated of a multiplicity, for instance the case of the whole with respect to its parts: the whole (*al-kull*) is not found in each part, but only in the sum of the parts. However, since the existent does not inhere in its subject as a whole in its parts, nothing hypothetically prevents a relative from existing in many things, and in each thing separately, in the same time<sup>224</sup>. Therefore, if the commentators speak of a simultaneous existence of a numerically one relative in many subjects and in each subject, then their doctrine is somehow legitimate; however, this is not the complete truth, as Avicenna says before postponing the discussion of this point to other “places” (*mawāḍi*) where the relative is dealt with.

In the *Šifā’*, Avicenna analyses the nature of relatives with respect to their subjects in *Ilāhiyyāt* III.10, where he states that relative properties inhere separately in each of the two subjects; the property shared by the two subjects is only one by species, not by number<sup>225</sup>. In the *Ilāhiyyāt* Avicenna rejects again the doctrine refuted in this passage of *Maqūlāt* II.2, and qualifies those who hold the same relative to be existent in two different subjects as “weak in discernment” (*du’afā’ al-tamyīz*)<sup>226</sup>.

**[§3.3] (65.6-11).** As for the category of having, it is not as the commentators think: for unlike the relation of relatives, “having” is an asymmetrical relation entertained by a subject with a certain object, and need not be inherent in the object as well. An armed man “has” his armour, whereas his armour does not “have” or “possess” him. Even though Avicenna provides a characterisation of having in this place and in chapter II.5, he will substantially dismiss it as an obscure and useless category in<sup>227</sup>.

**[§4] (65.12 – 66.5).** After refuting these arguments, Avicenna mentions another case made against the genericity of accident. According to this argument, ascribed again to some unspecified predecessors, “existent in a subject” does not constitute an essential determination of accidents (such as “whiteness” and “blackness”), but rather the fact that they have, with the subject, a relation (*nisba*) that is somehow required by their essence. However, since genera indicate the nature or quiddity of things, not “relations attached to their quiddities” (*mā yalḥaqu māhiyyātihā min al-nisbati*), the accident cannot be a genus.

<sup>223</sup> See also above, I.4 [§2].

<sup>224</sup> Avicenna has already inspected the differences between the inherence of accidents in their subject and the inherence of the whole in its parts above, in ch. I.4 [§3.2].

<sup>225</sup> Cf. *Ilāhiyyāt* III.10, 154.7 – 155.16, esp. 154.15 – 17 (tr. MARMURA 2005, p. 118): “Rather, fatherhood is in the father. The case is similar with the state of the son with respect to the father. There is nothing here at all which is in both of them. Here, there is nothing but fatherhood or sonship. As for a state posited for [both] fatherhood and sonship, this is something unknown to us and has no name” (*bal al-ubuwwa fī l-ab. wa-ka-ḍālika ayḍan ḥāl al-ibn bi-l-qiyās ilā l-ab fa-laysa šay’ wāhid al-batta huwa fī kilayhimā, fa-laysa ḥāhunā illā ubuwwa aw bunuwwa. wa-ammā ḥāla mawḍū’ a li-l-ubuwwa wa-l-bunuwwa fa-lasnā na’ rifuhā wa-lā lahā ism*).

<sup>226</sup> *Ilāhiyyāt* III.10, 155.14-16.

<sup>227</sup> For Avicenna’s “farabian” description of the category of having, see below II.5 [§4.3.3]; for his dismissal of it, see VI.6 [§2].



Avicenna qualifies this explanation as “pertinent” (*sadīd*): as a matter of fact, it reflects his own view on the problem. “Accidentality” may be understood to signify either that something exists in a subject, or that it needs a subject in order to exist: neither of these two meanings constitutes the quiddity of any category, for they are relational properties. An indirect proof for this lies in the fact that, even after having ascertained their quiddities in the *Categories*, some scholars still have doubts about them being accidents, and posit some of them – notably, quantity and quality – as substances. Those who argue for the substancehood of quantities are mainly to be identified with Platonists and Pythagoreans, especially in so far as they argue for the principiality of mathematical beings<sup>228</sup>; those who argue for the substancehood of qualities are, as Avicenna argues, the partisans of the doctrine of the “latency” (*kumūn*) of qualities, probably identifiable with the followers of the theologian al-Nazzām (d. before 232/847)<sup>229</sup>. As a consequence, in First Philosophy it is still necessary to prove that these properties are accidents and exist in a subject: a task that Avicenna will accomplish in the third treatise of the *Ilāhiyyāt*<sup>230</sup>.

As a conclusion, Avicenna remarks that the relation of “accident” to the nine accidental categories is the same as the relation of “existent” to all supreme genera, for they are both attributes that do not constitute the quiddities of any category. In the end, Avicenna’s solution may remind of a point made by Yahyā Ibn ‘Adī in the short treatise *On the fact that accident is not a genus for the nine accidental categories*. Part of Ibn ‘Adī’s complex solution may be synthesized as follows: given that “existent” (*mawǧūd*) takes part in the description of accident (“existent in a subject...”), and existence is not a genus for anything, accident is not a genus but a “concomitant” (*lāzim*) of the nine accidental genera<sup>231</sup>. Though it is uncertain whether Avicenna knew this work or not, it might have influenced Avicenna’s reply to the objections of the categorial dualists.

---

<sup>228</sup> Cf. *Ilāhiyyāt* III.1, 94.5-8; *Ilāhiyyāt* VII.2, 312.6 – 314.7.

<sup>229</sup> Cf. *Ilāhiyyāt* III.1, 94.9-11. On the doctrine of *kumūn* see HORTEN 1909, VAN ESS 1986. Avicenna refutes this doctrine extensively in *Kawn wa-fasād* 4, 101-111.

<sup>230</sup> On the opinion according to which quantity and quality are substances see *Ilāhiyyāt* III.1, 94.5-11; the arguments for the substancehood of quantity are better explained at III.1, 94.14 – 95.15. Avicenna will refute the “partisans of the substancehood of quantity” (*aṣḥāb al-qawl bi-ḡawhariyyat al-kam*), as he calls them at III.1 94.14, by proving the accidentality of number (III.3) and extensions (III.4); he will later move to proving the accidentality of qualities in chapters III.7-9.

<sup>231</sup> Ibn ‘Adī *Fī anna l-‘arād*, 144.11 ff. (for a synthesis of Yahyā’s argument see KALBARCZYK 2018, pp. 213-214).

### II.3

#### ON INVESTIGATING WHAT WAS SAID BY THOSE WHO REQUIRED THAT [THE CATEGORIES] BE LESS, OR MORE

Chapter II.3 deals with the third problem listed in II.1 [§3]: the discussion of other possible arrangements of Aristotle's table of the categories, proposed by the tenants of less numerous highest genera. The title of the chapter is misleading: Avicenna only discusses cases of smaller tables of categories, where some of Aristotle's ten genera are regrouped under others.

[§1] Avicenna begins by mentioning two alternative tables of the categories, that he will reject: (1) a doctrine according to which the categories are only four, namely substance, quantity, quality and relatives (the six remaining accidents being regrouped under relatives); (2) a doctrine that restricts the number of the categories to five, namely substance, quantity, quality, relatives and "extremes that take something from quality" (a corruption of the Greek *πρός τί πως ἔχοντα*). [§2] Before concentrating on the refutation of the aforementioned doctrines, Avicenna states that in general the ten categories divided by Aristotle are truly mutually different, in such a way that none of them can be reduced to another. [§3] The refutation begins: the four-fold list of the categories is incorrect, because relation may belong accidentally to genera other than the category of relatives, but it is not constitutive of their quiddity. [§4] Also the five-fold list of categories is incorrect: the expression "extremes that take something from quality" is obscure, and none of its possible significations makes the theory satisfactory. [§5] According to some other commentators, the category of affection is nothing but the category of quality. The absurdity of this doctrine is evident, argues Avicenna: the process of something heating up cannot be the same thing as the heat which is the result of that process. [§6] To some commentators it seemed that the two categories of acting and being acted upon should rather be conflated into a single genus, motion. This is false, says Avicenna: motion is only related with the category of being acted upon.

[§1] (66.9-12). After discussing the dualist table of categories in chapter II.2, Avicenna goes on to discuss other objections of redundancy moved against Aristotle's list. The first two doctrines he mentions are found, among many others, in the previous exegetical tradition, notably in the commentaries of Elias/David and Ibn al-Ṭayyib.

The first theory contemplates a four-fold table of categories: beside substance, quantity and quality stands a category of the relative (*al-mudāf*) that comprises the six remaining accidents (where, when, position, acting, being acted upon, having). Elias/David presents two versions of a four-fold table: the first bears no attribution, and collects the six minor accidental categories under the genus of *πρός τι*; the second one, mistakenly ascribed to Plotinus, identifies the same four categories and considers the remaining six as the result of a combination (*συνπλοκή*) of substance, quantity, quality and relatives<sup>232</sup>.

The second theory cited by Avicenna presents a five-fold list of categories: substance, quantity, quality, relatives and "the extremes that take something from quality" (*al-aṭrāfu llatī ta'ḥuḍu min al-kayfiyyati šay'an*). Elias/David and Ibn al-Ṭayyib expound an identical list, and attribute it to Galen: the obscure Arabic phrase found in Avicenna is also used in Ibn al-Ṭayyib's *Tafsīr*, and most probably translates the Greek formula *πρός τί πως ἔχοντα* (rather translatable into English as "relatively disposed things")<sup>233</sup>. It is not clear why Avicenna would choose to discuss these two particular issues, among the numerous alternative tables found in the exegetic literature; for sure, the attribution of the second one to Galen made it

---

<sup>232</sup> Elias/David, *In Cat.* 160.26-33. For a brief discussion of the two theories, see LUNA 2001, pp. 723-724.

<sup>233</sup> Elias/David, *In Cat.* 160.20-26; Ibn al-Ṭayyib, *Tafsīr al-maḳūlāt* 103.19-22, where the fifth category is called *al-aṭrāfu llatī ta'ḥuḍu min al-kayfiyyati šay'an mā*. On this theory and its attribution to Galen see MORAUX 1984, pp. 692-693; LUNA 2001, pp. 722-723.

particularly interesting for Avicenna, given the special influence that Galen had on his medical theory.

**[§2] (66.12 – 67.5).** Before refuting the two doctrines presented in par. **[§1]**, Avicenna states that on the whole, none of the ten Aristotelian categories can really be reduced to another. This will be clear when their descriptions will be given: for the difference between each category is a matter of definition and quiddity, and the quiddity of each category is clearly distinct from – and incompatible with – the quiddity of the other genera.

A previous commentator seems to have explained the difference between the categories of quantity and quality by observing the phenomena of relative repulsion that subsist between some quantities and some qualities: as a certain body increases its quantity, a certain quality of its may decrease in intensity, and *vice versa*<sup>234</sup>. Now, according to Avicenna this is not a valid argument: for even if one accepted this, he should still explain why the same sort of repulsion seems to occur also between attributes within the same category. The case Avicenna has in mind is that of contraries: if a cold body is heated, then the relative increasing of a quality (heat) gradually makes another quality (coldness) decrease<sup>235</sup>. Now, these two qualities do not belong to different genera for the fact of being repulsive to each other: on the contrary, as is known, contraries normally belong to the same genus or species, for they are different specifications of a same quiddity.

**[§3] (67.6 – 68.4).** Against the inclusion of the six minor categories under the genus “relative”, Avicenna argues that relation is only an accident for those genera: being such, it does not constitute their quiddity, and therefore it cannot be posited as a genus for them. In order to explain this point, Avicenna anticipates some points that he will make in the chapters devoted to the category of relative (IV.3-5): as he will declare in the end of this paragraph, what he says now is non-validated, and a sort of admonition or reminder (*ka-l-tanbīhi gayru muḥaṣṣalin*).

Now, the relative that constitutes the category has its quiddity said with respect to something else, and this is an essential determination of its; the other categories, on the contrary, have the same character as an accidental property, which belongs to them besides the constitution of their quiddity. “Having something”, as in the case of the category of having, or “being in something”, as in the case of the categories of when and where (being, respectively, in time and place), or “being with something” have a proper definition that does not include the “relation” of the category as a fundamental character. To explain this point, Avicenna suggests to take into account one character of true relatives: reciprocity or “repetition” (*al-takrīr*)<sup>236</sup>. Zayd’s “being in a house” is an instantiation of the category of where: it is constituted by a relation to a place, that is not a relation in the strong sense of the term (i.e., the reciprocal, essential relation that constitutes the category), but rather a weaker, asymmetrical relation. However, it comes to have the characters of a proper relation only accidentally, when understood – extrinsically – as the reciprocal relation of a contained thing with its container, such that it is possible to say “Zayd is the contained of the house” and “the house is the container of Zayd”. The same may apply to categories that do not normally stand as relative, such as quality: a certain whiteness may well be understood as something relative

---

<sup>234</sup> In his physical works, Avicenna rather argues for the opposite principle – namely, whenever the quantity of a certain body increases, its quality becomes more intense as well (cf. *Af’āl wa-infī’ ālāt* I.4). On the contrary, it is true that the effectiveness of a certain potency is inversely proportional to the volume of the subject it acts upon: for instance, a bigger piece of wood is more difficult to burn than a smaller piece of wood (see *Af’āl wa-infī’ ālāt* I.3, 213.10-14).

<sup>235</sup> For Avicenna’s chemical-physical analysis of the alternation (*ta’āqub*) of heat and coldness, see *Af’āl wa-infī’ ālāt* I.3.

<sup>236</sup> On “repetition” or “reciprocity” as a property of relatives, see below IV.3 **[§5]**, 145-146.

to the subject it exists in, and the subject itself may be seen as relative to whiteness, but only by accident. As a matter of fact, the quiddity of whiteness is not said with respect to its subject, nor is the quiddity of the subject said with respect to whiteness.

[§4] (68.5 – 69.5). In the following section, in order to reject Galen’s five-fold list, Avicenna tries to understand the signification of the expression “the extremes that take something from quality” (*al-aṭrāfi llatī ta’ḥuḍu min al-kayfiyyati šay’an*). It is not clear how the Greek phrase τὰ πρὸς τί πῶς ἔχοντα could have given rise to such an odd, interpretative translation, whose sense was evidently obscure even to Arabic speakers<sup>237</sup>. Curiously enough, in Ibn al-Ṭayyib’s *Tafsīr al-maqūlāt* we may read, besides the expression found in Avicenna, another clearer Arabic rendering of the same formula, associated with the Stoic table of categories: “things of which it is said how they are, and how their state is” (*al-ašyā’u llatī yuqālu fī-hā kayfa hiya wa-kayfa ḥāluhā*)<sup>238</sup>. The two forms might derive from different translations of different works: the latter very likely from the translation of Simplicius’ commentary on the *Categories*, where the Stoic theory is cited and criticized<sup>239</sup>; the former from a translation either of Elias/David’s commentary, or even of Galen’s work on the *Categories* (provided that this doctrine is really Galenic).

Be as it may, Avicenna does not understand it. If it was meant to apply to the six minor categories, he says, it may at least apply to acting, being acted upon and position. As a matter of fact, acting and being acted upon may refer to a quality, which is the result of a certain action or affection being exercised (for instance, heat is the result of both the processes of heating something up and becoming hot); and “extremes that take something from quality” would be the relations (*al-nisbatayni*) that the acting and affected thing establish with their actions and affections<sup>240</sup>. The formula might include position as well, for position is closely associated with a type of quality, namely figure<sup>241</sup>. However, these interpretations sound quite inventive, for the expression itself is murky: “extremes” does not mean anything determinate; “taking something from quality” is an equivocal locution, and it is not even predicable by ambiguity (*bi-l-taškīk*) of its numerous possible meanings. Therefore, Avicenna tentatively proposes to fix the expression by saying, in clearer terms: “realities that have a certain relation with quality” (*al-umūr allatī lahā ilā l-kayfiyya nisba mā*), which is by far the most reasonable interpretation of the first version. Yet, even after this correction Galen’s theory remains problematic. Avicenna proposes two arguments against it: the first (1) is based on the ontological status of relations, whereas the second (2) is an infinite regress argument.

(1) According to this reformulation the fifth category would regroup, after all, other realities with respect to their having a relation with quality: these other realities would belong in the first place to other categories (for instance, substance and quantity), and successively belong to the fifth category in virtue of an accident (the relation with quality) that would lie outside their essential determinations. However, for this very reason these realities could not fall under this further genus: for the relation with quality, being an accident, would not constitute their essence (as the categories do). If they did not mean that, and they actually

<sup>237</sup> Besides Avicenna, see Ibn al-Ṭayyib’s refutation (*Tafsīr al-maqūlāt* 103.24-25): “Firstly, the genus ‘extremes that take [something] from quality’ is something nobody can understand, nor explain its meaning” (*ammā awwalan fa-ḡinsu l-aṭrāfi llatī ta’ḥuḍu min al-kayfiyyati amrun lā yaqtadiru ‘alā fahmihī aḥadun*).

<sup>238</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 102.29.

<sup>239</sup> Simpl. *In Cat.* 66.32 – 67.8. For a stylistic analysis of the extant fragment of this translation, see CAMINADA 2016, pp. 217-221.

<sup>240</sup> On Avicenna’s treatment of action and being affected, and on their relation with quality, see below (VI.6 [§2]).

<sup>241</sup> Although figure is said by Aristotle to belong to quality, according to Avicenna it is a categorial complex that also seems to comprise a positional determination. In VI.1 [§6], below, Avicenna will even refute the erroneous claim – made by some previous commentators – that figures belong to the category of position.

meant to signify the relation of some things to quality, there is an additional problem: (2) given that any category may be accidentally related to another, there is no reason for positing a category that only comprises relations with quality; one could imagine, therefore, a genus for relations with quantity, a genus for relations with substance, and even a genus for relations with relatives, so that relations would go *ad infinitum*.

[§5] (69.6-15). The objection according to which the category of “being acted upon” should be reduced to quality is not attested in any previous commentaries on the *Categories*. It must rather be searched for in the context of natural philosophy, since in the *Samā‘ tabī‘ī* Avicenna rejects a similar doctrine, according to which a certain motion in quality (e.g. blackening, or whitening) corresponds to a “flowing” quality<sup>242</sup>. Avicenna finds this objection a particularly serious challenge: it implies, as a matter of fact, that there be no difference, in qualitative change, between a process and its result. One may suppose, as Avicenna’s opponents do, that a body heating up is hot (though in different degrees) at every stage of the process, and for this reason the process of heating up may not be distinguished from the quality that the body is acquiring. Now, for Avicenna this is false: even though a body heating up has in every instant a certain heat, there is always a quality distinct from each stage of the process, which is the quality that results from it ultimately. If it were as the commentators say, then the process of becoming qualified would always be identical with the quality, and what becomes qualified in order to acquire a certain quality would already possess it, which is clearly absurd. Another consequence of this, argues Avicenna, is that if becoming qualified were identical with quality, one should also admit that making something qualified is a quality; then, it would follow that making something move is identical with moving, and that every moving is moved, which is incompatible with the existence – demonstrated in physics – of an unmoved mover (see for instance in the *Physics* of the *Šifā‘*, *Samā‘ tabī‘ī*)<sup>243</sup>. Avicenna’s mention of “love” (*al-‘išq*) in the final paragraph is a clear reference to God, as an unmoved mover that moves as end.

[§6] (69.16-18). The last objection discussed by Avicenna is well attested in the previous commentaries. The exegetical tradition presents us, as a matter of fact, with two similar objections<sup>244</sup>: acting and being acted upon may be reduced to one and the same category, being moved (κινεῖσθαι), discussed by Dexippus, Simplicius and Elias/David<sup>245</sup>; acting and being acted upon may be reduced to one and the same category, motion (κίνησις), discussed by Dexippus, Simplicius and Olympiodorus<sup>246</sup>. As for the Arabic tradition, Ibn al-Ṭayyib expounds the second objection, and attributes it to Nicostratus (*Niqūstrītūs*)<sup>247</sup>; it is also the second version that we find in Avicenna.

Avicenna’s discussion of this objection is very short: he contents himself with a reference to natural philosophy, where it will be proved that an agent is not described by motion, for it is certainly not moved. Avicenna will deny that motion occurs within the categories of acting and being acted upon in *Samā‘ tabī‘ī* II.3<sup>248</sup>; however, he will substantially identify motion with the category of being acted upon, which justifies his final remark in this chapter: if the commentators had said that “being acted upon” is a sort of motion, or motion itself, and that

<sup>242</sup> *Samā‘ tabī‘ī* II.2, 94.16 – 95.10.

<sup>243</sup> *Samā‘ tabī‘ī* IV.15.

<sup>244</sup> The two objections, their sources and the commentators’ replies are thoroughly analysed in LUNA 2001, pp. 620-630; 696-713.

<sup>245</sup> Dex. *In Cat.* 30.35 – 31.10; Simpl. *In Cat.* 63.4-9, 311.13 – 312-37; Elias/David, *In Cat.* 160.7-14.

<sup>246</sup> Dex. *In Cat.* 34.3-19; Simpl. *In Cat.* 66.16-31, 301.20 – 303.31; Olympiodorus (*Olymp.* *In Cat.* 54.32 – 55.1) seems actually to combine the two objections, very likely on account of their similarity.

<sup>247</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 105.5 – 106.4.

<sup>248</sup> *Samā‘ tabī‘ī* II.3 106.7 – 107.14.

acting is coincident with making something move, they would have said something remarkable. It must be observed that Avicenna's solution is identical with the one provided by Dexippus and Simplicius to the first objection (probably deriving from Porphyry's *ad Gedalium*), also reprised by Olympiodorus<sup>249</sup>.

Motion will also be the subject of a longer discussion in the following chapter, devoted to those beings that seem to lie outside the ten categories<sup>250</sup>.

---

<sup>249</sup> Dex. *In Cat.* 31.3-10; Simpl. *In Cat.* 63.6-9; Olymp. *In Cat.* 54.34-36. See LUNA 2001, p. 621, 628.

<sup>250</sup> See below, II.4 [§2].

## II.4

### ON MENTIONING REALITIES THAT WERE IMAGINED EITHER TO BE COMMON TO SOME OF THE TEN [CATEGORIES] AS A GENUS, OR TO FALL OUTSIDE THE TEN [CATEGORIES], AND COMPLETING THE DISCUSSION OF THIS [TOPIC]

In chapter II.4, Avicenna takes into account the status of some beings that seem somehow to fall outside the ten categories, either as genera higher than them or even as separate genera. The chapter regroups some of the objections that Simplicius classified as charges of “incompleteness” (ἔλλειψις): for instance, the categories seemingly do not comprise the principles of some beings, for instance unity and the point; nor do they comprise some other things, such as matter, form and privations. Avicenna also discusses briefly the case of motion, which some commentators posited as a genus for a number of accidental categories.

[§1] Avicenna begins by presenting the doubts that will be discussed throughout the chapter. [§2] The first, dismissed quickly with a reference to natural philosophy, regards motion: some commentators posited motion as a genus for the categories in which motion is found, for instance quantity, quality and where. [§3] Before moving to the other doubts, Avicenna makes a general premise: on the whole, nothing forbids some isolated beings to fall outside the ten categories; the existence of such isolated beings does not imply that the categories be more than ten, for these “loners” do not form separate genera. [§4] Another premise consists of presenting the three standard solutions of the commentators for the aforementioned puzzles: (1) unity, point, prime matter and form fall outside the categories, because they are principles; (2) principles fall in the same category as the things they are principles of; (3) some of these beings belong to more than one category. [§5] Avicenna rejects the solution of the first group of commentators, by demonstrating: that unity and point do not belong to the category of quantity, but that this does not depend on their being principles of numbers and extensions; that matter and form belong to the category of substance. Then, he goes on to refute a doubt according to which “substance” is not applied equally to matter, form and body. [§6] He also refutes the second group of commentators, by proving (a) that unity does not belong to quantity; (b) by explaining that privations, if understood as contraries, belong to the same category as their opposites; if understood as absolute privations, they do not. [§7] Thirdly, Avicenna rejects the reply of the third group, claiming that nothing can belong to different categories properly, but only to one category by itself and to other categories by accident. [§8] In the end, Avicenna tackles a complicated doubt related to the question whether the aggregate of a substance and an accident, for instance “white” (being the equivalent of “white body”), deserves a category for itself. He presents three ways of solving the aporia, and thereafter discusses some minor, related doubts.

[§1] (70.5-9). After having discussed some objections of redundancy against Aristotle’s table of categories, Avicenna tackles at length some charges of incompleteness, and the status of some beings that seem to fall outside the ten categories. The first doubt mentioned in the beginning of the chapter regards motion (*ḥaraka*). Some commentators appear to have posited motion as a genus for a number of accidental categories, notably those in which motion is found: quantity, quality, and where. No such doctrine is attested in the exegetical tradition on the *Categories*. The second problem mentioned by Avicenna concerns some beings that seem to be “different” (*mubāyina*) from, or extrinsic to, the ten categories: unity (*al-waḥda*), being the principle of numbers; point (*al-nuqṭa*), being the principle of extensions; prime matter and form, that are, in a certain sense, constituents and principles of bodies (individual substances); privations (for instance blindness and ignorance) and “overparticular examples” such as north and south, lunch and dinner. The late ancient commentators dealt with the status of such beings as one, monad, point and instant, for and matter with respect to the categories<sup>251</sup>. Most

---

<sup>251</sup> See below, par. [§4].

commentators also discuss the status of privations, along with negations: such discussions are found in the commentaries of Dexippus, Simplicius, Ammonius and Philoponus.

[§2] (70.10-14). The doubt concerning motion is the first solved by Avicenna. Wishing to demonstrate that motion is not a separate genus, he posits the following alternative: either motion is identical with the category of being acted upon, and then it is not a genus other than Aristotle's categories; or it is said by ambiguity (*bi-l-taškīk*) of its species, and then it is not a genus at all. These are two of the three doctrines that will be presented and discussed in *Samā' tabī'ī* II.2, concerning the relation of motion to the categories: the third is the doctrine that qualifies motion as purely equivocal with respect to the supreme genera related to it<sup>252</sup>. In the *Samā' tabī'ī* Avicenna seems to opt ultimately for the identity of motion and being acted upon, a position that was held before him certainly by Fārābī<sup>253</sup>.

[§3] (70.15 – 71.14). Before moving on to consider the following doubts, Avicenna makes a general premise concerning the status of 'nomad' beings. The existence of something outside the ten categories does not necessarily imply that they be more than ten: it would only be the case, if the beings lying outside Aristotle's genera had their definitions shared with other beings, in such a way as to be included in a hierarchy of genera, species and individuals. However, if these isolated beings are isolated individuals, or isolated species, they need not be counted as further genera, or as belonging to further genera. Avicenna explains this point by means of a suggestive metaphor (quite rare an event, in his philosophical works): if in a country there exist ten cities, and outside the cities lives a number of uncivilized, nomad tribes, the existence of these Bedouins obviously does not imply that the cities be more than ten. It is the same with the ten categories, and the beings falling outside them: one cannot argue that Aristotle's list of supreme genera is incomplete on account of the fact that some beings do not belong to the ten categories, for these beings may not satisfy the conditions required to be counted as categories.

[§4] (71.15 – 72.10). Avicenna expounds, thereafter, some of his predecessors' replies to the puzzles raised with regard to isolated beings. Avicenna probably does not refer to specific authors or doctrines, but seems to regroup autonomously similar replies found in the previous commentaries.

[1] A first group of commentators argues that unity, point, prime matter and form, being principles of some quantities (unity and point) and substances (matter and form), fall outside the ten categories. Principles, as a matter of fact, cannot fall under the categories they are principles of, for then they would be principles for themselves – which is absurd. It is difficult to identify precisely the tenants of these doctrines: the debate on the categorial status of indivisible quantities (one, monad, point, instant) in the Greek tradition was quite a complex one, and the apparent incoherences showed by some commentators make it hard, at times, to understand their position<sup>254</sup>. Olympiodorus argues, for instance, that point, instant, monad, matter and form fall outside the ten categories in themselves, but "relatively" (ἐν σχέσει) they fall in the categories: presumably in the same categories as the beings they are principles of,

---

<sup>252</sup> *Samā' tabī'ī* II.2, 93.4-8.

<sup>253</sup> *Samā' tabī'ī* II.2, 97.13-15; cf. also Fārābī, *Qātāgūryās* 25.3-4 (DUNLOP 1959): "There is no difference between our saying 'is acted upon' and our saying 'it changes', 'it moves'; and the species of this genus are the species of motion, namely generation and corruption, augmentation and diminution, alteration and local motion" (*wa-lā farqa bayna qawlinā yanfa' ilu wa-bayna qawlinā yatagāyyaru wa-yataharraku, wa-anwā' u hādā l-ġinsi hiya anwā' u l-harakati, wa-hiya l-takawwunu wa-l-fasādu wa-l-namwu wa-l-idmihlālu wa-l-istiḥālatu wa-l-naqlatu*). On the categorial status of motion in Avicenna see HASNAWI 2004; see also DI VINCENZO 2017, pp. 50-51.

<sup>254</sup> For a thorough reconstruction of this debate and its incoherences, see LUNA 2001, pp. 673-696.



inasmuch as they are principles<sup>255</sup>. Philoponus discusses the state of point, instant and monad, inspecting whether they belong to the category of substance, quantity or relatives: he concludes that such simple beings lie outside Aristotle's scope in the *Categories*, and therefore outside the ten categories, because they are concepts with which common people are unfamiliar. Despite this, they could be reconducted to the category of quantity as indivisible quantities – if only quantity were subdivided by the differentiae “divisible” (μεριστόν) and “indivisible” (ἀμερές, ἀμέριστον)<sup>256</sup>. The idea according to which one, monad and point are principles of quantities was also used to prove that they belong to the category of relatives, a thesis that Simplicius ascribes to Alexander of Aphrodisias<sup>257</sup>; and it was also used to refute the claim, which Simplicius attributes again to Alexander, that these beings fall under the category of quantity, inasmuch as they are parts of quantities<sup>258</sup>.

[2] A second group of commentators claims [2a] that principles may fall in the same categories as the things of which they are principles: unity and point, then, would belong to quantity, because they are “in” numbers and lines. [2b] They also claim that privations belong to the same categories as their possessions: rest belongs to the same category as motion (being acted upon), blindness to the same category as vision (quality), and so on. Point [2a] might well derive from Philoponus' aforementioned argument against point and monad being substances (they are found “in” lines and numbers), or from Alexander's second argument (they are parts of quantities). Ibn al-Ṭayyib uses a similar argument, not involving inherence but insisting on principiality, to prove that point and unity belong to the category of quantity: point and unity are quantities “in potency” (*bi-l-quwwa*) since line and number, quantities in act, are produced respectively by “the flowing of a point” (*ḡarayān al-nuqṭa*) and “the repetition of one” (*tikrār al-wahda*)<sup>259</sup>. As for point [2b], the solution according to which privations belong to the same category as their possessions is found in Simplicius and Dexippus, where it is justified by recourse to some “hypomnematic works” of Aristotle<sup>260</sup>; it is also attested by Ammonius and Philoponus, who opt – nonetheless - for its opposite (i.e. privations do not fall in any categories)<sup>261</sup>.

[3] A third group of commentators admits the possibility that some isolated beings belong to more than one category. Point, for instance, would belong to relatives, inasmuch as it is the extreme of a line, and to quality, inasmuch as it is a certain configuration (*hay'a*); North, being corporeal, in motion and a pole, would belong respectively to substance, being acted upon and where; a meal, being a production of motion (digestion), an attribute of him who eats, and taking place at a certain time, would belong to the categories of acting, relatives and when. The identity of these thinkers is difficult to determine: there are parallels, in the known exegetical tradition, only for the doctrine according to which the point is relative, being the principle of the line<sup>262</sup>. Very likely, this doctrine stems from the Arabic commentary tradition.

**[§5] (72.11 – 76.20).** Avicenna first discusses the theory that denies citizenship within the ten categories to unity, point, matter and form, on account of the fact that they are principles of other beings.

<sup>255</sup> Olymp. *In Cat.* 53.34 – 54.3.

<sup>256</sup> Phil. *In Cat.* 46.14 – 48.1.

<sup>257</sup> Simpl. *In Cat.* 65.17-18; a similar thesis is also reported by Philoponus (though with reference to one, monad and point) at Phil. *In Cat.* 46.8-10.

<sup>258</sup> Simpl. *In Cat.* 65.24-29; Dex. *In Cat.* 33.27-30. As shown by C. Luna (LUNA 2001, pp. 675 – 682), there are independent texts by Alexander that seem to confirm his apparent incoherence on this point.

<sup>259</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 119.11-19.

<sup>260</sup> Dex. *In Cat.* 33.8-21; Simpl. *In Cat.* 65.2-13. For a discussion of the Aristotelian titles given by Simplicius, see LUNA 2001, pp. 666 – 673.

<sup>261</sup> Amm. *In Cat.* 34.5-10; Philoponus *In Cat.* 48.7-13.

<sup>262</sup> See for instance Phil. *In Cat.* 47.8-10.

[§5.1] (72.11 – 74.6). In the first part of the discussion, Avicenna argues that point and unity fall outside the categories, but not because they are principles; he later claims that matter and form fall in the category of substance.

[§5.1.1] (72.11 – 73.10). The opponents claim that the point and unity are principles of the category of quantity as a whole (*bi-asrihā*), and for this reason they do not belong to it. Against this assumption, Avicenna moves a two-fold argument.

(a) Point and unity are not, taken singularly, principles for quantity as a whole: unity is a principle for discrete quantity only (i.e. numbers), whereas the point is a principle exclusively for extensions (i.e. continuous quantities)<sup>263</sup>. Moreover, Avicenna specifies that they are not even principles in the same way, for unity is a principle of number “as a cause” (*‘alā annahā ‘illatun*) and “as an extreme” (*‘alā annahā tarafun*), whereas point is not a cause, but only an extreme of the line. As a matter of fact, in *Samā‘ tabī‘ī* II.5 Avicenna argues that the point is nothing but the termination (*fanā‘*) and the limit (*nihāya*) of the line, and in *Ilāhiyyāt* III.4 he rejects the idea according to which the point produces the line (a mistake induced, as he also claims here in II.4, by imagination)<sup>264</sup>. On the other hand, unity is said to be both a material and formal cause of number in *Ilāhiyyāt* III.5<sup>265</sup>.

(b) Furthermore, even if point and unity were principles, the fact of being principles would not suffice for ruling them out of the category of quantity. As a matter of fact, we could well imagine a category of quantity where the highest genus “quantity” falls in the first place upon unity and point, which are principles for – respectively – discrete and continuous quantities.

[§5.1.2] (73.10 – 74.6). As the safest way to decide the issue, Avicenna exhorts the reader to see whether the description of quantity applies to unity and point, and whether the description of substance applies to matter and form. Now, the description of substance certainly applies to matter and form; for matter and form share in the fact of being “existent not in a subject”, on a certain condition, as will be clarified below<sup>266</sup>. As to unity and point, they cannot be described by the definition of quantity, being “that wherein it is possible to find something that is appropriately one [thing] that enumerates - this being so in itself, regardless of whether the appropriateness is existential or suppositional” (*allatī yumkin an yūgada fihā šay‘ minhā yašihhu am yakūna wāhidan ‘āddan, wa-bi-kawn dālika li-dātihi sawā‘ kānat al-šihha wuğūdiyya aw farḍiyya*)<sup>267</sup>. As a matter of fact, unity is already comprised in this description, and if it were described by it then that definition would be circular; as for the point, being by definition something that has no parts<sup>268</sup>, it cannot be numbered by anything.

Here in ch. II.4, Avicenna does not make any further considerations about the categorial status of unity and point: if they do not belong to quantity, do they fall in another category, then? If one looks in the henological part of the *Ilāhiyyāt*, the answer is negative – at least in the case of unity: unity lies outside the ten categories, since it is – like “existent” – an accidental attribute predicated by ambiguity (*bi-l-taškīk*), a necessary concomitant of being<sup>269</sup>. His solution resembles, all in all, the one chosen by Dexippus and Simplicius (attributed to the “illustrious predecessors”): unity lies outside the categories because it is equivocal<sup>270</sup>.

<sup>263</sup> On continuous and discrete quantity, see Arist. *Cat.* 4 b20; cf. also below, III.4 [§4].

<sup>264</sup> *Samā‘ tabī‘ī* II 5, 112.18 – 113.2; *Ilāhiyyāt* III.4, 115.5-6.

<sup>265</sup> *Ilāhiyyāt* III.5, 119 – 120.

<sup>266</sup> See below, [§5.2]; III.1, [§1-2].

<sup>267</sup> *Ilāhiyyāt* III.4, 118.14-15 (tr. MARMURA 2005, p. 90).

<sup>268</sup> Cf. Euclid’s definition: Eucl. *Elem.* I, hor. 1.1 (tr. HEATH 1908, p. 153): “A point is that which has no part” (Σημεῖόν ἐστιν, οὐ μέρος οὐθέν), reprised by Avicenna at *Handasa* 1, 16.9.

<sup>269</sup> See *Ilāhiyyāt* III.2, 97.1-2, for the fact that unity is said by ambiguity; 103.7-9, for its similarity with ‘existent’ (as to the fact that neither of them constitutes the quiddity of anything).

<sup>270</sup> Cf. Dex. *In Cat.* 33.30 – 34.2; Simpl. *In Cat.* 66.12-15.

**[§5.2] (74.6 – 76.20).** The second part of the discussion concerns a doubt that is probably formulated by Avicenna himself, concerning the status of matter and form with regard to the category of substance. This long section partially anticipates the themes and conclusions of chapter III.1, whose main focus lies rather on the genericity of substance (and the relation between particular and universal substances).

**[§5.2.1] (74.6-16).** Someone might say that matter and form do not belong to the genus of substance, not because they are principles but because they are prior, in a sense, to some other substances (for instance, to body); and since what is predicated by priority and posteriority is said by ambiguity, and is not a genus, then substance could be a genus either for matter and form only, or for bodies only. The same problem would hold with respect to quantity, for also quantity has prior and posterior species (lines before surfaces, three before four, and the like). Avicenna introduces this objection in order to provide what he labels an “useful rule” (*qānūn muḥīd*) to determine the difference between a category (i.e. a genus) and another non-generic thing predicated “by the notion” (*bi-l-ma‘nā*), namely in such a way as to transmit a unitary meaning to its subject, despite not being a genus. In a nutshell, the rule in question is designed to distinguish genera from attributes said by priority and posteriority (by ambiguity), in doubtful cases.

**[§5.2.2] (74.16 – 75.18).** Avicenna begins to solve the aporia by making a preliminary distinction. Given a number of particulars that share in a certain, more universal signification (*maḥmūm*) or notion, and differ somehow by priority and posteriority, either [a] priority and posteriority concern the notion common to the particulars and to the universal, or [b] they concern another attribute of these particulars. Avicenna provides thereafter two examples, regarding two different kinds of priority: one concerns the causal priority of substances with respect to accidents, the other concerns the temporal priority of a father with respect to his sons. [a] In the case of substances and accidents, which share in the more universal notion of “existence”, priority and posteriority regard the universal attribute common to them. Substances are, as a matter of fact, causes for the existence of accidents, and their existence is prior to the existence of accidents. [b] In the case of a father and his children, who share in the essence of the species “man”, priority and posteriority do not concern the notion shared by all of them (the quiddity of man), for the father’s manhood is not prior to the manhood of his children; it is just that the father’s manhood exists before the children’s manhood, with respect to time. Therefore, priority and posteriority concern an attribute extrinsic to the essence of manhood, namely existence. In case [a], then, the attribute is not a genus; for it has been proven, above, that the attribute “existent” is not a generic predicate<sup>271</sup>. In case [b], on the contrary, “man” may well be a species, for the priority and posteriority of its individuals do not apply to the quiddity common to all of them.

**[§5.2.3] (75.19 – 76.18).** It is the same, evidently, for form and matter with respect to body. Form and matter are not causes for the body’s being substance: body is substance by itself, in virtue of its own quiddity. Form, matter and body share equally in the definition of substance: they only differ by priority and posteriority with respect to existence. The same logic applies to prior and posterior quantities: number three and number four share in the same quiddity (number), and what is prior (three) is not a cause for the essence of what is posterior (four), but rather it is a cause for its existence. Avicenna concludes by restating the usefulness of this principle: it allows us to decide whether difference in priority and posteriority prevents a certain general predicate from being a genus (as in the case of existence) or not (as in the case of substance). As for substance, Avicenna will reprise this point extensively later, in chapter III.1<sup>272</sup>.

---

<sup>271</sup> See above, II.1 [§4].

<sup>272</sup> See below, III.1 [§1-2], 91.7 – 94.3.

**[§5.3] (76.19-20).** In this short conclusion, Avicenna sums up what he has proven in general against the first group of commentators presented in paragraph **[§4]**: point and unity do not belong to the category of quantity, but this does not depend on the fact that they are “principles” of quantities; matter and form belong to the category of substance, and this is also independent of the fact that they are principles of composite substances.

**[§6] (76.20 – 77.16).** Thereafter, Avicenna goes on to refute the second group of commentators, who make principles fall under the same category as what they are principles of, and make privations fall in the same category as the corresponding possessions.

**[§6.1] (76.20 – 77.7).** The fact that unity exists “in” numbers, and point “in” lines, does not imply that they fall in the same category as numbers and lines (quantity); otherwise, Avicenna argues, accidents should all fall in the category of substance, for they are normally existent in substances. It must be said that such an argument is not particularly convincing, since the inherence of accidents in substances, on the one hand, and the inherence of unity and point in discrete and continuous quantities, on the other hand, are distinct sorts of existence<sup>273</sup>. However, Avicenna makes it more precise by arguing that only one particular sort of inherence would imply that unity and point, when inhering in numbers and lines, fall in the category of quantity: the inherence of a species in its genus. If unity fell as a species under number, number being a species of quantity, then unity would fall in the category of quantity. The same would hold true, logically, if unity were a genus for number; however, Avicenna does not mention this possibility (probably because it has substantially been denied, already, in par. **[§5.1]**).

**[§6.2] (77.8-16).** As for the case of privations, Avicenna makes a distinction between privations in a relative sense and privations in an absolute sense.

**(a)** Relative privations are actually contraries, for one may say of some contraries that they are – in a sense – privations of their opposites (for instance, coldness is a privation of heat, and vice-versa). A relative privation is only a privation with respect to something else; being such, is in fact a positive attribute, with a specific quiddity and a proper set of essential characters<sup>274</sup>.

**(b)** Absolute privations, on the other hand, are privations of essences: for this reason, they are only qualified as states of non-existence of certain properties (for instance, blindness coincides with the non-existence of vision).

Now, if the ten categories only classify the quiddities of beings, it is clear that non-beings such as “absolute” privations deserve not to fall under the categories, or at least to be found therein by accident. Even in this second case, however, they cannot be truly species of those categories, since species do not belong to their genera by accident.

**[§7] (77.17 – 78.5).** Eventually, Avicenna tackles the views of the third group of commentators, reported above in par. **[§4]**. Against them, Avicenna does not deny that something may belong to many categories at once; still, this does not imply that that thing be a species of all those categories. As a matter of fact, the ten categories regroup quiddities that are radically, intrinsically different: for this reason any definable being may belong, properly speaking (namely, as a species that ultimately shares in the description of the highest genus), to one category only. If a certain being belongs to another category, it does definitely by

---

<sup>273</sup> Accidents inhere in substance as in a subject, since they are *caused* by their subject and inseparable from it; unity and point, on the contrary, inhere in numbers and lines as – respectively – limits and causes thereof; see above, **[§5.1.1]**.

<sup>274</sup> Cf. also below, VII.1 **[§3.3]**, 248.1-3, where Avicenna alludes to the existence of “existential” and “privative” contraries.

accident. Relation stands as a genus and a category for a certain class of beings, but is often an accident that belongs extrinsically to beings that are found in other categories<sup>275</sup>.

[§8] (78.6 – 81.16). In the last pages of chapter II.4, Avicenna tries to solve a difficult aporia concerning categorial complexes, probably formulated as an objection to the characterization of categories provided in par. [§7].

[§8.1] (78.6-13). The doubt discussed here has no parallels in the preceding exegetical tradition; it is presented by Avicenna as “what someone might say” (*mā li-qā’ilin an yaqūlahū*), which might also mean that he is proposing the objection himself. According to the opponent, a body seems to have different essences whether it is considered as a body, or as a “white” (*abyaḍ*), in the sense of “white body” or “white thing”. As a matter of fact, when “body” belongs to “white” in two particular ways, either as a part of it (if “white” is understood as “white body”), or as a necessary concomitant of it (if “white” is formally understood as “white thing”, but the thing in question is always a body), the “body” which is part or concomitant seems to have an essence for itself, whereas the complex (“white body” or “white thing”) seems to have an independent essence. If the association with whiteness, then, modifies the essence of body, and – according to the point made in par. [§7] - distinct essences fall under distinct categories, it is not unlikely that “white” fall in another, independent category. Here Avicenna does not say anything about the nature of this separate genus, but there are evidently two main possibilities: that “white body” falls in the category of quality, or that it belongs to an independent category containing other conjunctions of substance and quality. Against this doubt, Avicenna presents – in the following pages – a set of three solutions, and discusses two further, related doubts. The three solutions must not be understood as independent replies to the same doubt, but rather as subsections of a unitary argument. These subsections prove, in this order: (1) that the union of body and whiteness does not belong to an independent genus or species, (2) that the union of body and whiteness does not belong to the category of quality, (3) that the union of body and whiteness belongs to the category of substance.

[§8.2] (78.13 – 79.5). The first solution is structured as a counter-argument. The thesis is the following: not any notion associated with another notion (*ma’nā qtarana bi-ma’nā*) requires that one posit, for it, an independent essence that falls in a separate genus or category. This is proven by means of a double *reductio ad absurdum*.

(1) If this were true, the mere conjunction of a substance with any accident would give rise to an independent genus or species: for instance, even the accidental union of man with farming would constitute an independent species of the genus “man” (“farmer”), which is absurd.

(2) If this were true, then we should posit a different category for each conjunction of substance with one of the accidental genera: one category for the sum of substance and quality, one category for the sum of substance and quantity, and so on. As a matter of fact, we would be obliged to posit a different category for each sort of categorial complex, since neither substance nor the accident taking part in the complex may be predicated of it by synonymy.

These arguments can be better understood in the light of the fifth treatise of the *Ilāhiyyāt*, most notably with the section of chapter V.7 where Avicenna classifies different kinds of “union” (*ittiḥād*) in order to distinguish between the union proper of genus and differentia, and other kinds of union<sup>276</sup>. There, Avicenna describes the union of body and whiteness as a union taking place among distinct things, some of which subsist by themselves in actuality, whereas others only subsist in virtue of the thing they are associated with: in other words, as a

---

<sup>275</sup> See below, for instance, Avicenna’s discussion of the status of knowledge (*ilm*) in chapter VI.4 [§2-4].

<sup>276</sup> *Ilāhiyyāt* V.7, 238.5 – 240.17.

union between a substance and an accident<sup>277</sup>. On the contrary, the union of genus and differentia is characterized as the union of two non-identical things, one of which (the differentia) has the potentiality of being the other (the genus)<sup>278</sup>.

**[§8.3] (79.6-11).** The second solution is aimed at proving that the complex of a substance and a quality cannot fall in the category of quality, and relies on the two possible interpretations of the category of “how” (*kayfa*, *πῶς*). Since this category may be seen as comprising either qualities in themselves or qualified things, what the opponents say does not hold true in any case: neither in the case where “how” is understood as including abstract qualities, nor in the case where it is interpreted as classifying qualified things. As a matter of fact, if the category of “how” regroups qualified things, the union of man and whiteness cannot be deemed a quality *inasmuch as it has whiteness*, for – according to this interpretation of “how” – whiteness would not be a quality; likewise, if the category regroups abstract properties, a white body does not fall therein as a species, since it is certainly not defined by its being a quality (“white”, understood as “white body”, is certainly not a quality). Even though the argument seems sound in its second part, in the first one it is rather counter-intuitive: it is however true that, as will be made clear below (**[§8.5]**), what properly constitutes an accidental category is not the thing described by the accident, but the abstract accident itself.

**[§8.4] (79.12 – 81.10).** The third solution concludes from the previous results that, even if we admit that the conjunction of body and whiteness has a unitary essence, then it still belongs to the category of substance, even if only a part of its (i.e. body) shares in the properties of substance. The discussion of this solution is followed by two doubts, related to Avicenna’s justification for this conclusion.

**[§8.4.1] (79.12 – 80.4).** Nothing prevents a whole from belonging to the same category as a part of its: for instance 6, being equal to 5+1, is undoubtedly a number despite being composed by a number (5) and a non-number (1). Furthermore, even if corporeity is understood as a concomitant of “white”, and not as a part of it (the second case described above in **[§8.1]**), this does not prevent the whole from being described by the essential properties of body, and from being a substance.

**[§8.4.2] (80.5-15).** Against this latter point, Avicenna presents a reasonable objection. How is it that a concomitant, despite being a concomitant, may transfer its essence to something in the same way as a genus does? This is evidently impossible, since a necessary concomitant does not constitute the quiddity of anything. Now, Avicenna argues that this objection is perfectly valid: as a matter of fact, what is really concomitant or accidental to a qualified substance such as “white” is not substancehood, but quality. It is clear that what deserves to be classified by the categories has a definable essence, shared to some extent with other beings, and a specific way of existence; now, “being white” does not specify a substance as a differentia does, namely in such a way as to provide it with an actual, essential unity<sup>279</sup>.

**[§8.4.3] (80.16 – 81.10).** With regard to unity, Avicenna tackles a further doubt. How is it that things resulting from aggregations, for instance number ten (being a sum of 5 and 5), are seen as species of genera despite not having actual unity? Avicenna dismisses the objection as not valid: what was at stake before was the unity of a generic predicate with a specifying property of its, whereas in this other example 5 and 5 do not correspond to a genus and its differentia. As a matter of fact, as Avicenna will prove in his metaphysics, number ten – like every other number – is unitary in itself and different from the others, insofar as it is a sum of

---

<sup>277</sup> *Ilāhiyyāt* V.7, 238.14-17.

<sup>278</sup> *Ilāhiyyāt* V.7, 239.2-6; 240.9-17.

<sup>279</sup> See above, **[§8.2]**.

ones that bears certain specific properties<sup>280</sup>. Being such, it must be defined as a sum of ten ones, rather than a sum of 5 and 5, or 9 and 1, or 7 and 3, or other numbers: for if we define ten by means of another number, such a definition always implies that ten – besides being ten – is itself that other number (having another form), which is clearly absurd<sup>281</sup>.

**[§8.5] (81.11-16).** As a consequence of the long discussion carried out in paragraph **[§8]**, Avicenna finally presents a distinction between accidents qualified as “simple” (*mufrad*) and accidents qualified as “composed” (*mu'allaf*), or better accidents that are “part of a complex”. Every accidental category may be said - and understood - in two ways: either as a simple, abstract attribute (for instance quality, or whiteness), or as the part of a compound. If it is understood as a compound, then there are two possibilities: either it is understood as composed with a substance (“white substance”), or as composed with something undetermined, and then it is called by a simple paronymous expression, derived from the name of the abstract quality (“white”). The same distinction between accidents understood as simple and accidents understood as parts of complexes was alluded to in paragraph **[§8.3]**, and it was the basis of Avicenna’s “second solution” against the opponent’s objection. As Avicenna argues in the end, what properly corresponds to the category is the accidental attribute understood as simple, namely the abstract quantity, quality, relation, and the like<sup>282</sup>. Avicenna will tackle again the distinction between quality and qualified below, in chapter VI.3 (also devoted to the properties of quality).

---

<sup>280</sup> Cf. *Ilāhiyyāt* III.5, 120.1-4 (tr. MARMURA 2005, p. 91): “Hence, for each of the numbers there is a reality proper to it and a form in terms of which it is conceived in the soul. This reality is its unity, by virtue of which it is what it is. Number is not a plurality of that does not combine [to form] one unity, so as to say, ‘It is [simply] as an aggregate of ones’. For, inasmuch as it is an aggregate, it is a unit bearing properties that do not belong to another.” (*Fa-idān li-kull wāhid min al-a’dād haqīqa taḥuṣṣuhū wa-ṣūra yutaṣawwaru minhā fī l-naḥs, wa-tilka l-haqīqa waḥdatuhū llatī bihā huwa mā huwa. Wa-laysa l-’adad kaṭra lā taḡtami’u fī waḥda ḥattā yuqāla: innahū maḡmū’ āḥād. Fa-innahū min ḥayṭu huwa maḡmū’ huwa wāhid yaḡtamilu ḥawāṣṣ laysat li-ḡayrihī.*)

<sup>281</sup> See the whole discussion at *Ilāhiyyāt* III.5, 120.9 – 122.12, particularly 121.9-10 (tr. MARMURA 2005, p. 93, slightly modified): “The definition of each number – if you wish true ascertainment – is to say: “It is number [formed] from the aggregation of one and one and one”, mentioning all the ones”. (*wa-ḥadd kull wāhid min al-a’dād – in aradta l-taḥqīq – huwa an yuqāla: innahū ’adad min iḡtimā’ wāhid wa-wāhid wa-wāhid, wa-tuḡkaru l-āḥād kulluhā.*)

<sup>282</sup> This was also argued by Avicenna with regard to Aristotle’s list of the categories: see above, II.1 **[§2]**.

## II.5

### ON NOTIFYING THE STATE OF THE NUMBER OF THE CATEGORIES

The final chapter of treatise II is devoted, in its first part, to one of the most difficult philosophical problems overall: the exhaustive division, or deduction, of the categories. In the second part, Avicenna discusses the final lines of *Cat.* 4, where the ten categories, being the ultimate significations of simple utterances, are distinguished from the significations of complex utterances.

[§1] Avicenna begins by presenting the problem of the deduction of the categories, which most logicians attempted to solve. [§2] According to Avicenna, three ways of consideration are necessary to confirm the number of the categories. The first way consists of providing a criterion to verify if each of the ten categories is properly a genus, namely if it is said of its particulars as a genus, and not as an accident or a necessary concomitant. If it were not so, and some categories were actually concomitants of their species, then those species themselves would be highest genera with respect to their particulars, and the categories would grow in number. This is the method that Avicenna presents as an independent, original acquisition of his. The second way consists of dividing the predicate “existent” in such a manner as to make the ten categories result from it; in this respect, the contributions made by the predecessors are allegedly disappointing. The third way is another unspecified method, alternative to division, apparently employed by some other commentators. [§3] Thereafter, Avicenna focuses on division, and presents the division proposed by a previous commentator (found as such in Ibn al-Ṭayyib’s *Tafsīr*, but probably derived from another source). [§4] He then expounds his own division of the categories, which is presented as a correction of his predecessor’s division. This division is not meant to be conclusive, but simply closer to the truth than the previous one (although the truth, on this point, seems particularly difficult to attain). [§5] After concluding the discussion on the number of the categories, Avicenna goes on to explore the differences between simple and complex utterances, and the difference between the manner of composing utterances which is current and admitted in logic, and the one used in grammar.

[§1] (82.4-7). The last problem tackled by Avicenna with regard to Aristotle’s list of categories is the fifth question raised in chapter II.1 [§3]: the justification of the number of the categories. The “mass” or “majority” of the previous logicians (*ḡumhūr al-manṭiqiyyīn*) attempted to solve the problem: Avicenna declares that he will loyally follow the custom of his predecessors, and he will in fact try to present a satisfactory division of the categories. This is an interesting declaration of intent: in his *Middle Compendium of Logic* Avicenna refuses to accomplish such a demanding task, for everything that was said before him in this regard is “stretched” (*takalluf*) and “unnecessary” (*laysa šay’an ḡarūriyyan*)<sup>283</sup>.

[§2] (82.7 – 83.8). The three “sorts of consideration” described by Avicenna in this paragraph may be seen either as different steps of a same argumentative process, or as different methods overall: the correct option is not easy to find. This initial discussion surely reworks the debate, found in the previous exegetical tradition, whether the list of categories provided by Aristotle at *Cat.* 4 is an actual division (*διαίρεσις*) or another sort of enumeration

[§2.1] (82.7 – 83.3). The first procedure consists in verifying whether all the categories listed by Aristotle may be properly qualified as ‘genera’, with respect to what is classified below them. The reason is clear: if one of these predicates ever turned out to be predicated by homonymy or by ambiguity (as a necessary concomitant), then the status of highest genera would immediately be transferred to their species, if in turn they are genera; and the

---

<sup>283</sup> *Muḡtaṣar al-awsaṭ* 6.6-8: “We shall not occupy ourselves with establishing that they are neither less than this, nor more, for this is not possible; and all that was said in this regard is stretched and unnecessary” (*Wa-lā naštaḡilu bi-itbāti anna-hū lā aqallu min-hā wa-lā aktaru fa-inna dālika mim-mā lā yumkinu. Wa-kullu mā qīla fī-hi fa-huwa takallufun wa-laysa šay’an ḡarūriyyan*).



categories would certainly multiply. Avicenna’s example here concerns the category of quality: if quality were proven to be an accidental predicate, or a necessary concomitant, then its four main species (affective qualities and affections, habits and states, capacities and figures) would become the highest genera, and the number of categories would grow to thirteen. Avicenna says that this procedure was not adopted by any predecessor of his. The detailed description of this method, along with its being presented here – allegedly – for the first time, may let us suppose that Avicenna deems it correct and valuable; on the other hand, the absence of a clear judgment about its effectiveness, and the fact that Avicenna does not apply it systematically (neither here nor elsewhere), may suggest that he is just presenting it as a further, “neutral” option that nobody before him took into account.

[§2.2] (83.4-6). The second method is “by dividing the existent” (*bi-qismat al-mawğūd*), chosen by most commentators engaged with this question<sup>284</sup>. This procedure, Avicenna says, did not produce anything correct before him, evidently because the divisions of his predecessors either are completely wrong, or need to be corrected (for instance, the one presented below in par. [§3]).

[§2.3] (83.6-8). The third method is not specified, and described quite summarily. Avicenna only says that it is other than division (*ğayr al-qisma*) and that it aims to prove the impossibility of any genus existing besides these ten. This third procedure seems to be a merely hypothetical one, designed to embrace any method other than division: indeed, Avicenna looks skeptical himself about the existence or effectiveness of any such method (“if there is a way to [do] something similar”, *in kāna ilā miṭli dālika sabīlun*). This sentence might also bear an implicit ironic reference to the numerous “methods” presented by other commentators, for instance Ibn al-Ṭayyib, who mentions – besides division (*qisma*) – an argument based on ‘existence’ (*wuğūd*), one based on the ‘worthier and the more appropriate’ (*al-awlā wa-l-aḥrā*), one based on the “wisdom of nature” (*ḥikmat al-ṭabī’a*) and one based on the perfection of number ten<sup>285</sup>. In his schematic exegesis of Avicenna’s text, Ḥillī seems to interpret this method as a part of the second procedure, but he does not identify the third one<sup>286</sup>.

Avicenna’s final remark is also quite vague: with regard to “that” (*dālika*), he says, “they” (very likely his predecessors) did “something that cannot be ignored”, or must be taken into account (*šay’an yu’taddu bihī*). This could refer (a) either to the third procedure, or (b) more in general to the commentators’ efforts to justify the number of the ten categories. (a) The third procedure seems too undetermined to have been really adopted by a predecessor, but the “division” that Avicenna will report and discuss in par. [§3] is presented by Ibn al-Ṭayyib as an argument other than division; for this reason, one might suppose that “the thing that cannot be ignored” is Ibn al-Ṭayyib’s argument, on account of its being a justification other than division. If the sentence, on the contrary, is taken as referring to all procedures, it seems to imply a radical shift of view, on Avicenna’s part, with regard to the *Muḥtaṣar al-awsaṭ*: even if stretched and unnecessary, the views of the previous commentators must be taken into account (at least in the context of the *Šifā’*).

[§3] (83.9 – 84.3). Avicenna expounds, thereafter, a division made by an anonymous predecessor of his, that he will later correct in order to formulate his own division of the

<sup>284</sup> A division of being into the ten categories is mentioned for instance by Simplicius at *In Cat.* 62.9-17, as a sort of correction for Iamblichus’ idea that accidents proceed from substance as from a principle (*In Cat.* 62.3-7); however, it is also proposed as a “deduction” of categories by Simplicius himself (*In Cat.* 67.26 – 68.31) and by many subsequent commentators (Phil. *In Cat.* 163.10-15; Olymp. *In Cat.* 54.5-11; Elias/David, *In Cat.* 159.9-13). For an analysis of these divisions see LUNA 2001, pp. 727-745.

<sup>285</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt*, 106.25 – 112.31.

<sup>286</sup> Ḥillī, *Kašf al-asrār*, f. 48r, ll. 23-25.

categories. This division leaves substance aside, and focuses exclusively on demonstrating that accidents are nine. According to this division, an accident may be:

(1) Stable in its subject, neither advening on it because of something external, nor in need of any sort of relation with an external thing. This subdivision comprises quantity, quality and position;

(2) Advening on the subject from the outside, by virtue of an asymmetrical relation that does not require the essence of the subject to be perfectly relational. This subdivision comprises where, when and having.

(3) Such that its essence is perfectly relational. This subdivision comprises relative, action and affection.

This commentator, says Avicenna, tried to support his view by referring to the perfection of number three, but this is nothing but an improper use of rhetoric in philosophical problems.

Now, the division reported by Avicenna bears a striking resemblance to an argument found in Ibn al-Ṭayyib's *Tafsīr*: the proof "by virtue of the wisdom of nature" (*min qibal hikmat al-ṭabī'a*), being a sort of teleological and arithmological justification of the number of the categories<sup>287</sup>. According to this proof, nature posited substance as the foundation (*al-uss*) of all other beings, and accidents as beings that follow substance, and exist somehow because of it. Now, the accidents cannot be but nine - organized in three triads - since the most perfect operations of nature manifest themselves in triplicity, and in number three. Each triad regroups three accidents on the basis of a common character: (1) accidents that exist in substance (*al-mawḡūda fīhi*), comprising quantity, quality and position; (2) accidents that come to be in substance from the outside, namely from something else (*al-ṣā'ira ilayhī min ḥāriḡ ay min ṣay'in aḥar*), comprising the categories of place (relation with place), time (relation with time) and having (relation with a possessed thing); (3) relations that subsist between substance and something else (*al-nisab allatī bayna l-ḡawhar wa-bayna ṣay' aḥar*), comprising the categories of relation, acting (symmetrical relation between the agent and its action), being acted upon (symmetrical relation between the patient and its affection). The triads are identical to those presented by Avicenna, as well as the criteria used for the subdivision; moreover, Ibn al-Ṭayyib argues for the perfection of number three<sup>288</sup>. If Ibn al-Ṭayyib is not the direct referent for this passage of Avicenna, they draw on the same source, very likely some previous Baghdadian commentator.

[§4] (84.4 – 86.17). After expounding and criticizing the division of the commentator, Avicenna presents his own division of the categories.

[§4.1] (84.4-6). Avicenna introduces his division as a correction of his predecessor's effort, rather than a radically different approach: as he remarks, the commentator's "procedure" (*ma'ḥad*) may be "consolidated" (*yumkinu an yuda'ama*) and "corroborated" (*yu'akkada*) slightly, in order for it to attain a higher degree of truth. As will become clear, in Avicenna's view the commentator's division is fairly unreasonable as concerns its being organized in triads, but acceptable for the criteria that it uses to distinguish and regroup the nine accidental categories. The first step of Avicenna's re-organisation is a bipartition, instead of the commentator's tripartition: accidents may be either (1) such that their conceptualization (*taṣawwur*) does not require one to conceptualize something outside their subject (*ṣay'un ḥāriḡun an al-mawḡū'*), or (2) such that their conceptualization requires that an extrinsic thing be conceptualized. On the whole, then, accidents are either non-relational or relational.

---

<sup>287</sup> P. Thom (THOM 2015, p. 36) has identified as a possible remote source of this division the paraphrase of the *Categories* that is attributed to Themistius (*Par. Them.*, LXXVIII). Cf. also KALBARCZYK 2018, pp. 155-159. Kalbarczyk also presents a parallel occurrence of this division in al-Wāhibī's *Kettenkommentar* (KALBARCZYK 2018, pp. 159-163).

<sup>288</sup> The claim for the perfection of number three almost certainly derives from Aristotle's analysis of *De Caelo* (Arist. *Cael.* A 1-2); cf. KALBARCZYK 2018, p. 158.

[§4.2] (84.6 - 85.8). Non-relational accidents correspond to the first triad of Ibn al-Ṭayyib's division, and comprise quantity, quality and position. Avicenna presents them as tripartite: they can be (1) relational, but not with respect to an extrinsic thing (position); (2) non-relational, and such as to make the subject measurable (quantity); (3) non-relational, and such as to make the subject qualified (quality).

[§4.2.1] (84.6-17). Ibn al-Ṭayyib (or his source) assigns the category of position to the first triad, on account of its being a sort of relation that changes intrinsically, according to the different positions adopted by the subject<sup>289</sup>. Avicenna adheres to this view, and describes position more in detail as the mutual relation that the parts of the subject (for instance, a body) have to one another, with regard to the whole. If the whole, for example a man, adopts a standing position, then its parts come to have a certain disposition with respect to one another, that changes when the man sits down, jumps or lies in his bed. Being a relation of parts, position makes the subject divided or divisible, in a certain sense: however, it consists of a single configuration (*hay'a*) of the whole resulting from all the relations of the parts, not as a single relation subsisting between single parts. In this respect, position differs from other accidents that may produce a sort of division in the subject, such as colours and smells, when different parts of a same body – for instance – have different colours: for the differentiation (*iḥtilāf*) of colours depends on an alterity (*ḡayriyya*) that qualifies every part separately, with respect to a specific accident of its (colour), but does not give rise to a unitary configuration of the whole body<sup>290</sup>.

[§4.2.2] (84.18 – 85.8). The two remaining non-relational accidents are quantity and quality. Quantity is an attribute that makes a substance countable or measurable, either discretely or continuously<sup>291</sup>; quality is an attribute whose conceptualization does not need absolutely something else to be conceptualized, neither in potency nor in act. It does not absolutely, for besides not needing a relation with something else quality does not require that the subject be subdivided into parts, as position and quantity do: into actual or potential parts, as required by position; into potential parts, as required by quantity<sup>292</sup>. Position and quantity have as a common attribute, indeed, the fact of signalling the existence of a division, or multiplicity (*qisma wa-katra*) in the subject, whereas quality does not have this property at all. In describing non-relational accidents, then, Avicenna has disposed them as a *continuum* that ranges from the most relational (position) to the least relational category (quality).

[§4.3] (85.9 – 86.12). Relational accidents correspond to the second and the third triads of Ibn al-Ṭayyib's division: they comprise the categories of relatives, where, when, having, acting and being acted upon.

[§4.3.1] (85.9-11). Unlike the commentator, who made a distinction between “symmetrical” and “asymmetrical” relations and then regrouped actions, affections and relatives in the first group, Avicenna strengthens the criterion for symmetrical relations so as to make them coincide with the category of relatives. The first bipartition of relational categories, then, goes as follows: relation (*nisba*) either has its quiddity said with respect to something else, and this corresponds only to the category of relation (*al-iḏāfa*); or it does not, and then it is either a relation with substances, or a relation with accidents.

---

<sup>289</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 109.25-27.

<sup>290</sup> See also Avicenna's accounts of position below (IV.1 [§2] and VI.6 [§1]); *Muḥtaṣar al-awsaṭ*, 342.4-8.

<sup>291</sup> Cf. the general definition of quantity at *Ilāhiyyāt* III.4, 118.14-15 (tr. MARMURA 2005, slightly modified, p. 90): “In short, quantity, by definition, is that wherein it is possible to find something that is appropriately one [thing] that numbers – this being [so] in itself, regardless of whether “the appropriateness” is existential or suppositional” (*fa-l-kammiyyatu bi-l-ḡumlati ḥadduhā hiya annahā llatī yumkinu an yūḡada fihā ṣay'un minhā yaṣiḥḥu an yakūna wāḥidan 'addan, wa-bi-kawn ḏālika li-ḏātihī, sawā'a kānat al-ṣiḥḥatu wuḡūdiyyatan aw fardīyyatan*).

<sup>292</sup> Cf. below, V.1 [§5.1], 171.17-19. On Avicenna's definitions of quality see also the INTRODUCTION, 3.6.1.

[§4.3.2] (85.12-18). Avicenna dismisses at first the case of substances: relations with substances do not deserve to be posited as accidental categories, but substances are only entitled to bear attributes that exist in them as accidents. Avicenna does not explain why, and this undemonstrated premise is certainly one of the weak points of his division of accidents. Very likely Avicenna refers, here, to all those asymmetrical relations of substances with substances that are ontologically irrelevant, and incapable of being categorized as independent properties (for instance being in love, and the like). Then, Avicenna inspects whether relations may subsist with accidents, at least those that have been already divided: relational accidents (relatives), or non-relational accidents (quantity, quality, position). Relations to relatives produce chains of relations that may go *ad infinitum*, if the last relative of the chain is not related to something else: for this reason they do not represent a simple, categorizable notion. Therefore, independent categories may be supposed only for relations with quantity, quality and position, though in the following paragraph Avicenna will actually dismiss position in favour of the other two accidents.

[§4.3.3] (85.19 – 86.9). The first case examined by Avicenna is that of relations with quantity. Not any relation with a quantity deserves to be categorized separately, argues Avicenna firstly: only relation with a quantity that “makes a quantified substance an extension of another substance” (*tağ‘alu ġawharan dā kammin miqdāran li-ġawharin āhara*), namely the relation of a substance A with another quantified substance B that measures it, inasmuch as it is quantified. Now, B can only measure A: (a) either by its own extension, or (b) by the extension of a certain state of its.

(a) If B measures A by means of its own extension, for instance its surface, then the relation of B to A is that of a container to its contained.

(b) If B measures A by means of the extension of its state, then the state is either a stable one or an unstable one.

If the state is stable, the extension is stable as well, and coincident with the extension of the body itself, which is again case (a); therefore, the state must be unstable, and so must be its extension. If every unstable state is a motion, then B will measure A by means of the quantity of its motion, namely time: this is the category of “when” (a relation with time)<sup>293</sup>. As to (a), the relation with a container may subsist with two different sorts of containers: with a container that does not move as the contained moves, and this is the category of where (a relation with place)<sup>294</sup>; with a container that moves together with the contained, and this is the category of having (a relation with a particular type of container). For the definition of having, Avicenna appeals to the “validating philosophers”, for – as will become clear later - he does not find the category of having neither clearly defined, nor useful<sup>295</sup>. The reference for this definition of having is very likely Fārābī, who characterizes having, in his *Paraphrase* of the *Categories*, as “the relation of a body with [another] body that fits it, or a part of its, when the fitting [body] moves along with the motion of the [body] surrounded by it”<sup>296</sup>.

[§4.3.4] (86.9-12). Thereafter, Avicenna goes on to discuss relation with quality. As in the case of quantity, it is not relation with any quality that may be categorized separately, but only the relation with a quality that is transferred: either coming to be, from the first substance A, in a second substance B, or coming to be in A from B. This type of relation defines the two remaining categories: acting, which corresponds to the quality being impressed in another

<sup>293</sup> Cf. Avicenna’s discussion of when see VI.6 [§3] (esp. [§3.1], 231.4-14); *Muhtaṣar al-awsaṭ*, 342.2

<sup>294</sup> Cf. Avicenna’s discussion of where see VI.6 [§1-2] (esp. [§1.1], 228.8-229.3); *Muhtaṣar al-awsaṭ*, 341.18-19.

<sup>295</sup> See VI.6 [§2], 235.7-16; *Muhtaṣar al-awsaṭ*, 342.10-17.

<sup>296</sup> Fārābī, *Qatāğūryās* (DUNLOP 1959), 24.7-8: *Wa-lahū huwa nisbatu l-ğismi ilā l-ğismi l-munṭabiqi ‘alayhī aw ‘alā ġuz ‘in minhū, idā kāna l-munṭabiqu yantaqilu bi-ntiqāli l-muḥāṭi bi-hī [...]*.

substance (A → B), and being acted upon, which corresponds to the quality being impressed in the first substance (B → A). With acting and being acted upon, the division is complete<sup>297</sup>.

[§4.4] (86.13-17). Avicenna's conclusion is fundamentally aporetic. He qualifies his effort as an attempt to get closer to the truth than the division mentioned in par. [§3]; he insists, however, on its improvised and provisional character, and remarks that other divisions are possible. The formula he uses to justify his unwillingness to present a further proof shows well that (1) he is skeptical about the usefulness of such a demonstration, and that (2) he is probably incapable of providing a truthful one. In the end, if there is no means to reach complete certainty about a problem, there is no real difference between getting close to it, or a little closer. In *Samā' tabī'ī* II.2, Avicenna will go as far as to claim that he is not "obstinate about preserving the received canon, namely that the genera are ten, and that each one of them is truly generic and that there is nothing outside of them"<sup>298</sup>.

Yet, despite Avicenna's skepticism on the categories, and his rhetorical emphasis on the extemporary nature of his division, he will present a similar deduction of the accidental categories in the metaphysical section of the *Dānešnāme*, with one important difference: position is numbered among relational accidents (see the Appendix to this chapter, for a schematic comparison)<sup>299</sup>.

[§5] (86.18 – 88.7). After the long digression of chapters II.2-5 Avicenna goes back to the text of the *Categories*, notably to Aristotle's claim that the categories, things said "without any combination" (κατὰ μηδεμίαν συμπλοκήν), are not said by themselves "in any affirmation" (ἐν οὐδεμιᾷ καταφάσει), since affirmations result from their combination: affirmations may be true or false but none of the categories, taken in itself, is true or false<sup>300</sup>.

In his exegesis of these Aristotelian lines, Avicenna firstly presents a distinction between what is "composed according to the usage of logicians" (*mu'allaf bi-ḥasab isti'māl ahl al-manṭiq*), on the one hand, and utterances "composed according to" the rules of "language" (*mu'allafa bi-ḥasab al-luġa*) on the other hand. The two sorts of composition coincide, in some cases: for instance, some assertions and sentences composed according to the common usage of Arabic speakers ("Zayd is a man", "Zayd runs") are also composed according to logic, for they respect the criterion for "logical" composition (the parts of these complex utterances always signify something independently of their composition, also in the context where they are used)<sup>301</sup>.

However, there are cases where this does not happen, since some complex locutions employed by speakers do not match this criterion: it is the case of some common proper names, such as 'Abdallāh ('*abd* + *Allāh*, meaning "servant of God") and 'Abdurraḥmān ('*abd* + *al-raḥmān*, meaning "servant of the Compassionate"), and nicknames, such as that of the poet Ta'abbata Šarran (literally, "he put mischief under his arm"). According to Avicenna these expressions are not composed according to the rules of logic, since when they are used as names their parts do not signify anything independently<sup>302</sup>. In other cases, the composition is only such with respect to logic, but not with respect to language. In some verbal forms, like

<sup>297</sup> Cf. the discussion of acting and being acted upon at VI.6 [§3.1], 235.17-236.8; *Muḥtaṣar al-awsaṭ*, 343.2-8.

<sup>298</sup> *Samā' tabī'ī* II.2, 97.10-12 (tr. MCGINNIS 2009, p. 135, slightly modified): *wa-ammā nahnu fa-innā lā natašaddadu kull al-tašaddud fī ḥafẓ al-qānūn al-mašhūr min anna l-aġnās 'ašara, wa-anna kull wāhid minhā ḥaqīqī l-ġinsiyya wa-lā šay' ḥāriġ minhā*.

<sup>299</sup> *Dānešnāme, Ilāhiyyāt* 28.5 – 31.3 (French translation: *Livre de science* I, pp. 108-110), to be compared with *Ta'liqāt* 174.17 – 175.9; on position, see in particular 30.3-7 (*Livre de science* I, p. 109). This division is also analysed in THOM 2015, pp. 44-45; KALBARCZYK 2018, pp. 168-177.

<sup>300</sup> Arist. *Cat.* 2 a4-10.

<sup>301</sup> For the definition of logical composition, see *Madḥal* I.5, 24.13-14 and the commentary above, I.1 [§1].

<sup>302</sup> The example with the name 'Abdallāh is also found in the *Ibāra*, and in the logic of the *Išārāt*: see *Ibāra* I.5, 30.9-10; *Išārāt Manṭiq*, Nahḡ I Ch. 7, 191.7-10.

in the imperfect tense of the verb *ʿāša* (to live), there is only logical composition: the prefixes *a-*, in the first-person singular form *a ʿīšu* (“I live”) and *ta-*, in the second-person singular form *ta ʿīšu* (“you live”), refer logically to the subject (I, you) and may be logically distinguished from the verb (the action of living); however, none of the two words is perceived by speakers as composite. It is not the case with the third-person singular form, *ya ʿīšu*, whose subject is undetermined and which is not composed at all (neither logically, nor linguistically).

After this digression Avicenna presents the types of complex utterances that may be built out of simple words expressing the categories, i.e. “sentences” or “statements” (*aqwāl*), corresponding to the Aristotelian λόγοι of *De Int.* 4<sup>303</sup>. In the main these types are two: (1) proposition and assertion (*qaḍīyyatan wa-ḥabaran*), that may be either true or false and (2) non-assertive compositions, that are always devoid of a truth value. Non-assertive compositions include: (2.1) compositions without predicates, for example “Zayd the writer” (*Zayd al-kātib*). (2.2) Definitions or descriptions, intuitively described by Avicenna as formulae in between whose parts one can insert the relative pronoun *allaḍī* (“which”). For instance, “rational, mortal animal” (*al-ḥayawān al-nāṭiq al-māʿit*) may become “the animal which is the rational which is mortal” (*al-ḥayawān allaḍī huwa l-nāṭiq allaḍī huwa l-māʿit*)<sup>304</sup>. (2.3) Compositions with predicates that cannot be true or false, such as prayer (*al-duʿāʿ*), interrogation (*al-masʿala*), order (*al-amr*), prohibition (*al-nahy*) and exclamation (*al-nidāʿ*)<sup>305</sup>.

---

<sup>303</sup> Arist. *De Int.* 4, 16 b26-30. In *Ibāra* I.5, 30.4 Avicenna defines “speech” (*qawl*) as “the complex utterance” (*al-lafẓ al-muʿallaf*).

<sup>304</sup> The same example is found in *Ibāra* I.5, 31.5-7.

<sup>305</sup> These other types of speech are also mentioned as irrelevant to logic in *Ibāra* I.5, 31.8-15 and *Iṣārāt Manṭiq*, Nahǧ III Ch. 1, 268.1-4.

### III.1

#### ON PRIMARY, SECONDARY AND TERTIARY SUBSTANCES; IN GENERAL, ON THE STATE OF THE RANKS OF UNIVERSAL AND PARTICULAR SUBSTANCES WITH REGARD TO SUBSTANTIALITY

Avicenna inaugurates the third treatise by means of a general discussion of substance, in line with the previous exegetical tradition. The aim of the first chapter is to solve a number of preliminary doubts, and to present the notion of substancehood (*ḡawhariyya*) in general – before the direct exegesis of *Categories* 5, carried out in chapters III.2-3.

[§1] Firstly, Avicenna presents two doubts that stem from the previous exegetical tradition. (1) Substance seems to be a true genus only if applied to bodies; if applied to other types of substances, prior to bodies, it is said by homonymy or by ambiguity. (2) Even if the description of substance (“existent not in a subject”) applies to all substances, it belongs to some substances primarily, to some others secondarily. As a matter of fact, “existent” is a notion said by priority and posteriority, and “not-in-a-subject” is a determination that also makes substances unequal in rank. [§2] To these two doubts, Avicenna opposes two distinct refutations: (1) first, nothing prevents a genus from having prior and posterior species (and the genus of body itself has prior and posterior species); (2) second, the description of substance, “existent not in a subject”, applies to all substances equally as a necessary concomitant, not as an essential determination. [§3] In the end, Avicenna presents a division of substances, moving from the distinction between simple and composite substance.

[§1] (91.7-15). The title of this chapter, mentioning “tertiary substances” (*al-ḡawāhir* [...] *al-tālīta*), deserves firstly to be discussed in brief. As is known, Aristotle makes no mention of “tertiary” substances in *Categories* 5: only primary and secondary ones are at stake. It is also for this reason that some Greek commentators of the *Categories* asked why, since the species of substance are said to be “more substance” than the genera, Aristotle did not label the species “secondary” and the genera “tertiary” substance<sup>306</sup>. The reply of exegetes to this doubt was basically the following: species and genera are both considered secondary, in so far as they bear the same relation to primary substances, namely inasmuch as they are both synonymously predicated of their individuals<sup>307</sup>. Now, given that apart from the title Avicenna makes no other mention of “third” or “tertiary” substances, neither here nor in chapter III.2, there are fundamentally two possibilities: (a) the title is influenced by the previous commentators’ doubt, and tertiary substances are genera alone<sup>308</sup>; (b) “secondary substance” comprises both genera and species, and tertiary substance is the specific differentia, which is said to be substance in a certain respect in the end of III.2<sup>309</sup>.

This short chapter contains a number of preliminary considerations on substancehood, a practice that is well rooted in the previous exegetical tradition (in both Greek and Arabic commentaries)<sup>310</sup>. In this respect, the Greek tradition shows a bipartition between what C. Luna has labelled as the “Porphyrian tradition”, on the one hand, and the “Alexandrian tradition” on the other hand. On the Porphyrian side, Simplicius discusses some scattered puzzles stemming from Plotinus’ criticism of Aristotle in *Enn.* VI.1 [42], along with Boethus of Sidon’s claim for the the accidentality of form<sup>311</sup>; the Alexandrian commentators, instead,

---

<sup>306</sup> On Aristotle’s claim that species are “more substances” than genera, see Arist. *Cat.* 2 b7-22; below, III.2 [§3].

<sup>307</sup> For this doubt on tertiary substances, see for instance Olymp. *In Cat.*, 65.8-15. Philoponus (*Phil. In Cat.* 61.20-30) rather wonders why the epithet “third” or “tertiary” substances was not given to accidents (συμβεβηκότα).

<sup>308</sup> J. Janssens seems to lean towards this first hypothesis (cf. JANSSENS 2013, p. 360).

<sup>309</sup> See below, III.2 [§6].

<sup>310</sup> For a more detailed account of these introductory discussions see INTRODUCTION, 3.3.1.

<sup>311</sup> *Simpl. In Cat.* 75.23 – 80.14.

show more schematic discussions organized in questions and “bullet points”. Olympiodorus and David/Elias present six introductory κεφάλαια, comprising: the reason for the priority of substance in the order of Aristotle’s text; the possible meanings of “substance” (οὐσία), and the meaning Aristotle is concerned with in the *Categories*; the reason why Aristotle calls individual substance “primary”; the question whether Aristotle’s definition is “correct” (ὀρθῆς) or not; the method employed by Aristotle in dividing substances; the question how substance can be a genus, despite having prior and posterior species<sup>312</sup>. Ammonius and Philoponus, instead, present a common set of questions that take part directly in the exegesis of *Cat.* 5, but clearly have a general, introductory character (resembling, on the whole, Olympiodorus and David/Elias’ κεφάλαια). This set includes: the reason for the priority of substance among the ten categories, a division of substances, the determination of the substance dealt with in the *Categories*, the reason why individual substance is said to be primary, the reason for substance having a negative definition, and the applicability of this definition to God and the individual soul (Ammonius) or to intelligible substance (Philoponus), the method employed by Aristotle in dividing substance<sup>313</sup>.

As for the Arabic aftermath, Ibn al-Ṭayyib seems to follow Olympiodorus’ tradition by proposing six subjects of research (*maṭālib*): the teaching method employed by Aristotle in *Cat.* 5, the priority of substance, the substance dealt with by Aristotle in the *Categories*, the way Aristotle divides substance, the reason why primary substance is prior “in substantiality” (*fī l-ḡawhariyya*) with regard to secondary substance, the characterization of this priority<sup>314</sup>. A short introduction to substance is also found in Fārābī’s paraphrase, where the discourse on substance begins with a short division of the genus “substance” into its species and individuals<sup>315</sup>.

Despite their numerous differences, all these discussions serve more or less the same scope: to present the notion of substance and its priority, to ascertain if it is as unitary as a genus and to establish whether all the existent types of substances are “substance” in the same way and to the same degree.

Hence, Avicenna begins his general discussion by expounding two doubts about the unitary nature of the genus “substance”.

[a] According to a first “group” (*qawmun*) of commentators, substance may be properly deemed a genus only when referred to corporeal substances; it becomes instead predicated by homonymy or ambiguity (*bi-l-taškīk*) when said of body and a notion “more common” or “universal” (*a’amm*) than body. As a matter of fact, there are substances that are clearly prior, in a certain sense, to corporeal ones: matter and form, which constitute body as parts, and the separate substance that causes the existence of form, matter and the compound (presumably the Giver of forms)<sup>316</sup>. Avicenna mentions, once again, the idea already refuted in chapter II.4 according to which principles do not fall in the same categories as the things they are principles of<sup>317</sup>.

[b] According to the second doubt, even though the description of substance applies to all of them it is applied to some of them primarily, to some others secondarily. As a matter of fact, the description in question is “existent not-in-a-subject”: “existent” is said by priority and posteriority, whilst “not-in-a-subject” is a negative meaning that “does not posit in

<sup>312</sup> Olymp. *In Cat.* 57.5 – 59.26; Elias/David, *In Cat.* 161.34 – 164.38. The first of Elias/David’s κεφάλαια, the reason for the priority of substance in the order of Aristotle’s text, is dealt with separately by Olympiodorus, who considers the question of the meanings of substance, and Aristotle’s focus in the *Categories*, as two distinct κεφάλαια (unlike Elias/David, who conflates them into one).

<sup>313</sup> Amm. *In Cat.* 35.12 – 38.22; Phil. *In Cat.* 49.5 – 55.2.

<sup>314</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 125.24 – 133.9.

<sup>315</sup> Fārābī, *Qāṭāḡūryās* 3 (DUNLOP 1957, 170.5-13).

<sup>316</sup> On the “Giver of Forms”, see JANSSENS 2006.

<sup>317</sup> See above, II.4 [§4-5].



[substances] existence equal in rank” (*laysa yağ‘alu l-wuğūd fihā ‘alā martaba wāhida*). What Avicenna means by this latter remark is not fully clear, but I take it to be a possible reprise of the point made by some Alexandrian commentators, namely that “not-in-a-subject” has a different meaning whether it is applied to sensible substances or intelligible substances.

[§2] (91.16 – 94.3). Avicenna’s refutation is structured as follows: a brief reply to the first doubt, followed by a more extended discussion of the second one, that leads him eventually to define the notion of substancehood and to provide a justification of its unity<sup>318</sup>.

[§2.1] (91.16 – 92.3). The opponents’ remarks are not sufficient to demonstrate that “substance” cannot be a genus for corporeal and incorporeal substances. Avicenna has already proven that principality is irrelevant, when it comes to classifying something under the categories: for the only criterion that matters, in this regard, is whether or not the principle (and the thing whereof it is principle) share in the description of a given category. Moreover, the genus “body” is potentially exposed to the same criticism moved by the opponents, since it comprises prior and posterior species (respectively, celestial and terrestrial bodies). As Avicenna has already shown, however, if priority and posteriority do not concern directly the universal character shared by a number of beings, but a certain other attribute, then nothing prevents that universal notion from being a genus in the proper sense. This very principle will also be the basis of Avicenna’s solution of the second doubt, in the subsequent lines.

[§2.2] (92.3 – 94.3). The second doubt needs lengthier discussion because, Avicenna argues, it leads to an evident aporia.

[§2.2.1] (92.4 – 93.3). “Existent not-in-a-subject” undoubtedly belongs to some substances primarily, to some others secondarily. If we take “existent not-in-a-subject” to be really a part of the quiddity of substance, then we are obliged to admit that the genera and species of substances are not substances at all: for universals do not exist in external reality, and rather seem to exist in a subject (i.e. the soul). Therefore if “existent” means, in the description of substance, “existent in extra-mental reality” (*mawğūd fī l-a‘yān*), then what the opponents say is verified: the description is applied to individual substances primarily, to universal substances secondarily (or applied only conditionally). What follows is curiously introduced by the plural verb *ya‘nūna* (“they mean”), as if it were an opinion of the opponents; still, it is rather an exposition of Avicenna’s own doctrine. As suggested by some parallel cases in *Maqūlāt* this could also be a reference to Aristotle himself, whose views sometimes are clearly reported by Avicenna by means of plural verbs<sup>319</sup>.

Be as it may, Avicenna suggests that by “existent in a subject” one should not mean what always, necessarily exist not-in-a-subject, in concrete reality, but what is necessarily accompanied by the fact of existing not-in-a-subject, when it exists out of the mind. In other words, existence not-in-a-subject does not constitute the essence of substances, but is rather a necessary concomitant of theirs. Avicenna proposes the example of the accidental attribute “risible”, which does not constitute the quiddity of man, but rather stands for an inseparable property of his. That man is “risible” does not mean that he exerts his capacity of laughing all the time, but that he necessarily laughs when certain conditions are realized (namely, when he is amazed, surprised or amused).

In order to explain this point more intuitively, Avicenna exhorts the reader to attempt a quick mental experiment. The experiment consists of thinking of substances as non-existent in concrete reality: either as temporarily absent (for example Zayd, when he is not before our eyes), or as potentially absent, or as probably non-existent. The fact that we still think of these beings as substances is, in itself, a proof for substancehood being independent of actual extra-

---

<sup>318</sup> This section up to [§2.2.2] is translated into German and analysed in KOUTZAROVA 2009, pp. 260 ff.

<sup>319</sup> See for instance below, V.4 [§5], 190.8-9 and VII.3 [§4.2], 263.20-21.

mental existence. Existence as such does not take part in the quiddity of any substance or being; for this reason it cannot be posited as a genus, not even as a highest genus.

[§2.2.2] (93.4-9). A consequence of this principle is that nothing whose quiddity is existence has anything to do with substance: for substances have existence not-in-a-subject as a necessary concomitant of theirs, not as a part of their quiddity. This principle clearly excludes God from being a substance, given that His essence is identical with existence: this point is only hinted at here, but Avicenna will say it explicitly below in the following chapter, and will prove it again the *Ilāhiyyāt*<sup>320</sup>. It is incorrect, then, to state that God and substances have some universal determinations in common, since what is essential for God (existence) is only accidental, or concomitant, for them; and what is essential for substances cannot be essential for God, since he does not have any quiddity accompanied by existence, but only a quiddity that is itself existence.

[§2.2.3] (93.9 – 94.3). It is clear, then, that substance is a notion in which there are no priority and posteriority: priority and posteriority regard, instead, an extrinsic attribute of its, namely existence. Thereafter, Avicenna mentions an example of specific differentia, and qualifies it as a substance that does not admit, in itself, of priority and posteriority: rational (*nātiq*), being a constitutive differentia of the species man. In the obscure sentence that concludes this paragraph, Avicenna seems to allude to a form of “differentiation” (*iḥtilāf*) that concerns somehow differentiae, not with respect to their essences but with respect to a concomitant of theirs, namely their capacity of “distinguishing” or “discriminating” (*tamyīz*) the species of a genus. Avicenna gives no indication or example, however, about the actual meaning of this differentiation: it may perhaps mean that some species are singled out by differentiae before some others; that the operation of singling out certain species depends on the previous discrimination of certain other species; that some differentiae are somehow more discriminating than others; in sum, that this actual power of distinguishing is subject to priority and posteriority, greater or lesser intensity, or another criterion for predication *bi-l-taškīk*. Mentioning differentia as an example of substance is not a “neutral” choice, since Aristotle seems to deny – in *Cat.* 5 – that it is a substance; Avicenna will defend and discuss more in detail the substantiality of differentia below<sup>321</sup>.

Before moving on to the division of substances, Avicenna presents a further proof for priority and posteriority being extrinsic to substancehood, that reprises the argument of II.4 [§5.2] but applies the description of substance provided right above ([§2.2.1]). If we consider the case of form, matter and compound, we see that form and matter are not prior to the compound with respect to their being substance: as a matter of fact, they are not prior with respect to their being quiddities that are necessarily accompanied, as they exist, by the fact of existing not-in-a-subject; furthermore, they are not prior in the sense that their being substances is a cause for the compound’s being substance. They are only prior inasmuch as their existence is prior, i.e. inasmuch as their existence comes before the existence of the compound, and the existence of the compound depends on their existence. Therefore, the fact that substance has prior and posterior species does not bear as a necessary consequence that it be no genus, for priority and posteriority regard existence, not the quiddity.

Eventually, Avicenna refers to further unspecified doubts that should be discussed in the so-called *Book of Appendices* (*Kitāb al-Lawāḥiq*). The *Lawāḥiq* is mentioned in the prologue of the *Šifā’* as a sort of complementary explanation (*šarḥ*) to the *summa*<sup>322</sup>; despite the

---

<sup>320</sup> See below, III.2 [§4.2]; *Ilāhiyyāt* VIII.4, 348.6 – 349.6. For a summary of Avicenna’s argument against the substantiality of God see LEGENHAUSEN 2007.

<sup>321</sup> See below, III.2 [§6].

<sup>322</sup> *Madḥal* I.1, 10.8-10.

number of references to this book scattered throughout the *Šifā'*, no such work of Avicenna has come to us<sup>323</sup>.

[§3] (94.4 – 95.11). After refuting the predecessors, that has provided him with an adequate theoretical background, Avicenna introduces his own division of substances. The division is followed by some considerations regarding the relation between universal and particular substances.

[§3.1] (94.4-10). According to Avicenna's division, substance may be either (a) simple (*basīf*) or (b) composite (*murakkab*). Simple substance is subdivided into substance that is (aa) free and separate (*barī' mufāriq*), not taking part in the constitution of the compound, and substance that (ab) takes part therein. The 'free' and 'separate' substance introduced here by Avicenna very likely includes intellect and soul, that will be qualified as 'separate' substances in the *Ilāhiyyāt* of the *Šifā'*<sup>324</sup>; substance that takes part in the constitution of the compound, instead, is either (aba) matter or (abb) form: the former is described as what constitutes the compound's being existent in potency, and the latter as the thing that actualizes the compound's existence<sup>325</sup>.

Avicenna's division of substances coincides, in its general structure, with the one presented by the previous commentators (the Alexandrians and Ibn al-Ṭayyib); there is however a discrepancy, since Avicenna has substituted the axiologic distinction between "nobler" and "lesser" substances found in the other exegetes with a distinction between simple substances that take part in the constitution of a compound, and simple substances that do not<sup>326</sup>. This discrepancy does not merely amount to a terminological difference, for Avicenna assumes that all substances are equal, with respect to their substantiality.

[§3.2] (94.10-19). In the follow-up, Avicenna introduces the distinction between universal and particular substance. These are not characterized as two different kinds of substance, but as different forms of existence of the same quiddities: concrete, extra-mental existence in the case of individual substances, mental existence in the case of universals. All the substances divided in [§3.1], argues Avicenna, may exist either as universals or as particulars, for individuality and universality (*al-šahṣiyyatu wa-l-'umūmu*), as well as extra-mental and mental existence (*al-ḥuṣūlu fī l-a'yāni, al-taqarruru fī l-dihni*), are extrinsic realities attached (*talhaqu*) to substance. The absence or corruption of these "accidents" or "concomitants" does not affect substancehood, and the corruption of substance does not destroy them (for they may come to be attached to another kind of substance). Avicenna's conceptualism with regard to the nature of universals is particularly evident here<sup>327</sup>.

[§3.3] (95.1-11). Whereas there are no doubts about the fact that individuals are substances, an objection may be raised with regard to universals: if the universal form of a thing X in our mind is equivalent, in a sense, to our knowledge of X, then this universal is knowledge; since knowledge is an accident, then we are forced to admit that the universals of substance are accidents. Avicenna tackles this doubt in more detail in *Ilāhiyyāt* III.8: just as he does here in *Maqūlāt*, there he remarks that, given that substance is such as not to exist in a

---

<sup>323</sup> A further reference is found below, in chapter III.4 [§2.4]. Some of these references are discussed in GUTAS 2014, pp. 160-163.

<sup>324</sup> See *Ilāhiyyāt* II.1 60.12-14, where Avicenna presents a further difference between intellect and soul, based on the relation they have to the body (tr. MARMURA 2005 p. 48, slightly modified): "If [substance] is separate and not a part of a body, then either it has some administrative relation to bodies in terms of moving [them] – and this is called 'soul' – or it is free from material things in all respects and is called 'intellect'" (*wa-in kāna mufāriqan laysa ḡuz' ḡism fa-immā an takūna lahū 'alāqa bi-ḡarb mā fī l-aḡsām bi-l-tahrīk wa-yusammā nafsan, aw yakūnu mutabarri'an 'an al-mawād min kull ḡiha wa-yusammā 'aqlan*).

<sup>325</sup> On the relation between matter and form, see *Ilāhiyyāt* II.3-4; BERTOLACCI 2003, pp. 132-134.

<sup>326</sup> See above, INTRODUCTION 3.3.3.

<sup>327</sup> On the fact that universals only have mental existence, see for example *Ilāhiyyāt* V.2, 207.10-12.

subject only when it actually has extra-mental existence, universals may well be substances despite being existent in the mind<sup>328</sup>. As a matter of fact, if genera and species are taken in themselves as natures, they are certainly predicated of primary substances; if they are predicated of them, they share the same definition, and this certainly implies that they are substances as well. It is necessary to underscore that universal substances are substances in their quiddities, not only because in external reality they exist in a certain way: as a matter of fact, existence is an “accident” or “something that belongs accidentally” (*‘āriḍ*) to the quiddities of things, and if substances were substances because of an accident of theirs, an evident absurdity would follow<sup>329</sup>.

---

<sup>328</sup> *Ilāhiyyāt* III.8, 140.4-15.

<sup>329</sup> “Accident” must be understood here in a weak sense, given that Avicenna rather conceives of existence as a “necessary concomitant” (*lāzim*) of things.

## III.2

### ON PRIMARY, SECONDARY AND TERTIARY SUBSTANCE

III.2 is the first exegetical chapter, *stricto sensu*, on the category of substance. Here Avicenna paraphrases and explains Aristotle's text until line 3 a6, taking into account (in this order): the distinction between primary and secondary substances, the relation between the species and genera of substances, the substantiality of differentiae.

[§1] According to Aristotle, individuals are “primary” substances. This does not mean, in Avicenna's opinion, that they are primary with regard to substantiality, for substantiality does not admit of a differentiation in degree; this rather means that they are “worthier” (*awlā*) of substantiality. [§2] Individuals are worthier of substantiality because they are primary in four respects: existence, realization of the necessary concomitant of substances (existing not-in-a-subject), perfection and precedence in being named. [§3] Secondary substances are the species and the genera of primary substances, and substantial species are worthier of substantiality than substantial genera. [§4] Thereafter, Avicenna solves two difficulties: (1) firstly, a doubt concerning the relation between genus and species, and the fact that the notion of “species” seems to be relative to the notion of “genus”. (2) In the second place, a difficulty that concerns the status of intelligible substances: if individuals are primary substances, should we conclude that God and the separate, intelligible substances are posterior to sensible substances? [§6] In his reprise of the exegesis, Avicenna moves on to discuss the relation between substances of the same rank: individuals with individuals, species with species, genera with genera. [§7] In the end, Avicenna takes into account specific differentiae: differentiae are either substances in themselves (when taken as simple, formal properties, for instance “rationality”) or have substantiality as a necessary concomitant (when taken as predicates, for instance “rational”).

[§1] (95.15 – 96.4). In the beginning of his discussion of substance, Aristotle immediately states that what is called a substance “most strictly (*κυριώτατα*), primarily (*πρώτως*) and most of all (*μάλιστα*)” is what is neither said of a subject nor in a subject, namely individual substance – such as this particular man or this particular horse (*ὁ τις ἄνθρωπος ἢ ὁ τις ἵππος*)<sup>330</sup>. The reasons for the primacy of individual substance are explained right below: since everything else is either said of primary substance (its genera and species, which are secondary substances) or inherent in primary substance (universal and particular accidents), nothing could exist without it<sup>331</sup>; moreover, given Aristotle's substrative conception of substancehood in the *Categories*, individuals – being subjects for all other things – are clearly said to be substances “most of all”<sup>332</sup>.

Against this background, Avicenna begins his exegesis of ch. 5 by stating that primary substances are individuals, right before explaining in what sense, according to him, primary substance is “primary” (*awwal*). He reprises a distinction already made above in ch. II.4 [§5.2.2]: prior and posterior things that share a certain common predicate may be either prior and posterior with respect to that very predicate, or with respect to another notion<sup>333</sup>. As we saw in the previous chapter, in the name of his strongly unitarist theory of substance Avicenna does not grant to substances a difference in substancehood, but rather a difference with respect to existence – or other attributes. As a matter of fact, substance is rather “worthier” (*awlā*) of substancehood than prior with respect to it: this means that the attributes (*lawāḥiq*) and perfections (*kamālāt*) of substancehood belong to it in a more perfect way, or exist therein before coming to existence in other things. Avicenna has already presented the distinction

---

<sup>330</sup> Arist. *Cat.* 2 a11-14.

<sup>331</sup> Arist. *Cat.* 2 a34 – 2b5.

<sup>332</sup> Arist. *Cat.* 2 b15-17.

<sup>333</sup> See above, II.4 [§5.2.2].

between priority and worthiness in ch. I.2, when discussing the criteria for predication *bi-l-taškīk*: there he argued that greater and lesser worthiness may be also found in things that are not necessarily prior and posterior<sup>334</sup>.

[§2] (96.5 – 98.13). After stating that individuals are not prior in substancehood, but simply worthier thereof, Avicenna goes on to list and discuss the attributes that belong to individuals primarily, and in a more perfect manner.

[§2.1] (96.5-7). Primary substances are worthier of substancehood because they are prior with respect to four properties. Avicenna’s four criteria for the primacy of individuals are: (1) with respect to existence (*min ġihat al-wuġūd*), (2) with respect to the realization of the reality in consideration of which a substance is substance (*min ġihat taqarrur al-amr llađī bi-‘tibārihī kāna l-ġawhar ġawharan*), (3) with respect to perfection and excellence (*min ġihat al-kamāl wa-l-fađīla*), (4) with respect to precedence in being-called (*min ġihat al-sabq ilā l-tasmiya*). Despite their original formulation, these criteria might well mirror or paraphrase Ishāq’s Arabic rendering of Aristotle’s three adverbs *κυριώτατα, πρώτως, μάλιστα*: respectively, “worthier with respect to truthfulness” (*awlā bi-l-tahqīq*), “with respect to priority” (*bi-l-taqdīm*) and “with respect to excellence” (*bi-l-tafđīl*)<sup>335</sup>. Be as it may, the explanation of Aristotle’s adverbs is a standard step of the earlier exegeses of this passage, and Avicenna’s discussion will sometimes reprise the commentators’ analysis<sup>336</sup>. I have insisted on this point in the INTRODUCTION<sup>337</sup>.

[§2.2] (96.8 – 97.19). The first property considered by Avicenna is existence. After contending that primary substances exist before secondary substances, he solves four anonymous objections to this claim.

[§2.2.1] (96.8-13). Universals need individuals to exist because, inasmuch as they are universals existing in act, they are somehow relative to individuals: either because they are said “universal” only with respect to the multiplicity of their particulars, or because they are considered as having a certain relation with them. Therefore, they need something else to exist in order to exist as universals. On the contrary, since individuals do not need anything else in order to become existent in act, they are prior to universals in this respect<sup>338</sup>.

[§2.2.2] (96.14 – 97.19). Avicenna presents and solves a series of four doubts, all related to distinction between universal and particular.

(1) The first doubt is reasonably directed against Avicenna’s claim, in [§2.2.1], that universals are somehow relative to particulars: how is it that the opposite is not true, namely that particulars are not relative to universals? One should rather say, perhaps, that the universal and the particular have their proper quiddities, but they are mutually related when considered as universal and particular. In response to this doubt, Avicenna precises that what is at stake here is not the universal and the particular understood as relatives, but only the very nature of universality and individuality. According to its nature and definition, a universal is said of a multiplicity of things, whereas an individual is not said of many things and is one by number: it is in respect of how they are in themselves that the notion of universal is relative to the notion of “individual”, and not vice versa.

(2) The second objection claims that the existence of individuals and universals is mutually independent, if they are taken in themselves as different quiddities: the existence of an individual man is independent of the existence of the species “man”, and *vice versa*.

---

<sup>334</sup> See above, I.2 [§3.2].

<sup>335</sup> *Manṭiq Aristū*, 36.10.

<sup>336</sup> Porph. *In Cat.* 89.10-32; Simpl. *In Cat.* 80.31 – 81.5; Olymp., *In Cat.* 59.31 – 60.3; Elias/David, *In Cat.* 165.3-13.

<sup>337</sup> See above, INTRODUCTION 3.3.3.

<sup>338</sup> On the definitions of universality and particularity and their mutual relations, cf. *Ilāhiyyāt* V.1, 195.6 – 196.5; *Nağāt* 10.8 – 11.1.

Avicenna replies that this is not true, if the universal and the individual are considered with respect to the natures of universality and individuality. A universal is such that its notion is necessarily shared in by a number of things, and for this reason its existence depends on the existence of many particulars sharing in it. On the contrary the individual, insofar as it is an individual, does not need anything else to exist.

(3) The third objection says that the quiddity of man is prior with respect to the nature of Zayd, for Zayd shares in the definition of man. Once again, Avicenna replies that the point here is not about quiddities, but rather about “universal” quiddities, and the nature of universality.

(4) The last objection reprises the point of objection (1): Avicenna appeared to act incorrectly, by positing an asymmetrical relation between the universal and the individual. The first part of Avicenna’s reply is dialectical and methodological: objections concerning the initial assumption (namely that the universal is relative, whilst the individual is not) are acceptable only when the assumption is firstly proven to be false, not when it is declared false *a priori*. In the second part of his answer, he claims that the difference is undeniable, since universals and individuals exist in different ways: the former in the mind, the latter in concrete reality.

[§2.3] (97.19 – 98.3). The second criterion is “the realization of the notion” proper to substance. Since all substances are necessarily accompanied by the fact of not existing in a subject, if they exist in extra-mental reality<sup>339</sup>, it is clear that individuals are prior because they exist actually among concrete beings, whereas universals do so only in potency.

[§2.4] (98.4-9). The third criterion is “perfection and excellence” (*al-kamāl wa-l-faḍīla*), corresponding to Aristotle’s *μάλιστα*. Before explaining the reason for the perfection of individuals, Avicenna criticizes the doctrine of a group of people, who claim that individuals are “more excellent” (*afḍal*) because they are “subjects and principles” (*mawḍū‘ātin wa-uṣūlan*) for all other beings, and that which is a subject and a principle is more excellent than what is not such. Despite not being formulated identically, this doctrine resembles Porphyry’s and Simplicius’ explanation for the fact that individuals are substance *μάλιστα*, which is certainly based on Aristotle’s words at *Cat.* 2 b15-17: since substance is characterized by being a substrate, and individual substance is a substrate for everything else, individuals are substances “most of all”<sup>340</sup>. Against these commentators, and in a sense against Aristotle himself, Avicenna contends that a principle is not necessarily more perfect than that whereof it is a principle, for something that has a principle can be more perfect and excellent than its principle. The same holds for substrates: if the substrate were necessarily more excellent than that of which it is substrate, then a primary substrate – such as prime matter - should be the most excellent being overall. This passage is crucial, inasmuch as it contributes to highlighting Avicenna’s rethinking of the “substrative” model of substance deployed by Aristotle in the *Categories*.

In Avicenna’s view, the reason for the primacy of individuals in respect of perfection is teleological: the existence of individual substances seems to be the purpose of nature (*al-qaṣd fī l-ṭabī‘a*), and all the “actions and states” (*al-af‘āl wa-l-aḥwāl*) that occur in the world are either performed by them, or existing in them. However, as Avicenna will prove in metaphysics, the infinite individuals of substance are in a sense goals of nature, but not “essential goals” (*ḡāyāt dātiyya*) thereof: nature rather tends to producing and preserving the more durable nature of their species<sup>341</sup>.

<sup>339</sup> See above, III.1 [§2-3].

<sup>340</sup> Porph. *In Cat.* 89.27-31; Simpl. *In Cat.* 81.2-5.

<sup>341</sup> Cf. *Ilāhiyyāt* VI.5, 289.16 – 291.3: here, Avicenna denies that nature tends to the existence of infinite individuals, to the aim of rejecting the possibility of a *regressus ad infinitum* in final causes.

**[§2.5] (98.10-13).** The last criterion discussed is “precedence in being named”, probably corresponding to Aristotle’s *πρώτως*. Avicenna’s explanation resembles what some previous commentators say to clarify Aristotle’s *κυριώτατα*: primary substances are such “most strictly” because they are named substances properly and primarily, not by metaphor<sup>342</sup>. Since the first substantial beings that we encounter are sensible individuals, they are evidently named “substances” before everything else.

Before moving to the discussion of secondary substance, Avicenna restates Aristotle’s principle: being a subject of predication for their genera and species, and a subject of inherence for accidents, it is clear that any other being exists either as predicated of the individual, or as inhering in it.

**[§3] (98.13 – 99.7).** The discussion of secondary substances is basically a reworking paraphrase of Aristotle’s text (2 b7-22). Among secondary substances, that comprise the species and genera of individuals, the species is “more substance” (*μᾶλλον οὐσία*) than the genus: according to the Greek commentators, Aristotle presents two proofs for this claim, a proof based on the relation (*σχέσις*) or proximity (*ἐγγύτης*) of species and individual substances, and a proof by proportion or analogy (*ἀναλογία*)<sup>343</sup>. As a matter of fact, Aristotle contends firstly that the species is “closer” (*ἐγγιον*) to primary substance than the genus: he explains this by the fact that, if one wants to notify the essence of primary substance, he gives a more adequate indication by stating its species, rather than its genus. Secondly, the relation of primary substance to all other things (*πρὸς τὰ ἄλλα πάντα*) is also the relation of the species to the genus<sup>344</sup>.

Avicenna reprises Aristotle’s two explanations, with a few important differences. First of all, he says, the species is not “more substance”, but “worthier of substantiality” (*awlā bi-l-ḡawhariyyati*) than the genus; it is not, of course, prior with respect to the very notion of substancehood, but only with respect to some properties extrinsic to it. Then, he interprets Aristotle’s criterion of “proximity” as follows: the species is worthier than the genus because it is “more participative” (*ašaddu mušāarakatan*) in the quiddity of primary substance, and for this reason it signifies primary substance more than the genus does: the example he gives, concerning the individual man, is the same as Aristotle’s. Now, that which shares “more” with primary substance in its essence is also closer to it (*aqrabu ilayhī*) in respect of priority and posteriority: not in the essence of primary substance in its being substance, but in the determinate essence it has besides the fact of being a substance.

**[§4] (99.7 – 101.3).** Having explained the relation of primary and secondary substances, Avicenna quickly solves two doubts: the first concerning genera and species, the second concerning intelligible substances.

**[§4.1] (99.7 – 100.7).** Avicenna recalls the doubts solved above, (1) and (4) in par. [§2.2.2]. There, Avicenna justified the primacy of individual substance by saying that universals are, inasmuch as they are universal, relative to it, but not *vice versa*. According to the present objection, the same does not hold true of the relation between species and genera, for species are always species with respect to their genera, to the exception of the *species infima* (*al-naw‘ al-sāfil*), that is such only with respect to its individuals. Moreover, what Avicenna and Aristotle say is only confined to the relation that the lowest species has with its genera, but does not really describe the relation of intermediate species and genera. Avicenna’s reply to this objection is in line with the solutions adopted for the previous

<sup>342</sup> Olymp. *In Cat.* 59.32-33; Elias/David, *In Cat.* 165.3-6.

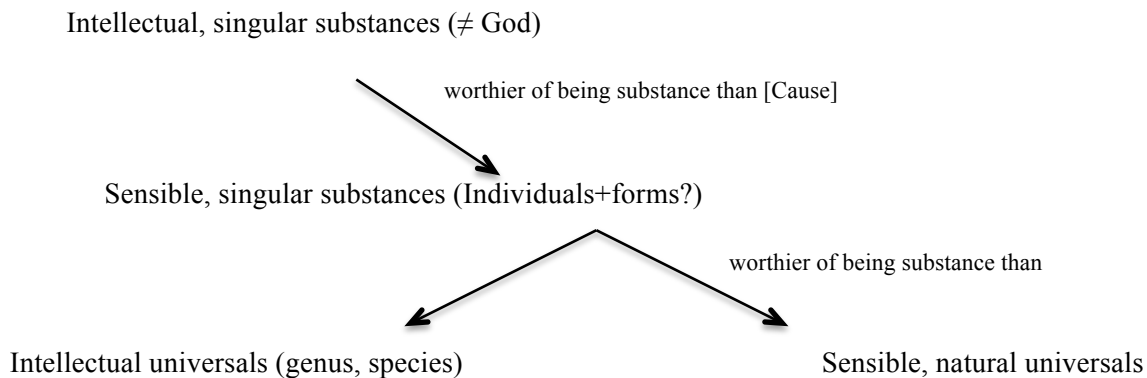
<sup>343</sup> Cf. Simpl. *In Cat.* 89.2-16; Phil. *In Cat.* 59.5-9; Olymp. *In Cat.* 64.18-20; Elias/David, *In Cat.* 168.11-12. According to Ibn al-Ṭayyib (*Tafsīr al-maqūlāt* 142.19 – 143.16), the two proofs consist respectively of a categorical syllogism (*qiyās ḡazmī*) and a conditional syllogism (*qiyās šarṭī*).

<sup>344</sup> Arist. *Cat.* 2 b7-22.



doubts: what is at stake here is the relation between two universals that differ in terms of commonality, one of them (the species, be it intermediate or ultimate) being more particular than the other (its genus or genera). This point counters the second part of the objection; as to the first part, concerning the relative nature of genera and species, Avicenna refutes it by appealing to the fact that, if taken as universals, genera and species are not relative, though they certainly are if taken – respectively – as genus and species.

[§4.2] (100.8 – 101.3). The second doubt is reminiscent of Platonic objections to the primacy of individual substance. If universal substances are understood as intelligible substances, then the separate principles of reality (God, Intellect and the Forms) are posterior to sensible beings, which is clearly absurd. Now, the strategy of most ancient commentators consists of invoking the subject-matter of Aristotle’s *Categories*, that focuses mainly on beings signified by expressions: in the context of this work, primary substance is the sensible individual – whereas however Aristotle, in other works of his, acknowledges himself the primacy of intelligible beings<sup>345</sup>. From his Peripatetic perspective, Avicenna provides his own, interesting solution to the puzzle. (1) As regards God, he firmly denies that He is a substance, since this has been – indirectly – proven above: given that “existence” does not constitute the quiddities of substances, a being whose quiddity is identical with existence cannot be a substance (III.1, [§2.2.2])<sup>346</sup>. (2) As for “intellectual substances” (*al-ḡawāhir al-‘aqliyya*) one must distinguish genera and species, on the one hand, from other separate, self-subsistent beings (namely, the intellects and souls of the heavens): these are not posterior to individuals, but – on the contrary – they are worthier of substancehood than anything else. As a matter of fact, they are the causes of the existence of sensible individuals, being the principles of their matters and their forms; individuals, in turn, are worthier of substancehood than any universal (according to the four criteria expounded in par. [§2]). From Avicenna’s words, we may thus infer the following hierarchy:



It is not perfectly clear what Avicenna means here by “sensible, natural universals” (*al-kulliyāt al-ḥissiyā al-ṭabī‘iyya*); since however genera and species are qualified as intellectual universals, these are very likely to be identified with universal forms.

Thereafter, Avicenna precises again that the relation (*muqāyasa*) that subsists between individuals and universals is not the same as that which subsists between individuals and separate substances: only if intellectual substances are such as to “contain” a multiplicity of individuals by constituting a common, specific notion or a generic notion, then individuals are

<sup>345</sup> Porph. *In Cat.* 91.19.23 (tr. Strange 1992, p. 81): “[...] since the subject of the work is significant expressions, and expressions are applied primarily to sensibles [...] it is reasonable for him to have called the things that are primarily signified by expressions, that is, sensibles and individuals, primary substances” ([...] ἐπεὶ περὶ λέξεων σημαντικῶν ἢ πρόθεσις, αἱ δὲ λέξεις πρώτως ἐπὶ τὰ αἰσθητὰ ἐτέθησαν [...] εἰκότως ἂ ταῖς λέξεσι πρώτα κατονομάσθῃ (ἔστι δὲ τὰ αἰσθητὰ καὶ τὰ ἄτομα), πρώτως οὐσίας ἔθετο). See the discussion in the INTRODUCTION, 3.3.1.

<sup>346</sup> III.1, [§2.2.2], 93.4-9.

worthier of substancehood than them for the reasons described above. The same happens with other kinds of sensible substance: individualized forms are prior to universalized forms (for instance, the form of this particular water is worthier of substancehood than the form of water *simpliciter*). However, there is no need for Avicenna to specify that the *Categories* does not deal with separate substances, to justify the primacy of sensible beings: for individuals are “primary” not with respect to their being substances, but with respect to a number of extrinsic attributes, and separate substances as well are not prior, but worthier (inasmuch as they are causes).

In sum, Avicenna’s reply to the puzzle regarding intelligible substances is rather original, and still coherent with the theory of substance outlined in chapter III.1.

**[§5] (101.4-11).** After solving the two doubts Avicenna returns to the text, notably to Aristotle’s description of the relation between substances of the same rank. Here Avicenna adopts the commentators’ jargon: after considering substances “in depth” (*‘amqan*), namely according to their vertical ranking (κατὰ βάθος in the Greek commentaries, *‘amqan* in Ibn al-Ṭayyib as well), it is now necessary to consider substances “in width” (*‘arḍan*), namely horizontally (κατὰ πλάτος in the Greek commentaries, *‘arḍan* in Ibn al-Ṭayyib as well)<sup>347</sup>.

Aristotle begins his explanation by stating that “none of the species [...] is more substance than another” (αὐτῶν δὲ τῶν εἰδῶν [...] οὐδὲν μᾶλλον ἕτερον ἑτέρου οὐσία ἐστίν)<sup>348</sup>, for saying of a certain horse that it is “a horse” is not more informative than saying of a certain man that he is “a man”. He then declares that the same holds true of primary substances: for a certain man is not more substance than a certain ox (paradoxical example).

Avicenna inverts the order of Aristotle’s exposition, by arguing firstly for the equal substancehood of individuals, secondly for the equal substancehood of species. An individual substance such as Zayd may be prior to some other individual not with respect to their being substances, but rather with respect to some other accidental attributes: for instance knowledge, for a certain individual man is undoubtedly wiser than a horse, an ox, or any other animal. The same holds true of species: the species “man” is maybe worthier of being substance in respect of perfection and excellence than any other species of the genus animal (but it is not, definitely, “more” substance than it).

**[§6] (101.12 – 102.9).** There are no other substances but concrete individuals and their species and genera. As for differentiae, the matter of their substancehood is a complex one: Aristotle denies their substancehood indirectly, by claiming that “being not-in-a-subject” is not a true property of substance, for it is also typical of differentiae<sup>349</sup>. Avicenna clearly has a nuanced position regarding the substantiality of differentiae: inasmuch as they are abstract properties or forms, they are necessarily simple substances; inasmuch as they are predicates, synonymously said of their subjects (species), they are necessarily accompanied by the fact of being substance (if they are predicated of substances).

**[§6.1] (101.12-18).** In a sense, claims Avicenna in the first place, differentiae “are equivalent to species” (*taḡrī maḡrā l-anwā*). This is enough to classify them as substances, when they are equivalent to the species of primary substance: it is probably what Avicenna means by stating that the reader already knows “what to count on” (*mā ta ‘tamiduhū*) to solve this issue. Differentiae are equivalent to species with respect to predication, for differentiae and species are “participated” equally by their individuals<sup>350</sup>.

<sup>347</sup> Phil. *In Cat.*, 60.22-26; Elias/David, *In Cat.* 169.29 – 170.5; Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 143.17-18.

<sup>348</sup> Arist. *Cat.* 2 b22-24.

<sup>349</sup> For a summary of the scholarly debate concerning the ontological status of differentiae see also above, the INTRODUCTION (3.2.2) and the commentary on ch. I.6 ([§1] and [§4]).

<sup>350</sup> Porph. *Isag.* 18.11-14; cf. also *Madḥal* II.3, 103.10.

In another sense, one may understand differentiae in two ways: (1) either as abstract properties and forms, that are not predicated of the species that they distinguish univocally, but only paronymously (for instance, “rationality”); (2) or as predicates said synonymously of the species that they distinguish (for instance, “rational”). In *Ilāhiyyāt* V.6 Avicenna declares that the former are not properly differentiae, but rather principles of differentiae (*mabādi’ al-fuṣūl*)<sup>351</sup>; whereas the latter are actual specific differentiae, in a logical sense. Avicenna focuses first on abstract forms, such as “rationality”: if these are understood as forms, then their relation to species and individuals is that of a simple substance to composite substances, but not the relation of a universal predicate to its particular subject<sup>352</sup>.

**[§6.2] (101.19 – 102.2).** As for logical differentiae, they are in themselves neither substances nor accidents: the equivalent of the predicate “rational” is “[a thing x] having rationality”, and the thing x that has rationality may abstractly be an accident or a substance. However, insofar as that thing x is always, undoubtedly a certain kind of substance, then “rational” is necessarily accompanied by the fact of being a substance – and for this reason it is a substance. For the same reason, an accidental differentia (e.g. “divisive of sight”, which produces whiteness) is accidental since it may abstractly be predicated of both a substance and a quality, but it always accompanies a quality (i.e. “colour”). This point is also reprised in the end of *Ilāhiyyāt* V.6<sup>353</sup>.

**[§6.3] (102.2-9).** Eventually, Avicenna sums up the discussion of substance and compares the substancehood of differentiae with the substancehood of species.

A simple differentia, like the rational soul, is worthier of substancehood in respect of priority (*al-quḍma*) than the species it constitutes, i.e. humanity, but it is not worthier than it in respect of perfection (*al-kamāl*). From this we may infer that it has either the same perfection, or a lesser perfection: inasmuch as the differentia and the species can be deemed equivalent, in a sense, we may well conclude that they have the same degree of perfection. As for the logical differentia “rational”, it is less worthy with respect to posteriority than its species, because it is not a substance in itself<sup>354</sup>.

---

<sup>351</sup> *Ilāhiyyāt* V.6, 230.4-18.

<sup>352</sup> A source for this distinction between simple and predicable differentiae is possibly Alexander of Aphrodisias’ *Quaestio on differentia* (for a translation and analysis of which see M. RASHED 2007, pp. 53-79).

<sup>353</sup> *Ilāhiyyāt* V.6, 235.1-5.

<sup>354</sup> See above, [§6.2].

### III.3

#### ON THE DESCRIPTIONS OF SUBSTANCE, AND ITS PROPERTIES

After presenting in general the notion of substance (III.1) and the distinction between primary and secondary substances (III.2), Avicenna goes on – in chapter III.3 – to expound Aristotle’s discussion of the properties of substance. The “descriptions” (*rusūm*) in the title refer to an exegetical commonplace: since substance is one of the highest genera, and – being such – it is not definable by means of a proper definition, Aristotle presented its properties in order to provide a “description” (ὕπογραφή, *rasm*) thereof.

[§1] The first property, existence “not-in-a-subject”, is truly proper of all substances. Whereas Aristotle does not take it to be a real property, since it also belongs to differentiae, Avicenna states that it is indeed such, because it belongs to the differentiae of substance – which are undoubtedly substances. [§2] The second property is signifying something determinate: following Aristotle, Avicenna argues that it is truly proper of individuals only, since secondary substances rather signify a sort of non-accidental qualification. [§3] The third property is not having contraries: this is not a property of substances only, since it also belongs to quantities. Quantities that seemingly admit of contraries, such as “large” and “small”, are neither quantities nor contraries – but, in fact, relatives. [§4] The fourth property is not admitting of more and less: it is also proper of quantity. When discussing this property, Avicenna refutes the anonymous view according to which the more and the less may not be found – at times – in between contraries. [§5] The fifth property is, according to Aristotle, the only actual property of substance: substance admits of contraries, while remaining one and the same (thus, an unchanging substrate of change). Avicenna corrects Aristotle by saying that this property does not belong to all substances, but only to some corporeal substances. Thereafter, he discusses the objection formulated by Aristotle himself against substance having this property exclusively: also some accidents, such as speech and opinion, seem to admit of it.

[§1] (102.13 – 103.12). The first characteristic that Aristotle says to be “common to every substance” (κοινὸν [...] κατὰ πάσης οὐσίας) is “not being in a subject” (μὴ ἐν ὑποκειμένῳ εἶναι)<sup>355</sup>.

[§1.1] (102.13-17). All substances are such as not to exist in a subject. Aristotle proves this by recalling the previously given descriptions of primary and secondary substance: primary substance is neither said of a subject nor in a subject, secondary substance is said of a subject and not in a subject<sup>356</sup>. That secondary substances are really substances is also clearly deducible from the way in which they are predicated of their subjects: synonymously, namely in such a way as to provide subjects with both their names and definitions, not accidentally<sup>357</sup>. Despite being “common” (κοινὸν), however, this attribute is not really a “property” (ἴδιον), for it also belongs to specific differentiae, that – like secondary substances – are said of a subject as well<sup>358</sup>. With regard to the distinction between “common” and “proper”, the ancient commentators used to recall Porphyry’s definition of ἴδιον in the *Isagoge*: since the *proprium* of a species is what holds of “all of it” (παντί), “of it alone” (μόνῳ) and “always” (ἀεὶ), being not-in-a-subject is not an actual *proprium* because it belongs to all substances, but not to substance alone<sup>359</sup>.

---

<sup>355</sup> Arist. *Cat.* 3 a7-8.

<sup>356</sup> Arist. *Cat.* 3 a 8-15.

<sup>357</sup> Arist. *Cat.* 3 a 15-21.

<sup>358</sup> Arist. *Cat.* 3 a 21-28.

<sup>359</sup> Porphy. *Isag.* 12.17-18; Porphyry also provides a slightly simplified definition of ἴδιον, not comprising the character “always”, in his commentary on the *Categories* (*In Cat.* 93.31 – 94.3).

After restating immediately that all substances are not-in-a-subject, Avicenna does not recall the descriptions of primary and secondary substance: he focuses exclusively on differentiae, claiming that logical differentiae (for instance, the predicates “rational” and “sensible”) are also existent not-in-a-subject, despite being less worthy of substancehood than genera and species<sup>360</sup>. The fact that differentiae “provide their individualities with their names, along with their definitions” (*tu tī šaḥṣiyyātihā asmā’ahā bi-ḥudūdiha*), whereas things that exist in a subject do not, is mentioned not in order to prove that differentiae are substances, but rather in order to prove that they share the properties of the other secondary substances. After having defended the substancehood of differentiae<sup>361</sup>, Avicenna insists on this very point: against Aristotle, he seems to contend that differentiae are substances, and for this reason he holds “not being in a subject” to be an actual property of substance – for it belongs to all substances, including differentiae, and to substances alone.

**[§1.2] (102.17 – 103.12).** Aristotle’s claim that the parts of substances are substances despite being somehow “in” a subject may be interpreted in various ways: either as referring to differentiae, mentioned right above in the text, or as referring to form and matter (with respect to composite substance), or as referring to the organic parts (μόρια) of primary substances<sup>362</sup>. In his paraphrase Avicenna takes it to refer to the elements of composite substance, very likely matter and form (like Alexander)<sup>363</sup>, and to particulars with respect to universals. That the inherence of particulars in universals and of parts in wholes are other than the inherence of an accident in its subject, has already been stated in chapter I.4<sup>364</sup>. With regard to these distinctions, Avicenna does not hesitate to recall once again a crucial doctrinal point that was already at stake in chapter I.6, and in the short treatise *Fī ḥata’*: one must refrain from thinking that forms and abstract differentiae are substances, inasmuch as they are parts of compounds, and accidents, inasmuch as they inhere in matter as in a subject<sup>365</sup>. Nothing may fall under two different categories by essence, and these forms and differentiae are substances, rather than accidents: they are only said to be “qualities” by homonymy.

On the whole, then, existence not-in-a-subject is shared by all “actual substances” (species, genus and individual) and by logical differentiae. If taken with regard to substance absolutely, this property is said equally of all substances and it is “convertible” (*mun’akisa*) with substance itself, as is the case for every true *proprium* according to Aristotle’s and Porphyry’s characterizations<sup>366</sup>. If taken with regard to actual substances, this property is “more common” (*a’amm*), in the sense of “less proper”.

**[§2] (103.13 – 105.13).** Besides not-being in a subject Aristotle mentions another attribute of substances, notably the fact that they always give rise to synonymous predications, or “all things called from them are so called synonymously” (τὸ πάντα συνωνύμως ἀπ’αὐτῶν λέγεσθαι)<sup>367</sup>. Avicenna completely omits the discussion of this property, probably because it

<sup>360</sup> For the distinction between actual and logical differentiae see above, III.2 [§6.2].

<sup>361</sup> Cf. above, III.2 [§6].

<sup>362</sup> Arist. *Cat.* 3 a29-32. For the “organic” interpretation see BODÉÛS 2002, pp. 95-96: Bodéüs supports it by mentioning some passages of the *Metaphysics* (Arist. *Metaph.* Δ 8, 1017 b12; Z 2, 1028 b 9-13; H 1, 1042 a 9) where Aristotle expressly states that the parts of animals, plants, natural bodies and heaven are substances.

<sup>363</sup> See M. RASHED 2007, pp. 43 ff.

<sup>364</sup> See above, I.4 [§4], 31.12.

<sup>365</sup> See above I.6 [§3-4]; *Fī ḥata’* [§4] ff. (Introduction, 3.2.3).

<sup>366</sup> According to Aristotle (Arist. *Top.* A 5, 102 a18-20), since the actual *proprium* belongs to one thing only it is “said interchangeably with the thing” (ἀντικατηγορεῖται τοῦ πράγματος). Cf. also Porph. *Isag.* 12.20-22 (tr. BARNES 2003, p. 12): “and they say that these are properties in the strict sense, because they convert: if horse, neighing; and if neighing, horse.” (ταῦτα δὲ καὶ κυρίως ἰδιά φασιν, ὅτι καὶ ἀντιστρέφει· εἰ γὰρ ἵππος, χρεμετιστικόν, καὶ εἰ χρεμετιστικόν, ἵππος).

<sup>367</sup> Arist. *Cat.* 3 a33 – b9.

holds true of secondary substances alone, but also because it holds true of the universals of accidents. As we have seen, in par. [§1.1] he rather employs this property as a criterion to compare logical differentia and secondary substance, in order to confirm the substancehood of the former (certainly not in order to prove it). For this reason, then, Avicenna moves on directly to the third one, which is signifying something determinate (τόδε τι σημαίνειν). Aristotle introduces this property, Ackrill argues, to prevent us from inferring erroneously that genera and species, being substances, are also substances that exist “in their own right like Platonic Forms”<sup>368</sup>. As a matter of fact, whereas (the names of) primary substances certainly signify a τόδε τι, for the thing that they “express” or “reveal” (τὸ δηλούμενον) is “individual and numerically one” (ἄτομον [...] καὶ ἐν ἄριθμῳ), secondary substances rather signify a certain qualification (ποιόν τι), although by the form of their name (τῷ σχήματι τῆς προσηγορίας) they appear to signify something determinate as well<sup>369</sup>. The qualification provided by secondary substances is other than the qualification provided by accidents: an accident, such as white, provides a qualification absolutely (ἄπλῶς), whereas the genera and species of substance provide a qualification around substance (περὶ οὐσίαν), for they signify “a substance of a certain qualification” (ποιὸν γὰρ τινα οὐσίαν σημαίνειν)<sup>370</sup>.

[§2.1] (103.13 – 104.12). Ishāq ibn Hunayn intuitively renders Aristotle’s τόδε τι σημαίνειν as “expressing something that is sought for by means of indication” (*yadullu ‘alā maqṣūdīn ilayhī bi-l-iṣārati*)<sup>371</sup>. In the beginning of his discussion of this property, Avicenna focuses on the term “indication”, or “pointer” (*iṣāra*), and on the types of indication that isolate something individual in reality. An *iṣāra* is “a sensible or intellectual sign” (*dalāla ḥissiyya aw ‘aqliyya*) directed towards a single thing, and to nothing else (not even to things that belong in the same species as the first individual). Now, sensible indication certainly isolates *per se* individual substances; still, what does happen with individual accidents, that appear to be equally determinate?

Individual accidents, Avicenna says, are not properly determinate. They cannot be isolated by means of a sensible indication *per se*: for they are individualized by their subject, so they are necessarily pointed to by accident, together with their subjects. One could say that it is possible to determine them intellectually, by means of an “intellectual indication” (which is equivalent to conceiving of separate, individual accidents independently of their subjects). Still, even in that case there are two possibilities: (1) either intellectual indication points to the notions of accidents, (2) or it points to some individual, intellectual accidents. In the first case the indication is not really such, for it points to universal notions; in the second case it is only possible to conceive of them in this way if their multiplicity already presupposes the multiplicity of their (intellectual) subjects, a multiplicity that the subjects came to have either by themselves or by virtue of another, external cause. For this reason, even if intellectual indication is said to comprise accidents, it does only secondarily, not according to the first intention (*bi-l-qaṣd al-awwal*). What is sought for primarily by means of intellectual indication, therefore, is again individual substance. For this reason, argues Avicenna, it is possible to understand Aristotle’s *iṣāra* – here – both as a sensible indication, that isolates only sensible substances, or as a more general indication that comprises both sensible and intellectual indication. The problem with this latter interpretative option is that such a general notion would not be synonymous: what Avicenna means is that sensible indication, understood as a physical gesture, differs considerably from a intellectual indication, which is rather a mental operation of abstraction.

<sup>368</sup> ACKRILL 1963, p. 88.

<sup>369</sup> Arist. *Cat.* 3 b10-16. This point is also made by Aristotle at Arist. *Metaph.* Z 13, 1039 a1-16. Cf. BODÉÜS 2002, pp. 99-100.

<sup>370</sup> Arist. *Cat.* 3 b18-21.

<sup>371</sup> *Manṭiq Aristū* 40.7.

**[§2.2] (104.13 – 105.8).** Be as it may, indication does not certainly point to secondary substances, for universal notions are not as determinate as individuals are. When we point to Zayd, we are not also pointing to his being man as to something determinate: if it were so, the notion of manhood would be inseparable from Zayd, and every man would be Zayd. Universals do not signify “something subject to indication” (*‘alā mušār ilayhī*), but rather “which one sort of thing subject to indication there occurs” (*‘alā ayyi wāḥidin ittafaqa min al-mušāri ilayhī*). Secondary substances may either provide other secondary substances with a certain qualification (*ayyiyya*) that isolates them within a more universal notion, such as “specificities” (*al-naw‘iyyāt*) or species; or they may not provide other secondary substances with such a qualification. There is only one possible example for this latter case: it is the highest genus “substance”, which is not a species of any genus; unless someone understands being-isolated as happening with respect to the notion of “existence”, in which case we should say that the notion “substance” isolates a group of determinations within the class “existence” (which however is not a genus, as was proven above in chapter II.1<sup>372</sup>).

Unlike Aristotle, who contrasts the qualification provided by universals with the qualification provided by qualities in rather vague terms, Avicenna tries to determine the qualification of universals more precisely, in itself. Universal substances notify a certain qualification in two ways: (a) either essentially, namely in such a way as to isolate a group in itself without its being subsumed under a more general predicate; (b) or so as to isolate a group subsumed under a more common predicate. Not all secondary substances, however, qualify in the same way: differentiae necessarily qualify according to (b), whereas species qualify and isolate mostly according to (a), whereas they do according to (b) only by accident (*bi-l-‘arād*). “By accident” does not mean here that species do not isolate under a genus at all, but that they isolate under a genus inasmuch as there is in them “something that isolates” (*mufriẓan*) in that way primarily, namely their differentia. With respect to their specific way of qualification, secondary substances signify the “what sort of” (*ayyun*) in two ways: by isolating a single group of individuals and by providing a “substantial isolation” (*ifrāzan ḡawhariyyan*), namely an isolation of determinations that fall under the category of substance.

**[§2.3] (105.9-13).** Following the previous commentators, Avicenna states that this property belongs to substances alone, but not to all substances<sup>373</sup>. One may say, thus, that all things embraced by this condition fall only under substance, but not that all substances embrace this condition. Likewise, explains Avicenna with an example, we say that the Ka‘ba is proper of Mecca because the Ka‘ba is found only in Mecca, not because the Ka‘ba has the same extension as Mecca.

**[§3] (105.14 – 106.19).** The fourth property of substances mentioned by Aristotle is “the fact that there is nothing contrary to them” (τὸ μηδὲν αὐταῖς ἐναντίον εἶναι)<sup>374</sup>. This property, again, is not truly proper of substance, for it seems to hold of things that belong to other categories – for instance “definite” quantities (τῶν [...] ἀφορισμένων ποσῶν): nothing is really contrary to two, four or two-cubits. For indefinite quantities, instead, the doubt remains: someone might say that many and few, large and small are quantities and contraries<sup>375</sup>. Against this possible objection, Aristotle will later contend – in chapter 6 – that “large” and “small” are neither quantities nor contraries, but relatives<sup>376</sup>.

**[§3.1] (105.14 – 106.2).** According to Avicenna, the property of not admitting of contraries is a property of substance “not with respect to every accident, but with respect to

<sup>372</sup> See above, II.1 [§4].

<sup>373</sup> Cf. for example Porph. *In Cat.* 96.3-13.

<sup>374</sup> Arist. *Cat.* 3 b24-25.

<sup>375</sup> Arist. *Cat.* 3 b 28-32.

<sup>376</sup> Arist. *Cat.* 5 b 11 – 6 a11.

some accidents [only]” (*laysat* [...] *bi-l-qiyās ilā kull ‘araḍ bal bi-l-qiyās ilā ba ‘d al-a-rāḍ*). This is not true with regard to every conception of contraries: it is only with regard to the most proper one, according to which contraries are essences that “succeed each other” (*yata ‘āqabāni*) on the same subject, and cannot exist together therein<sup>377</sup>. On the contrary, if we conceive of contraries in a more generic sense, as of essences that share the same receptacle (*maḥall*) – be it a subject or matter – in this case a substance may admit of contraries: form has indeed a contrary, privation, that may succeed it on the same receptacle (notably matter)<sup>378</sup>. The case of form and privation is mentioned by Simplicius, in his commentary, as a possible objection against substance having this property: he solves it, there, by arguing that form (τὸ εἶδος) is contrary to privation not inasmuch as it is a substance, but inasmuch as it is a state (ἔξις)<sup>379</sup>.

**[§3.2] (106.3-8).** The logician cannot prove that substance has no contraries, at least not demonstratively: the only ways he can afford consist either of induction (*al-istiqrā’*), or of proofs taken among the commonly accepted ones (*al-mašhūrāt*). As for his doubts, he can remove them by means of inductive examples that yet may not suffice to convince him of the truth of this point<sup>380</sup>. It is therefore clear, by induction, that man and horse have no contraries: for nothing is contrary to man and horse, inasmuch as man is man and inasmuch as horse is horse. Furthermore, a hot and cold body are not contrary inasmuch as they are bodies, but inasmuch as they bear contrary qualities. This latter statement seems to reply implicitly to a doubt found in the preceding exegetical tradition: how is it that substances appear to have no contraries, while Aristotle says – in the *De generatione et corruptione* – that simple bodies (like fire, water, air and earth) may be contrary to one another?<sup>381</sup> Avicenna’s reply to this puzzle resembles the one offered by Alexander of Aphrodisias, at least according to the account of his position offered by an anonymous marginal scholium on Ammonius’ commentary on the *Categories*: elements are contrary to one another in so far as they have bear contrary qualities, not in themselves<sup>382</sup>.

**[§3.3] (106.9-19).** As Aristotle himself argues, the fact of not having contraries is also a property of quantity: it is well evident that quantities like “four-foot” and “ten” have no contraries. If someone objects that there are quantities that admit of contraries, like large and small, Aristotle says, it must be kept in mind that at least “definite quantities” (τῶν δὲ ἄφωρισμένων ποσῶν) do not<sup>383</sup>. Avicenna simply reprises Aristotle’s argument and objection; he also explains that although large/small and many/few are neither quantities nor contraries, as Aristotle will argue in *Cat.* 6<sup>384</sup>, there is no need to explain this in advance: to prove that this property does not only belong to substances it is sufficient to remark, as Aristotle does, that there are quantities that evidently do not admit of contraries (and this is even clear by induction)<sup>385</sup>.

<sup>377</sup> Avicenna will undertake an in-depth examination of opposites and contraries in chapters VII.1-2, when commenting on *Categories* 10.

<sup>378</sup> For the notion of *maḥall* (receptacle), and the difference between receptacle and subject, see *Ilāhiyyāt* II.1, 59.1 – 60.1. On the contrariety of form and privation, see VII.1 [§3.2.2].

<sup>379</sup> Simpl. *In Cat.* 107.30 – 108.4.

<sup>380</sup> That Aristotle in this place uses induction was already remarked by many a commentator, for instance by Porphyry, Simplicius and Elias/David. See Porph. *In Cat.* 96.30-32; Simpl. *In Cat.* 105.27 – 106.4; Elias/David, *In Cat.* 178.26 – 179.1.

<sup>381</sup> See for instance Arist. *Gen. Corr.* B 8, 335 a3-6; Olymp. *In Cat.* 73.22 – 74.3. Elias/David, *In Cat.* 178-180.

<sup>382</sup> The scholium is edited and translated in M. RASHED 2007, p. 131 (see also pp. 129-141; M. RASHED 2015, pp. 89-90).

<sup>383</sup> Arist. *Cat.* 3 b24-32.

<sup>384</sup> For the argument, see Arist. *Cat.* 5 b11 – 6 a11 (discussed by Avicenna below, at IV.2 [§2]).

<sup>385</sup> A similar remark about Aristotle’s argument is made for example by Simplicius. See Simpl. *In Cat.* 106.10-27, esp. 16-19 (tr. DE HAAS, FLEET 2001, p. 50): “[...] since this makes no difference to the present discussion he



**[§4] (107.1 – 108.8).** The fifth property analysed by Aristotle is “not admitting of more and less” (οὐκ ἐπιδέχεσθαι τὸ μᾶλλον καὶ τὸ ἥττον). This property applies in a certain sense to some substances, with respect to others: as a matter of fact, individuals have been said to be “more” substance than species and genera, and species have been said to be “more” substance than genera<sup>386</sup>. However, what is meant here is that no substance can be more or less “that which it is” (τοῦθ' ὅπερ ἐστίν): a man cannot be more or less a man, neither with respect to himself nor with respect to another man. As Aristotle remarks here, this property typically holds of qualities: a certain colour can always be that which it is more or less than itself (in different times), and than another colour of the same species (also in the same time)<sup>387</sup>.

**[§4.1] (107.1-11).** Before describing this property in detail, Avicenna explores briefly the relation that subsists between admitting of contraries and admitting of more and less. Indeed, the fact of not having contraries entails itself the fact of not admitting of more and less, for the more and the less are always observed in between contraries. However, not every contrariety is associated with a difference in degree: for change in between a certain kind of contraries, that is admissible in substances, may occur all at once – without a gradual transition. This is what happens, for instance, in the case of corruption<sup>388</sup>. An anonymous predecessor argued, apparently, that the more and the less can also be found outside a couple of contraries: someone may have more beauty and less health, or – viceversa – more health than beauty, whereas health and beauty are not contraries. The fallaciousness of such an objection is evident: the intension and remission that the opponent highlights in these two properties differ clearly from the ones considered here, since the opponent’s example concerns the relative, empirical predominance of one of two non-related properties; whereas the “more and less” taken into account here is related to the gradual transition that occurs in physical change, in between contraries.

**[§4.2] (107.12 – 108.8).** Substance, then, does not admit of more and less in the sense of motion (*‘alā sabīl al-ḥaraka*), nor does it admit of more and less with regard to the nature and definition of substancehood: for no substance is “more” substance in itself, and compared to another substance, with regard to substancehood itself. That some substances are “worthier” of substancehood than others, instead, has already been observed above, with regard to the distinction between primary and secondary substances<sup>389</sup>. The difference between “worthier” (*al-awlā*) and “more” (*al-ašadd*), in the main, is the following: greater or lesser worthiness regards the existence of substantiality (*yata ‘allaqu bi-wuḡūd al-ḡawhariyya*), whereas being more or less regards the quiddity of substantiality (*yata ‘allaqu bi-māhiyyat al-ḡawhariyya*)<sup>390</sup>.

Before moving on to the next property, Avicenna clarifies that not admitting of more and less is also proper of quantity, as will be said more precisely below<sup>391</sup>.

**[§5] (108.9 – 111.18).** The last property taken into account by Aristotle is what he claims to be “proper” of it “most of all” (μάλιστα [...] ἴδιον): being receptive of contraries while remaining numerically one and the same (τὸ ταῦτόν καὶ ἐν ἀριθμῷ ὄν τῶν ἐναντίων εἶναι δεκτικόν), namely being capable of functioning as a substrate for change<sup>392</sup>. A substance, such

---

leaves it as being a disputed issue and infers the same conclusion from what is agreed, saying that such quantity is not determinate” (ἀλλ' ἐπεὶ οὐδὲν πρὸς τὸ παρὸν διαφέρει, ταῦτα μὲν ὡς ἀμφισβητούμενα συγχωρεῖ, ἀπὸ δὲ τοῦ ὁμολογουμένου τὸ αὐτὸ συμπέρασμα συνάγει λέγων ὅτι τὸ τοιοῦτον ποσὸν οὐκ <ἀφωρισμένον> ἐστίν).

<sup>386</sup> Arist. *Cat.* 2 b7 ff.

<sup>387</sup> Arist. *Cat.* 3 b33 – 4 a9.

<sup>388</sup> On the fact that corruption and generation occur all at once see *Samā' ʿIabīʿ* II.3, 98.9-18.

<sup>389</sup> See above, III.2 [§1-2].

<sup>390</sup> See above, III.1 [§2-3]; INTRODUCTION, 3.3.3.

<sup>391</sup> Arist. *Cat.* 6 a19-25 (cf. also below, IV.2 [§3]).

<sup>392</sup> Arist. *Cat.* 4 a10-11.

as an individual man, can become – at different times – white and black, hot and cold, virtuous and vicious while always remaining one and the same<sup>393</sup>; but this does not hold true of other entities. Aristotle mentions the following cases of accidental attributes: an individual white cannot admit of its contrary, black, without changing; nor does an individual virtuous action receive its contrary, a vicious action, without itself changing<sup>394</sup>.

**[§5.1] (108.9-12).** Avicenna paraphrases Aristotle’s formulation of this property as follows: “its quiddity (i.e. the quiddity of substance) is a quiddity that, if individualized, is a subject for contraries” (*māhiyyatuhū mahiyyatun idā taṣaḥḥaṣat waḍa‘at al-aḍḍād*). I.e., when the quiddity of substance exists as an individual in concrete reality, it admits of contraries as a subject. This does not hold true for instance of universals: universals are not one by number, and since every universal comprises many individuals it is impossible to say that many individuals simultaneously admit of a property, for example white, and simultaneously admit of its contrary – black.

**[§5.2] (108.13 – 109.2).** Avicenna reprises Aristotle’s example of quality, but not with regard to individual colour: he does, instead, with regard to universal colour. Absolute colour can abstractly be said to admit of contraries, for it can be – for instance – black or white. However, there is an evident difference between admitting of contrary properties in change (as a singular man does) and admitting of contrary differentiae (as the genus “colour” does): the presence of contraries in a same genus may be read either extensively, as a “numerical” difference in distribution (some colours are black, some colours are white), or intensively, as a difference regarding the nature of colour, when it is taken along with contrary specific differentiae. If universal colour admitted of contraries as individual substances do, the same paradox would result as the one imagined for universal substances (**[§5.1]**): many individual colours would be blackness and whiteness simultaneously, which is absurd. Moreover, if the abstract nature of colour admitted of blackness and whiteness as individual men do, then: (1) colour would not be really blackness and whiteness, but a blackened and whitened subject, and this would bear the absurd consequence that even particular colours would be blackened and whitened; (2) blackness and whiteness would not characterise colour simultaneously, since “man” does not admit of contraries simultaneously, but in different times (by way of alternation, *‘alā ta ‘āqubin*).

**[§5.3] (109.3-17).** Given that substance admits of contraries when it is a substrate for change, it is clear that this property does not belong to unchangeable substances, like simple and separate substances (soul and intellect) and some corporeal substances (the celestial bodies). It is clear, therefore, that this property only holds of a number of corporeal substances: those that are composed of matter and form, and are subject to change. These substances share in this property equally, without one of them being more entitled to have it than the others. Moreover, the property does not only belong to each of these substances singularly, but to all of them: for this reason their universals – species and genera – may be said to share in it as well, not inasmuch as they are universal<sup>395</sup>, but inasmuch as one single part of theirs has the property of receiving contraries in change. Someone might object that such a reformulation of the property, made in order to apply it to universals as well, would imply that it be removed from individuals: for one cannot say that Zayd admits of contraries because a single part of his admits of contraries. This objection, says Avicenna, would be true and correct (*ḥaqq ṣaḥīḥ*); for the property of not admitting contraries belongs first of all to the nature of corporeal substance “under consideration of its quiddity” (*manzūran ilā māhiyyatihī*), independently of it existing as a particular or as a universal. Universals also share in this property: the property belongs to the nature and the category, and it belongs to it

<sup>393</sup> Arist. *Cat.* 4 a18-21.

<sup>394</sup> Arist. *Cat.* 4 a14-17.

<sup>395</sup> This was denied above, in par. **[§5.1]**.

as a property that truly specifies its subject, not as a property that is common to it and something else.

[§5.4] (109.18 – 111.18). Aristotle formulates himself an objection, by claiming that this property seems indeed to be found in beings that belong to other categories: e.g. statement and belief (τὸν λόγον καὶ τὴν δόξαν), for one and the same statement (or belief) may admit of truth and falsehood, depending on changes that intervene in its external truth conditions<sup>396</sup>.

Many commentators argue that Aristotle's reply to this doubt comprises two parts, an "opposition" (ἔνστασις) and a "counter-objection" (ἀντιπαράστασις): the former consists of conceding that statements and beliefs actually admit of contraries, but they do not receive them in the same way as substance does; the latter consists of denying that statements and beliefs are actually receptive of contraries<sup>397</sup>. Actually, Aristotle has a unitary line of argumentation: as he remarks, statements and beliefs admit of truth and falsehood not because of a change taking place in themselves, but because of a change occurring in the external event that determines their truth or falsehood. The statement "Socrates is sitting" is true when Socrates is sitting in reality, but it becomes false when Socrates stands up. This brings him to conclude, firstly, that statement and belief admit of contraries in a different way: whereas substance changes, they do not change at all. Secondly, he concludes – on the same ground – that they do not admit of contraries at all, for they receive them because of what happens to something else<sup>398</sup>.

[§5.4.1] (109.18-20). Avicenna's formulation of the doubt comprises, besides speech and opinion (*al-qawl*, *al-zann*), a case not considered by Aristotle: that of a quantity (surface) that may admit of contrary qualities (blackness and whiteness).

[§5.4.2] (110.1-5). Thereafter, Avicenna sums up Aristotle's solution, with some slight differences. Speech does not persist in itself as a substrate for truth and falsehood; opinion does, instead, and this is sufficient to raise the doubt. However, they do not admit of contraries because change does not affect them directly, but rather affects an actual, external thing that is directly responsible for their truth-value.

[§5.4.3] (110.6-19). In Avicenna's view, Aristotle's solution must be reassessed and corrected - for three reasons.

(1) Aristotle insists on the distinction and correlation between the existence or non-existence of some external thing, and the corresponding truth-value of a statement or belief<sup>399</sup>. In Avicenna's view, this solution is ineffective and counter-productive: Now, Avicenna argues that both the actual thing and belief change, though in two different respects, and with regard to two different couples of contraries: the actual thing with respect to existence and non-existence, belief with respect to truth and falsehood. It is not true that belief does not itself change, when the external thing changes: for if someone truly believes that "X exists" – at a certain time  $T_1$  – because X actually exists, and X ceases to be at another time  $T_2$ , whereas one still believes in its existence, "X exists" undergoes alteration – for it becomes a false belief, after having been a true belief. This solution, therefore, posits another sort of alteration – with respect to existence and non-existence – that does not help solve the initial doubt, since the whole discussion only concerns the alteration between truth and falsehood.

(2) Truth and falsehood do not subsist in the external thing only: one true belief has in itself an attribute "true", a relative notion – whose meaning is "corresponding to existent

---

<sup>396</sup> Arist. *Cat.* 4 a21-28. Aristotle does not say to which other categories these belong, but Bodéüs remarks that "opinion" might belong to relatives along with knowledge and sense-perception, and "statement" – in so far as it is a spoken statement – should belong to quantity (BODÉÜS 2002, p. 102).

<sup>397</sup> Simpl. *In Cat.* 118.7-25; Phil. *In Cat.* 80.24 – 82.23; Olymp. *In Cat.* 78.10 – 79.33; Elias/David, *In Cat.* 183.24 ff. On the rhetorical categories of ἔνστασις and ἀντιπαράστασις and their Arabic equivalents, see below IV.2 [2.5] and the Commentary *ad loc.*

<sup>398</sup> Arist. *Cat.* 4 a28 – b4.

<sup>399</sup> Cf. *Ilāhiyyāt* I.8, 48.5-7.

[reality]” (*muṭābiq li-l-mawǧūd*) – that may cease to exist in belief itself when existent reality undergoes alteration. Nothing prevents an attribute from undergoing change from being relative, rather than as stable as a quality.

(3) Moreover, nothing prevents an alteration in something from causing another alteration in something else: the appearance or disappearance of the Sun, for instance, may well cause a change in the temperature and light conditions of air and the earth. It is not unlikely, then, that a certain alteration in external reality be a cause for an alteration occurring in statements and beliefs.

In conclusion, if the alteration of statements and beliefs is understood as an alteration that concerns a relative attribute (truth/falsehood), caused by the alteration of something else (something in external reality), it is sufficient – in order to solve this doubt – to say that substance does not admit of change in the same way, but in a different way: without changing in itself (like accident), but also by a primary, non-relative alteration.

**[§5.4.4] (111.5-8).** The alteration of a quantity that receives contrary qualities (for instance a surface that may admit of a black or white colouring) does not depend on an alteration of quantity itself, but rather on the alteration of its substrate in respect of that quality.

**[§5.4.5] (111.9-18).** In the end, Avicenna recalls the objection according to which accident cannot inhere in other accidents – and counters it again. As a conclusion, he argues that accidents never change by themselves: they do either because their substrate changes, or because some other relative thing does.

### III.4

#### ON BEGINNING THE DISCOURSE ON QUANTITY

After discussing substance, Avicenna turns – following Aristotle – to the category of quantity, the first of the main accidental categories. Avicenna’s treatment of quantity covers chapters III.4, IV.1 and IV.2; in III.4, being the first part, Avicenna takes up the division of substance into discrete and continuous, and solves a number of doubts concerning the species of both continuous and discrete quantity.

**[§1]** In the beginning, following a consolidated exegetical practice, Avicenna explains the reasons why quantity is discussed immediately after the category of substance. This depends both on the fact that Aristotle has often mentioned quantity as a term of comparison for the properties of substance, and on the fact that quantity shows a certain existential priority with regard to the other accidental categories. **[§2]** Before dealing with quantity as an accident, it would be necessary to demonstrate its accidentality; however, this cannot be done by logicians properly, for such a demonstration is a prerogative of metaphysics. In spite of this rigid epistemological distinction, Avicenna provides here a concise exposition of the difference between the substantial body – being the form of corporeity – and the finite, measurable body which belongs to the category of quantity (the so-called “mathematical body”), in order to clarify that extensions are accidents. He then states – by taking the demonstration for granted – that unity (and consequently number, which is composed by unities) is also an accident. **[§3]** Thereafter, Avicenna presents the two couples of differentiae used by Aristotle to divide quantity in *Cat.* 6: continuous and discrete quantity, quantity whose parts have position and quantity whose parts do not have position. He makes a long digression, then, to determine precisely in what sense continuous quantity is continuous, given that “continuous” (*muttasil*) is a polysemous term. **[§4]** Continuous quantity is such that it is possible to suppose, among its parts, a common boundary: this is a character of mathematical bodies, surfaces, lines and time. **[§5]** In discrete quantities it is not possible to suppose such a common boundary (for example in numbers). **[§6]** Continuous quantity is either changing (time) or stable (extension, or magnitude). Place, which Aristotle lists among *continua*, is not a type of continuous quantity independent of extensions: it is rather a continuous quantity inasmuch as it is an extension. **[§7]** Discrete quantity only comprises number, even though – according to Aristotle and his commentators – it also comprises audible speech. However, if speech is a quantity it is inasmuch as it is numerable, not as a quantity *per se*. **[§8]** In the end, Avicenna mentions and refutes the view – held by some anonymous commentators before him – that heaviness and lightness fall under the category of quantity. This is false: as will be made clear later, heaviness and lightness are rather to be numbered among qualities.

**[§1] (112.4-15).** The question why Aristotle deals with quantity immediately after substance is taken up by the majority of known commentators. This is not a superficial matter of textual order: some previous exegetes answered this question by invoking the special ontological relevance of quantity with respect to the following accidents, for example by stating that if quality and other attributes are stripped off substance, but quantity is preserved, substance remains such – because quantity is a necessary completer of corporeal substance: as a matter of fact, a body must have three dimensions, in order to be a body<sup>400</sup>. Against this “physicalist” explanation of the arrangement of the categories, Eudorus of Alexandria and the Pseudo-Archytas granted quality a priority over quantity and the other accidents<sup>401</sup>; Simplicius followed Archytas, by arguing that *per se* – not with respect to the sensible world, which is the privileged focus of Aristotle’s *Categories* – quality is certainly more akin to

---

<sup>400</sup> This is one of Porphyry’s explanations for the primacy of quantity (*In Cat.* 100.11-28), also reprised by Simplicius (*In Cat.* 121.1-3).

<sup>401</sup> For Archytas, see Simplicius *In Cat.* 121.13 – 122.1.

substance than quantity, because it is more resemblant of what is substance most of all, i.e. the form<sup>402</sup>.

Avicenna does not change or contest the order of Aristotle's exposition; as concerns its explanation, he mentions five "notions" (*ma'ānin*) or arguments. (1) The first argument is also found in some previous commentaries: it consists of remarking that Aristotle, in the preceding chapter, has spoken expressly of quantity as bearing some of the properties of substance (notably, not admitting of contraries and not admitting of more and less); having mentioned quantity, rather than other accidents, he turns to explain it immediately after the discussion of substance<sup>403</sup>. (2) Moreover, quantity has "wider" (*a'amm*) existence than quality: "wider" means that some quantities – like numbers – may exist outside the realm of physical beings, among separate realities, while qualities cannot: for eternal substances are absolutely not qualified. (3) Besides this, quantity has a "more correct" or "stable" (*aṣaḥḥ*) existence than relatives: this means that relatives have a lesser stability, in their existence in the substrate, than quantity – for a relational property is less firmly "rooted" in the substrate than a non-relational one. (4) The fourth reason is that continuous quantities – line, surface and body – are naturally found in all bodies "without differentiation", or "without being different" (*min ḡayr iḥtilāf*), whereas different bodies may have specifically different qualities: every body necessarily has lines and surfaces, while a certain single body may have a different set of qualities than another. (5) Moreover, quantities are attached to what is primary – or worthier of substancehood – among substances, notably corporeity, whereas qualities are attached to the specific substantial forms that follow corporeity (for instance animality, manhood, and the like). This list is not exhaustive: according to Avicenna, it would be possible to find other respects in which quantity excels over quality.

**[§2] (112.16 – 116.3).** Even though it is not a logician's business to verify that quantity is an accident, Avicenna establishes it preliminarily, before turning to the divisions and properties of the category.

**[§2.1] (112.16 – 113.2).** The accidentality of quantity is certainly not self-evident: it is particularly doubtful in the case of corporeity, since "body" (or "solid") is a species of continuous quantity and the form of corporeity is a fundamental completer of substance. Since the accidental or substantial nature of beings depends on their manner of existing, such an investigation is rather to be carried out in metaphysics: as a matter of fact, Avicenna will also take up the issue of corporeity and the accidentality of extensions in the *Ilāhiyyāt*<sup>404</sup>.

**[§2.2] (113.2 – 114.4).** Avicenna presents a long digression concerning the distinction between the substantial body (the "form of corporeity") and the quantitative or mathematical body, which is identical with the quantitative extension of the substantial body. This whole section – comprising the following paragraphs – is certainly to be read in parallel with the first pages of *Ilāhiyyāt* II.2, a chapter where Avicenna takes up again the distinction between the physical and the mathematical body.

It is empirically clear, first of all, that every body is finite (*mutanāhin*), for we see that it is enclosed by one or more surfaces. Yet, corporeity itself is not identical with finitude, for finitude is an attribute that accompanies bodies necessarily when they are already constituted as bodies – and it is not intellected immediately therein: its existence must be proven by means of the appropriate demonstrations. Therefore, neither the finitude of body nor "surface" constitute its quiddity. It is also clear that the dimensions of a body do not always exist actually in it: a sphere is undoubtedly a body, although we only see a single boundary of it

---

<sup>402</sup> Simpl. *In Cat.* 122.5-8.

<sup>403</sup> See for example Porph. *In Cat.* 100.21-23; Simpl. *In Cat.* 120.30-33; Elias/David, *In Cat.* 185.14-19.

<sup>404</sup> Cf. *Ilāhiyyāt* II.2 for the issue of corporeity; *Ilāhiyyāt* III.4 for the demonstration of the fact that extensions are accidents.

instead of three well-distinguished dimensions (as happens, for instance, in the case of a cube). As a matter of fact, a body is such that it is possible to *suppose* in it three dimensions that intersecate one another perpendicularly, but they must not necessarily exist in actuality. This attribute, i.e. admitting of three perpendicular dimensions in potency, is itself the form of corporeity: a determination that constitutes every single body, inasmuch as it is a body. Now, inasmuch as a body has dimensions or actual dimensions it can be measured, and differ – depending on the different measures it may admit of – from other bodies, without its substantial form (corporeity) being affected; the attribute that provides the dimensions of absolute body with definite or indefinite measurability is the body belonging to the category of quantity. The same line of argumentation, along with the example of the sphere, is found in *Ilāhiyyāt* II.2, where Avicenna’s starting-point is the standard definition of body as “a long, wide, deep substance” (*ḡawharun ṭawīlun ‘arīḏun ‘amīqun*)<sup>405</sup>.

[§2.3] (114.5 – 115.7). Avicenna further details the difference between quantitative and substantial corporeity: bodies may differ with respect to quantity, but not with respect to form. This is explained by means of two examples: (1) a single piece of wax (*šam ‘a*) maintains its substantial corporeity whether it is modeled as a sphere or as a cube, for it is always possible to suppose three dimensions in it; on the contrary the actual, measurable determination of its dimensions, namely its quantity, changes from shape to shape<sup>406</sup>. (2) The same with water, when it becomes rarefied and increases in volume: its specific substantiality is preserved, while its corporeal extension changes. Against example (1), someone might object that the spherical body’s dimensions do not change when it becomes a cube, for the surface (*misāḥa*) of the two solids is equivalent; but the surface of one of them is only equivalent potentially, not actually – whereas quantity is an attribute of the actual dimensions of corporeal substance.

Substantial corporeity is not measured by anything (*lā tuqaddaru bi-šay’in al-battata*), because it does not fulfill one of the basic conditions of measurability: being actually different from other substantial corporeities, and therefore quantitatively comparable to them. As Avicenna has already said, all bodies are equal with respect to their substantial corporeity – i.e., with respect to their having three potential dimensions – whereas they are different and comparable with respect to their actual dimensions. It has become apparent, in conclusion, that quantitative corporeity is something other than substantial corporeity, despite being a necessary concomitant of it.

[§2.4] (115.7-16). There exists not only a form of corporeity, distinct from quantitative corporeity, but also a form of surface distinct from surface as a continuous quantity. This “absolute”, non-quantified surface is something where it is possible to suppose two dimensions that intersecate each other perpendicularly, inasmuch as it is the limit of a three-dimensional body. Unlike absolute corporeity, this absolute surface is not a substance but an accidental property whose existence depends on the existence of absolute body.

The form of body, when it is abstracted along with its quantity or when its quantity is abstracted and assumed in the mind, is called “mathematical body” (*ḡism ta ‘līmī*)<sup>407</sup>.

[§2.5] (116.1-3). After the discussion of corporeity Avicenna briefly alludes to the accidentality of number, that here is simply taken for granted but will be proven extensively in metaphysics<sup>408</sup>.

[§3] (116.4-5). This paragraph is practically a quotation of *Cat.* 4 b20-22, where Aristotle introduces the category of quantity by dividing it directly into “discrete” (διωρισμένον) and

<sup>405</sup> *Ilāhiyyāt* II.2, 61.6-7. On Avicenna’s account of corporeality, see for instance STONE 2001 and LAMMER 2018, pp. 114-154 (with an extensive discussion of the previous literature).

<sup>406</sup> The example of the piece of wax is also found at *Ilāhiyyāt* II.2, 64.1-4.

<sup>407</sup> *Ilāhiyyāt* II.2, 64.16 – 65.2.

<sup>408</sup> Cf. *Ilāhiyyāt* III.2-3; 5-6.

“continuous” (συνεχής), “composed by parts that have position in relation to one another” (ἐκ θέσιν ἐχόντων πρὸς ἄλληλα τῶν ἐν αὐτοῖς μορίων συνέστηκε) and “not [composed] by parts that have position” (οὐκ ἐξ ἐχόντων θέσιν). As Avicenna argues, these two divisions are “interpenetrating” (*mutadāhilayni*) because they are not perfectly coincident: most continuous quantities have mutual position in their parts, except for time<sup>409</sup>. Avicenna will focus on the first division in the rest of this chapter, whereas he will take up the second one below, in chapter IV.1<sup>410</sup>.

**[§4] (116.6 – 119.2).** Before taking into account the species of continuous and discrete quantities, Avicenna makes some general considerations regarding the couple continuous/discrete.

**[§4.1] (116.6 – 117.19).** The term “continuous” (*muttaṣil*) may be employed in multiple senses and referred to different things; it is necessary to establish the exact meaning that is at stake in this place. A similar discussion of the meanings of “continuous”, to be read in parallel with this section, is found in the third book of the *Physics* of the *Šifā*<sup>411</sup>.

**[§4.1.1] (116.6-8).** “Continuous” may signify either (1) a differentia of quantity, (2) or an attribute of magnitudes (*al-a’zām*) inasmuch as they are magnitudes, (3) or an attribute of magnitudes in so far as they are natural (*ṭabī’iyya*). In *Samā’ ṭabī’ī* III.2, Avicenna presents a tripartition that is formulated in different terms: something may be said “continuous” in three senses, two of which are relative, i.e. said of the thing “with regard to something else” (*bi-l-qiyās ilā ḡayrihī*), whereas the remaining one is absolute, i.e. said of the thing “in itself” (*fī nafsihī*)<sup>412</sup>. The third sense of the *Samā’ ṭabī’ī*-classification corresponds to signification (1), which is the one sought for in *Maqūlāt* III.4; the first relative sense of *Samā’ ṭabī’ī* corresponds to signification (2), whereas the second relative sense of *Samā’ ṭabī’ī* corresponds to signification (3).

**[§4.1.2] (116.9-14).** (1) Continuous as a differentia of quantity is continuous *per se*: its definition is “what is such that it is possible to suppose for it parts among which a common boundary is joint, that is a limit for two of these parts, and in another respect a limit for one of these two” (*alladī yumkinu an tufrada lahū aḡzā’u yuḡma’u baynahā ḥaddun muštarakun huwa nihāyatun li-ḡuz’ayni minhā wa-bi-’tibārin āḡara huwa nihāyatun li-aḡadhimā*). This is the same definition proposed by Aristotle in *Cat.* 6, as he says that line is continuous because it is possible to take “a common boundary at which its parts join together” (κοινὸν ὄρον πρὸς ὃν τὰ μόρια αὐτῆς συνάπτει)<sup>413</sup>. Furthermore, Avicenna specifies that the division into parts joining at a common boundary is not existential and actual, but only mental and potential.

**[§4.1.3] (116.15 – 117.11).** (2) The second sense of continuous, corresponding to the first sense of *Samā’ ṭabī’ī* III.2, is continuous with respect to something else (but independently of motion). A magnitude that is continuous with something else in this sense, is such that there exists in it actually a single “extreme and limit” (*ṭaraf wa-nihāya*) which is also an extreme and limit of the thing with which it is continuous. If in such a situation there were two distinct limits instead of one, it would be possible to say that there is contiguity (*mumāssa*) instead of continuity, and that the two magnitudes are contiguous; contiguity being defined, in *Samā’ ṭabī’ī*, as the state of two things in contact between whose limits there is “nothing having position” (*šay’ dū waḍ’*)<sup>414</sup>. Avicenna’s examples for this sort of relative continuity are the

<sup>409</sup> See below, IV.1 [§2.5] and the Commentary *ad loc.*

<sup>410</sup> See below, IV.1 [§1-3].

<sup>411</sup> *Samā’ ṭabī’ī* III.2, 182.1 – 183.11.

<sup>412</sup> *Samā’ ṭabī’ī* III.2, 182.1-2.

<sup>413</sup> A similar definition of “continuous” is found at *Phys.* 228 a29, 227 a1 (*Met.* 1069 a6).

<sup>414</sup> *Samā’ ṭabī’ī* III.2, 178.15 – 179.3.



two lines that form an angle, that are continuous in that they join at an actually existent common boundary (the point); or a single body, two parts of which come to be qualified by two different accidents, e.g. the white and black stripes of a zebra's body. In the latter case, white and black have different subjects (i.e., different areas of the same surface) and in this respect they become actually individualized and finite, but they join at a single common boundary. Now, this sort of continuity may belong to quantities, in a sense, but only to quantities that are accompanied by a certain qualitative attribute (e.g. the extensions – lines and surfaces – to which the configuration of angles and figures are attached)<sup>415</sup>.

[§4.1.4] (117.12-16). (3) The third sense of continuous is continuous with respect to motion: this consists of something following the thing with which it is continuous, when this latter is moved in a certain direction. Nothing prevents this from occurring because of contact, as in the case of adherence (*mulāṣaqa*) and interweaving (*mušābaka*); for it is irrelevant whether the two things that are “continuous” in this sense have a single common boundary or two distinct limits, what matters is just that one of them follows the other in motion. As Avicenna says in *Samā' tabī'ī* III.2, this sort of continuity is thus – in a sense – more general than the other relative meaning, for it may also apply to relations of contiguity<sup>416</sup>.

[§4.1.5] (117.16-19). The sense at stake in the *Categories* is the first: continuous quantities are continuous in themselves, not with respect to something else. Continuity *per se*, however, seems not to be primary, as well, at least with respect to its denomination: in Avicenna's view, this sort of continuity derives from sense (2), and such intrinsic *continua* are called continuous because the name “was transferred” (*nuqila*) upon them from that other continuity.

[§4.2] (118.1-16). Once the exact meaning of “continuous” has been defined, Avicenna goes on to determine in more detail the characters of continuous quantities.

[§4.2.1] (118.1-4). According to the description of continuity given in par. [§4.1.2], it is clear that continuous quantities are continuous *per se*, and it is possible for each one of them to suppose parts that join together at a common boundary. This holds true, for instance, of bodies: for the parts of bodies may be thought of as joining together at common boundaries (which are surfaces). This also holds true of surfaces, whose parts have lines as common boundaries; and of lines, whose parts have points as common boundaries<sup>417</sup>. It is also possible to suppose continuous parts in time, for past time and future time seemingly join together at a single common boundary – which is the instant (*al-ān*)<sup>418</sup>.

[§4.2.2] (118.5-16). It is proper of bodies to be divisible into parts: however, this is not proper of them inasmuch as they are bodies – i.e., inasmuch as they have the substantial form of corporeity – but inasmuch as they are extended: for being divisible into parts is proper of things that can admit of difference and equivalence, and it has already been ascertained that the form of corporeity is not such<sup>419</sup>. Someone might object that the divisibility of bodies is not determined by their extension, but by the fact that they have matter: still, it is to be proven in natural science that it is not so. For this reason, the reader of the *Categories* must concede temporarily that divisibility only belongs to bodies on account of their being extended. For Avicenna it is sufficient to anticipate that there are two types of partition (*tağzi'a*), a partition that occurs along with motion and physical separation and a “mental” partition that consists of “determining the part [as a part] only” (*ta'yīn al-ğuz' faqat*). The former needs matter to take place, whereas the latter only needs extension.

<sup>415</sup> On the ontological status of angles, see below VI.2 [§1.1.2].

<sup>416</sup> *Samā' tabī'ī* III.2, 183.4-7.

<sup>417</sup> Arist. *Cat.* 5 a1-6.

<sup>418</sup> For Avicenna's account of the instant, see *Samā' tabī'ī* II.12.

<sup>419</sup> See above, par. [§2.3].

[§4.3] (118.17 – 119.2). Discrete quantities are not such that it is possible to suppose in them parts that share a single boundary. Here Avicenna takes only number into account: as will become apparent below, he clearly rejects Aristotle’s inclusion of speech among discrete quantities<sup>420</sup>. The only “extreme” (*ṭaraf*) that numbers have is unity (*al-waḥda*); it is not an extreme in the sense that numbers are physically defined by unity, but in the sense that all numbers are composed by unities as elements. Now, if we split a number into two parts, for instance 7 into 3 and 4, they have no common unity in between them. If this common boundary existed, then there would be two possibilities: this common unity would be either (a) one of their unities, or (b) a further external unity. However, in case (a) 3 and 4 would become intersecting classes, and their sum would be 6 – not 7; in case (b), the existence of a supplementary unity would result in their sum being 8, instead of 7.

[§5] (119.3 – 120.16). Thereafter, Avicenna goes on to divide continuous quantity into its species, and to discuss the status of place – that Aristotle expressly includes among *continua*.

[§5.1] (119.3-4). Continuous quantity has either a stable essence (*qārr al-dāt*), or an essence that is unstable (*ḡayr qārra*) and found “in the renewal” (*fī l-taḡaddud*), i.e. subject to change<sup>421</sup>.

[§5.2] (119.4-5). Unstable continuous quantity is coincident with time, that will be taken up in detail in natural philosophy<sup>422</sup>.

[§5.3] (119.6-13). Stable continuous quantity is identical with the notions of “magnitude” (*‘aẓm*) and “measure” (*qadr*). Avicenna presents magnitudes in ascending order, in a way that is clearly reminiscent of Aristotle’s definition of body in the first book of the *De caelo*: what is divisible according to one dimension only is the line; what is divisible according to two dimensions is surface; what is divisible in three dimensions is the quantitative body<sup>423</sup>. Thereafter, Avicenna lists and analyses three alternative names for body, or rather for the third dimension that characterizes mathematical bodies: “thickness” (*ṭiḥan/ṭuḥn*), “depth” (*‘amq*), “height” (*samk*), depending on how this dimension is considered in space – either as something that “fills in” the gap between two parallel surfaces (thickness), or as a distance regarded from the bottom to the top (height), or as a distance regarded from the top to the bottom (depth).

[§5.4] (119.14 – 120.16). Place (τόπος) is listed by Aristotle among continuous quantities, along with time, at *Cat.* 4 b24-25. Against Aristotle and a “group” of commentators who argue that place is a quantity independently of other extensions, because besides being a surface it is also the containing limit of a certain contained body, Avicenna contends that place is a quantity only inasmuch as it is a surface<sup>424</sup>.

[§5.4.1] (119.14-17). The identity of these philosophers of commentators is uncertain. Given Aristotle’s standard definition of place as “the limit of a containing body”<sup>425</sup>, they seem to argue that place is a quantity inasmuch as it is a limit (*nihāya*) and a container (*ḥāwin*), besides being a surface. Such an argument is probably aimed at justifying the fact that Aristotle seems to list surface and place as independent kinds of continuous quantity: it implies that the difference between surface and place lies in the latter’s being a quantity

<sup>420</sup> Cf. below, [§6.2].

<sup>421</sup> Cf. *Ilāhiyyāt* III.4, 117.8-10: “Continuous quantity is either something stable, realized in existence in all its parts, or it is not. If it is not, but has renewed successive existence, then it is time” (*inna l-kam al-muttaṣil lā yaḥlū immā an yakūna qārran ḥāṣil al-wuḡūd bi-ḡamī‘ aḡzā’ihī, aw lā yakūnu, fa-in lam yakun, bal kāna mutaḡaddid al-wuḡūd ṣay’an ba’da ṣay’ fa-huwa zamān*); English translation in MARMURA 2005, p. 89, slightly modified.

<sup>422</sup> *Samā‘ ṭabī‘ī* II.10-13.

<sup>423</sup> Arist. *De cael.* A 1, 268 a7-10; a24-28.

<sup>424</sup> Cf. also *Ilāhiyyāt* III.4, 118.1: “As for place, it is the surface” (*wa-ammā l-makān, fa-huwa al-saṭḥ*).

<sup>425</sup> Arist. *Phys.* Δ 4, 212 a6-7.

insofar as it is a limit and a container. A point that reminds this anonymous argument is made for instance by Ibn al-Ṭayyib in his *Tafsīr al-maqūlāt*, though in slightly different terms: place is listed separately from surface because it is an extension that is “external to the thing” (*ḥāriḡ min al-ṣayʿ*), whereas a surface is an internal, intrinsic extension<sup>426</sup>.

**[§5.4.2] (119.17 – 120.16).** In this paragraph, Avicenna presents us with four distinct arguments against this “mixed” conception of place.

(1) What matters primarily, when it comes to attributing something to a genus or a species, is whether the notion of the genus or species is constitutive of the quiddity of the thing, or not. If place is defined – according to the commentators – by being a surface, a limit and a container, then there are two possibilities: either “limit” and “container” also take part in its quiddity, or they don’t. If they take part in its quiddity, inasmuch as “limit” and “containing” refer to a body (the container) the surface which is place must be divisible in three dimensions as a body is, which is certainly not the case (for surface is only divisible in two dimensions, **[§5.3]**). If on the contrary they do not take part in the quiddity of place, then being a limit and a container only belong to quantity inasmuch as their substrate – i.e., surface – belongs to quantity; what is actually quantity, then, is only surface, which certainly belongs in the continuous extensions that have already been mentioned and described. On account of all this, it is perfectly useless to introduce place as a species of quantity that is independent of other extensions.

(2) Furthermore, another reason for excluding that “limit” and “container” are constitutive of the quiddity of place is the fact that – in the case of place – they are relative notions: if these took part in the quiddity of place, then quantity should be relative *per se*, which is absurd, for only the genera, species and individuals of the category of relatives are essentially characterized by the fact of being relative to something else<sup>427</sup>.

(3) Moreover, the opponents do not manage to describe the quantitative nature of limits and containers in a satisfactory way, so as to make it possible to distinguish it from the quantitative nature of surface as surface.

(4) If it is clear that place is a quantity inasmuch as it is a surface, then there are two possibilities: either it is a species of the extension “surface”, or a surface taken under a certain consideration, and “in a specific state” (*bi-ḥāl maḥṣūs*). If the latter option were correct, however, we would be obliged to postulate a sixth species of continuous quantity: for in that case we should posit an independent species for body inasmuch as it is localized (*mutamakkin*), but not as a species of “absolute body” (*al-ḡism al-muṭlaq*). However, it is clear that every non-essential property that specifies a certain notion does not constitute another species on the same level of the notion that it specifies. Be as it may, when we number the species of a genus we must include neither things that are species of the species, nor the same species when they are characterised accidentally by a certain state. For all these reasons, it is useless and even wrong to list place expressly among continuous quantities.

**[§6] (120.17 – 123.19).** Aristotle only lists two types of discrete quantity: number and speech (ἀριθμὸς καὶ λόγος)<sup>428</sup>. Avicenna accepts number, but rejects Aristotle’s inclusion of speech among the species of discrete quantity.

**[§6.1] (120.17 – 121.15).** The first section is designed as a proof for the fact that there is no discrete quantity other than number. “Discrete” (*munfaṣīl*) is something composed by “separate things” (*mutafarriqāt*), that in turn are constituted by “simple” or “single” things (*mufradāt*), namely “units” (*āḥād*). Each of these units can be either a unity in itself, namely

<sup>426</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 196.17-18.

<sup>427</sup> Avicenna argues for the relative nature of surface, inasmuch as it is understood as a “limit” (*nihāya*) of the quantitative body, in *Ilāhiyyāt* III.4, 112.7-10.

<sup>428</sup> Arist. *Cat.* 4 b25-37.

an “indivisible existence” (*al-wuğūd alladī lā yanqasimu*), or something that has unity accidentally and another essence and existence that works as a substrate for unity<sup>429</sup>. Discrete quantity as such consists of the sum of these elementary units, which results in a certain number: in the case where units are absolute unities, the resulting quantity is number in itself; when they are things having unity, instead, the resulting quantity is the number of some numerable thing. Now, for numerable things there cannot be a measure other than their units, nor is there a discrete quantity other than the sum of those units. If measurement is a source for equivalence and non-equivalence, there can be in these things no equivalence or non-equivalence granted by any other unit of measurement: for discrete is fundamentally identical with “numerable”. If one ever looked for a quantitative principle other than number, he would be forced to turn to the principle of continuous quantities, like voice, motion and body. However, it is not possible to find a principle of measurement and equivalence other than number and extensions: for this reason, there exists no discrete quantity other than number.

**[§6.2] (121.15 – 123.19).** In order to reject Aristotle’s inclusion of speech among quantities, Avicenna presents and refutes some explanations provided by former exegetes with regard to its quantitative nature<sup>430</sup>.

**[§6.2.1] (121.15 – 122.2).** This passage is introduced by a sentence that might be an interpolated gloss, or could probably be moved to the end of the paragraph: see the note *ad loc.* in the text. The sentence seems to contain a reference to Porphyry’s claim, in the short commentary on the *Categories*, that syllables are reducible to numbers analogically, since a long syllable is to a short syllable as 2 is to 1<sup>431</sup>. Though not completely out of context, it might well have been inserted as a gloss for the following discussion.

In the end of par. **[§6.1]** Avicenna has argued that there is no quantity other than number (discrete) and the aforementioned *continua*. Now, there seem to be cases where this distinction is doubtful and questionable, or cases where it may be difficult – at least superficially – to decide whether something is a discrete or continuous quantity. For at times, continuous quantity may appear to be discrete: e.g. there exist in nature bodies that are segmented in such a way that their parts are numerable (for instance the bodies of caterpillars and insects); drawings, despite being in themselves surfaces, are painted in such a way as to have countable areas of different colours; time may be subdivided into separate, countable times; percussions (*al-īqā’āt*) are motions, but they are numerable. Despite all this ambiguous evidence, Avicenna finds it surprising that his predecessors had doubts only about the quantitative nature of audible speech, which Aristotle lists as a species of discrete quantity. Aristotle only says, concerning the discrete nature of speech, that “it is measured by the long and short syllable” (καταμετρεῖται [...] συλλαβῆ μακρῆ καὶ βραχείᾳ)<sup>432</sup>, a formulation whose sense is not perfectly clear. In this regard, Avicenna mentions three concurring explanations for the quantitative nature of speech, found in the previous exegetical tradition.

**[§6.2.2] (122.2-6).** The first explanation consists of describing the quantitative nature of speech as continuous and discrete simultaneously; the direct or indirect source of this opinion is very likely Simplicius, who reports it as an anonymous view in his commentary<sup>433</sup>. According to this interpretation, speech is numbered by its syllables, because they are measured in themselves by time: for this reason, Avicenna argues, it is as if these commentators posited speech as numbered or countable time. The absurdity of such a

<sup>429</sup> The expression “indivisible existence”, “existence that cannot be divided” occurs many times near the end of *Ilāhiyyāt* III.3, where Avicenna expounds his arguments for the accidentality of unity (*Ilāhiyyāt* III.3, 106.10 – 110.4).

<sup>430</sup> See also above the INTRODUCTION, 3.4.3.

<sup>431</sup> Porph. *In Cat.* 101.32-34.

<sup>432</sup> Arist. *Cat.* 4 b33-34.

<sup>433</sup> Simpl. *In Cat.* 131.23-27. Simplicius introduces this view by means of a simple “they say” (φασίν).

conclusion is self-evident, for even though time can be effectively counted and numbered by accident, it is in itself continuous (as will be clarified below, IV.1 [§5.2]).

[§6.2.3] (122.7-15). The second explanation comes from people who criticize the former interpretation, but end up formulating similar absurdities. According to them, it is not necessary to recur to time in order to explain the quantity of syllables: their quantity is only determined by the physical extension of voice, which is capable of producing a variable impact on the air. This solution resembles the one that Simplicius, in his commentary, ascribes to Iamblichus: speech is a quantity because an utterance is an impact of a certain strength, that our sense of hearing can measure<sup>434</sup>. Now, according to Avicenna the anonymous commentators (or Iamblichus) do not manage to solve the difficulties of the solution proposed in [§6.2.2], because they clearly understand voice or breath as a magnitude, capable of quantitative change; but if voice is a magnitude then it is continuous, and in order to defend Aristotle’s claim they should rather prove that voice is discrete. In addition, the properties that they ascribe to voice (heavier and lighter, louder and feebler) are not proper of quantities, but mainly qualities. As for heaviness and lightness, Avicenna will argue right below (par. [§7]) against some predecessors that they are qualities, rather than quantities.

[§6.2.4] (122.16-17). The third explanation is simpler, and comes from “some better-discerning philosopher”: speech has syllables as parts; since everything that has parts is measured by its parts, it deserves to fall under quantity. This doctrine resembles al-Fārābī’s explanation, as we may read it in his short *Paraphrase on the Categories*<sup>435</sup>.

[§6.2.5] (122.17 – 123.16). Avicenna implicitly formalizes Fārābī’s explanation with a syllogism of this form:

Everything that has parts by which it is measured is a quantity  
Speech has parts by which it is measured

---

Speech is a quantity.

Now, according to Avicenna the major premise is “diseased”, or better “incorrect” (*madhūla*), for it is not necessarily true that, if something has parts and is measured by them, it belongs to what is quantitative *per se*. Something may be characterized accidentally by the fact of having an extension, or by the fact of being numerable: in this case it is not quantity *per se*, but quantity by accident. Speech is quantity by accident, for it is only a quantity inasmuch as a part of its – the syllable – is one, and speech as a whole is multiple: however, besides its unity and multiplicity, the time equivalent to it, the extension of the syllables, there is nothing specifically quantitative in speech as such. If it were sufficient for something to be numerable, in order to belong to the category of quantity *per se*, then all of the ambiguous cases mentioned in par. [§6.1] (the parts of segmented bodies, the motions of percussions, the colours of paintings and the notes of melodies) should be discrete quantities *per se*, whereas they are only such by accident.

Someone might object that extensions may be accompanied by number, and for this reason they may be considered as quantities *per se*: it is also the case with speech. However, continuous quantities have a quantitative nature that is totally independent of numbers and numerability: and their being divided into parts is something that only accompanies this nature extrinsically, without being constitutive thereof.

---

<sup>434</sup> Simpl. *In Cat.* 131.10-16. In the same place Simplicius ascribes a similar explanation to Porphyry, that however does not refer explicitly to the impact of the voice: a short syllable is short “in itself”, because it derives from a constriction of the wind-pipe that limits the amount of breath, and a long syllable is long “in itself”, because it derives from an extension of the wind-pipe that enlarges breath (131.27-32).

<sup>435</sup> Fārābī, *Qātāguryās* 172.3-4 (DUNLOP 1958).

[§6.2.6] (123.17-19). According to Avicenna, Aristotle’s inclusion of speech in quantity only depends on the fact that speech was commonly accepted as a discrete quantity “among them” (*fī-mā baynahūm*), i.e. among his contemporaries. The First Teacher made the same kind of mistake in the case of motion, which is dealt with and classified “non-scientifically” in *Cat.* 14<sup>436</sup>, and in the case of relatives, where Aristotle firstly presents the “current” description of the category (often attributed to Plato in the previous exegetical tradition) and secondly the actual one<sup>437</sup>.

[§7] (124.1-14). The final section of the chapter is devoted to refuting the opinion, held by some commentators, according to which heaviness and lightness are quantities because they are measurable and comparable magnitudes; the issue is quite recurrent in the previous exegetical tradition. Simplicius ascribes a similar view to Lucius and Nicostratus, according to which weight or downward thrust should have been included in the category of quantity as a third species or differentia, besides continuous quantities (sizes and magnitudes) and numbers<sup>438</sup>. Such a view was endorsed by the Stoic Athenodorus, Ptolemaeus, Archytas (who expressly listed weight as a differentia of quantity), and Iamblichus; it was criticized by Cornutus and Porphyry, who argued instead that heaviness and lightness are qualities<sup>439</sup>. Furthermore, the opinion is reported and criticized by Ibn al-Ṭayyib, who also dismisses an unsatisfactory refutation provided by a previous group of commentators<sup>440</sup>; he also refutes the idea that inclinations (*al-muyūl*) are quantities, since a certain inclination and weight may be said to be equivalent to another inclination or weight<sup>441</sup>.

Against this view, and in line with Aristotle’s account of heaviness and lightness<sup>442</sup>, Avicenna argues that heaviness and lightness are potencies for – respectively – upward and downward motion: being such they are not measurable in themselves, but only in respect of their quantitative concomitants, i.e. “motion, time and distance” (*al-ḥaraka wa-l-zamān wa-l-misāfa*). This point will be reprised in more detail in the *Ilāhiyyāt*: we say that a certain heaviness H1 is half another heaviness H2 if H1 “moves half the distance in [the same amount of] time or the same distance in twice the time, or else [because] the movement of the greater [in weight] downward through an instrument of motion necessitates conjointly the movement of the lesser [weight] upward, or some similar thing” ([...] *yataḥarraku fī l-zamān niṣf al-masāfa, aw fī l-masāfa di f al-zamān, aw taḥarraka l-a ḥam ilā asfal fī āla ḥarakatan yalzamu ma’ahā an yataḥarraka l-asḡar ilā l-’ulūw aw amran mimmā yaḡrī hādā l-maḡrā*)<sup>443</sup>. Inasmuch as they are potencies or capacities they rather deserve to fall under the category of quality, most notably in the species of affective qualities<sup>444</sup>.

<sup>436</sup> Arist. *Cat.* 15 a13 – b16.

<sup>437</sup> For Avicenna’s discussion of *Cat.* 14 see below, VII.4 [§3]; for the discussion of the first definition of relatives see below, chapter IV.3 [§1-5].

<sup>438</sup> Simpl. *In Cat.* 128.5-6.

<sup>439</sup> Simpl. *In Cat.* 128.7 – 129.6.

<sup>440</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 203.6 – 204.3.

<sup>441</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 237.8-17.

<sup>442</sup> Cf. Aristotle’s definition of absolute and relative heaviness at lightness at Arist. *Cael.* IV.1, 308 a29-33; *Samā’ wa-l-’ālam* 9, 64.5-9.

<sup>443</sup> *Ilāhiyyāt* III.4, 118.7-9.

<sup>444</sup> Avicenna will establish that heaviness and lightness belong to the species of affective qualities below, in ch. V.5 [§2.4].

## IV.1

### ON CLARIFYING THE SECOND DIVISION OF QUANTITY, AND CLARIFYING QUANTITY BY ACCIDENT

In the second of the three chapters devoted to the category of quantity, Avicenna takes up Aristotle's second division of quantity: quantity whose parts have position with respect to one another, and quantity whose parts do not have position with respect to one another.

[§1] The parts of a quantity having position must satisfy three conditions: they must have stable and simultaneous existence, they must be continuous, and they must be ordered in such a way that the position of each one of them can be determined precisely with respect to the others. [§2] Avicenna makes then a long digression concerning the polysemous term “position” (*wad'*), in order to define the exact meaning of “position” referred to in the division of quantity. This is neither equivalent to position in its most generic sense, being the individual direction of something in space, nor to the position which is one of the ten categories (which is exclusively a property of substances, not of quantities). [§3] Now, among quantities only extensions – body, surface, line – have this sort of reciprocal position in their parts, whereas time, number and speech do not. [§4] Quantities by accident are things that are thought (and said) to be quantities only because they are associated – somehow – with actual quantities. They are either subjects for quantities, or accidents that usually exist along with quantities (e.g. motion), or even accidents that are proper of quantities, for instance “length”, “width” and “depth” when understood as relative qualifications. [§5] Also, some quantities may be continuous or discrete by accident. A curious example is time, a quantity which is continuous both in itself and by accident, and discrete by accident (inasmuch as it is subdivided, despite being continuous, into discrete units like seconds, minutes, hours and days). [§6] Continuous and discrete are neither species nor forms, but rather logical differentiae of quantity: for nothing becomes continuous or discrete in virtue of its being endowed with continuity or discreteness.

[§1] (127.6-9). The list of three conditions for the parts of some quantity having position is an exegetical commonplace, at least from Porphyry on; even though they are not presented by Aristotle expressly, they can be inferred from Aristotle's whole discussion of position (θέσις) at *Cat.* 5 a15 – 5 a38. Porphyry states that in things whose parts have position three things must be conceived: “(a) the place where the parts are located, (b) the parts themselves, which do not disappear, and (c) the continuity of the parts with one another” (τόπον ὅπου κεῖται τὰ μόρια, αὐτὰ τὰ μόρια μὴ ἀφανιζόμενα, συνέχειαν τῶν μορίων ἀλληλοῦχον)<sup>445</sup>; Simplicius presents condition (b) as “the co-existence of parts” (τοῦ τὰ μόρια συνυπάρχειν) and criticizes Porphyry's condition (a), on account of the fact that there exist continuous extensions that are not found in any place (e.g. lines)<sup>446</sup>. Whereas Olympiodorus claims that the three conditions are (a) being in something, (b) being continuous, (c) being subject to indication (δείξει ὑποπίπτειν), Elias/David lists (a) the simultaneous subsistence of parts, (b) their being subject to indication, (c) their being receptive of the six adverbs of position (θετικὰ ἐπιρρήματα), i.e. up/down, forwards/backwards, left/right<sup>447</sup>. Ibn al-Ṭayyib numbers (a) the stable existence of parts, (b) their being subject to indication and (c) their being continuous<sup>448</sup>.

Avicenna's list is partly reminiscent of the previous ones, partly original (in the third condition). (1) The first condition, having “stable existence in actuality simultaneously”

---

<sup>445</sup> Porph. *In Cat.* 104.12-14.

<sup>446</sup> Simpl. *In Cat.* 136.12-21.

<sup>447</sup> Olymp. *In Cat.* 88.27-29; Elias/David, *In Cat.* 194.20-22 (see also 194.26-28, for the enumeration of the six adverbs).

<sup>448</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 225.25-31.

(*wuḡūd qārr bi-l-fi'l ma'an*), is deducible from Aristotle's claim that the parts of time and speech have no position at all, for "none of the parts of time endures" (ὕπομένει γὰρ οὐδὲν τῶν τοῦ χρόνου μορίων) and nothing that does not endure can have position<sup>449</sup>. (2) The second condition, continuity (*ittiṣāl*), is alluded to by Aristotle as he states that the parts of a line have position in relation to one another, for it is possible to say where each of them is situated, and "which one of the other parts it joins on to" (πρὸς ποῖον μῦριον τῶν λοιπῶν συνάπτει)<sup>450</sup>. (3) The third condition, having a certain order (*tartīb*), is rather mentioned by Aristotle as a character of time and number that might indicate that their parts have position, but in fact does not suffice for that<sup>451</sup>.

**[§2] (127.10 – 129.8).** The Arabic term employed by Ishāq to translate Aristotle's θέσις ("position") is *wad'*, whose root is the same adopted in rendering the category "being-in-a-position" (κεῖσθαι, *al-mawḏū'*)<sup>452</sup>. Before engaging with a discussion of position in the parts of quantities, Avicenna tries to determine the exact meaning of "position" at stake here, clearly to the aim of distinguishing it from the category – since the category is exclusively an attribute of substantial bodies, not of quantities.

**[§2.1] (127.10-16).** *Wad'* is an equivocal name applied to "disparate meanings" (*ma'ānin ṣattā*), many of which are unrelated with bodies or extensions. Avicenna will provide another discussion of the senses of "position" in chapter VI.1 when arguing – probably against Ṭābit Ibn Qurra – that shapes do not belong to the category of position<sup>453</sup>. According to the present subdivision, one can employ *wad'* either (1) in its most generic sense, meaning the object of any "pointer" or indication (*iṣāra*) that determines the direction (*ḡiha*) of something in space; or he can use it in more specific senses, like (2) the one found in the parts of quantity (position<sub>q</sub>) and (3) the one that constitutes the category (position<sub>c</sub>). Position<sub>q</sub> is left undetermined for the time being, but will be described in more detail right below (in par. **[§2.2-3]**). As for position<sub>c</sub>, it is the configuration assumed by the whole of the parts of a body, with respect to the different directions they have with respect to one another, and with respect to an external landmark: Avicenna will formulate similar definitions in chapter VI.1 **[§6.2]** and in the beginning of chapter VI.6 **[§1]**<sup>454</sup>.

**[§2.2] (128.1-8).** Avicenna firstly characterizes position<sub>q</sub> quite blandly, as merely analogous to position<sub>c</sub> and as something that takes its name from it: as the potential parts of substantial bodies have a certain position with respect to one another, so the actual parts of mathematical bodies and extensions are such that it is possible to determine their positions with respect to one another. In the following paragraph, Avicenna will show in what respect position<sub>q</sub> and position<sub>c</sub> actually differ.

**[§2.3] (128.8 – 129.8).** The case under examination is that of the moving body (*al-ḡism al-mutaḥarrik*), that some anonymous commentator has held to be completely deprived of position. A possible source for this idea, at least in this context, might be the anonymous Heraclitist opinion reported by Simplicius, according to which in the universal flux of all things nothing has position<sup>455</sup>. Against such an opinion, Avicenna expounds two arguments.

<sup>449</sup> Arist. *Cat.* 5 a27-28; a33-36.

<sup>450</sup> Arist. *Cat.* 5 a18-20.

<sup>451</sup> Arist. *Cat.* 5 a28-33.

<sup>452</sup> *Manṭiq Aristū* 44.13-14.

<sup>453</sup> Cf. VI.1 **[§6.2]**, the COMMENTARY *ad loc.* and the Introduction,

<sup>454</sup> The essence of position was also expounded above, II.5 **[§4.2.1]**.

<sup>455</sup> Simpl. *In Cat.* 140.22-31. Simplicius attributes this doctrine to the anonymous αὐτοὶ ἄνδρες who presented some doubts that precede this discussion in the text; according to B. Fleet (DE HAAS, FLEET 2001, p. 148) they could "possibly" be identified with Lucius and Nicostratus.



(1) It is not so, Avicenna argues, since there is a difference between not having position at all, and not having a fixed or stable position (*wad' qārr*): a moving body changes position, but never ceases to have position. The same holds true of the category of where: moving locally from a place to another is not the same thing as being deprived of place. We see, for instance, that a running man changes quickly and continually the actual relative disposition of his arms and legs, though he never stops having one. Now, this example also helps clarify the difference between position<sub>c</sub> and position<sub>q</sub>, consisting in the fact that the former actually changes in motion, whereas the latter does not: for motion does not prevent the parts from having always, in abstract, mutual “proximities” (*muḡāwarāt*) that determine their position with respect to one another. Position<sub>c</sub> – on the other hand – is identical with the specific configuration assumed by the parts of a body, and changes in motion: unlike quantities and quantitative determinations, it admits of both contrariety and more/less<sup>456</sup>. In no way, however, is it possible to say that a moving body has no position at all.

(2) Avicenna’s second argument against the idea that a moving body has no position is the following: given that “having position” and “not having position” are specific differentiae of quantity, then, if an extension that has position really ceased to have it when in motion, it would lose its specific nature (i.e. having position), which however would be absurd.

**[§3] (129.9 – 130.4).** After discussing the different senses of “position”, Avicenna goes on to paraphrase Aristotle’s text and to declare which quantities have position and which ones instead have not.

**[§3.1] (129.9-10).** According to the characterization of “having a position” sketched right above ([§1-2]) it is clear that mathematical bodies, surfaces and lines are quantities whose parts have position with respect to one another. The parts of place have a position both with respect to the body it is a surface of, and with respect to the body it contains.

**[§3.2] (129.10 – 130.1).** Following Aristotle, Avicenna denies that time, number and speech are quantities whose parts have position with respect to one another. As for time, it is so because its parts do not have stable simultaneous existence: it is absurd to establish a relation of reciprocal proximity between parts that exist, parts that existed and parts that will exist. Moreover, the continuity of time is such as not to allow anyone to determine the respective position of its parts, since it is associated with motion; and its being-ordered is only such with respect to priority and posteriority. As for number, it satisfies only two of the requirements listed in par. **[§1]**: for the parts of number are ordered and exist simultaneously, but they are not continuous<sup>457</sup>. Number can have position only in virtue of something it is associated with, for instance a continuous quantity that becomes numerable by accident. Moreover, it is possible to suppose at least one number whose parts are not susceptible of being localized, namely the intelligible number. As for speech, finally, it has neither the requisite of being “naturally” ordered, nor that of being stable<sup>458</sup>.

**[§3.3] (130.2-3).** In sum, the type of quantity whose parts have position with respect to one another ultimately amounts to “extension” (*al-miqdār*), a class that embraces line, surface and body. Also place is such, if it is taken as an independent type of extension; however, Avicenna has already argued above that it rather belongs to extensions inasmuch as it is a surface<sup>459</sup>.

---

<sup>456</sup> Actually, according to Avicenna the category of position admits of contrariety and more/less only in some cases: see VI.6 **[§1.2-3]**.

<sup>457</sup> Number is a discrete quantity, as argued by Aristotle at *Cat.* 4 b22-23 and confirmed by Avicenna in III.4 **[§6.1]**.

<sup>458</sup> As Avicenna argued above in III.4 **[§7]**, speech is not even to be numbered among discrete quantities.

<sup>459</sup> III.4, **[§5.4]**.

[§4] (130.4 – 132.13). Aristotle calls quantities "by accident" (κατὰ συμβεβηκός) those things that we may happen to describe as quantified, although they are not quantities in themselves: his examples are "a large amount of white" (πολὸν [...] λευκόν) and a long action or motion. In the first case, what is really "much" is certainly not the colour white, which belongs to the category of quality, but a surface coloured in white; in the second case, what is actually long is not the action or motion in itself, but rather the time that measures them<sup>460</sup>.

[§4.1] (130.4-20). Avicenna states that quantities by accident are things that are called "quantities" because of their being-associated (*muqārana*) with actual quantities. In this respect, there are mainly three types of things that may be mistaken for real quantities: (a) the subjects of quantities, (b) accidents that "only exist along with the existence of quantities" (*lā tūḡadu illā ma‘a wuḡūd al-kammiyyāt*), and (c) "accidents that are proper of quantity" (*‘awāriḍ ḥāṣṣa li-l-kammiyya*).

(a) A substance having a certain quantity can be described as quantified, for a man may be said to be tall or short, as well as a horse; however, they are not in themselves quantities, since they are evidently substances.

(b) As for accidents that are necessarily associated with quantity, Avicenna's first example is motion (*ḥaraka*): motion is an accident that exists in association with two quantifiable determinations, i.e. a measurable distance and a measurable lapse of time<sup>461</sup>. Avicenna also mentions Aristotle's example of the large white surface, as belonging to this class: for colour seems to be mostly a qualitative character of surfaces.

(c) As examples of accidents that are proper of quantity, Avicenna mentions a number of relative quantitative determinations such as long and short, large and narrow, thick and thin, much and little: these are all accidents that define constitutive properties of certain quantities, when they are taken absolutely, but are not strictly quantitative when they are taken as relative. This means that if we say of a line that it is longer than another, of a surface that it is larger than another, of a body that it is thicker than another, we are not describing their actual quantity, but a relative determination of theirs. Apart from this, however, lines are defined as "long", surfaces as "large" and bodies as "thick" in an absolute sense, i.e. inasmuch as they have respectively one, two and three dimensions.

[§4.2] (131.1-13). After introducing the distinction between absolute and relative length, width and depth, Avicenna enumerates all the possible descriptions of absolute dimensions. Some of the meanings of depth mentioned here were already cited above, with different names, in the discussion of magnitudes and mathematical bodies; a similar list of the meanings of length width and depth is found in the beginning of *Ilāhiyyāt* II.2<sup>462</sup>.

[§4.3] (131.14 – 132.5). Avicenna expounds two intuitive procedures to show the actual nature of line, surface and body. (1) Firstly he constructs a mathematical body, starting from the motion of a point or the motion of a point in a body. A point in motion traces a line; when the line moves in a direction perpendicular to the initial direction of the point, it traces a surface; when the surface is lifted or lowered with respect to the original plane, it draws a tridimensional body. Avicenna will refer to the moving point being a principle for the line, in *Ilāhiyyāt* III.4, as to "something said according to imagination, that yet cannot exist" (*amrun yuqālu li-l-taḥayyuli wa-lā imkāna wuḡūdin laḥū*)<sup>463</sup>, or again as something that only occurs "in fantasy and imagination" (*fī l-wahm wa-l-taḥayyul*): a point is only one and its trace vanishes along with its passage and contact with the underlying plane, so it cannot draw a

<sup>460</sup> Arist. *Cat.* 5 a38 – b10.

<sup>461</sup> Despite being associated or united with quantities, motion is not in itself a quantity: as a matter of fact, it falls under the category of being acted upon (*Samā‘ ṭabī‘ī* II.2).

<sup>462</sup> See above, III.4, [§5.3]; *Ilāhiyyāt* II.2, 61.7-15.

<sup>463</sup> *Ilāhiyyāt* III.4, 115.5-6.

line<sup>464</sup>. Avicenna evidently recurs to this simple constructing procedure in the non-demonstrative context of the *Categories*, which – as is known – is a work appropriate for beginners. (2) In the second place, Avicenna analyses a mathematical body: its external part (*zāhir*), considered absolutely, is a surface; if the surface is cut then its limit is a line; if the line is cut, then its limit is a point. Hence, a determinate line will be enclosed by two points; a determinate surface will be enclosed between two lines; a determinate depth will be enclosed by two surfaces.

**[§4.4] (132.6-13).** After restating that attributes like “long”, “deep” and the like are quantitative only when understood absolutely, Avicenna presents an odd distinction concerning their relative use. Now, the length, width, depth and multitude which are relative can be relative in two ways: either absolutely (*‘alā l-iṭlāq*) or, we should say, relatively. “Absolute” relativity is found when the relation implied by the attributes “long”, “large” and the like only comprises two extremes: of two lines, one is (comparatively) long, the other (comparatively) short. “Relative” relativity is found where one of the two primitive relatives has a relation to something else, and this happens when we use the relative forms “longer” (*aṭwal*), “more” (*akṭar*), “deeper” (*a‘maq*): if we say of a line that is “longer” than another line, this implies that the second line is already “long” with respect to a third, “short” line.

**[§5] (132.14 – 134.12).** After focusing on quantity by accident, Avicenna presents a discussion of what is continuous and discrete by accident.

**[§5.1] (132.14-16).** The continuous and the discrete differ not only intrinsically, but also as regards the procedure used to measure them (or their “measurement”, *taqdīr*): the continuous is usually measured by “estimating the extension” (*misāha*), whereas the discrete is measured by “counting” (*‘add*). There is however a distinction to be made between the mental operations of counting and estimating, on the one hand, and what is fit for being counted or having its extension estimated on the other hand: it is possible to apply the operation of counting to something that, in itself, is fit for being estimated. In this case a quantity continuous in itself becomes accidentally discrete, inasmuch as it is countable.

**[§5.2] (133.1-17).** Time is continuous both in itself and by accident, and discrete by accident. It is continuous in itself as its parts share the essential character of continuity; it is continuous by accident because it is measured extrinsically, with respect to the distance covered in motion: we can say “the time of a two-kilometer-walk”, or of a “parasang” (*farsah*), as in Avicenna’s example. However, it is also discrete by accident, because it is normally subdivided into countable units (hours, days, years, etc.). Against those who claim that time is a discrete quantity in itself, because it is the number of motion and instants (*al-ān*) function as units that divide it finitely, Avicenna replies that the instant is a sort of *Grenzbegriff*, like the point in a line. If the instant existed in actuality, it would make time divided (*fāṣilan*), but not as a discrete quantity: rather, as a continuous one<sup>465</sup>.

**[§6] (133.18 – 134.12).** Eventually, Avicenna turns to discuss the logical-ontological status of “continuous” and “discrete”. The issue is taken up by many previous exegetes, who mostly claim that continuous and discrete are differentiae rather than species: according to Simplicius, for instance, the actual species of quantity are “magnitude” (μέγεθος) and “amount” (πλήθος), but Aristotle divides it into differentiae because not all the kinds of quantity he lists are immediately reducible to these two (speech is not exactly an amount, and time is not exactly a magnitude)<sup>466</sup>. Ibn al-Ṭayyib, on the contrary, argues that they are both species and differentiae, since in Aristotle’s view the proximate species of the highest genera

<sup>464</sup> *Ilāhiyyāt* III.4, 115.6-12.

<sup>465</sup> For Avicenna’s account of the instant or “now”, see *Samā‘ tabī‘ī* II.12; MCGINNIS 1999.

<sup>466</sup> *Simpl. In Cat.* 122.35 ff.

are species and differentiae in the same time: they are species in so far as they divide the genus, and differentiae in so far as they differ mutually in themselves<sup>467</sup>.

**[§6.1] (133.18-20).** Avicenna poses the problem by supposing the following objection: if “continuous” and “discrete” constitute the essence of something as simple differentiae (i.e. forms) do, then it might be disputed whether the thing they constitute belongs to the category of quantity or not; for simple differentiae may belong to a category that is other than the species they constitute (e.g. the fact of dividing the sight, being the differentia that constitutes the colour “white”, belongs to the category of acting). However, they must be somehow constitutive of discrete and continuous things, for otherwise they would be accidental, and they would not characterize essentially the different kinds of quantity.

**[§6.2] (134.1-12).** Avicenna’s reply is based on the distinction between simple and logical differentiae, which was already hinted at above in chapter III.3 [§6]. He claims that “continuous” and “discrete” are only logical differentiae of quantity, but they are not species thereof: or it is better to say that they are predicated of the species and equivalent to it “with regard to the subject” (*fī l-mawḍūʿ*), but different “in consideration” (*bi-l-iʿtibār*). This means that they are perfectly co-extensive with the species that they constitute, but can be distinguished logically from it. However, despite being logical differentiae, they do not have corresponding simple differentiae or forms: unlike the case of the differentia “rational” (*nāṭiq*), which derives paronymously from “rationality” (*nuṭq*) – a simple differentia that constitutes man but is not predicated of it – “continuous” and “discrete” do not derive their names from a form of continuity and a form of discreteness that come to exist in the species, without being predicated of it. The final allusion to a future deeper discussion of this question probably refers to the chapters on differentia in the fifth treatise of the *Ilāhiyyāt*<sup>468</sup>.

---

<sup>467</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 202.13-19.

<sup>468</sup> *Ilāhiyyāt* V.4, V.6.

## IV.2 ON THE PROPERTIES OF QUANTITY

In the final chapter devoted to quantity, Avicenna expounds the four properties of the category and a number of related doubts.

[§1] A group of predecessors argued that the main, basic properties of quantity are two, being measurable and not having contraries: these two primitive properties give rise to further derivative properties, being equivalent and non-equivalent (derived from measurability) and not admitting of more and less (derived from the fact of not having contraries). Avicenna replies that the first main property (being measurable) is an actual property of quantity, whereby the second main property (not having properties) is neither basic nor proper, since it is a relational property and it is also found in another category at least (substance). [§2] That quantity has no contraries is proven, in logic, only by induction. Despite the favourable evidence, however, one may observe many quantities that appear to be contrary: for instance continuous and discrete, and the couples even/odd, right/curved, equivalent/different, large/small. Continuous and discrete, however, are not contrary; whereby the other couples are neither quantities nor contraries, but relative or qualitative accidents of quantity. Avicenna makes thereafter a digression concerning the difference between the opposition of contraries and the opposition of relatives: relatives have natures that are only intelligible with respect to their counterparts, whereas contrariety is an accident that relates two natures intelligible in themselves and ontologically incompatible. Avicenna criticizes then the previous commentators (like the Alexandrines and Ibn al-Ṭayyib) who read Aristotle's argument, in this passage, as rhetorically structured according to the canon of "opposition" (ἐνστάσις) and "indulgence" (ἀντιπαράστασις). In conclusion, Avicenna criticizes the view according to which contrariety in quantities is found most of all in place, notably between up and down (a higher place and a lower place). [§3] Quantities do not admit of more and less; not in the sense that a quantity cannot be "more" than another (since it is certain that four is more than three), but in the sense that a quantity cannot be more of a quantity than another. [§4] Quantities admit in themselves of equivalence and non-equivalence. [§5] Avicenna's final summary takes into account not only the properties discussed in detail in this chapter, but also the constitutive characters mentioned above in chapter III.4: having parts in actuality and being measurable.

[§1] (134.16 – 135.5). Before discussing contrariety, Avicenna cites and rejects the opinion of some predecessors concerning the properties of quantity in general.

[§1.1] (134.16-19). Aristotle presents three properties of quantity in *Cat.* 6: not having contraries, not admitting of more and less (6 a19-25) and being called equal and unequal (6 a26-35). The anonymous predecessors cited here by Avicenna seem to have introduced a further property: being measurable, which is indeed an essential feature of quantity. They also appear to have made a hierarchical distinction between primary and secondary properties of the category, where the secondary attributes "derive" (the verb used by Avicenna is *tawallada*, which implies the idea of generation) or are deduced from the primary ones. A source for this doctrine is possibly Elias/David's commentary, where it is written that the first two properties (being measurable and not having contraries) "brought forth" or "gave birth to" (ἀπεκύησαν) the two remaining ones<sup>469</sup>. According to this scheme, the primary properties of quantity are being measurable and not having contraries; being equal and unequal derives from the former,

---

<sup>469</sup> Elias/David, *In Cat.* 200.8-11: "The two properties of quantity, I say being measured and not having any contraries, brought forth two other properties to us: not having any contraries [gave birth to] not admitting of more and less, whereas being measured [gave birth to] the fact of being equal and unequal" (Τὰ δὲ δύο ἴδια τοῦ ποσοῦ, τὸ μετρεῖσθαι φημι καὶ τὸ μηδὲν ἔχειν ἐναντίον, ἀπεκύησαν ἡμῖν ἄλλα δύο ἴδια, τὸ μὲν μηδὲν ἐναντίον ἔχειν τὸ μὴ τὸ μᾶλλον καὶ ἧττον ἐπιδέχεσθαι, τὸ δὲ μετρεῖσθαι τὸ ἴσον καὶ ἄνισον). However, the idea that being equal/unequal derives from being measured is also found in Olympiodorus (Olymp. *In Cat.* 96.4-5).

since equality and inequality depend on measures; not admitting of more and less depends on the latter, since the more and the less are necessarily found in between contraries<sup>470</sup>.

**[§1.2] (135.1-5).** Avicenna rejects this tentative deduction of the properties of quantity from its primary attributes, on account of the fact that one of the two properties called “primary” by the commentators is not as fundamental as the other. Being measurable is a property that quantity has in itself and that defines it essentially, whereby having no contrariety does not contribute to the essence of quantity and – furthermore – is an attribute shared with other categories (e.g. substance)<sup>471</sup>. Avicenna calls the absence of contrariety a relative property, because contrariety is in a certain sense a relative attribute (though the difference between the opposition of contraries and the opposition of relatives will be examined below in parr. **[§2.3-4]**). In the end of the chapter, Avicenna will reprise the hierarchical scheme of his predecessors and number the absence of contrariety among “relational” (*idāfiyya*) properties<sup>472</sup>.

**[§2] (135.6 – 142.5).** The first property analysed by Aristotle is the fact that quantity does not admit of contraries<sup>473</sup>. Avicenna’s presentation of this property is particularly lengthy, given the numerous issues that arise – both in Aristotle and the previous exegetical tradition – with regard to the notion of contrariety.

**[§2.1] (135.6-15).** As is the case with most problems dealt with in the *Categories*, Aristotle seems to posit that quantity has no contraries by mere “convention” (*wad’an*), i.e. non-demonstratively<sup>474</sup>. In the context of logic, Avicenna argues, this property can merely be proven by induction: thereafter, he infers by induction that it is so for the two main species of quantity. This is evident for example in the case of continuous quantities: we observe that many extensions (for example lines and surfaces) can exist together in the same subject, without being repulsive for one another. As for the case of numbers, one cannot evidently posit a contrary for, say, number 2 or 3: for the contrary of 2 should be the farthest thing from it within the same genus, and – given the infinity of numbers – for any bigger number posited as a contrary of 2 it is always possible to find one that is even bigger. Similar inductive proofs are provided, for instance, by previous commentators such as Porphyry and Simplicius<sup>475</sup>.

**[§2.2] (135.16 – 137.2).** Most part of Aristotle’s discussion of this property concerns those quantitative determinations that seem to contradict the rule of contrariety, and to be effectively contrary: for instance the couples many/few and large/small (that Aristotle himself calls “contraries” in *Metaphysics* A 6). Aristotle’s reply to this doubt consists of a two-fold argument: firstly, he denies that such attributes are quantities, and states that they are only relatives; secondly he claims that, regardless of what category they belong to, they are certainly not contraries<sup>476</sup>. Avicenna basically follows Aristotle’s line of thought here, but – along with the previous commentators – he takes further ambiguous cases of possibly contrary quantities into account.

**[§2.2.1] (135.16 – 136.4).** The first problematic case taken up by Avicenna is the false contrariety of “discrete” and “continuous”. Against the contention that continuity and discreteness represent a case of contrariety in quantity, Avicenna presents two distinct proofs that mirror the structure of Aristotle’s main argument. (1) Firstly, being differentiae that are not identical with their species, “continuous” and “discrete” are not – strictly speaking –

---

<sup>470</sup> On the relation between contrariety and admitting of more and less see above, III.3 **[§4.1]**.

<sup>471</sup> For this property of substance, see Arist. *Cat.* 3b 24-32; Avicenna’s discussion above in III.3 **[§3]**.

<sup>472</sup> See below, par. **[§5]**.

<sup>473</sup> Arist. *Cat.* 5 b11 – 6 a18.

<sup>474</sup> On the non-demonstrative character of the *Categories*, see above I.1 **[§4]**; INTRODUCTION, 3.1.3.

<sup>475</sup> Porph. *In Cat.* 106.12 – 107.4; Simpl. *In Cat.* 141.16 – 143.1.

<sup>476</sup> Aristotle’s arguments on contrariety in quantity are reconstructed and analysed in detail in O’BRIEN 1980.

quantities. As Avicenna argued in the end of the previous chapter, “continuous” and “discrete” are not identical with the species “discrete quantity” and “continuous quantity”, although their being distinct from them has been characterized as a matter of consideration rather than an actual ontological difference<sup>477</sup>. (2) Secondly, there is no actual contrariety between continuous and discrete, for they rather display the opposition of possession and privation: discreteness is characterised as the absence of continuity in something that should be continuous by nature. Moreover, as Avicenna showed above, there are cases where something continuous can be in the same time (accidentally) discrete<sup>478</sup>: continuity and discreteness can co-exist in the same subject without destroying each other, therefore they are not contraries.

**[§2.2.2] (136.5-16).** Another ambiguous case is the couple odd/even, which is not discussed by Aristotle but represents a possible exception to this property of quantities. Avicenna remarks: (1) oddness and evenness are properties that do not alternate on the same subjects, for one and the same odd number (say, number three) cannot absolutely become even. (2) Further, the opposition of even and odd is not the opposition of contrariety: given that “odd” is defined as “what is not even” (i.e., not divisible into two equal numbers), they should rather have the opposition of affirmation and negation, or possession and privation<sup>479</sup>. (3) Odd and even are qualities attached to quantity: since quality admits of contraries, it is not unlikely that they be contrary inasmuch as they are qualities, and that number therefore admit of contrariety by accident because of them<sup>480</sup>. The same holds true of another couple of qualities attached to quantities, namely straightness and curvedness (properties of lines and surfaces); as for equivalence and difference (*al-tasāwī wa-l-tafāwut*), which are applicable to quantities, they are not contraries but relatives.

**[§2.2.3] (136.16 – 137.2).** Largeness, smallness “and the like” (*wa-mā yağrī mağrāhā*), for instance many and few, are relative attributes of quantities but not quantities in themselves: a certain quantity (e.g. a surface, a body) is a quantity in itself, and it is only large with respect to something else. Thus, even though this quantity seems to admit of contrariety, it is clear that it only does so by accident.

**[§2.3] (137.3 – 138.3).** In the second part of his argument, after claiming that the couples large/small and many/few are not – strictly speaking – quantities, Aristotle questions their contrariety by invoking again the fact that they are relative notions: “[...] how could there be any contrary to what cannot be grasped just in itself but only by reference to something else?” (*ὁ γὰρ μὴ ἔστιν αὐτὸ καθ' αὐτὸ λαβεῖν ἀλλὰ πρὸς ἕτερον ἀναφέροντα, πῶς ἂν εἴη τούτῳ τι ἐναντίον;*)<sup>481</sup>. He proposes then two *reductiones ad absurdum*:

(R1) if large and small were contraries, one and the same thing would admit of two contraries at the same time: something large with respect to one thing could well turn out to be small with respect to something else, but this is absurd – since contraries are never found in the same subject at the same time.

(R2) If large and small were contraries, then one and the same thing would end up being contrary to itself, inasmuch as it is large and small at the same time<sup>482</sup>.

It is clear that the effectiveness of such arguments depends on the possibility of distinguishing coherently between the opposition of relatives and the opposition of contraries, and it is for this reason that Avicenna centers his exegesis of this passage (**[§2.3-4]**) around this distinction (that he will explain in more detail below, in ch. VII.2 **[§5]**). Now, as

<sup>477</sup> Cf. above, IV.1 **[§5.3]**.

<sup>478</sup> Cf. above, III.4 **[§6]** and IV.1 **[§5.1-2]**.

<sup>479</sup> On the contrariety of odd and even, see also below VI.3 **[§2.2.2]**.

<sup>480</sup> On the fact that some qualities admits of contraries, see Arist. *Cat.* 10 b17 ff., and Avicenna’s remarks in VI.3 **[§2]**.

<sup>481</sup> Arist. *Cat.* 5 b31-33.

<sup>482</sup> Arist. *Cat.* 5 b33 – 6 a11.

Avicenna remarks here, contrariety is a relational accident of two natures that are intelligible in themselves: blackness and whiteness have a proper quiddity (as qualities and colours), but they become contrary when they are compared or related to each other. As for large and small, the quiddity-test reveals that they are essentially determined with respect to each other: for something is necessarily said to be large or small with respect to something else. Now, if we posited large and small as actual contraries, they should satisfy the following conditions: they should be natures realized and intelligible in themselves, to which the relation of contrariety is attached. If what is “large” were such, then, it could not turn “small” with respect to something else: and the same thing would admit of two properties co-existing simultaneously, “large with respect to something else” and “small with respect to something else”. However, contraries have natures that are physically incompatible even before being accidentally compared as contraries; large and small are not such, since they can evidently subsist together in the same subject (for something may be large with respect to a thing, and small with respect to another thing).

**[§2.4] (138.4 – 139.3).** Avicenna promises here further considerations concerning Aristotle’s arguments, and he presents some more general clarifications about the types of opposition. The opposition of “mutual relation” (*al-tadāyuf*) and the opposition of contrariety present a number of resemblances and differences. As for the resemblances, they are both opposite and their extremes cannot subsist together in the subject. As for the difference, it is made evident by the fact that the natures to which contrariety is applied are not in mutual relation (e.g. blackness and whiteness) and by the fact that there are relations that display no contrariety (e.g. proximity). Contrariety, in a sense, is a species of mutual relation; it differs from its quasi-genus in that it is applied to certain natures that are intelligible in themselves, and mutually incompatible<sup>483</sup>. Again, then, it becomes apparent that large and small cannot be properly deemed contraries, for they are not even applied to natures that are mutually incompatible: they are just relative in themselves.

**[§2.5] (139.4 – 140.2).** The “stretch” or “sophism” (*takalluf*) presented and refuted here by Avicenna is not to be read as an original reply to Aristotle’s lines on contrariety, but rather as a standard schematization of Aristotle’s argument at 5 b14 – 6 a11 found in the previous exegetical tradition. “Opposition” (*mu’ānada*) and “indulgence” (*musā’ada/musāhala*) clearly mirror the pair *mu’ānada/musāmaḥa* found in Ibn al-Ṭayyib’s *Tafsīr al-maqūlāt*<sup>484</sup>: both couples evidently refer to the couple ἔνστασις/ἀντιπαράστασις, being the two sections of a pattern of refutation theorized in some late ancient rhetorical works (such as the Περὶ εὐρήσεως wrongly attributed to Hermogenes of Tarsus), and applied by some late ancient commentators of the *Categories* to this passage<sup>485</sup>. These two terms refer to the aspects of a two-fold refutation: a “destructive” one and a “constructive” one, so-to-say. An example from Hermogenes’ manual: to someone’s claim that “I was right in killing my son”, it may be objected by way of “opposition”, or ἔνστασις: “it was not right”, and then by way of “counterobjection”, or ἀντιπαράστασις: “Even if it was right, it was not right to do it in front of his mother”<sup>486</sup>. Now, Aristotle’s refutation of the claim that there exist contrary quantities may appear to be structured according to the same pattern, since he contends firstly that large and small are not quantities (ἔνστασις/*mu’ānada*), and thereafter he claims that even if we suppose that they are quantities, they are not actual contraries (ἀντιπαράστασις/*musā’ada*). Avicenna argues firstly that the “indulgent” reply, if formulated properly and correctly (as we may suppose he has done himself above, [§2.3-4]), is the most correct one. However, being

<sup>483</sup> For a detailed analysis of the difference between contrariety and mutual relation see below, VII.2 [§5].

<sup>484</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 229.19-23.

<sup>485</sup> For example Elias/David, *in Cat.* 196.12-13. The couple ἔνστασις/ἀντιπαράστασις was also adopted by some commentators to explain Aristotle’s reply to a doubt concerning the fourth and most proper property of substance; see above, III.3 [§5.4].

<sup>486</sup> Ps.-Herm., Περὶ εὐρήσεως III, 3.6.1-8.



evidently unaware of the technical rhetorical background of the distinction, Avicenna criticizes the use of the terms “opposition” and “indulgence”, for both answers seem to be at the same time opposing and indulgent. Now, if the thesis to be refuted amounts to a syllogism of this form:

Large and small are quantities  
Large and small are contraries

---

Some quantities are contraries,

each objection “opposes” one of the two premises and “indulgently” concedes the other. For the *mu’ānada*-objection fundamentally denies that large and small are quantities, but implicitly concedes that they are contraries; whereby the *musā’ada*-objection denies that large and small are contraries, but explicitly concedes that they are quantities. The only difference is that the *mu’ānada*-objection does not grant the other premise explicitly, whereas the *musā’ada*-objection does so.

**[§2.6] (140.3-10).** Avicenna next mentions two further considerations made by his predecessors concerning the existence of seemingly contrary quantities. (1) Some commentators argued that since “small” is constitutive of “large”, and “odd” is constitutive of “even”, they are certainly not contrary – since nothing is contrary to the thing that it constitutes. (2) Someone said that large and small are contrary inasmuch as they represent an excess and a deficiency, and they have “proportionate” (*al-mu’tadil*) as an intermediate. Avicenna’s point is that this is true as concerns having too much or having too little of some property (for instance an extension or a quality), but contrariety in that case does not depend on the opposition too much/too little, but rather on the natures of contraries themselves – inasmuch as they are mutually incompatible. Recklessness is contrary to cowardice not because recklessness is “too much courage” and cowardice “too little courage”, but because the nature of recklessness is essentially remote from the nature of cowardice.

**[§2.7] (140.11-16).** An absolute usage of the terms “large” and “small” seems to be possible, besides the relative one, with respect to what is naturally largest and naturally smallest. Even in this case, their contrariety does not depend on their being quantities, but on their being associated with certain qualities or on their being – in themselves – natural extremes. Avicenna gives two examples of absolute largeness and smallness. The first example is the magnitude of living beings: we can say that the blue whale is “large” absolutely – within its genus – because it is the largest existing animal, whereas the *myxobolus cephalus* is “small” absolutely because it is the smallest existing animal. The second example is that of the natural extremes of ascending or descending motion (heaviness and lightness), being respectively the absolutely “high” (the limits of the universe) and the absolutely “low” (the centre of the world). This example introduces perfectly the following section, where Avicenna will discuss the nature of contrariety in place.

**[§2.8] (140.17 – 142.5).** Aristotle says that quantity is commonly believed to admit of contraries because contrariety seems to be characteristic of place: people regard “up” (τὸ ἄνω) as contrary to “down” (τὸ κάτω), the centre of the world as the region most remote from the extreme part of the universe. The immediate, intuitive existence of local contrariety would be even the reason for the fact that all contraries are currently defined as “those things which are most distant from one another” (τὰ [...] πλεῖστον ἀλλήλων διεστηκότα) within the same genus<sup>487</sup>.

---

<sup>487</sup> Arist. *Cat.* 6 a12-18. In the *Metaphysics* (Δ 10, 1018 a 27-28) the definition of contraries is almost identical, but διεστηκότα (“distanced”/“distant”) is significantly replaced by διαφέροντα (“differing”).

Avicenna, instead, criticizes it openly and vehemently, not only with regard to the opposition between the absolute natural up and down, but also with regard to the opposition between the relative up and down.

Avicenna's refutation runs as follows. A place is not contrary to another place inasmuch as it is place: in itself a place is a surface, and two surfaces do not have the character – typical of contraries – of being incapable of co-existence in a same subject. Places are contrary to one another only accidentally, with regard to their being (the upper/lower) extreme limits of motion, (the upper/lower) extremes of a certain distance, or (the upper/lower) extremes of a certain containing body. Those people who understand contrariety as a primarily local determination are incapable of discerning whether contrariety is a character of two most distant places or the character of a single, localized thing that may be found in most distant places at different times. Now, the usage of the mass must clearly be overlooked in philosophy: what really matters is rather to understand contrariety according to the “second imposition”, corresponding to the scientifically valuable meaning of the word<sup>488</sup>. Now, places are not contrary inasmuch as they are places: for a place is always “up” or “down” with respect to another place. As for up and down, they may be considered either as relative determinations or as absolute, natural determinations. If they are relative, then it is clear that they are not contrary (as was proven for large/small, many/few, etc.)<sup>489</sup>. If they are absolute, then there are two possibilities: a place may be “up” either because it is a limit (*nihāya*) of a containing body whose natural position in the universe is highest, or because it is the place (= the container) of such a body. As for the first case, it will be proven that the highest body (i.e. outermost sphere, the heaven of the fixed stars) has no contrary at all: on these conditions, then, the upper place is not contrary to the lower place. If in the second case contrariety is observed, it is clear that it only depends on the position of the localized body (*al-mutamakkin*): therefore the existence of such a contrariety proves that place only admits contraries by accident.

**[§3] (142.5-18).** Like substance, quantity – besides not admitting of contraries – does not admit of more and less<sup>490</sup>. There is in fact a sense in which quantity does admit thereof, and a sense in which it does not: for extensions and numbers can be undoubtedly “more” or “less”, inasmuch as they are bigger or smaller than other extensions or numbers. On the contrary, quantities do not admit of more and less in terms of nature and intensity: no quantity is more of a quantity than another quantity. The difference between the first type of more and the second one is that the “quantitative” more may be associated with mathematical operations, whereas the other cannot.

**[§4] (142.19 – 143.5).** The last and most distinctive property of quantity consists of its being called both equal and unequal (ἴσον τε καὶ ἄνισον). It is the most proper attribute, since nothing else can be said “equal” in the same way: of a quality, we rather say that it is “similar” (ὅμοιον) to another<sup>491</sup>. Avicenna explains that quantity admits of equivalence and inequality in itself (*bi-dātihā*), not because of something else (*li-ġayrihā*); he then explains what equivalence is, namely the condition that comes about when we imagine to adapt (*taṭbīq*) reciprocally the dimensions of two extensions, or the units of two numbers, in such a way that none of the two congruent quantities has a boundary that the other does not share. The opposite condition – namely, one quantity being not congruent with the other – is called

<sup>488</sup> On the primary and secondary imposition of names, see Porph. *In Cat.* 57.19 – 58.20; INTRODUCTION, 3.1.1.

<sup>489</sup> See above, [§2.3].

<sup>490</sup> Arist. *Cat.* 6 a19-25. For the corresponding property of substance, see *Cat.* 3 b33 – 4 a9; see also above, III.3 [§4].

<sup>491</sup> As a matter of fact, quality is such that it may be called similar and dissimilar: see Arist. *Cat.* 11 a15-19 and below, V.1 [§3].

“inequality”. Unlike Aristotle, who provides examples of qualities that are not said to be equal or unequal<sup>492</sup>, Avicenna proposes the example of two ambiguous cases: motion and heaviness, whose non-quantitative nature is well shown by the fact that they cannot be called equal and unequal in this sense. We must keep in mind that heaviness is the potency of downward motion, according to Avicenna: being such, a weight it is not in itself comparable quantitatively with another weight<sup>493</sup>.

**[§5] (143.6-8).** In the end, Avicenna makes a distinction between “real” or “actual properties” (*ḥawāṣṣ ḥaqīqiyya*) and “relational properties” (*ḥāṣṣiyyatāni idāfiyyatāni*) that reprises, somehow, the one proposed by the anonymous predecessor in paragraph **[§1]**. Actual properties are the fact of having parts in actuality and not only potentially<sup>494</sup>, the fact of being measurable and the fact of being said equal and unequal; relational or derivative properties are not admitting of contraries and not admitting of more and less.

---

<sup>492</sup> Arist. *Cat.* 6 a29-34.

<sup>493</sup> On the fact that heaviness and lightness are not quantities, see above III.4 **[§7]**.

<sup>494</sup> As was explained above (III.4 **[§2.2-3]**), this is what marks the difference between the body belonging to the category of quantity and the one belonging to the category of substance.

### IV.3

#### ON BEGINNING THE TREATMENT OF THE RELATIVE, THE NOTIFICATION OF THE FORMER DEFINITION THEREOF AND THE EXPLANATION OF THAT DEFINITION; ON THE GENERAL INDICATION OF THE SUBDIVISIONS OF THE RELATIVE

Avicenna devotes three chapters to the category of relatives (IV.3-5). Chapter IV.3 focuses mainly on Aristotle's "first" definition and three of the four properties the Aristotle ascribes to relatives in the first sense: admitting of contraries, admitting of more and less, convertibility.

**[§1]** The most evident reason for Aristotle discussing relatives right after quantity is that relatives were mentioned in the discussion of quantity, with respect to the issue of contrariety. **[§2]** Logicians must not inspect, in so far as they are logicians, the existential nature of relatives. **[§3]** Under relatives fall those things whose quiddities are spoken of with respect to something else, either absolutely or by another sort of connection. "Absolute" relatives are things whose names reflect exclusively their being relative, for instance "brother"; relatives "by another sort of connection" are things to which a certain relative determination, or "connection", is attached extrinsically. **[§4]** A thing is spoken of with respect to something else if its conceptualization requires a certain other thing to be conceptualized along with it: not anything, but a thing with which the first thing has a certain existential connection. **[§5]** It is necessary to distinguish between "connection" (*nisba*) and "relation" (*idāfa*): "connection" is fundamentally asymmetrical, whereas "relation" is symmetrical. **[§6]** Avicenna next lists some examples of relatives, and examines again the difference between attributes that are relative in themselves (large/small, double/half) and attributes that are relative accidentally. **[§7]** Thereafter, Avicenna turns to the first three properties of relatives. Firstly, some relatives seem to admit of contrariety but not all of them have contraries, as Aristotle says. The standard interpretation of the commentators consists of remarking that since relatives are found in – more or less – all categories, when they are found in categories that admit of contraries (e.g. quality) they do themselves admit of contraries, whereas when they are found in categories that do not admit of contraries (e.g. substance, quantity) they don't. **[§8]** Further, some relatives admit of more and less: the rule of the other categories seems to hold true also of this property. **[§9]** Eventually, relatives are characterised by the fact of being convertible and mutually equivalent. Avicenna characterises this property in intuitive linguistic terms, as the "repetition" of the subject and the predicate in the propositions that display the mutual relation of two relative terms: "the slave is slave of the master", "the master is master of the slave".

**[§1] (143.13-15).** As in the case of quantity (III.4, **[§1]**), Avicenna begins his exegesis of Aristotle's chapter on relatives with a question that concerns the internal structure of the *Categories*: the reason why Aristotle dealt with relation right after quantity. The question has often been discussed by the commentators; Avicenna refers to the "declarations" (*tahrīḡāt*) of his predecessors without explaining them, but adheres to the opinion – found in the exegetical tradition – that the most evident reason for this is the fact that relatives have been mentioned by Aristotle in the chapter of quantity, with regard to the issue of seemingly contrary quantities<sup>495</sup>.

**[§2] (143.15 – 144.2).** The first point made by Avicenna is identical with the one made about quantity it does not lie within the limits of a logician's competences to verify properly how relatives exist<sup>496</sup>. This is to be done in a higher science, metaphysics, which is directly concerned with existence inasmuch as it is existence; and it will be done – at least partially –

---

<sup>495</sup> Arist. *Cat.* 5 b15-16; cf. above IV.2 **[§2]**, esp. **[§2.5-6]**.

<sup>496</sup> See above, III.4 **[§2.1]**.

in the *Ilāhiyyāt*<sup>497</sup>. Nonetheless, as we will see, Avicenna’s treatment of relatives in IV.3-5 provides us with interesting evidence for understanding better the more ontology-oriented discussion of the *Ilāhiyyāt*.

[§3] (144.2 – 145.6). As is known, throughout chapter 7 Aristotle presents two definitions of relatives<sup>498</sup>. The first definition of relatives is provided just in the beginning of *Cat.* 7, and reads: “we call relatives all such things as are said to be just what they are, *of* or *than* other things, or in some other way *in relation* to something else” (πρός τι δὲ τὰ τοιαῦτα λέγεται, ὅσα αὐτὰ ἄπερ ἐστὶν ἐτέρων εἶναι λέγεται ἢ ὅπως οὖν ἄλλως πρὸς ἕτερον)<sup>499</sup>; Ackrill renders Aristotle’s genitive ἐτέρων as “*of* or *than* other things” in order to make Aristotle’s linguistic point better translatable into English. Thereafter, Aristotle provides some examples of relatives: larger (μεῖζον) and double (διπλάσιον), for they are larger “*than*” and double “*of*” something else; things that are supposed to belong to other categories, such as state, condition, perception, knowledge and position (ἔξις, διάθεσις, αἴσθησις, ἐπιστήμη, θέσις).

Ishāq’s Arabic translation of Aristotle’s definition reads: “It is said, of things, that they are relative when their quiddities are said with respect to something else, or [are spoken of] according to a certain other way of connection with something else, whatever it is” (*yuqālu fī l-ašyā’ innahā min al-muḍāf matā kānat māhiyyātuhā innamā tuqālu bi-l-qiyās ilā ḡayrihā aw ‘alā naḥw āḥar min anḥā’ al-nisba ilā ḡayrihā ayyu naḥw kāna*)<sup>500</sup>. Avicenna evidently reads the disjunction as implying a stronger preliminary distinction between types of relatives: relatives that are spoken of with respect to something else absolutely (*‘alā l-iṭlāq*), relatives that are such “by another sort of connection” (*bi-naḥw āḥar min anḥā’ al-nisba*). This distinction permits to justify Aristotle’s mention, in this place, of those qualitative realities (state, condition, perception and knowledge) whose relative nature is disputed, or evidently different from that of “pure” relative attributes such as large and small, double and half<sup>501</sup>. In his analysis, here, Avicenna seems committed to following primarily Aristotle’s linguistic focus, by presenting relations in a manner as familiar and intuitive as possible for his Arabic readers. Despite its main focus on language, however, the discussion is well grounded in ontology, particularly in the distinction between relatives that are such absolutely and essentially, and independent realities that become relative only derivatively, or in certain respects.

**R<sub>a</sub>**) Absolute relatives are realities whose names perfectly express their relative meaning (*tadullu ‘alā kamāl al-mā nā llaḍī lahā*, literally “express the perfection of the meaning they have”), in the sense that they refer to no other feature of those realities besides their being relational: for example “brother” (*al-aḥ*). The linguistic counterpart of such relative attributes, we may suppose, is the Arabic *status constructus*, which is called indeed *iḍāfa* (“relation”): *aḥū l-aḥ* (brother of the brother), or – to cite another classical example of relative attribute, fatherhood and sonship – *abū l-ibn* (father of the son), *ibn al-ab* (son of the father).

**R<sub>b</sub>**) Relatives said according to another sort of connection are things to which relation is attached extrinsically, whose relationality is thus expressed in language by means of a certain particle, for example the Arabic proposition *li-*: potency (*quwwa*) is the potency “*of* him who has potency” (*li-ḍī l-quwwa*), knowledge is knowledge “*of* him who knows” (*li-l-‘ālim*). If such things are really relative, then they are referred *without particles* to the realities they are actually relative to. According to Avicenna’s example: if knowledge (*al-‘ilm*) is truly related

<sup>497</sup> *Ilāhiyyāt* III.10 (this chapter is translated and analysed in MARMURA 1975).

<sup>498</sup> Cf. above the INTRODUCTION, 2.5.1.

<sup>499</sup> Arist. *Cat.* 6 a36-37.

<sup>500</sup> *Manṭiq Aristū* 48.7-8.

<sup>501</sup> The ambiguous nature of these accidents will be discussed in more detail, with a particular focus on knowledge, in chapter V.4.

with the object of knowledge (*al-ma‘lūm*) rather than with him who knows (*al-‘ālim*), in Arabic it is said:

Ra *al-aḥu aḥū l-aḥi*  $\leftrightarrow$  *al- aḥu aḥū l-aḥi*.  
 Rc *al-‘ilm ‘ilm li-l-‘ālim*  $\leftrightarrow$  *al-‘ālim ‘ālim li -l-‘ilm*.

Sometimes the connection is granted by the presence, in one of the two extreme sides of the relation, of a connecting particle like *dū*, “having”. The example clearly refers to Aristotle’s case with “wing/winged” (περὸν/πτερωτόν): “wing” (*ḡanāḥ*) is relative to “winged/having wings” (*dū l-ḡanāḥ*), and vice versa. Sometimes it is not so, and the name of the related thing is a commonly accepted one that needs to be changed, in order for the mutual connection to become apparent. Other commentators say that Aristotle’s “other sort of connection” refers to cases where the particles differ on both sides (for instance case Rc2).

A similar linguistic distinction between proper and improper relatives is found in the first book of Fārābī’s *Kitāb al-Ḥurūf*. Nonetheless, Fārābī does not apply it to the alternative implied by the Arabic version of Aristotle’s first definition, but he employs it instead to explain the difference between the first and the second definition<sup>502</sup>.

**[§4] (145.6-16).** In Avicenna’s view, two conditions are necessary for one thing X being spoken of with respect to another thing Y: a mental condition (C<sub>1</sub>), so-to-say, and an extramental condition (C<sub>2</sub>):

C<sub>1</sub>: The conceptualization (*taṣawwur*) of X requires the parallel conceptualization of Y. This means simply that X cannot be intellected but together with Y: we cannot conceive of a son – inasmuch as he is a son – without bearing in mind his father.

C<sub>2</sub>: X has a certain intelligible meaning that is dependent on the existence of Y. A son is a son (has sonship) as long as his father exists, and the existence of his father is – in a certain sense – a cause for his being a son.

The relation of X is the notion that X comes to have as long as the counterpart Y exists together with it, and its existence provides X with a certain relative qualification.

C<sub>1</sub> alone is not sufficient to describe relatives: X and Y must have a strong existential connection, in order to be called relatives. Apparently, argues Avicenna, there are relations that satisfy C<sub>1</sub> but not C<sub>2</sub>; in his example, we cannot think of a ceiling without thinking of the wall that supports it, but this does not mean that the ceiling is relative – strictly speaking – to the wall (i.e., that the quiddity of the ceiling is spoken of with respect to the wall). If we analyse this example, we do not see very clearly in what sense the relation roof-wall does not satisfy C<sub>2</sub>: does a ceiling cease to be a ceiling when the wall is destroyed? What Avicenna means, probably, is that we do conceive of a relation in the case of the ceiling and the wall, but that relation is extrinsic to their essences: a roof and a wall are something in their own right, before being related to each other.

Avicenna’s example for a relation that satisfies both C<sub>1</sub> and C<sub>2</sub>, on the contrary, is once again brotherhood (*uḥuwwa*): a brother is conceptualized necessarily together with his brother, and it is a brother only as long as his brother (= another son of his mother) exists. The relation of brotherhood consists, in itself, of the very consideration of a brother’s being-such-as-to-have-a-brother. However, it seems that there are cases where relation consists of the very consideration of the fact that something else exists with it, that has one or more different attributes. This is the case, for instance, for fatherhood and sonship: the relative terms father/son do not share the same character, but they are – nonetheless – perfectly relative.

<sup>502</sup> Fārābī, *Ḥurūf* 87.6 – 88.4; cf. the INTRODUCTION, 2.5.2.

**[§5] (145.17 – 146.16).** In this paragraph Avicenna presents a difference between connection (*nisba*) and relation (*iḍāfa*) based on the notion of reciprocity or symmetry, which is a further condition for being relative. The linguistic counterpart of symmetry or convertibility is “repetition” (*tikrār*): an intuitive notion that Avicenna will present below, in par. **[§9.1]**, according to which a relation R(XY) is linguistically equivalent to saying:

X is X of Y  
Y is Y of X

where the subject and the predicate are completely convertible, and repeated (*mukarrara*) in both sentences. The idea that convertibility is expressed linguistically by means of a repetition is already found in Aristotle’s *Metaphysics* Δ 15, probably Avicenna’s direct source in this passage<sup>503</sup>.

A simple “connection” (*nisba*) becomes a “relation” (*iḍāfa*) when it is taken as “repeated”, i.e. when it is understood as perfectly symmetrical. Avicenna takes up, once again, the example of the ceiling and the wall. The ceiling has a connection with the wall, for it stays upon the wall. However, it is not relative to the wall, inasmuch as it is wall: it is relative to the wall inasmuch as the wall is “ceilinged”, or “a basement that sustains the wall”. We cannot apply the rule of repetition, and we cannot say:

The ceiling is ceiling of the wall  
The wall is wall of the ceiling,

for in this case, only the first proposition is correct. We may say instead, by replacing “wall” with the made-up term “ceiling-ed”:

The ceiling is ceiling of the ceiling-ed  
The ceiling-ed is ceiling-ed of the ceiling.

If we want the connection between the ceiling and the wall to become an actual relation, we must consider the attribute or condition of the wall that is truly relative to the ceiling (namely, the fact that it is what sustains the ceiling). Therefore a simple connection is asymmetrical, whereby a true relation is symmetrical. We have then a further condition for something being relative:

**C<sub>3</sub>:** The relation holds both between X and Y and between Y and X.

Now: does this distinction between *nisba* and *iḍāfa* correspond to the distinction between R<sub>a</sub> and R<sub>b</sub> made above (**[§3]**)? We are tempted to answer yes, because of a terminological consonance: relatives R<sub>b</sub> were defined by means of the term *nisba*. The actual difference between the two sorts of relatives has not yet been highlighted, but only alluded to above: it will become clear in the follow-up that it lies in the nature of the essential attribute itself, depending on whether it is essentially a relative, or some other thing to which a relation is attached by accident.

**[§6] (146.16 – 147.18).** After the long digression of pars. **[§3-5]**, Avicenna reprises the distinction between relatives R<sub>a</sub> and relatives R<sub>b</sub>. Among relatives, he says, we may number either such things as large/small and double/half or such things as “potency” (*quwwa*), “power” (*qudra*), “state” (*ḥāl*), “perception” (*ḥiss*) and “knowledge” (*ilm*), “standing” (*qiyām*) and “sitting” (*ḡulūs*). However, there is a difference between the relational nature of the former

---

<sup>503</sup> Arist. *Metaph.* Δ 15, 1021 a31 – b3 (the passage is reported and analysed above in the INTRODUCTION, **2.5.1**).

group and the relational nature of the latter group: large and small have a relational quiddity, whereas knowledge and the remaining relatives do not have it. Large is only “large” in itself and in its quiddity when small exists; knowledge is not knowledge in itself when he who knows exists, despite the fact that its existence only occurs in him who knows (for example in Zayd). In the first case, large *has its quiddity spoken of* with respect to small; in the second case, knowledge *is spoken of with respect* to him who knows. Therefore the condition of existential dependence is not sufficient for two things to be called relatives: where there is an existential dependence in the relation between cause and effect (a substrate which makes an accident exist, God that makes the world exist) there is not necessarily a relation, but a further condition is necessary. This means that  $C_1$  and  $C_2$  (along with  $C_3$ , we may suppose) are not sufficient for something to be relative, but that a proper relative has its quiddity said with respect to something else, a condition that we may characterise as follows:

**C<sub>4</sub>:** X is essentially X because of the existence of Y.

To sum up, Avicenna has distinguished so far between “proper” relatives ( $R_a$ ) and “improper” relatives ( $R_b$ ): the former have their quiddity said with regard to something else, the latter are solely spoken of with respect to something else:

**R<sub>b</sub>:**  $C_1 + C_2$  = Being spoken of with respect to something else (e.g. knowledge, disposition, etc.);

**R<sub>a</sub>:**  $C_1 + C_2 + C_3 + C_4$  = Having the quiddity spoken of with respect to something else (e.g. large/small, similar/similar, brother/brother, knowledge/object of knowledge).

[§7] (147.19 – 148.8). Aristotle says that there is contrariety in relatives, but not in all of them. Virtue (*ἀρετή*) is contrary to vice (*κακία*), knowledge (*ἐπιστήμη*) is contrary to ignorance (*ἄγνοια*); nonetheless, double (*διπλάσιον*), treble (*τριπλάσιον*) and the like certainly have no contraries<sup>504</sup>. Aristotle does not provide a general rule or explanation to account for this fact, but it is argued by most previous commentators that this depends on the category to which relative attributes are attached<sup>505</sup>. We may call this principle, with some imagination, the rule of permeability: if relatives are attached to quality (e.g. virtue and vice), since quality admits of contraries then they admit of contraries too; if they are attached to quantity (double/treble etc.) then they do not, since quantity does not admit of contraries; and so forth. Avicenna reprises this interpretative “canon” (*qānūn*) without elaborating further on it; he limits himself to mentioning examples of relative properties for each category (leaving aside position, acting, being acted upon and having). He seems to subscribe then to this standard interpretation of the property, that bears the consequence of making relatives, in so far as they are permeable to the properties of the other categories, ontologically diminished with respect to them.

[§8] (148.8-17). The same holds true of another property, i.e. admitting of more and less: some relatives admit thereof, according to Aristotle (e.g. similar and unequal), whereas some others do not (e.g. double)<sup>506</sup>. The principle of permeability seems not strictly applicable to this property as well, for “unequal” is an accident of quantity, and quantity does not admit in itself of more and less: a possible solution to defend Aristotle’s claim is to say that equivalence admits of the “quantitative” more and less (*al-akṭar wa-l-aqall*), whereas similarity admits of the “qualitative” more and less (*al-ašadd wa-l-ad‘af*). Avicenna here tries to apply the rule of permeability more strictly, by arguing that inequality does not admit of any type of more and less, neither quantitatively nor qualitatively, but rather admits of the

<sup>504</sup> Arist. *Cat.* 6 b15-19.

<sup>505</sup> E.g. Porph. *In Cat.* 114.12-22.

<sup>506</sup> Arist. *Cat.* 6 b20-27.



“further and closer” (*ab‘ad wa-aqrab*): 3 is not more unequal than 4 with respect to 10, but further from it with respect to equivalence. Equality/inequality do not admit different degrees of intensity since they are proper accidents of quantities, and if a number were “more” or “less” unequal than another it would be, in a sense, more or less of a number (which is absurd, given that quantity does not admit of more and less in itself). As for the quantitative more and less, in Avicenna’s view, a certain number cannot be “larger” with respect to inequality (in quantitative terms) than another unequal: it is only further from it.

[§9] (148.18 – 150.13). The third property of relatives mentioned by Aristotle is convertibility: “all relatives are spoken of in relation to correlatives that reciprocate” (πάντα [...] τὰ πρὸς τι πρὸς ἀντιστρέφοντα λέγεται)<sup>507</sup>. In those cases where they seem not to reciprocate, it is the case either because the name of one of the two relative terms has not been given properly (wing is relative not to bird, but to the winged), or because it still needs to be invented: the rudder (πηδάλιον) of a boat is relative not to the boat, but to the “ruddered” (πηδαλιωτοῦ)<sup>508</sup>.

[§9.1] (148.18 – 149.10). The conversion of relatives, argues Avicenna, is different from the conversion of propositions and from other types of conversion (*‘aks*) that were mentioned above. Thereafter, he proceeds to explain the notion of repetition (*takrīr*), which we have cited above as the linguistic description of the conversion of relatives<sup>509</sup>. The subject is repeated, and the predicate is simple; when conversion is operated the predicate becomes repeated, and the subject becomes simple. As Aristotle says that there may be a slight verbal difference of “ending” (τῆ πτώσει) between the initial sentence and its converse, so Avicenna remarks that it may be necessary to introduce particles such as *bi-/li-* (meaning “to” or “of”, depending on the context) to connect the subject to the predicate. In other cases, the connection is simply guaranteed by the standard *status constructus* or *iḍāfa*<sup>510</sup>.

[§9.2] (149.11 – 150.13). As already argued above, for conversion to take place it is necessary that a certain relative thing be related with its proper relative term, and not with another being associated with it (cf. Aristotle’s examples and Avicenna’s example of the relation ceiling/wall, ceiling/ceiling-ed). Avicenna openly shows, once again, an effort of “ontologizing” Aristotle’s formal and linguistic approach: whereas Aristotle speaks of “giving the proper names”, Avicenna speaks of relating the first term to “the thing with which the relation is primarily and in itself” (*al-šay‘ alladī ilayhī l-iḍāfa awwalan wa-bi-l-dāt*). Interestingly, Avicenna presents then a kind of short catalogue of the things associated with a given relative nature X that may be mistaken for X:

- (1) The subject ( $S_x$ ) of X, e.g.: “head is the head of Zayd”;
- (2) An accidental property of  $S_x$ , e.g.: “head is the head of a capable of walking”, “head is the head of a Peripatetic”
- (3) The genus of  $S_x$ , e.g.: “head is the head of an animal”
- (4) The species of  $S_x$ , e.g.: “head is the head of a man”, “wing is the wing of a bird”.

As Aristotle says, the proper relative term either has already a name convertible with the name of the first term, or it must be given an appropriate one. In Avicenna’s view, it is necessary to invent names only in the cases where the relation is not ontologically significant (i.e., when the two relatives do not have their quiddities said with respect to each other). In these cases, to identify the proper attribute it is necessary to enumerate all the essential and

<sup>507</sup> Arist. *Cat.* 6 b28.

<sup>508</sup> Cf. Arist. *Cat.* 6 b36 – 7 a5 (for the example of the winged bird); 7 a5-22 for the example with “rudder” and “ruddered”.

<sup>509</sup> Cf. above, par. [§5].

<sup>510</sup> For this grammatical distinction, see above pars. [§3] and [§5].

accidental qualifications of the thing  $x$  and, thereafter, to strip them off one by one in order to see whether their removal affects the relation  $R(xY)$  or not.

#### IV.4 ON THE PROPERTIES OF THE RELATIVE

Despite the title referring to the plural “properties” (*ḥawāṣṣ*) of relatives, this short chapter only focuses on one of the properties that Aristotle ascribes to relatives, i.e. being simultaneous by nature, and on some aporiae related to it.

[§1] Relatives seem to be simultaneous in existence: when one of them exists, the other exists as well; when one of them ceases to exist, the other ceases to exist as well. Some relatives seem not to have this property, for instance knowledge and sensation: as a matter of fact their relative counterparts, knowables and sensibles, seem to exist without them. Avicenna claims that this is not true, since natural beings exist as properly knowable or sensible only inasmuch as they are relative to a certain act of knowing or perceiving. [§2] Two objections may be formulated against Aristotle’s example with knowledge and sense-perception: firstly, the object of knowledge must not be necessarily existent in reality, i.e. in the case of mathematical or geometrical constructions; secondly, Aristotle’s example with the squaring of the circle is doubtful and inappropriate. [§3] Avicenna replies to both objections, and shows that they [§4] Thereafter, Avicenna takes up two further aporiae concerning the simultaneity of relatives: how can prior and posterior, being relative attributes, be simultaneous? How can we know about the Resurrection, if it is yet to exist? [§5] Some commentators criticized Aristotle on account of the fact that there is a certain kind of knowledge that transcends all beings and knowables, and is prior to all of them: the knowledge of God and the angelic intellects. This is true, says Avicenna, but it is not an appropriate reply to Aristotle’s doubt: it simply provides another case where knowledge and knowable do not exist simultaneously. [§6] Aristotle’s exception concerning knowledge and knowables is effective not when applied to knowledge in general, but to singular knowledges (or acts of knowledge).

[§1] (150.17 – 151.11). Aristotle describes relatives as being in most cases “simultaneous by nature” (ἀμα τῆ φύσει), namely such as to exist simultaneously, and such that the destruction of one of them entails the destruction of the other. It is so “in most cases” (ἐπὶ τῶν πλείστων) since many counterexamples may be found for this rule: knowable things are relative to knowledge, but they seem to exist independently of it; perceptible things seem to be prior to perception, and to exist independently of it<sup>511</sup>.

[§1.1] (150.17-18). Being “simultaneous with respect to existence” (*ma’an fi l-wuḡūd*) is held to be, in common opinion (*fi l-mašhūr*), one of the property of relatives. It is unclear whether Avicenna refers “common opinion” to Aristotle, to Aristotle’s sources, or also to the following commentators, but all in all it is irrelevant: what matters is that – once again – Avicenna alludes to the doctrinal content of Aristotle’s *Categories* as being based on a common, basic consensus, rather than on sound scientific foundation<sup>512</sup>. Avicenna’s explanation of this property follows closely Aristotle’s description at 7 b16-22: relatives are such that if one exists, the other exists as well, whereas if one ceases to exist, the other ceases to exist as well.

[§1.2] (150.18 – 151.11). Following Aristotle closely, Avicenna takes up the doubts concerning the relative nature of knowledge and perception. Firstly Avicenna warns us that knowledge (*ilm*) and perception (*ḥiss*) must not be understood here as cognitive powers or “faculties” (*quwwatāni*), but rather as two cognitive acts, or “acquisitions” (*idrākāni*). In other words, what has relative nature is not knowledge or perception in general, but every *act* of knowledge or perception. We should understand, then, that whereas a certain act of

---

<sup>511</sup> Arist. *Cat.* 7 b15 – 8 a12.

<sup>512</sup> See INTRODUCTION, 2.1.1.

knowledge exists simultaneously with its object of knowledge, the object of knowledge in itself does not exist simultaneously. Avicenna's solution to this puzzle is the following: we have to understand that the act of knowledge and its object are not simultaneous in so far as they have different essences: the essence of the act of knowledge requires the object to be existent, whereas the object in itself (independently of its being "something known", which is a supervening, relative attribute of its) does not require knowledge thereof to exist.

**[§1.3] (151.11-13).** Aristotle's specific example concerning the doubtful case of knowledge and knowables is a classical problem of Greek geometry, squaring the circle (ὁ τοῦ κύκλου τετραγωνισμὸς), i.e. the construction of a square equivalent to a given circle by means of compass and straightedge<sup>513</sup>.

**[§2] (151.13 – 152.12).** Two sorts of objections may be formulated against Aristotle's claim that some knowables exist independently of our act of knowing them.

**[§2.1] (151.13 – 152.7).** Not every sort of knowledge needs its object to be existent concretely: for example, by means of conceptualization (*taṣawwur*) we may well come to know things that do not exist in concrete reality, such as a sphere inscribed in a icosahedron<sup>514</sup>. The fact that it exists in the mind, however, certainly implies that we know it, for in a certain sense mental existence is in itself knowledge. The same seems to hold true of another mental operation, namely assent (*taṣḍīq*): by assent we may come to know things that exist in external reality only "possibly" (*bi-l-imkān*), like the fact that the distance between a curve and its asymptote approaches zero<sup>515</sup>.

**[§2.2] (152.8-12).** It is unclear whether these lines should be considered as a further possible objection, or rather as an independent remark – on Avicenna's part – concerning Aristotle's example. I am inclined to read it as a second objection, for in one of the below subparagraphs Avicenna seems to tackle it and dismiss it as if it were such<sup>516</sup>. Be as it may, the sense of this objection or remark is clear: the squaring of the circle is a difficult and doubtful case, and one may wonder how Aristotle knows that it exists. If it only exists in mind, then it is already known (since, as has been argued above, mental existence is – in a sense – itself knowledge). What Aristotle probably means is that it exists potentially, as knowledge thereof does: but if it does, then it is only something in potency.

**[§3] (152.12 – 153.12).** Avicenna's reply to the hypothetical objections formulated in par. **[§2]** is articulated in two points, and ends with a general conclusion about the issue of knowledge and knowables.

**[§3.1] (152.12 – 153.4).** A logician cannot verify anything truly about these issues. What matters, in the *Categories*, is only the fact that some relatives seem to require essentially the existence of their counterparts, whereas others do not. The first argument of the opponent (**[§2.1]**) is not effective: what matters in this place is only a kind of knowledge that is actually relative to some external, existing thing, i.e. sense-perception, not intellectual knowledge (conceptualization or assent, as in the adversary's examples). Avicenna's example for the kind of knowledge at stake here is: our knowledge of the fact that celestial spheres have circular motion. Regardless whether the object of knowledge has mental or concrete existence, what counts here is only simultaneity in existence.

---

<sup>513</sup> Arist. *Cat.* 7 b31-32.

<sup>514</sup> The sphere inscribed in a icosahedron is constructed by Euclid in the thirteenth book of his *Elementa* (Eucl. *Elem.* XIII, prop. 16).

<sup>515</sup> On the difference between "conceptualization" (*taṣawwur*) and "assent" (*taṣḍīq*) see above, I.1 **[§1]** and the COMMENTARY *ad loc.*

<sup>516</sup> Cf. par. **[§3.2]** below.

**[§3.2] (153.4-7).** As to the case of the circle, its being existent in potency does not prove that simultaneity belongs to all relatives: for the fact that the squaring exists in potency certainly does not make it necessary, for knowledge thereof, to exist in actuality.

**[§3.3] (153.7-12).** It is possible to summarize Avicenna's interpretation of this passage in the following terms: mutually relative things exist simultaneously if they are mutually relative in actuality, for the quiddity of one thing is spoken of with respect to the other. If we take one of them to exist only in potency, then the reciprocity with respect to existence ceases to be, like in the case of the squaring of the circle (where one of the two extremes only exists in potency, and the other cannot exist in actuality).

**[§4] (153.12 – 154.19).** The issue of simultaneity gives rise to two further puzzles, one concerning the couple prior/posterior and one regarding our knowledge of the future, notably of the event of the Resurrection (*al-qiyāma*).

**[§4.1] (153.12-16).** The doubt concerning priority and posteriority is quite intuitive. If we admit that prior and posterior are relative notions, having their quiddities spoken of with respect to each other, then we must also admit that they are simultaneous, which is absurd: simultaneous things are by definition neither prior nor posterior to one another<sup>517</sup>.

As for the second doubt, we seem to have a present knowledge of future events, like the day of the Resurrection: but what is future is not yet existent, so we have to admit that our knowledge exists simultaneously with some currently non-existing events.

**[§4.2] (153.16 – 154.13).** The issue of priority and posteriority will be dealt with also in the end of *Ilāhiyyāt* III.10, where Avicenna will describe the relation between prior and posterior in terms of an exclusively intellectual connection<sup>518</sup>.

**[§4.2.1] (153.16-18).** Avicenna's analysis of the problem in *Maqūlāt* IV.4 is based on the possibility of conceiving of prior and posterior at least in two different manners: with respect to the mind absolutely, and with respect to existence, but still "depending on the mind" (*mustanidan ilā l-dīhn*). The underlying argument consists of proving that, according to these two considerations, the relation between priority and posteriority is always simultaneous in the mind, and this fact does not entail any absurd consequences. Despite the fact that priority and posteriority are said in many ways, Avicenna seems to focus here exclusively on chronological priority<sup>519</sup>.

**[§4.2.2] (153.18 – 154.3).** The first consideration is with respect to mental existence, where prior and posterior are absolutely simultaneous. The relation of priority and posteriority is an attribute that our mind confers upon (1) two different times represented simultaneously in our estimative faculty (*wahm*)<sup>520</sup>, or upon (2) a present time that is currently existing and represented in estimation and a future time that is only represented in estimation. As for the first case, we may conceive simultaneously of, say, the dawn and the sunset and our mind relates them as being – respectively – prior and posterior. As for the second example, we wake up in the morning and estimate morning as a present time, evening as a future time, and our mind relates them as being – respectively – prior and posterior. In both cases, the relation of priority has been established when and since these moments were simultaneously present to the estimative faculty.

**[§4.2.3] (154.4-8).** The second consideration is with respect to both mental and concrete existence. Given a prior and a posterior time, when the prior time exists the posterior time is a time other than the first, that does not exist yet but has the possibility of existing, according to

---

<sup>517</sup> For Aristotle's discussion of simultaneity, see Arist. *Cat.* 13, 14 b25-26; see also below, VII.4 [§2].

<sup>518</sup> *Ilāhiyyāt* III.10, 159.15 – 160.9.

<sup>519</sup> On the different meanings of priority and posteriority according to Aristotle, see Arist. *Cat.* 12, 14 a26–b23 and *Metaph.* Δ 11 (1018 b9 – 1019 a14); for Avicenna's treatment of priority and posteriority see below, VII.4 [§1]; *Ilāhiyyāt* IV.1, 163.4 – 167.5.

<sup>520</sup> One of the internal senses, according to Avicenna; cf. *Nafs* IV.3, 162 ff..

a possibility that, Avicenna says problematically, “tends to necessity” (*yu’addī ilā wuḡūb*). Now, what characterises the posterior time (not yet existing, having the possibility of existing) is an attribute that only accompanies it when the prior time exists; and if the posterior time comes to existence but the mind still conceives thereof as posterior, then it has a further relation to the mind: it is something that was existent before as posterior, and then was destroyed as posterior. This latter sort of relation is, once again, simultaneous with the existence of the posterior time.

**[§4.2.4] (154.8-13).** Besides (a) and (b), Avicenna mentions a “further manner” (*waḡh āḡhar*) of considering prior and posterior times, which rather sounds like a demonstration of the fact that priority and posteriority only have intellectual existence. According to this consideration, no time ever exists as prior or posterior (i.e. relative to another time); as a matter of fact, if any time were actually existent as relative to another – since for every single time there are infinite prior and infinite posterior times – then infinite temporal relations would exist, and this is absurd.

**[§4.3] (154.14-17).** In the light of the preceding discussion, it becomes easier to solve the puzzle concerning our knowledge of future events. According to Avicenna, we may have knowledge of the Resurrection in two senses: conceptual and existential (or assenting). We have conceptual knowledge of the Resurrection since we can tell what it is; we have existential knowledge of Resurrection in so far as we may state that there will be a Resurrection. As for conceptual knowledge, it has already been argued above that it is not in itself a relative sort of knowledge<sup>521</sup>. As for our existential knowledge of Resurrection, it consists of a judgment of the following form:

The Resurrection will be (*sa-takūnu*),

where “will be” is a state that belongs to Resurrection when it has mental, and not yet concrete existence. Now, our knowledge of this fact is perfectly simultaneous with the fact itself in the mind, and this does not imply any sort of incongruence. A discussion of the same issue is found in *Ilāhiyyāt* I.5, where Avicenna refutes the idea – held by some previous mu’tazilite theologians – that some entities possess absolutely no thingness (*ṣay’iyya*) when they are not existent: there, Avicenna argues against this doctrine that it is possible to state something only about items that exists in the soul, but the judgment involving them is also related by accident to what occurs in external reality<sup>522</sup>.

**[§4.4] (154.17-19).** The examples discussed in these two doubts (prior/posterior and Resurrection) concern relations that only exist in the mind, or in the estimative faculty (*wahm*). The existence of some exclusively intellectual relations is one of the problematic points of Avicenna’s fundamentally realist theory of relations, as developed in *Ilāhiyyāt* III.10<sup>523</sup>.

**[§5] (154.19 – 155.4).** Some other commentators apparently tried to object to Aristotle’s claim that knowable things are prior to knowledge, by saying that there exists at least a kind of knowledge which is – in a sense – prior to all knowables: God’s knowledge, and the knowledge of the angelic intellects. This is true, argues Avicenna, but it is not a proper answer to the doubt set forth by Aristotle. The fact that knowledge is prior to all knowables may rather disprove either such claims as “all relatives are simultaneous”, which is what Aristotle’s example with knowledge already does, or such claims as “no knowledge and knowable exist simultaneously”. This objection, therefore, seems to work better as a further counter-example for the rule of simultaneity.

<sup>521</sup> Cf. above, [§2.1-2].

<sup>522</sup> *Ilāhiyyāt* I.5, 34.1-9. On the mu’tazilite doctrine at issue here, see MARMURA 1984, pp. 227-229; WISNOVSKY 2003, p. 155-156.

<sup>523</sup> Cf. CAMINADA 2017, pp. 86-97.

**[§6] (155.4-12).** A case where the exception highlighted by Aristotle is particularly evident is our individual knowledge of the existence of the world. An individual knowledge of the existence of the world only exists as knowledge, in its essence, if the world exists; however, the world may exist in its essence without this particular knowledge of its being existent. Therefore, Aristotle's exception works in such a case, for although knowledge in general is necessarily simultaneous with the existence of the known thing, a particular knowledge may be non-simultaneous with it.

## IV.5

### ON VERIFYING THE RELATIVE THAT IS A CATEGORY; ON THE DIFFERENCE BETWEEN WHAT IS RELATIVE BY ITSELF AND WHAT HAS RELATION AS AN ACCIDENT OR A NECESSARY CONCOMITANT; ON THE PROPERTIES OF THE RELATIVE THAT IS A CATEGORY

The last chapter of the section on relatives focuses on Aristotle's second definition of the category, and a number of related aporiae: given the complexity of the final section, focusing on the determinate knowledge and existence of relatives, it stands out as one of the most difficult sections of Avicenna's *Maqūlāt*

[§1] The first description of relatives given by Aristotle, discussed up to now in chapters IV.3-4, does not represent the proper description of the category. This is evident because it gives rise to some unacceptable ambiguities, in particular concerning the status of some beings that appear to fall both under relatives and other categories: the parts of substances (like the head and hand of a man), for instance, or some species of quality (like states or dispositions). [§2] It is therefore necessary to correct the definition, by specifying that actual relatives are those things whose existence consists in their being relative. [§3] Someone objected that this second definition is not given correctly because it is circular: it already comprises the notion of relative. Against this objection Avicenna replies that it is possible to employ one and the same word in two different senses, one of which has a more generic meaning than the other; this latter generic meaning may well be used to define the other, more specific sense. This happens for example in the case of the notion of "possible" (as opposed to "necessary"), whose definition can be formulated by recurring to another more general meaning of "possible" (i.e., the one opposed to "impossibility"). [§4] Another doubt is the following: how is it that something like "white", being "thing having whiteness", does not constitute an independent category whereas "relative", being "thing having a relation", does? Moreover, how do the two definitions differ, despite positing both the relative as "a thing having relation"? Avicenna's reply consists of specifying that the thingness of the actual relative is accompanied by a different sort of existence, for actual relatives have no other existence but the fact of existing as relatives. [§5] Relatives are such that when one of them is determined, the other becomes determined because of the first. To characterise relations, and to know them determinately, it is always necessary to know the nature of their subjects. [§6] Relations are unitary by species, but differ individually inasmuch as they are found in individual subjects.

[§1] (155.17 – 157.4). In *Cat. 7*, right after the discussion of simultaneity, Aristotle presents a doubt that ultimately leads him to correct and reformulate the first definition of relatives. It seems, indeed, that some beings that evidently belong to other categories may share in the aforementioned description of relatives: for instance some secondary substances such as "head" and "hand", for "a head is called someone's head and a hand is called someone's hand" (ἡ κεφαλὴ τινὸς λέγεται κεφαλὴ καὶ ἡ χεὶρ τινὸς λέγεται χεὶρ), and this seems to characterise them as relatives<sup>524</sup>.

Avicenna reprises Aristotle's doubtful case and corrects the first definition, on account of the fact that it allows some beings evidently found in other categories to belong to relatives at the same time, whereas it is impossible for something to belong to more than one category *per se*. In order for a certain description to be the description of a category, it must provide a truly distinctive character that (1) is predicated of each member of a certain class of beings as an ultimate genus, and (2) is such that none of those beings has another fundamental attribute of the same kind. Given two categories that have certain distinctive characters, if there exist beings that seem to be constituted by both of them it is necessary to reformulate one of the two descriptions, for it is evident that the nature of one of them was not grasped correctly or

---

<sup>524</sup> Arist. *Cat.* 8 a13-28.



appropriately. Take for instance a head: if taken absolutely and as a secondary substance, it seems to be constituted both by the fact of being a substance and by its quiddity being said with respect to something else – the headed. On the contrary, as Aristotle says, an individual head is not relative to anything, for we are able to perceive it and imagine it without necessarily conceiving of its correlative counterpart. The same holds true of other beings that were mentioned initially as relatives, such as “habit” (*mulk*): for habits and states evidently belong to the first species of the category of quality<sup>525</sup>.

Now: we have remarked that Avicenna already saw, in the first description of *Cat.* 7, an implicit distinction between actual, absolute relatives and accidental relatives (those that we have called above, respectively,  $R_a$  and  $R_b$ )<sup>526</sup>: in chapter IV.3 he ended up qualifying the relational nature of the former as “having the quiddity spoken of with respect to something else”, and the relational nature of the latter as “being spoken of with respect to something else”. As I have explained in the Introduction, Avicenna’s overall strategy in this chapter consists of correcting the first definition by excluding any reference to “improper” relatives, i.e. relatives having a proper essence that is other than their being relatives<sup>527</sup>.

**[§2] (157.5-9).** In his second definition, Aristotle calls relatives those things “for which being is the same as being somehow related to something” (οἷς τὸ εἶναι ταῦτόν ἐστι τῷ πρὸς τί πως ἔχειν), rendered by Ishāq as “the things [...] whose existence consists of their being related in some way” (*al-ašyā’u [...] al-wuḡūdu lahā huwa annahā mudāfatun ‘alā nahwin min al-anhā*)<sup>528</sup>. Avicenna qualifies this reformulation as “correct” (*ṣahīh*); thereafter he immediately mentions the opinion of some commentators who criticise it, on account of the fact that it appears to be the same as the first one<sup>529</sup>. Avicenna defends this second description by arguing – quite obviously – that if the two descriptions were really equivalent, then the first one would have been sufficient and clear enough in itself.

**[§3] (157.10 – 159.11).** After mentioning Aristotle’s second definition of relatives, Avicenna expounds and solves a doubt concerning its alleged circularity.

**[§3.1] (157.10-12).** Some commentators claimed that Aristotle provided a circular definition, since in this second description the *definiendum* (“relative”) is comprised in the *definiens*. Among those who tried to settle this difficulty before him, Avicenna says, there was someone who came very close to the solution he is about to propose.

Now, this point was debated in antiquity by illustrious Peripatetics (Boethus of Sidon, a certain Ariston, probably Ariston of Alexandria, Andronicus of Rhodes)<sup>530</sup> and discussed by many later commentators. Porphyry solved the difficulty by arguing that the definition does not define relative things by means of themselves, because πρὸς τί does not refer to the things that are defined, but to the “fact of having a certain relation to something” (πρὸς τί πως ἔχειν), which inheres in those things as an essential attribute; the same explanation is found in Simplicius, and a similar one is found in the commentary attributed to Philoponus<sup>531</sup>. The

<sup>525</sup> For Avicenna’s discussion of habit and state, see above V.3 [§1].

<sup>526</sup> See above, IV.3 [§2].

<sup>527</sup> See above, INTRODUCTION 3.4.2.

<sup>528</sup> Arist. *Cat.* 8 a31-33; *Mantiq Aristū* 53.15.

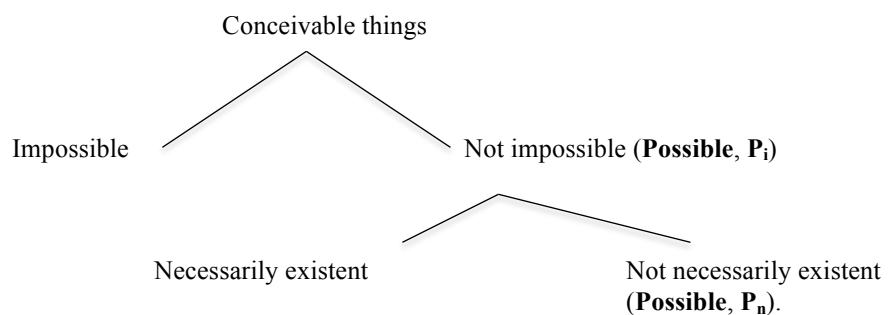
<sup>529</sup> So for instance Syrianus, according to Elias/David’s account (Elias/David, *In Cat.* 218.32-33).

<sup>530</sup> Simpl. *In Cat.* 201.34 – 202.4. We are also told by Simplicius that, to avoid the difficulty, Andronicus and Ariston proposed to change πρὸς τί πως ἔχειν into πρὸς ἑτερόν πως ἔχειν (202.2-4; 203.4-5); see MORAUX 1973, pp. 108 and 185.

<sup>531</sup> Porph. *In Cat.* 123.31 – 125.28; Simpl. *In Cat.* 202.11-25; Phil. *In Cat.* 130.22-31. In Philoponus’ case it is not clear whether the solution is exactly the same as Porphyry’s. As a matter of fact, the commentator firstly makes a distinction between “those very things where relation is” (αὐτὰ τὰ πράγματα ἐν οἷς ἡ σχέσις γίνεται, 130.25) and “relation itself” (αὐτὴ δὲ ἡ σχέσις, 130.26), and then he argues that “in the definition” (ἐν τῷ

solution to which Avicenna refers might be Porphyry's, but also the one that Simplicius ascribes to the Peripatetic Achaicus, who argued that the definition is not circular since Aristotle uses  $\pi\rho\acute{o}\varsigma \tau\iota$  in it homonymously, i.e. not as meaning the very "relative" that he is defining but rather as meaning  $\pi\rho\acute{o}\varsigma \acute{o}\tau\iota\omicron\upsilon\nu$  ("relative to anything whatsoever")<sup>532</sup>. As a matter of fact Avicenna's solution, expounded in the following two paragraphs, also rests on the assumption that the "relative" (*mudāf*) comprised in the *definiens* is homonymous with respect to the *definiendum*.

[§3.2] (157.12 – 158.15). As a reply to this objection, Avicenna claims firstly that a single name or term may well be employed in two different senses, one of which is more generic than the other. This depends on the fact that common people (*al-ġumhūr*), responsible for the primary imposition of names, usually give the name in the first place to the more generic meaning, which is also more intuitive and better-known (*ašhar*); in a second moment, then, the same name comes to be imposed to some other related notion, that has nonetheless a more specific and technical sense. Avicenna's example for this linguistic phenomenon is the term "possible" (*mumkin*), which may be referred either to what is not impossible (**P<sub>i</sub>**) or to what is not necessary (**P<sub>n</sub>**). In the first instance, the name "possible" was exclusively imposed on the negative determination "not impossible" (*ġayr mumtani*); secondly, given that what is not impossible may be either necessarily existent or not necessarily existent, the same name was given to a quasi-subspecies of the first meaning, namely to what is neither impossible nor necessarily existent:



The same holds true of the term "relative" (*mudāf*), which philosophers applied primarily to Aristotle's first definition (i.e. having the quiddity spoken of with respect to something else + another sort of connection). According to this first definition, it does not matter whether a relative merely exists as a relative or not: the description also includes beings that have their quiddity said with-respect-to only when they are considered as related with something else, whereas they have a proper existence and quiddity other than their being relative (for instance the quiddity of substance, of quantity, of quality, or another category). The second definition, on the contrary, is restricted to attributes like fatherhood and sonship, that cannot exist but as relatives.

[§3.3] (158.15 – 159.6). Now: given the case of one and the same name applied to a more generic and a more specific notion, it is not unlikely that the more generic term be used to define the more specific one. For instance in the definition of possible **P<sub>n</sub>**, which is definable by means of possible **P<sub>i</sub>** in the following terms:

**P<sub>n</sub>** is what has the possibility-**P<sub>i</sub>** of being and the possibility-**P<sub>i</sub>** of not-being.

---

$\acute{o}\rho\iota\sigma\mu\acute{\omega}$ , 130.30) Aristotle included relative things because they are sensible and more easily knowable; it is unclear, however, whether he claims that with regard to the first or the second definition. Elias/David, *In Cat.* 217.4 ff.

<sup>532</sup> Simpl. *In Cat.* 202.5-8; 203.2-4. On Achaicus, see MORAUX 1984, pp. 217-220.

The same holds true of the second definition of relatives: if relative in the more generic sense is what has its quiddity spoken of with respect to something else ( $\mathbf{R}_q$ ), Aristotle defines relative in its more specific sense ( $\mathbf{R}_e$ ) as follows:

$\mathbf{R}_e$  is that thing which only exists as being  $\mathbf{R}_q$

where a certain kind of existence is a condition that specifies the generic attribute  $\mathbf{R}_q$ . Since  $\mathbf{R}_q$  and  $\mathbf{R}_e$  are different things, then, and “relative” is said of both by homonymy, the second definition is not circular.

The history of the names “possible” and “necessary” reported in par. [§3.2] will be resumed completely in *Ilāhiyyāt* I.5, where Avicenna will contend – inconsistently with what is held in the *Maqūlāt* – that this way of defining them “may almost entail a circle” (*qad yakādu yaqtaḍī dawran*)<sup>533</sup> or is even “evidently circular” (*dawr zāhir*)<sup>534</sup>.

Eventually, Avicenna explains from a theoretical point of view in what sense relatives  $\mathbf{R}_e$  are specific with respect to relatives  $\mathbf{R}_q$ . The notion  $\mathbf{R}_q$  is specified according to the so-called “condition of abstraction” (*ṣarḥ al-taḡrīd*), i.e. a condition that makes the natures of things susceptible of being conceived of as universal notions<sup>535</sup>. This consists of understanding the nature of  $\mathbf{R}_q$  not as a nature in itself, devoid of all attributes, of which it is possible to predicate neither A nor  $\neg A$ , but rather as a nature with a certain generic character, which can be specified by means of a positive and a negative determination<sup>536</sup>. Therefore, a certain positive determination (“existing exclusively as”) may work as a sort of *differentia specifica* and produce a quasi-species ( $\mathbf{R}_e$ ); on the contrary, the negation of that very determination (“not existing exclusively as”) may produce another quasi-species that is not contemplated here, i.e. “relatives that do not exclusively exist as being  $\mathbf{R}_q$ ”.

[§4] (159.7-11). The second definition of relatives solves the puzzle concerning secondary substances, since a head is not completely relative in respect of both quiddity and existence, but only in a certain respect: its being-relative is an accidental attribute, whereas its proper quiddity is that of a substance. This definition also helps clarify that other beings are not in themselves relatives: knowledge, for it exists in itself as a quality of the soul; double and half, for they are either forms in the soul, numbers or quantities, and a relation is attached to them accidentally.

[§5] (159.12 – 160.18). Avicenna discusses two further related doubts about the second definition of relatives; these doubts are centred around the notion of “thing” (*ṣay*).

[§5.1] (159.12-18). (1) The first doubt explicitly recalls a discussion carried out by Avicenna in chapter II.4, as he denied the possibility of positing such composite notions as “white thing” as independent categories. In the light of this tenet, argues the opponent, we may find it puzzling that there exists a category for “relative”, which is nothing but “a thing having relation” (*ṣay’ dū idāfa*). (2) Moreover, if the relative according to the second definition is also “a thing having relation”, how is it possible to distinguish it from a relative according to the first definition? This doubt must be interpreted in the light of Avicenna’s

<sup>533</sup> *Ilāhiyyāt* I.5, 35.5.

<sup>534</sup> *Ilāhiyyāt* I.5, 36.2. For the whole discussion of possible and necessary in this passage, see 35.5 – 36.3.

<sup>535</sup> Cf. the discussion above at I.5 [§1.2.1].

<sup>536</sup> Cf. *Ilāhiyyāt* V.1, 197.2 (MARMURA 2005, p. 149): “If we are asked about horseness [in connection with] the two terms of what is contradictory (for example, ‘Is horseness A, or is it not A?’) the answer would only be negation for whatever thing there is [...]” (*Fa-in su’ilanā ‘an al-farasiyya li-ṭarafay al-naqīd, maṭalan: hal al-farasiyya alif am laysa bi-alif? lam yakun al-ḡawāb illā l-salb li-ayy ṣay’ kāna*).

distinction between “existence” and “thing”<sup>537</sup>. If the main difference between the first and the second definition of relatives lies in the fact that the first one concerns the quiddity whereas the second concerns existence, how is it that the quiddity plays a significant role in the second as well?

**[§5.2] (159.19 – 160.18).** Avicenna’s reply focuses for the most part on doubt (2), and apparently leaves doubt (1) unsolved. He firstly says that “thingness” (*al-šay’iyya*) is undoubtedly something that accompanies both sorts of relatives, according to the first and according to the second definition<sup>538</sup>. However, what marks a difference between the first and the second sort of relatives is the fact that their thingness is specified by different kinds of “proper existence”, i.e. essence<sup>539</sup>: the thingness of the second kind of relatives is exclusively specified as relative, whereas the thingness of the first kind of relatives is specified as another category (a substance, a quality, a quantity, etc.). The thingness of what is relative in itself is always relation: the thingness of the thing having relation, in this latter case, requires to be specified by some thing other than relation. Ultimately, it is possible to say that the difference between the first and the second relatives lies in the fact that their thingnesses are specified by different kinds of existence, not in the fact that the first relatives only have a relative thingness and the second ones a relative existence<sup>540</sup>.

**[§6] (160.18 – 163.10).** After formulating the second definition, Aristotle presents a property of attributes that are relative in this sense: “if someone knows any relative definitely he will also know definitely that in relation to which it is spoken of” (ἐκ δὲ τούτων δῆλόν ἐστιν ὅτι ἐάν τις εἰδῆ τι ὀρισμένως τῶν πρὸς τι, κάκεινο πρὸς ὃ λέγεται ὀρισμένως εἴσεται)<sup>541</sup>. This means that, when we know about something that it is relative, we immediately know about its counterpart definitely: i.e., when we know about a certain quantity (e.g. 4) that it is double, we understand immediately what it is double of (2). Aristotle distinguishes between the *definite* and the *indefinite* knowledge of relatives: by definite knowledge he means knowing a certain relative as related to another definite thing, not as abstractly related to something else<sup>542</sup>.

**[§6.1] (160.18 – 161.2).** Avicenna seems to paraphrase Aristotle’s statement about the definite knowledge of relatives in non-gnoseologic terms: when one of the two correlative “is determined” (*huṣṣila*) in a certain way, the other becomes “determined” (*muḥaṣṣalan*) because of it. However, the subsequent discussion makes some sense only if we understand *ḥaṣṣala*, *taḥṣīl* and so forth as meaning “knowing determinately” (the idea of “acquisition” is already implicit in the non-technical meaning of the word *taḥṣīl*).

The example that Avicenna proposes here partially contradicts Aristotle’s claim: if we say “double” indefinitely we conceive immediately of its counterpart, “half”, indefinitely, and if we speak of a determinate double (4) we figure out immediately a determinate half (2). The explanation of this fact is found in the follow-up of the discussion.

**[§6.2-3] (161.3 – 162.7).** Before taking up the notion of “determination of the relative” (*taḥṣīl al-muḍāf*), Avicenna makes a general premise concerning the way of existence of relations. Since relations do not have “separate”, singular existence, but are necessarily attached to something, specifying them means specifying the way they are attached to their subjects. Now, there are two possible ways of making this: (1) either by specifying the

<sup>537</sup> As is known, the distinction is expounded by Avicenna in *Ilāhiyyāt* I.5, 30.3 – 32.5 (MARMURA 1984).

<sup>538</sup> On the concept of “thingness” see WISNOVSKY 2000.

<sup>539</sup> On “proper existence” as a synonym for “quiddity” see *Ilāhiyyāt* I.5, 31.7-9.

<sup>540</sup> For a reading of this passage cf. ZGHAL 2006, pp. 238-247.

<sup>541</sup> Arist. *Cat.* 8 a36-37.

<sup>542</sup> This is D. Sedley’s interpretation, to which I adhere. Sedley has dubbed this Aristotelian rule “principle of cognitive symmetry” (SEADLEY 2002, pp. 327-328).

relative by means of another category, so as to say: qualitative relative, quantitative relative, substantial relative, etc; (2) or by specifying the relative and the kind of attachment in itself, as a single accident of the thing to which relation is attached. A similar distinction between different possible specifications of relatives is also found in the beginning of *Ilāhiyyāt* III.10<sup>543</sup>. Be as it may, it is now clear that the determination of relatives necessarily occurs with respect to their subjects. It is for this reason that the determination of double/half does not concern double and half in themselves, but rather the subject of doubleness and halfness.

**[§6.4] (162.7 – 163.3).** It seems that the subject of relations does not necessarily determine them in all respects. This happens, for instance, in the case of false relations like “being-head” (*ra’siyya*): the part of the body that has “being-head” as an accidental attribute may be determined as being “this particular substance”, but this does not determine its being-head, for inasmuch as that part of a body is a substance it is not relative to anything. If we know by sense-perception that head is a substance, and we do not perceive its being in a certain respect relative (as a “head-of”), then neither our perception nor our intellect are able to represent the correlative “headed”. On the contrary, in the case of actual relatives the determinate knowledge of one member of the couple always brings the determinate knowledge of the correlative.

**[§6.5] (163.3-10).** The subject of actual relations may not only come to specify (*yunawwi*) them, but also to individualise (*yuṣahḥiṣu*) them, in a sense. It does so not when it attaches a specific attribute to the definition of relation (as a quality, a quantity or a substance do), but rather when it attaches an extrinsic accident to it: for instance, when we come to know a just man as the father of his son, the son of a just man. This sort of attribute is not a constitutive component of relations, as other attributes are: for if we deprive the relative notion of equivalence (*al-musāwāt*) of its reference to quantity we destroy it, we cannot conceive of it as of equivalence anymore.

**[§7] (163.11 – 164.5).** As for the individuals of the category, every relative thing has its own individual relative attribute: as there exist many individual fatherhoods, which are different in Zayd (with respect to the individual sonship of his son ‘Amr) and in Ḥusayn (with respect to the individual sonship of his son ‘Alī), so two close things are characterised by different individual proximities. Therefore, it is not true that an individual relation exists at the same time in both correlatives, but correlatives always have individual relative attributes. It is not necessary, on the other hand, that the relation be one by species: this is certainly true in the case of proximity, but not in the case of fatherhood and sonship (that Avicenna classifies as two relatives that differ in species).

---

<sup>543</sup> For an analysis of this passage see ZGHAL 2006 pp. 259-260. At pp. 262-263, Zghal also provides the translation and discussion of a parallel passage of *Ġadal* V.3, which proves very useful for understanding this obscure distinction (*Ġadal* V.3, 263.10 – 264.11). See also CAMINADA 2017, p. 90 ff.

## V.1

### ON NOTIFYING QUALITY AND ITS FIRST SUBDIVISIONS

Avicenna's discussion of the category of quality covers the whole fifth treatise and about half of the sixth. In the very first chapter of treatise V, Avicenna deals with the two most common ways of defining or "notifying" (*ta'rīf*) the essence of quality, and presents the reader with five possible divisions of quality into its species: three tentative divisions proposed by Avicenna himself, and two further divisions made by his predecessors.

[§1] There are two customary ways of defining quality: either as what is said as a reply to the question "how is it", or as an attribute that makes things susceptible of being called similar and dissimilar. [§2] The first customary way does not define quality univocally, for what is said in response to the question "how?" may also belong to other categories – such as position, acting, being acted upon and where. [§3] The second customary way of defining quality is not satisfactory either, for in its common usage the word "similar" may well be applied to other categories. [§4] We may define quality by means of "how" and similarity only if we posit a further condition that specifies it, and distinguishes it from other things that share the same characters. The "how?" and similarity proper of quality refer to how a thing is qualified in itself, without the qualification depending on any external cause or being somehow relative to something else. [§5] Eventually, Avicenna defines quality as a stable accidental configuration that can be conceptualized in itself, without reference to anything else. [§6] Avicenna presents three tentative – though imperfect – divisions of quality into its first species (i.e. states and habits, capacities, affections and figures), right before [§7] presenting two divisions proposed by two anonymous predecessors of his, which will be refuted in the following chapter.

[§1] (167.6-8). The first of the two ways of defining quality listed by Avicenna corresponds to Aristotle's description: in the first line of *Cat.* 8, quality (ποιότης) is defined as "that in virtue of which things are said to be qualified somehow" (καθ' ἣν ποιοί τινες λέγονται), translated by Ishāq into Arabic as "that in virtue of which it is said, of individuals, how they are" (*tilka llatī bi-hā yuqālu fī l-aṣḥāṣi kayfa hiya*)<sup>544</sup>. The second description is not found in the *Categories*, but clearly derives from the fact that being called similar and dissimilar is the only property that Aristotle ascribes to qualities alone<sup>545</sup>: in the case of supreme genera, that cannot be known by means of a real definition, an exclusive property of theirs may be used to notify their essence<sup>546</sup>.

[§2] (167.9 – 168.17). Avicenna criticises the first definition not on account of its being incorrect or inadequate, but rather of its being too large: it is also inclusive of beings that certainly belong to other categories.

[§2.1] (167.9 – 168.5). In this curious linguistic *excursus*, Avicenna reviews the most common uses of the question "*kayfa*?" ("How?") in both Arabic and Persian, his mother tongue. In ordinary language, answers to the question "how?" may refer not only to items that belong to the category of quality (red, virtuous, triangular) but also to items found in the categories of position (standing/sitting), acting (walking, eating), being acted upon (blushing) and even the category of where (on the bed). All of these determinations are "qualities", for a common speaker, so as for him any attribute (*ṣifa*) is a "state" (*ḥāl*), a word that in the context of the *Categories* bears a specific technical meaning (i.e., a particular kind of quality,

---

<sup>544</sup> Arist. *Cat.* 8 b25; *Mantiq Aristū* 8.2.

<sup>545</sup> Arist. *Cat.* 11 a15-19; cf. also below, VI.3 [§4].

<sup>546</sup> See above, III.3 [§1.2] and the note *ad loc.*

corresponding to Aristotle's διάθεσις). There emerges here, once again, Avicenna's attack on Aristotle's adoption of common language as a starting point for the deduction of categories.

[§2.2] (168.6-17). Someone might object that position belongs to two different categories, according to two different considerations: in so far as it may be an answer to "how?" it is a quality, inasmuch as it presents the distinctive essential characters of position it belongs to the category of position. By proposing this objection, Avicenna is evidently mocking those philosophers who recur to inconsistent relativistic arguments of the form "in a certain respect X, in another respect Y" to explain away ontological ambiguities: a typical example of this procedure is the well-known Porphyrian thesis that something may be substance and accident in different respects, refuted above in chapter I.6<sup>547</sup>. To this imaginary objection about quality Avicenna replies that the two aforementioned considerations of position are not independent and mutually incompatible: on the contrary, inasmuch as a position consists of the parts of a body having a certain configuration with regard to one another, it is still possible to ask "how" the body is *with respect to that configuration*. One of the two considerations (being a reply for the question "how?") is rather more general than the other, for it may be said not only of position, but also of items found in other categories. For this reason, the first definition mentioned in par. [§1] is clearly too general to notify the essence of quality univocally.

[§3] (168.18 – 170.8). What Avicenna said about the first definition in the previous paragraph holds true of the second one as well.

[§3.1] (168.18 – 169.4). It is possible to distinguish between a common, ordinary usage of the word "similar" and a technical/specific one. In ordinary usage, this term appears to be possibly referred to items that definitely belong to other categories, e.g. position (way of sitting), being acted upon (combustion of grease) and quantity (length or tallness). At least as far as ordinary usage is concerned, then, also categories other than quality make things susceptible of being said similar and dissimilar, and this description seems to be too large.

[§3.2] (169.5-13). Someone might object that the word "similar" is employed truly and properly for items belonging to quality, and only by metaphor for items that belong to other categories. Avicenna concedes that this might be the case in one of the aforementioned examples, namely length or tallness; as for the others (similar way of sitting, similar combustion) it may be impossible to tell what common speakers use properly or metaphorically, for they may qualify heat (quality) and combustion (being acted upon) as "similar" without being aware of the difference between the proper and metaphorical usage.

[§3.3] (169.13 – 170.8). Those (anonymous) commentators who claim that there exist a metaphorical usage and a proper usage of "similar" are unable to define the latter satisfyingly – which is a serious issue, since the different meanings of homonyms may be particularly different to understand (as the example of the Arabic term *'ayn* proves well)<sup>548</sup>. By saying that the specific sense of "similar" is "concordant with respect to quality" (*al-muwāfiq fī l-kayfiyya*) they ended up providing a circular definition of quality. As a matter of fact, if we apply this criterion to the second definition of quality given in par. [§1] it will assume the following circular form:

Quality is what is called "similar" in the traditional scientific way (*bi-l-qawl al-naqlī*)

=

Quality is what makes things susceptible of being said concordant with respect to quality.

Even by appealing to a more specific sense of "similarity", then, the commentators did not succeed in adopting it as a good criterion to define quality.

---

<sup>547</sup> On Avicenna's refutation of onto-relativists see INTRODUCTION, 3.2.5.

<sup>548</sup> On the homonymy of *'ayn* see also above, I.2 [§3.4].

**[§4] (170.8 – 171.16).** Avicenna does not hold the two descriptions of par. **[§1]** to be completely inappropriate, but rather to be too generic: it is necessary to specify them appropriately in order to define quality. Therefore he proposes, as a “stratagem” (*hīla*), to refine the research by seeking for items that are said in response to a question like “how is something with respect to an attribute it has in itself, without any reference to something else or some extrinsic cause?”. According to the division of categories outlined above in ch. II.5, the accidents that might satisfy this condition are those that Avicenna called “conceptualized in themselves”, namely quantity, quality and position<sup>549</sup>; it is not necessary to examine other categories that, despite representing some sort of qualification, are evidently relative to something else (such as acting and being acted upon, mentioned above in **[§2.1]** and **[§3.1]**). Now: according to Avicenna, neither position nor quantity have this property, and they are only said in response to “how” metaphorically. Position needs, in order to be conceptualized, that its parts be conceptualized, and also that there be a conception of the external directions with respect to which the parts are oriented<sup>550</sup>; quantity, instead, is characterised by the mutual comparability – in terms of equality and inequality – of parts that need to be conceptualized, in order for quantity itself to be conceptualized. It is clear, then, that both categories represent properties that do not qualify something in absolute terms, but provide things with qualifications that are absolute (in a sense), but also intrinsically relational (in another sense).

In the light of this correction, it is well possible to define quality by means of the question “how”: “quality” (*kayfiyya*) derives from “how” (*kayfa*) and “how” is definitely more easily knowable than “quality”, both inasmuch as it is a word and inasmuch as it is a reality, understood as equivalent to “qualified thing” (*al-šay’ al-mukayyaf*)<sup>551</sup>. As a matter of fact, a primitive word is always better known than its derivative terms, for the knowledge of primitives is necessary for forming derivatives: in Arabic, it is the knowledge of a root or a first-form verbal noun (*maṣdar*) that makes it possible to derive, grammatically, all related words. Furthermore, qualified things are knowable immediately by means of sense-perception, whereas qualities need to be known by abstraction.

Since the same correction can be applied to “similar”, it is clear that eventually Avicenna admits both descriptions of quality mentioned in par. **[§1]**, on condition that they are conveniently specified.

**[§5] (171.17 – 172.5).** After clarifying Aristotle’s description Avicenna provides a more rigorous definition of quality, and criticises a definition given by a previous exegete.

**[§5.1] (171.17-19).** The actual definition of quality reprises the characterization made by Avicenna above, when dividing the categories: what properly defines quality is its total logical and ontological independence from external beings, i.e. its capacity of being conceptualized and existing independently of any entity other than its subject<sup>552</sup>. Thus, quality is any “stable configuration” (*hay’a qārra*) that does not make its subject measurable – i.e. is not a quantity – and is not conceptualized with respect to a thing other than the subject it describes<sup>553</sup>. This is not a proper definition, argues Avicenna, for it consists of a positive attribute (“stable configuration”) that is specified by two negative determinations (non-measurable, non-conceptualized with respect to something else).

---

<sup>549</sup> See above, II.5 **[§4.2]**.

<sup>550</sup> As will become clear below (VI.6, **[§1]**) position is not only determined by the intrinsic relations that hold between the parts of substances, but also by the relation that they have with some external landmark.

<sup>551</sup> Cf. Porph. *In Cat.* 128.13-15; Phil. *In Cat.* 139.31 – 140.1.

<sup>552</sup> Cf. above, II.5, **[§4.2.2]**; see also the INTRODUCTION, **3.6.1**.

<sup>553</sup> For other similar Avicennan definitions of quality, insisting on its conceptual autonomy from external beings, see *Hidāya* I.2, 73.3-4 and *Naḡāt* 155.2-4.



**[§5.2] (172.1-5).** Some commentator defined quality as an attribute that produces a “description”, or a “mark” (*rasman*) in substance. Neither the sense, nor the source of this doctrine seem particularly evident; nonetheless, this might be a reference to the idea that a quality may be deemed in a sense a “character” (*χαρακτήρ*) of substances. This is a hypothesis a term that appears, in Simplicius’ commentary, both in the Stoic doctrine of relations and in Boethus of Sidon’s reaction to it<sup>554</sup>. Moreover, in the first treatise *On the Kinds of Being* Plotinus proposed “non-substantial character” (*χαρακτήρ τις ... οὐκ οὐσιώδης*) as a possible – though unsatisfactory – unitary characterization for Aristotle’s category of quality; the idea might have come to Avicenna’s ear again through Simplicius, who mentions it in his commentary<sup>555</sup>. The hypothesis is viable also because *rasm* is attested at least once as an Arabic rendering for *χαρακτήρ*, in Hunayn Ibn Ishāq’s translation of Artemidorus’ *Oneirocritica*<sup>556</sup>.

Avicenna criticises his predecessor for choosing the term *rasm*, which bears in philosophy the standard meaning of “description” (*ὑπογραφή*): either he is employing it metaphorically, and then it is inadequate for a scientific definition, or he is using it in a sense that is distant from all common meanings of the word, and this makes it particularly inappropriate for defining quality in a clear fashion.

**[§6] (172.6 – 173.3).** Aristotle’s category of quality appears to be particularly heterogeneous, for it comprises on the one hand active attributes, like powers, and – on the other hand – affections or simple configurations, such as shapes and figures. Avicenna makes a considerable effort in order to provide a satisfactory division of its primary species, which leads him to propose three alternative hypotheses.

**[§6.1] (172.6-15).** The first division [TABLE 1.1 in the appendix] makes a first distinction between active qualities, capable of producing a qualitative change in something else (heat, darkness, and the like) and inactive qualities. Inactive qualities may be dependent on quantity (shapes) or independent of quantity; independent qualities may belong to bodies inasmuch as they are natural bodies (powers and capacities), or they may belong to the soul of animated beings (states and habits).

**[§6.2] (172.16-18).** The second division [TABLE 1.2 in the appendix] is totally different, and distinguishes firstly between qualities of the soul (states and habits) and qualities that do not depend on the soul; these latter qualities either depend on quantity (shapes and figures) or don’t; those which don’t either consist of an aptitude (*isti’dād*, namely capacities and incapacities) or are actions that have a certain aptitude only by accident (affections and affective qualities).

**[§6.3] (172.19 – 173.3).** The third division [TABLE 1.3 in the appendix] is basically a revision of the first: Avicenna calls it “more correct in method” (*aṣaḥḥ ma’ḥaḍan*) probably because it does not divide by means of the category of quantity. It consists of distinguishing once again between active and inactive qualities; then, of dividing inactive qualities into qualities that depend on bodies and qualities that do not depend on bodies. Qualities that depend on bodies may be attributes of them inasmuch as they are mathematical and measurable (shapes/figures), or inasmuch as they are natural bodies (capacities and incapacities, states and habits). Despite being more correct in method, this division is not exhaustive: qualities such as odd and even are quantitative, but they belong to numbers (not bodies).

<sup>554</sup> Simpl. *In Cat.* 167.2-18. For an analysis of this passage and its context, see M. RASHED 2013, pp. 73-77.

<sup>555</sup> Plot. *Enn.* VI.1 [42], 10.54-55; cf. also Simpl. *In Cat.* 227.24 – 228.3.

<sup>556</sup> Artem. *Oneirocr.* 198.22 = 359.8.

A further independent division of quality, starting from the distinction between qualities attached to quantities and qualities unrelated to quantities, is found in the logical section of the *Kitāb al-Nağāt* [TABLE 1.4 in the appendix]<sup>557</sup>.

[§7] (173.4-19). Thereafter, Avicenna presents two concurring divisions proposed by previous commentators, that he will refute bitterly and integrally in the next chapter.

[§7.1] (173.4-9). The source of the first commonly accepted division (TABLE 2.1 in the appendix) is very likely Simplicius: this Avicennan passage is a close paraphrase, almost a translation fragment, of Simpl. *In Cat.* 228.19-35<sup>558</sup>. A similar division is found in Ibn al-Ṭayyib's *Tafsīr al-maqūlāt*, and attributed to the mysterious commentator Allīnūs<sup>559</sup>. The author of this division very likely is not Simplicius himself, for he also seems to report an objection set forth by Iamblichus against it<sup>560</sup>; the ultimate source could be thus a pre-Iamblichean commentary, maybe Porphyry's *Ad Gedalium*. Avicenna will criticise this division extensively below<sup>561</sup>.

[§7.2] (173.10-19). The source of the second commonly accepted division [TABLE 2.2 in the appendix] is unknown. A similar tentative division of qualities, starting from a distinction between qualities of the body and qualities of the soul, is proposed by Plotinus twice in his treatises *On the Genera of Being*, where he also suggests to classify the qualities of each part of the tripartite soul (rational, irascible, appetitive)<sup>562</sup>. In his commentary, Simplicius reprises Plotinus' divisions and comments extensively upon them<sup>563</sup>: this detailed account might well have been a source for a later Arabic commentator, to which Avicenna is referring here.

The “Plotinian” division shares with Simplicius' division in the fact of distinguishing between “deep” and “superficial” qualities, a distinction that Avicenna will reject *in toto* in

<sup>557</sup> *Nağāt* 155.4 – 156.5.

<sup>558</sup> Simpl. *In Cat.* 228.19-35 (Tr. FLEET 2002, pp. 87-88): “[...] some qualities are natural, some acquired; the natural ones are those which are by nature innate and are always present, while acquired ones are those which are brought in from outside and can be lost. Of these latter, let states and conditions be those which differ by being longer or shorter lasting and harder or easier to get rid of. Of natural qualities, let some be potential, others actual; the former are those because of which we are said to be capable of something, while of the latter some are deeply ingrained, as with affective qualities. And we speak of these in two ways: either the result of causing an affection in the percipient, or the result of the qualities coming to be present as a result of an affection, such as sweetness, heat, whiteness and their kin. For these are qualities, since what possesses them is said to be of a certain quality because of them; but they are affective because they produce an affection in the senses or come to be as a result of an affection: ‘for when you are ashamed, you blush; and when you are frightened, you turn pale’. Superficiality belongs to qualities which are actual, like figure and shape (which is the figure of something ensouled) and colour (not *qua* colour pure and simple, since that has already been presupposed, but in that it completes the shape) and all outline manifestations which are seen on the surface.” (τῶν γὰρ ποιότητων αἰ μὲν εἰσιν φυσικαί, αἰ δὲ ἐπίκτητοι, φυσικαὶ μὲν αἰ κατὰ φύσιν ἐγγινόμεναι καὶ αἰ ἐνοῦσαι, ἐπίκτητοι δὲ αἰ ἔξωθεν ἀποτελούμεναι καὶ δυνάμεναι ἀποβάλλεσθαι· καὶ τούτων μὲν ἔστωσαν αἰ ἔξεις καὶ διαθέσεις τῶ πολυχρονιωτέρῳ τε καὶ ὀλιγοχρονιωτέρῳ καὶ δυσαποβλήτῳ τε καὶ εὐαποβλήτῳ διαφέρουσαι, τῶν δὲ φυσικῶν ποιότητων αἰ μὲν ἔστωσαν κατὰ τὸ δυνάμει, αἰ δὲ κατὰ τὸ ἐνεργείᾳ, αἰ μὲν κατὰ τὸ δυνάμει καθ' ἃς ἐπιτήδειοι πρὸς τι λεγόμεθα, τῶν δὲ κατ'ἐνεργείαν τὸ μὲν διὰ βάθους, ὅπερ κατὰ τὰς παθητικὰς ποιότητας ὑπάρχει, διττῶς καὶ τοῦτο λεγόμενον, ἢ ἀπὸ τοῦ πάθος ἐμποιεῖν τοῖς αἰσθανομένοις ἢ ἀπὸ τοῦ αὐτὰς ἀπὸ πάθους ἐγγίνεσθαι, οἷον γλυκύτης καὶ θερμότης καὶ λευκότης καὶ τὰ τοῦτοις συγγενῆ· ποιότητες γὰρ αὐταί, εἴπερ ποῖα κατὰ ταῦτα λέγεται τὰ ἔχοντα, παθητικαὶ δὲ, ὅτι πάθος ἐμποιοῦσιν ταῖς αἰσθήσεσιν ἢ ἀπὸ τοῦ πάθους ἐγγίνονται· “αἰσχνονθεὶς γὰρ ἐρυθρὸς τις ἐγένετο καὶ φοβηθεὶς ὠχρὸς”· τὸ δὲ ἐπιπολῆς ἐστὶ τῶν κατ' ἐνεργείαν ποιότητων ὡσπερ τὸ σχῆμα καὶ ἡ μορφή, ἣτις ἐστὶν σχῆμα ἐμψύχου, καὶ χρῶμα, οὐ καθὸ χρῶμα ἀπλῶς [ἤδη γὰρ ἐκεῖνο προεἰληπται], ἀλλὰ καθὸ τὴν μορφήν συμπληροῖ, καὶ πᾶσαι αἰ ἐπιπολῆς φαινόμεναι κατὰ περιγραφὴν ἐμφάσει.)

<sup>559</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 306.9-14.

<sup>560</sup> Simpl. *In Cat.* 228.36 – 229.2.

<sup>561</sup> See below, V.2 [§2-3].

<sup>562</sup> Plot. *Enn.* VI.1 [42], 12.2-5 ff.; VI.3 [44], 17.1-3.

<sup>563</sup> Simpl. *In Cat.* 273.8 – 275.9.

chapter V.2 [§3]. It also seems to be more comprehensive than Simplicius', for it also subdivides – apparently – the four primary species of quality.

APPENDIX

1. Avicenna's divisions of quality

TABLE 1.1 (*Maqūlāt* 172.6-15)

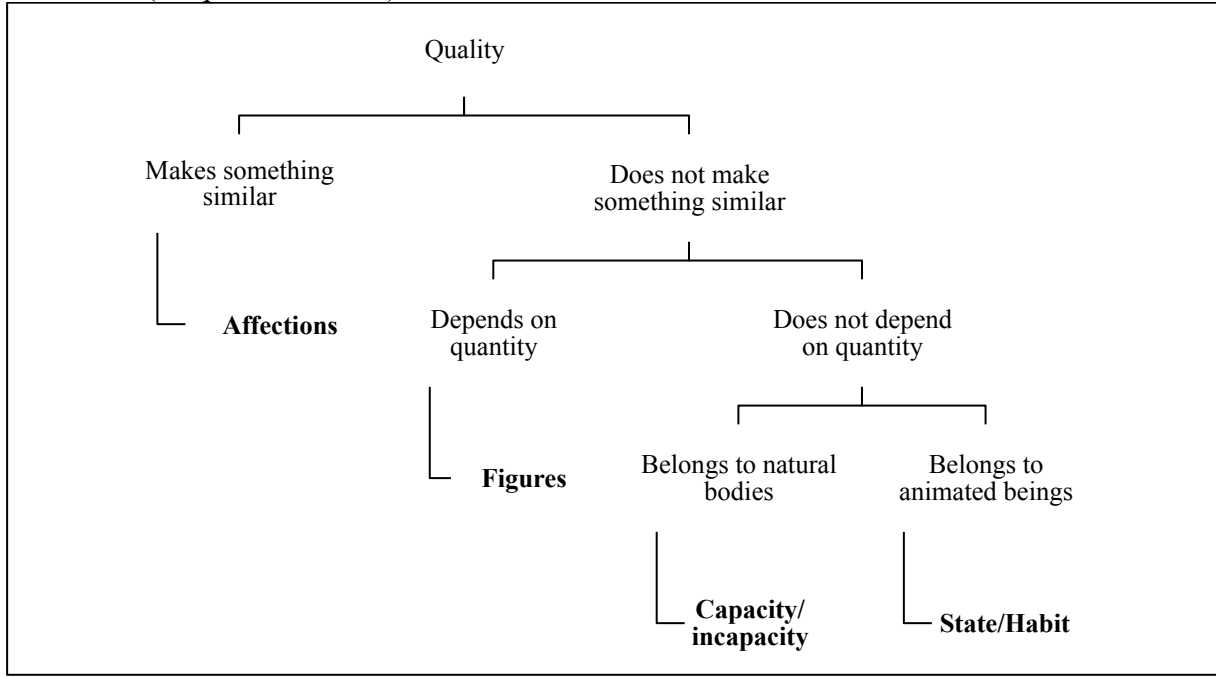


TABLE 1.2 (*Maqūlāt* 172.16-18)

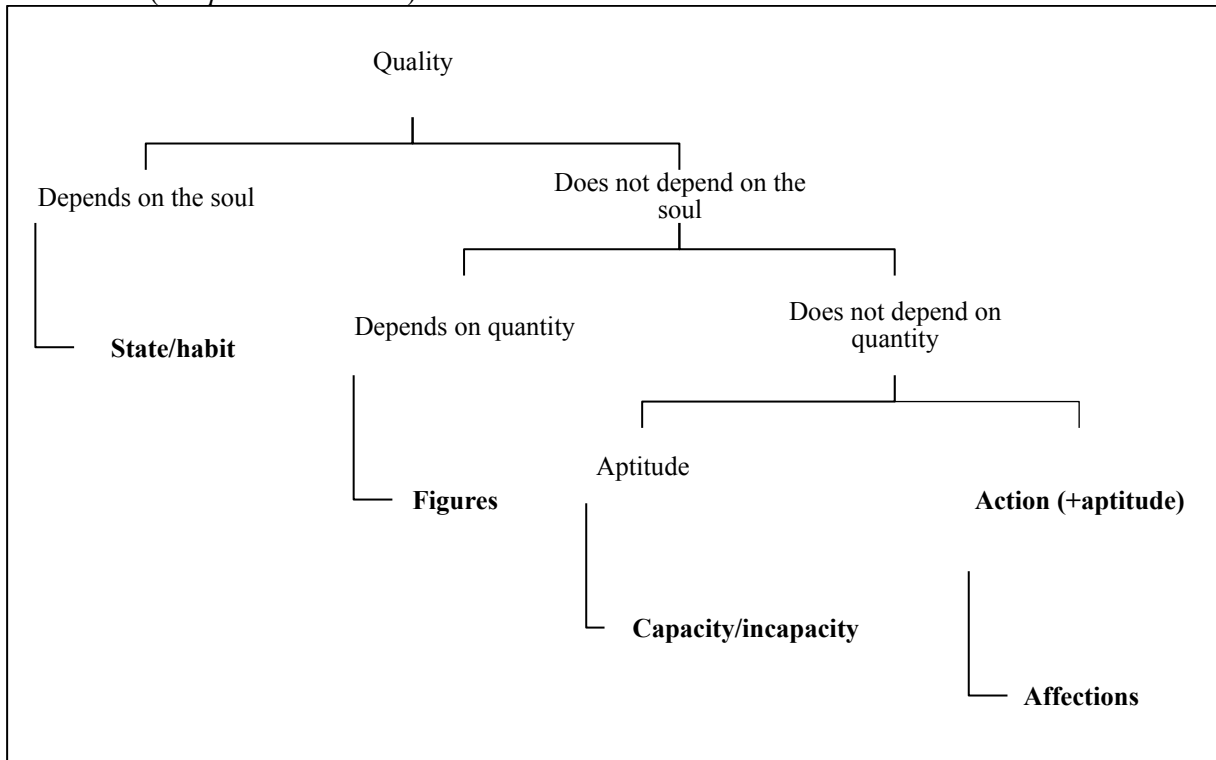


TABLE 1.3 (*Maqūlāt* 172.18 – 173.3)

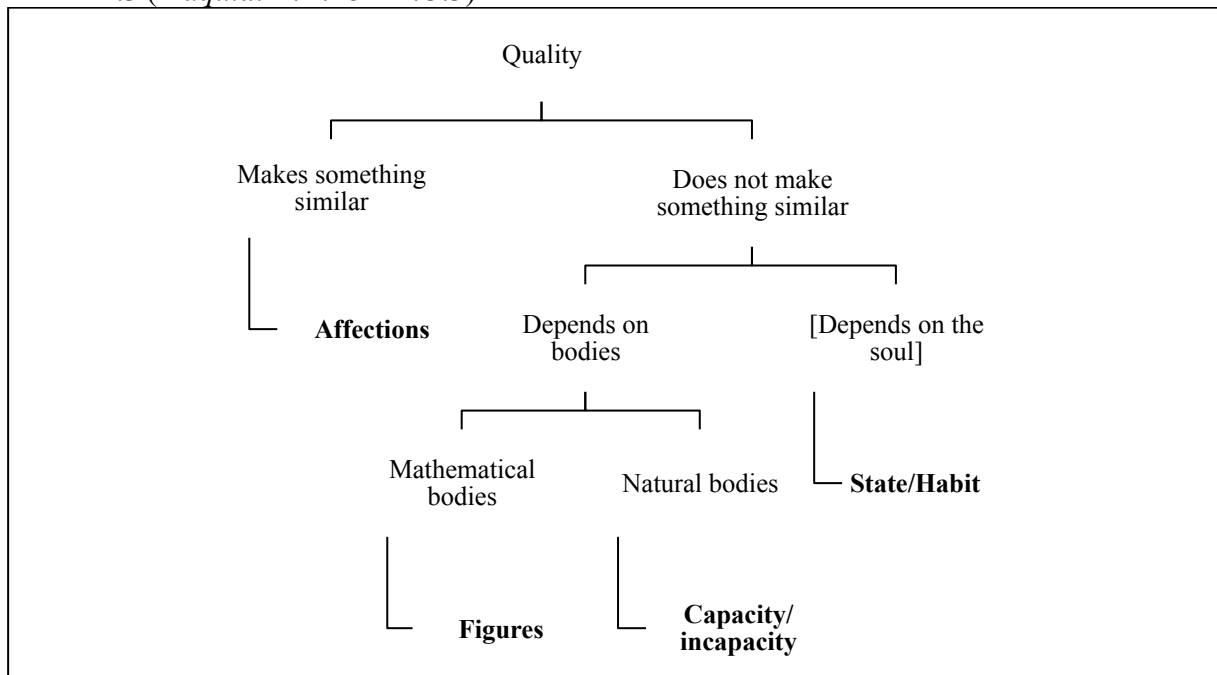
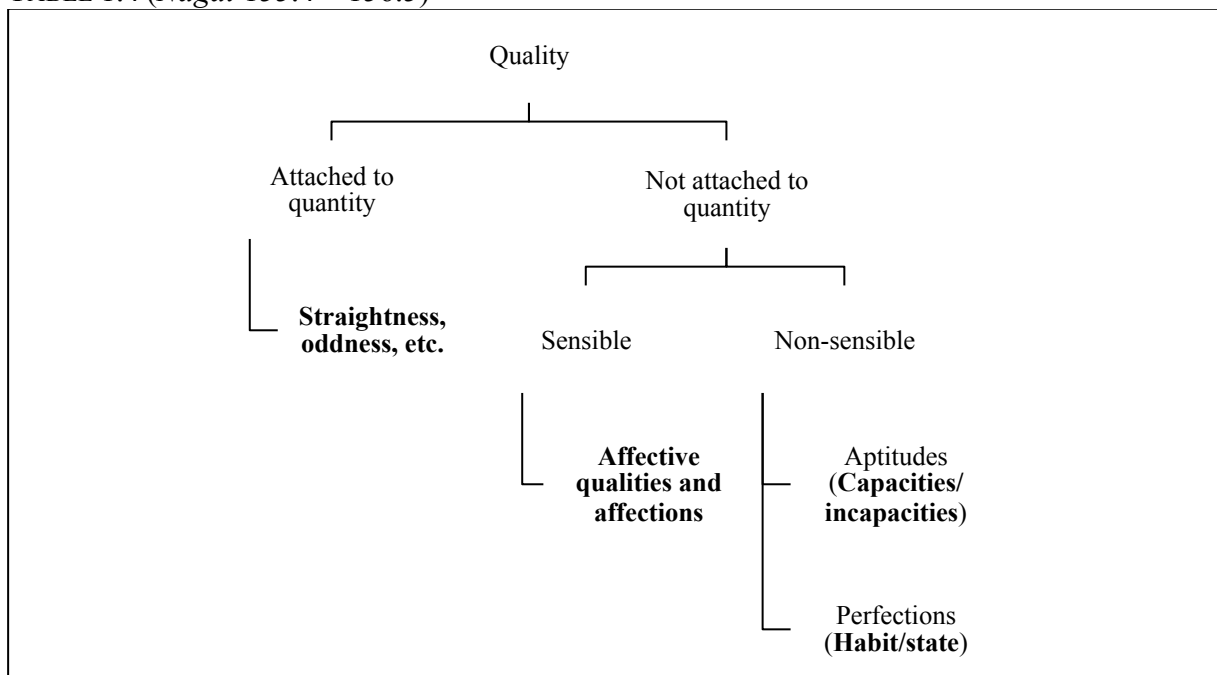


TABLE 1.4 (*Nağāt* 155.4 – 156.5)



## 2. The commonly accepted divisions of quality

TABLE 2.1 (Simpl. *In Cat.* 228.19-35; *Maqūlāt* 173.4-9).

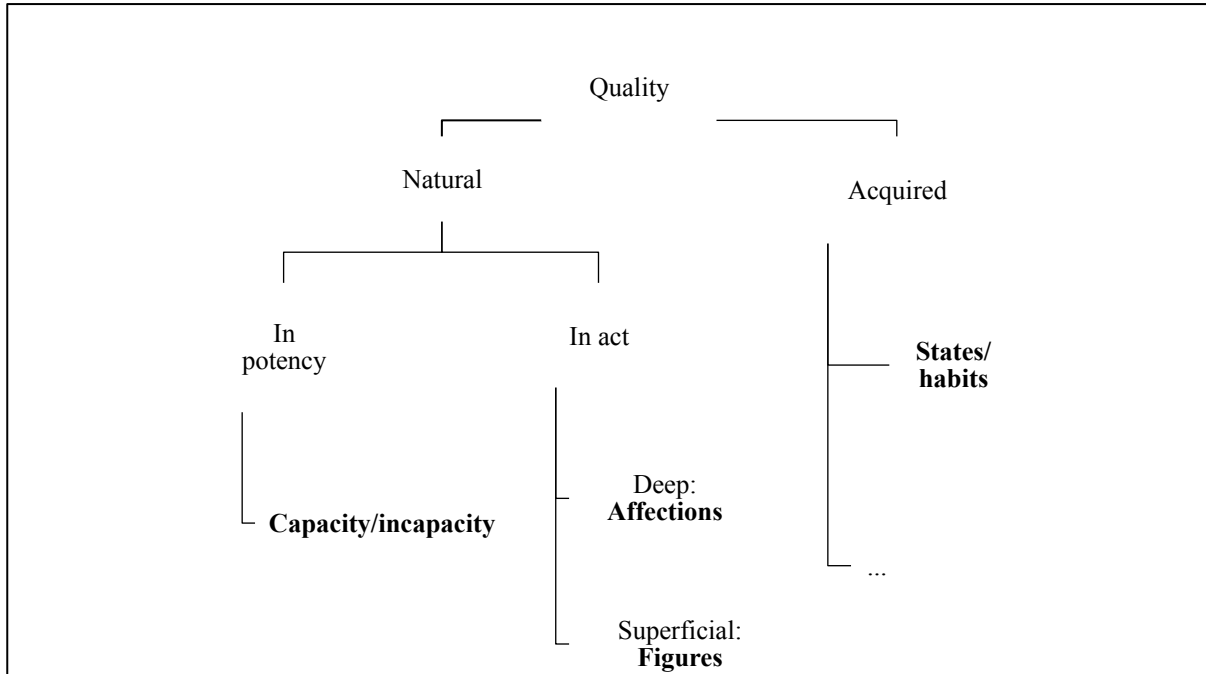
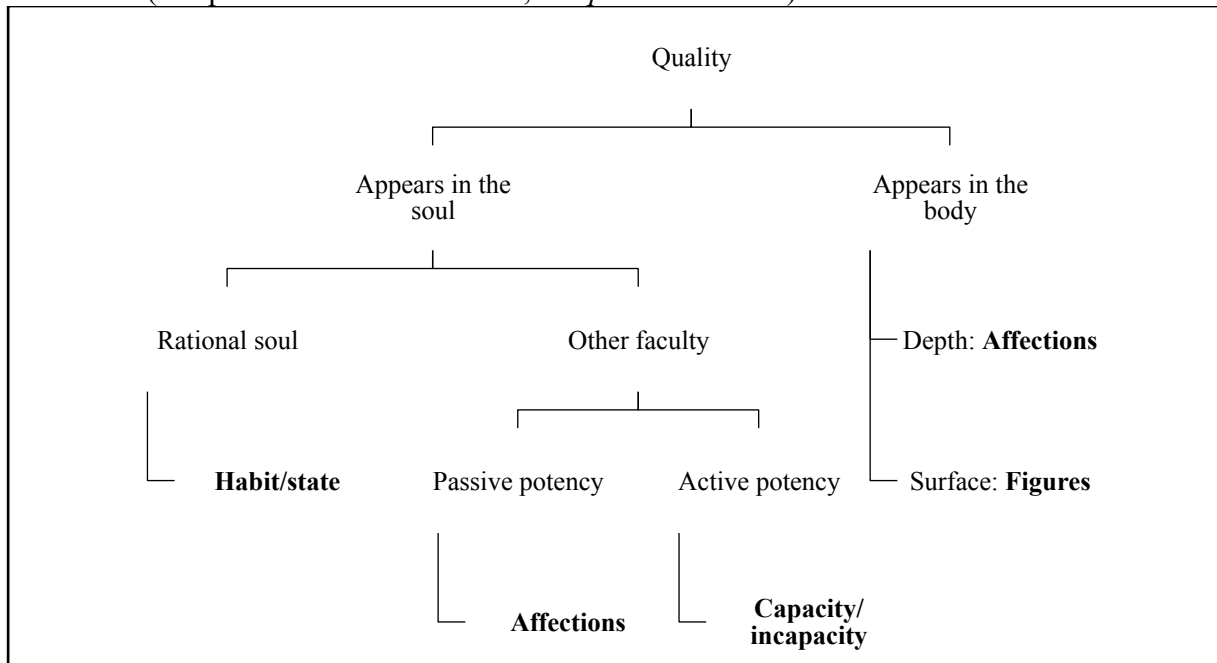


TABLE 2.2 (Simpl. *In Cat.* 273.8 – 275.9; *Maqūlāt* 173.10-19).



## V.2

### ON INVESTIGATING THE WAYS ACCORDING TO WHICH A GROUP OF PEOPLE DIVIDED QUALITY INTO ITS FOUR SPECIES

The second chapter on quality is entirely devoted to refuting the two commonly accepted divisions presented at the end of V.1.

[§1] The aforementioned divisions of quality are sophistical, and need to be thoroughly examined and rejected. [§2] The first division presents a distinction between acquired and natural qualities: this division, besides being incorrect, may apply to all species of quality and determine their undue duplication. Moreover, the distinction between qualities in potency and qualities in actuality is wrong and misleading, if by “potency” the commentator meant “being in potency” (as opposed to “being in actuality”); if on the contrary by “potency” he simply meant “aptitude”, he could have succeeded in dividing qualities properly, but nonetheless he didn’t. [§3] Both divisions postulate a difference between deep and superficial qualities, and qualify shapes and figures as superficial. This is absurd for many reasons: not all mathematical qualities exist on a surface; there exist plane figures and solid figures, and the latter exist in the whole of the bodies. [§4] The second division makes a distinction between qualities that are not found in the rational soul, and qualities that are found therein. Moreover, not all capacities are “active potencies” (ex. sickness) and not all affections are “passive potencies” (ex. heat and coldness).

[§1] (174.4-6). In Avicenna’s view, the two commonly accepted divisions of quality that he expounded in the preceding chapter are sophistical and affected by a number of gross philosophical mistakes. This short introduction has a marked didactic character: Avicenna aims to provide the student with elements that will make him able to judge other commonly accepted divisions.

[§2] (174.7 – 176.15). First of all, Avicenna takes up the Simplician division, presented above in chapter V.1<sup>564</sup>.

[§2.1] (174.7-12). Simplicius presented a distinction between natural and acquired qualities: among acquired qualities he listed states and habits, whereas he called all other qualities “natural”. Avicenna rejects this distinction on account of its being both incorrect and useless. It is incorrect because it entails that natural and acquired qualities differ essentially and specifically, whereas we cannot say that the blackness of a raven is specifically different from the blackness of a painted 8-ball. It is useless because it may bear, as a consequence, an undue multiplication of the species of quality: if we can suppose acquired states and habits, then nothing prevents us from supposing further species such as acquired capacities, acquired affections and acquired shapes. This multiplication of qualities seems also to be implicit in the verbal formulation of the division, for Simplicius alludes to numerous kinds of acquired quality by saying “among these (*fa-minhā*/καὶ τούτων) there are states and habits”<sup>565</sup>. According to Simplicius, also Iamblichus argued – very likely against this division – that other qualities besides those mentioned here can be acquired and not natural, for example figures and colours<sup>566</sup>.

[§2.2] (174.13 – 176.15). Among natural qualities, Simplicius distinguishes qualities in potency (that include capacities and incapacities) from qualities in act (that include affections

---

<sup>564</sup> Although the division is very likely not an original acquisition of Simplicius, as I argued above (V.1 [§7.1]), in the following pages I will refer to Simplicius as if he were its author.

<sup>565</sup> *Simpl. In Cat.* 228.21.

<sup>566</sup> *Simpl. In Cat.* 228.35 – 229.6.

and shapes). It is absurd, argues Avicenna, to posit qualities in potency as a separate species, regardless whether one means by “potency” being in potency, as opposed to being in actuality, or – more in general – a certain aptitude for doing something, as opposed to doing something.

[§2.2.1] (174.13 – 175.11). According to Avicenna’s first hypothesis, the potency mentioned by Simplicius corresponds to being in potency. There are two possibilities here: either certain aptitudes or capacities (for instance the aptitude for wrestling, healthiness and sickliness) are qualities other than the qualities they are apt to (wrestling, health and sickness), or they are those very qualities in potency. In the first case, a paradoxical consequence would result: since what is in potency is not yet existent, there would be only non-existent capacities (non-existent healthiness, non-existent sickliness, etc.). The second case would also give rise to three absurdities: let us say for instance that “healthiness” is equivalent to saying “health in potency”, and health in act belongs to another species of the category. (1) This implies that, when health in potency becomes health in act at a certain time, an accident belonging to a species changes into an accident belonging to another species; but it is impossible that accidents change into other accidents in this manner<sup>567</sup>. (2) Moreover, if health in potency, despite being called “healthiness”, is health all the same, we are confronted with the absurdity of a same attribute belonging to a certain species, inasmuch as it is existent in potency, and belonging to another species inasmuch as it exists in actuality. (3) Like the distinction between natural and acquired qualities, this subdivision would also obtain the effect of multiplying the species of quality, since every quality may exist in potency and in actuality.

[§2.2.2] (175.11 – 176.11). Dividing quality by means of potency is not unfeasible, if by “potency” one means aptitude (*isti dād*) as opposed to action; however, Avicenna tries to show that Simplicius was not able to do it properly. Avicenna objects firstly that also some qualities that Simplicius listed under qualities “in act” seem to have a certain aptitude for something: for instance affective qualities, like heat, coldness and the like, which make their subject apt for making something else hot or cold; or qualities that are apt to being affected (humidity) or not being affected (dryness). However – and this is also implied by Avicenna’s second division of qualities<sup>568</sup> – heat, coldness and in general affections or affective qualities are not characterised by being aptitudes in themselves: their being aptitudes is a necessary concomitant of theirs. According to Simplicius, then, who divides by means of “potency” in a generic sense, we would be forced to include also affections and affective qualities among qualities in potency; but Simplicius does not. In order for his division to be more correct, he should have spoken of aptitudes “in a certain state” (*bi-ḥāl*), namely “the aptitudes of substances in themselves” (*isti dādāt al-ḡawāhir fī dawātihā*): then he would have divided correctly, by including only capacities and incapacities under this description.

[§2.2.3] (176.11-15). Avicenna’s last argument against the potency/act distinction rests upon the fact that potency and act are, in a sense, relative conditions, and they are mostly found together with respect to a single thing. There is thus an evident imbalance in Simplicius’ classification of potential and actual qualities: the qualities that Simplicius posited as qualities in act (states/habits, affections, shapes) are not, all of them, acts of the qualities that he posited as potential (capacities and incapacities); and the qualities he classified as potential are not potencies of all that is in act. As a matter of fact, Aristotle’s species “capacities/incapacities” does not comprise a capacity or aptitude for each of the remaining qualities.

[§3] (176.16 – 179.16). Both the Simplician and the Plotinian division present a distinction between qualities that are deep or superficial with respect to the body: a distinction introduced mainly in order to isolate shapes and figures (superficial) from the remaining

---

<sup>567</sup> The transformation of an accident belonging to a species into an accident belonging to another species is impossible according to Aristotle’s analysis of generation, and his account of the distinction between generation and alteration (Arist. *Gen. Corr.* A 4, 319 b6 – 320 a7). Cf. also *Kawn wa-fasād*

<sup>568</sup> V.1 [§6.2], TABLE 1.2.



qualities. Avicenna dismisses the distinction as artless and misleading, and criticizes the idea that mathematical qualities are “superficial” by means of a long discussion that anticipates some points of his discussion of shapes.

**[§3.1] (176.16 – 177.8).** Avicenna argues firstly that the species of shapes and figures also comprises mathematical qualities that do not exist in bodies: oddness and evenness (existing in numbers), straightness and curvedness (existing in lines), and the like. It was by the same token that in ch. V.1 **[§6.3]**, above, he dismissed one of his own tentative divisions of qualities. However, Avicenna chooses not to insist on this point, since for example straightness and curvedness inhere in bodies inasmuch as they inhere in lines, and lines are found in bodies; the author of the Plotinian division and and Simplicius might well have said “existent in the surface of a body” without distinguishing between primary (direct) and secondary (indirect) existence therein.

**[§3.2] (177.9 – 178.10).** It is absurd to say that shapes exist “in the external part of the body” (*fī zāhiri l-ġismi*), for some shapes (solid shapes) are qualities that exist in the body as a whole. To demonstrate this, Avicenna analyses a shape into its three main components and shows that none of these is a quality that exists in the external part of the body. These components are (1) boundaries (*hudūd*), (2) a thing (i.e. an extension) having boundaries and a certain configuration (*hay’a*), (3) the configuration itself<sup>569</sup>.

(1) Boundaries are not shapes, but extremes (*aṭrāf*): it is absurd to say that they exist *in* the external part of what they are boundaries of, for they constitute that external part themselves. As a line is the external part of the surface, a surface is the external part of a body. Someone might defend the opponents and argue, once again, that by saying “in the external part” they actually meant “the external part”. In Avicenna’s view, such an excuse would be contradicted by the fact that the species opposed to qualities “in the external part” are qualities “in depth”, and by saying “in depth” they certainly did not mean “depth” itself: for it would be obviously absurd to say that affections and affective qualities *are* the internal part of the body. Be as it may, this excuse would be even useless, for even though boundaries are the external part of a body they are quantities, not qualities.

(2) The same holds true of the area delimited by boundaries, which is in itself a surface and – therefore – a quantity.

(3) What is actually a quality is the configuration that results from having boundaries, and this configuration is what is properly called “a figure”. However, not all figures exist on the surface or external part of the body, for there are solid figures (*al-muġassamāt min al-aškāl*) that exist in the body as a whole (e.g. spherical figure).

**[§3.3] (178.10 – 179.7).** Thereafter, Avicenna makes a further digression concerning solid shapes – and the fact that they do not exist in the boundaries of the body, despite depending on them. Avicenna’s example is spherical shape, compared with circular shape: neither the sphere nor the circle exist in the single boundaries that define them (respectively, a surface and a line), for the qualities that these boundaries have in themselves are convexity or curvedness, not sphericity or circularity. Rather, spheres and circles exist in the whole compound formed by extensions and boundaries<sup>570</sup>.

**[§3.4] (179.8-16).** This distinction would be absurd even if the commentators meant, by distinguishing between attributes “in the external part” or “in depth”, that every part (*ġuz’*) in the exterior and the interior of the body is described by those attributes. It would still be incorrect, for shapes that exist in the whole of the body do not exist in every single part thereof. Moreover, many qualities that belong to the group of “deep” qualities are such as to exist in the whole, and not in the parts. It is certainly the case with capacities and incapacities,

<sup>569</sup> Cf. below, VI.1 **[§2-3]** and also the INTRODUCTION, **3.6.3**.

<sup>570</sup> The existence of the circular shape will be proven by Avicenna, against the stances of atomists, at *Ilāhiyyāt* III.9.

for instance the capacity of wrestling and sickliness; for they are both predicated as capacities of man as a whole, not of certain parts of the human body.

**[§4] (179.17 – 180.19).** After discussing deep and superficial qualities, Avicenna turns to the flaws proper to the second division presented in ch. V.1 (**[§7.2]**).

**[§4.1] (179.17 – 180.6).** The first specific point criticised by Avicenna is the commentator's distinction between qualities of the irrational soul that have an active potency (capacities/incapacities) and qualities of the irrational soul that have a passive potency (affections/affective qualities). It is quite clear, according to Avicenna, that neither capacities nor affections may be identified univocally as qualities of the soul, for there are many examples of capacities (hardness and softness) and affective qualities (heat and coldness) that certainly belong to bodies and not to souls.

**[§4.2] (180.7-11).** Moreover, the author of the "Plotinian" division identifies capacities with qualities that have an "active potency" (*quwwa fā'ila*); but there are also capacities that make us apt for being affected, for instance sickliness, or not being affected, for instance healthiness. Avicenna will take up the difference between these sorts of capacities below, in chapter V.3-4; he will also argue that in the species of capacities and incapacities no such thing is comprised as an active capacity, but there are only passive ones<sup>571</sup>.

**[§4.3] (180.11-19).** The same point can be made about affections, of which we cannot say that they are always passive potencies. Heat and coldness are affective qualities, but nonetheless they are active in that they are capable of making something else hot or cold. Moreover, the second division presents affections and affective qualities twice, both as "passive" qualities of the irrational soul and as "deep" qualities of the soul.

---

<sup>571</sup> See below, V.3 **[§2.4]**

### V.3

#### ON NOTIFYING THE ESSENCE OF EVERY TWO SPECIES OF QUALITY, NAMELY STATE AND HABIT AND CAPACITY AND INCAPACITY

In this chapter, Avicenna deals with the first two species of quality discussed by Aristotle: habits and conditions (in Arabic, respectively, “habits” and “states”), capacities and incapacities.

[§1] A habit is a quality of the soul that is firmly established therein, and difficult to remove; a state, on the contrary, is a quality of the soul that is susceptible of passing away easily. States and habits differ neither in species, nor in number, but only with respect to an accidental attribute of theirs (i.e., their duration in time). Among habits we number knowledges and sciences, virtues and vices; among states we number emotions, opinions and temporary beliefs. [§2] “Capacity” as a quality is an aptitude of the body directed somehow towards an external thing; among capacities, we number for instance healthiness, sickliness, being apt for wrestling and for being hit, hardness and softness. Since capacities include aptitudes to acting, aptitudes to being affected and to not being affected, it is not clear in what sense the meaning of the species is applied to them by synonymy. Moreover, it is not clear in what sense the aptitude for wrestling is numbered among capacities: is it an aptitude for not being hit, or an aptitude for hitting someone else? Avicenna analyses the capacity of wrestling in its three main components, and concludes that it is a certain passive aptitude of the limbs of the wrestler, that makes them capable of being moved fluidly.

[§1] (181.5 – 183.11). The first species of quality taken up by Aristotle and Avicenna is habit and condition (ἔξις καὶ διάθεσις), rendered in Arabic by Ishāq respectively as “habit” (*malaka*) and “state” (*hāl*)<sup>572</sup>.

[§1.1] (181.5-19). Avicenna reprises Aristotle’s distinction between habits and states in terms of time and stability: habits (Aristotle’s ἔξις) are more firmly established in the subject and tend to last longer, whereby states (Aristotle’s διάθεσις) are more weakly rooted in the subject and tend to have shorter duration<sup>573</sup>. Since Aristotle presents two distinct notions (habits and conditions) as a single species, some previous commentators apparently comprised one of them (the most specific one, namely “habit”) under the other (the most generic one, namely “state”), in order to unify the species under the single name “state”; this is what Aristotle also seems to do at 9a 10-13, by saying that all states are conditions, but not all conditions are also states<sup>574</sup>. This is incorrect, argues Avicenna, for states and habits are two different aspects of the same unitary nature: they differ neither as species nor as individuals, but with respect to a certain accidental attribute of theirs, which is their duration in time. Avicenna describes the relation between state and habit by means of a comparison that is also found in Simplicius and Ibn al-Ṭayyib: states and habits are not like two different individuals, but rather like a same individual taken with respect to two different times of his life (say, childhood and adulthood)<sup>575</sup>. As a matter of fact, as a child becomes a man a state may well become a habit – if by chance it comes to be more firmly rooted in its subject.

---

<sup>572</sup> Arist. *Cat.* 8 b26 – 9 a13; *Manṭiq Aristū* 8.4.

<sup>573</sup> On Aristotle’s distinction between ἔξις and διάθεσις in the *Categories* see BRAGUE 1980 (esp. pp. 285-292).

<sup>574</sup> Cf. the discussion below, [§1.4].

<sup>575</sup> Cf. *Simpl. In Cat.* 229.12-14 (FLEET 2002, p. 88, slightly modified): “We should not understand habits and conditions as two species distinguished by specific differentiae in the way that man and ox are distinguished, but in the way that the man as a new-born baby differs from the man in his prime” (Τῶν δὲ ἕξων καὶ διαθέσεων οὐχ ὡς δύο εἰδῶν ἀκούειν χρῆ διαφοραῖς εἰδοποιοῖς διωρισμένων, ὡς ἄνθρωπος διώρισταὶ καὶ βοῦς, ἀλλ’ ὡς ὁ ἀρτίτοκος πρὸς τὸν ἀκμάζοντα διενήνοχεν); Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 305.3-14. For a similar argument, that nonetheless does not comprise the example of new-born babies and adults, see Porphy. *In Cat.* 129.6-13.

**[§1.2] (182.1-9).** Among habits (ἔξεις) Aristotle lists sciences and virtues (αἱ τε ἐπιστήμαι καὶ αἱ ἀρεταί), because they appear to be qualities that are particularly difficult to eradicate<sup>576</sup>. Avicenna describes virtues as configurations of the soul (*al-hay'āt al-nafsāniyya*) that make someone easily, almost naturally disposed to acting virtuously (even without previous deliberation), and – vice versa – particularly reluctant to acting viciously. Vices, being contraries of virtues, also belong to this species: they are qualities that make someone's soul particularly inclined to vicious actions, and reluctant to acting virtuously<sup>577</sup>. As for knowledge, it seems especially stable in the soul even when it is not comprehensive or deep (μὴ μεγάλη, as Aristotle says<sup>578</sup>), but it consists for example of a single durable conviction (*ra'y wāhid*).

**[§1.3] (182.10-15).** Among conditions (διαθέσεις) Aristotle lists heat and coldness (θερμότης καὶ κατάψυξις) and health and sickness (νόσος καὶ ὑγίεια), for they are qualities that pass away easily<sup>579</sup>. Now, since Aristotle will posit both couples under other species of quality (respectively, affective qualities and capacities), we must probably understand them here as temporary states of heat and coldness, and temporary states of health and sickness<sup>580</sup>. Avicenna tries to cope with this apparent incoherence: he reprises Aristotle's examples, but specifies that they have been mentioned not because they belong to this species, but merely because they exemplify well qualities that pass away easily. As for heat and coldness, they do not belong to this species at all; as for health and disease, they belong to this species only when they actually pass away easily. The reason why heat and coldness do not belong to this species is clear: they are not qualities of the soul<sup>581</sup>. On the contrary, the reason for health and disease being part of this species is not clear, for Avicenna seems to include them inasmuch as they are temporary conditions, not inasmuch as they are temporary and affect the soul.

Be as it may, Avicenna's classification of habits and states as qualities of the soul requires states to be temporary mental conditions: for this reason, Avicenna lists among states qualities that Aristotle does not mention, such as emotions and temporary opinions or beliefs.

**[§1.4] (182.16 – 183.11).** After presenting examples of habits and dispositions Aristotle insists once again on the fact that habits last longer in the subject, whereas dispositions cease to be more easily; eventually, he argues that “habits are also conditions but conditions are not necessarily habits” (εἰσὶ δὲ αἱ μὲν ἔξεις καὶ διαθέσεις, αἱ δὲ διαθέσεις οὐκ ἐξ ἀνάγκης ἔξεις), for “people in a state are, in virtue of this, also in some condition, but people in a condition are not in every case also in a state” (οἱ μὲν γὰρ ἔξεις ἔχοντες καὶ διάκεινται πῶς κατὰ ταύτας, οἱ δὲ διακείμενοι οὐ πάντως καὶ ἔξιν ἔχουσιν)<sup>582</sup>. This passage has sometimes been read as stating that habits are, to some extent, a sub-species or sub-class of conditions: for example, the issue is tackled extensively by Simplicius, who reports the views of Nicostratus, Iamblichus and Syrianus<sup>583</sup>. Against this possible interpretation, Avicenna proposes two alternative readings:

<sup>576</sup> Arist. *Cat.* 8 b29.

<sup>577</sup> For a similar characterization of moral characters, see *Ilāhiyyāt* IX.7, 429.18-19 (Tr. MARMURA 2005, p. 354, slightly modified): “We say that moral temperament is a habit through which certain acts easily ensue from the soul without prior deliberation” (*fa-naqūlu inna l-ḥalq huwa malaka yaşduru bihā min al-nafs af'āl mā bi-suhūla min ḡayr taqaddum rawiyya*). In Avicenna's Aristotelian ethics, a virtuous habit is a natural tendency to pursuing the golden mean between opposite temperaments, whereas a vicious habit is a natural tendency to pursuing excess or deficiency (Arist. *Eth. Nic.* II.6, 1106 b36 – 1107 a8; *Ilāhiyyāt* IX.7, 429.19 – 430.7).

<sup>578</sup> Arist. *Cat.* 8 b31-32.

<sup>579</sup> Arist. *Cat.* 8 b35-37.

<sup>580</sup> Simpl. *In Cat.* 233.10 – 235.2; Olymp. *In Cat.* 120.33 – 121.13; Cf. also BODEÜS 2001, p. 40 n.2.

<sup>581</sup> Avicenna has above characterized habits and states quite strictly as qualities of the soul: cf. V.1, [§6]; V.2,

[§4.1].

<sup>582</sup> Arist. *Cat.* 9 a10-13 (ACKRILL 1963, p. 25).

<sup>583</sup> Simpl. *In Cat.* 230.28 – 233.9. Cf. also ACKRILL 1963, p. 104.

(1) What the passage actually means is that all acquired habits *have been* previously states, but not all states *have been* previously habits. Habit cannot be a species of state, for – as has been said above, [§1.1] – it does not have its essence specified by a differentia, but it is differentiated by means of an accident (duration in time)<sup>584</sup>.

(2) It is also possible to read this sentence as stating that habits *are* actually states, in the sense that they may be less durable (as states are).

Avicenna has chosen the first reading (1), in agreement with the common “rigorous” interpretation of the difference between state and habit: habits are those qualities of the soul that last longer, whereas states are those qualities of the soul that are less durable.

[§2] (183.12 – 185.14). Aristotle’s second species of quality comprises natural capacity or incapacity (δύναμις, ἀδυναμία), like the capacity of boxing or running and the capacity of being healthy or sick. Each of these capacities must be understood as a certain natural aptitude for doing something, either for doing something with ease or for not being affected easily<sup>585</sup>. Avicenna’s discussion of this species presents interesting aspects of originality, as I have already remarked in the INTRODUCTION<sup>586</sup>.

[§2.1] (183.12-19). The word that translates into Arabic Aristotle’s δύναμις, *quwwa*, is definitely so ambiguous as the Greek original: it may signify either “power” in the sense of physical force, or in the sense of faculty, or “potency” in the sense of possibility, or “potency” in the sense of potential being. In the beginning of *Ilāhiyyāt* IV.2, a chapter relying on book Θ of Aristotle’s *Metaphysics*, Avicenna distinguishes eight senses of the word *quwwa*: four non-philosophical (*mašhūr*) meanings, three philosophical senses and one mathematical meaning<sup>587</sup>. Avicenna tries to determine here the exact meaning of *quwwa* as a species of quality, and distinguishes it from both ontological potency and potency as possibility, although it is related to the latter sense. As a matter of fact, most capacities are possibly directed towards contraries: a man has the capacity of being either healthy or sick, so as a body has the capacity of being either hard or soft. The capacity that is a species of quality is not identical with this basic possibility, but is rather a physical aptitude that makes the subject especially or perfectly apt to attain one of the two contraries, to the detriment of the other: healthiness is a natural capacity of maintaining health to the detriment of sickness, sickness is a natural predisposition to falling ill to the detriment of health.

[§2.2] (183.19 – 184.5). Avicenna presents a first doubt regarding the species of capacity and incapacity, notably the issue of its unitariness. From Aristotle’s examples, we infer that this species comprises an aptitude for being affected (sickness), an aptitude for acting (capacity of boxing) and an aptitude for not being affected (hardness); now, these three distinct aptitudes seem to be hardly synonymous, with respect to the general notion of capacity. A similar doubt is taken up by Simplicius: an anonymous opponent objected that Aristotle seems to have collected together under the same species different things, i.e. the aptitude for acting and the aptitude for being affected: the former better deserves the name “capacity”, but the latter better deserves the name “incapacity”, and capacities and incapacities seem to be heterogeneous<sup>588</sup>. Avicenna does not reply to this doubt, for the time being: he will tackle it again below, in chapter V.4 [§3-5].

---

<sup>584</sup> This is also Ibn al-Ṭayyib’s interpretation: see *Tafsīr al-maqūlāt*, 310.20-22.

<sup>585</sup> Arist. *Cat.* 9 a14-27.

<sup>586</sup> See above INTRODUCTION, 3.6.2.

<sup>587</sup> *Ilāhiyyāt* IV.2, 170.4 – 172.9. Although Aristotle’s main discussion of δύναμις is found in *Metaph.* Θ, see also *Metaph.* Δ 12 (1019 a15 – 1020 a6).

<sup>588</sup> Simpl. *In Cat.* 246.31-36 (Tr. FLEET 2002, p. 106): “For since some capacities consist in acting, others in not easily being affected, the former quite reasonably can remain secure in being capacities, while the latter, since they are considered in terms of affection, should rather be seen as incapacities. So why should we put these very different things under one heading, and count incapacities alongside capacities?” (ἐπεὶ γὰρ εἰσιν αἱ μὲν ἐν τῷ

**[§2.3] (184.5-10).** A further related doubt, very likely formulated by Avicenna himself, concerns the capacity of wrestling: one may wonder whether it belongs to this species of quality inasmuch as it is a capacity of acting (namely, of hitting someone) or a capacity of not being affected (namely, of not being hit). If it does as an aptitude for not being affected, then this species of quality only comprises the passive capacity of being affected or not being affected, which does not pose problems with regard to its unity; however, if it is passive the capacity of wrestling will lose its evident aptitude for producing motion. If on the contrary this capacity is an aptitude for acting, then the doubt formulated above in **[§2.2]** will be confirmed: there will exist in this species an active capacity, besides the other examples of passive capacities.

**[§2.4] (184.11 – 185.9).** Avicenna’s reply to this doubt consists first of all of defining the capacity of wrestling, and then of analysing it into its three main components. According to the definition proposed in par. **[§2.1]**, we have to conceive of this capacity as of the perfect realisation of a certain natural power. The power of moving belongs to the soul, and it is a substantial attribute thereof that does not admit of different degrees of intensity (just as substances don’t)<sup>589</sup>; the capacity of wrestling, on the contrary, is a certain natural perfection of this power that may admit of different intensities, like acumen and intelligence with regard to the rational soul.

In the capacity of wrestling, nonetheless, there are at least three qualitative aspects: (1) a certain skill or knowledge, (2) a certain capacity of moving well and (3) a certain suitability of the body. (1) Knowledge of fighting techniques, being a knowledge is undoubtedly a habit (first species of quality); (2) the capacity of moving well is a sort of virtuous practical habit, directed to attaining the goals of wrestling (first species); (3) the suitability of the body is a certain aptitude of the limbs for being bent and moved easily, and it is the attribute that belongs to the species of capacities and incapacities (being a capacity of being affected).

**[§2.4] (185.10-14).** To sum up, a “capacity” in the sense of the quality is the physical perfection of a natural possibility of being affected or not being affected: Avicenna totally excludes from this species of quality the capacity or incapacity of acting<sup>590</sup>. It is “incapacity” when understood as a deviation from a natural state, “capacity” when it goes along with nature: for instance, we may say that a healthy person has the natural capacity of not-being-affected by diseases and the natural incapacity of being affected by them. This point is better explained in the commentaries of Simplicius and Ibn al-Ṭayyib: even though two opposite aptitudes may be called both “capacity” and “incapacity” in different respects, Aristotle called healthiness a “capacity” because it is more in accordance with nature, and unhealthiness an “incapacity” because it is not a natural condition<sup>591</sup>.

---

ποιῆσαι δυνάμεις, αἱ δὲ ἐν τῷ μὴ ῥαδίως παθεῖν, αὗται μὲν εἰκότως μένουσιν ἐν τῷ δυνάμεις εἶναι, αἱ δὲ κατὰ τὸ πάσχειν θεωροῦμεναι κατὰ ἀδυναμίαν μᾶλλον θεωροῦνται. πῶς οὖν ταῦτα τοσοῦτον ἀλλήλων διαφέροντα εἰς ἓν τάξομεν καὶ τὰς ἀδυναμίας ὁμοῦ ταῖς δυνάμεσι συναριθμήσομεν;).

<sup>589</sup> According to Aristotle and Avicenna, substances do not admit of more and less: see above, III.3 **[§4]**.

<sup>590</sup> Cf. also *Naḡāt* 155.11 – 156.2, where the qualities classified as “aptitudes” (*isti dādāt*) are only said to comprise the capacity of being affected and the capacity of not being affected.

<sup>591</sup> Simpl. *In Cat.* 242.34 – 243.2 (Tr. FLEET 2005, p. 102): “But because that which is not easily affected is more perfect than that which is, and because the healthy is more in accordance with nature than the unhealthy, Aristotle ascribed capacity to the former of each pair, and incapacity to the latter” (ἀλλ’ ἐπειδὴ τὸ δυσπαθὲς τοῦ εὐπαθοῦς τελειότερον καὶ τὸ ὑγιεινὸν τοῦ νοσώδους μᾶλλον κατὰ φύσιν, διὰ τοῦτο δὴ τοῖς μὲν τὴν δύναμιν, τοῖς δὲ τὴν ἀδυναμίαν ἀποδέδωκεν); Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 305.18-22.

## V.4

### ON MENTIONING DOUBTS ABOUT THE SPECIES RELATED TO CAPACITY AND INCAPACITY

The fourth chapter is entirely devoted to doubts that arise concerning the second species of quality, capacities and incapacities.

[§1] Despite the conclusions of the previous chapter, it is necessary to cope with the fact that Aristotle also numbers the capacity of acting among capacities and incapacities. [§2] The first doubt presented by Avicenna concerns the status of heat, that might be thought to belong to this species of quality inasmuch as it is an aptitude for burning easily. Avicenna claims that it is not so. Another puzzle: “easiness”, employed by Aristotle to qualify the capacities of acting and being affected that belong to this species of quality, is a relative notion; for someone may be more easily capable of acting on someone [§3] Starting from Aristotle’s metaphorical application of the term “incapacity” to some positive attributes (e.g. softness), Avicenna attempts to prove that Aristotle also employs “capacity” metaphorically when he applies it to active capacities. [§4] A group of commentators argued that a certain capacity and a certain incapacity may be seen as a single aptitude, considered in two different respects. [§5] It is possible to improvise a common definition for all capacities, but the result is all the same arbitrary. [§6] Whereas capacities and incapacities belong to this second species of quality, their goals or outcomes belong either to the remaining species or quality, or even to other categories.

[§1] (186.4-7). Despite Avicenna’s rejection of active capacities being comprised in this genus, in the *Categories* Aristotle expressly associates δύναμις with the capacity of acting, and he has been followed in doing so by all subsequent commentators (including Fārābī)<sup>592</sup>. Throughout this chapter, Avicenna insists on the necessity of excluding the capacity of acting from this species of quality, and the intrinsic difficulty of finding a common, unitary notion for the capacities of acting and being acted upon<sup>593</sup>.

[§2] (186.8 – 188.3). Firstly, Avicenna expounds a series of puzzles concerning active capacities in general.

[§2.1] (186.8-16). This first difficulty derives from the fact that heat – despite being an affective quality – seems to belong to the species of capacities and incapacities inasmuch as it *is*, in a sense, an aptitude for burning easily. A similar doubt was already tackled by Avicenna above, when refuting Simplicius’ primary division of qualities into qualities in potency and qualities in act. There, Avicenna argued that heat is not an aptitude for burning in its essence, but it is only a substantial capacity of burning that does not fall under any species of quality; if it has a certain aptitude, understood as a physical propensity that facilitates the act of burning, this is rather an accident or a necessary concomitant of its<sup>594</sup>. Besides recalling this solution, Avicenna makes another hypothesis here: it is possible that the aptitude of heat for burning be a consequence of its strength, and that “strength” (*šadda*) be a further accident of heat that belongs to the species of capacities and incapacities. However, this clearly would not imply that heat be in itself a certain aptitude, belonging to the second species of quality: its being an aptitude for burning easily would be rather conferred upon it by an extrinsic attribute that has another nature, not by the addition of another heat. Therefore, even in this case we are not forced to admit that heat is in itself an aptitude for burning easily.

---

<sup>592</sup> Fārābī, *Qāṭāgūryās* 176.26 – 177.1 (DUNLOP 1958).

<sup>593</sup> More in general on this issue, see INTRODUCTION, 3.6.2.

<sup>594</sup> See above, V.2 [§2.2.2].

**[§2.2] (186.17 – 187.13).** The second difficulty descends from Aristotle’s statement that this second species of quality comprises the natural capacity of acting “easily” (ῥαδίως, *bi-suhūla* in Ishāq’s translation)<sup>595</sup>. As a matter of fact, easiness seems to be a relative notion: a certain wrestler may be easily apt for hitting someone, but also better apt for being hit by someone else (depending on his own physical complexion, and the complexion of his adversaries). Therefore, it seems that in every subject there exists a principle for contrary capacities, and one aptitude may be predominant to the detriment of the other with respect to different things. If this is the case, it is unclear whether the two capacities of acting, and the capacity of being acted upon, differ in species or merely with respect to an accident of theirs (i.e., their relative intensity).

**[§2.3] (187.14 – 188.3).** These doubts would probably be redundant if the capacities of acting and of not being acted upon, and their respective privations, were listed as separate species of quality: then it would not be necessary to unify them under a single species. However, they are posited by Aristotle under the same unitary species, which evidently poses the problem of notifying their common essence. Apparently, there is no other way of doing this than saying, as Aristotle does, that this species comprises such and such capacity: for any attempt of providing a non-equivocal common notion would be arbitrary and incorrect. Avicenna will attempt himself to provide a unitary definition below, in par. [§5].

**[§3] (188.4 – 189.14).** Since there is a certain confusion as to what Aristotle qualifies as “capacity” and “incapacity”, Avicenna takes up a few doubts related to the use that Aristotle makes of these terms.

**[§3.1] (188.4-16).** When Aristotle says that softness is an incapacity, notably the incapacity of not being split<sup>596</sup>, it is not clear whether softness is understood as a simple privation, without a positive counterpart (= the capacity of not being split), or it is understood as a positive quality, meaning “capacity of being split easily”. Well, it is convenient that softness and hardness be understood, both of them, as a full and positive aptitudes. If it is so, however, since softness has been qualified as an incapacity despite being a “strongly apt passive capacity” (*quwwa infī ‘āliyya šadīdat al-isti dād*), also hardness can be qualified either as a positive capacity of not being divided, or as a privation – i.e. the privation of the capacity of being divided. It seems that each of the two properties is characterized essentially by the fact of being in itself what it is, and accidentally by the fact of being a privation or negation of the other.

**[§3.2] (188.16 – 189.7).** If it is so, then it is as if Aristotle had called softness an “incapacity” only because it is accidentally accompanied by the fact of being a privation of hardness. Therefore, Avicenna insinuates the doubt that also the word “capacities” (*quwā*) is used somehow metaphorically, most notably in the case of the capacity of acting easily: here, he might have meant – by saying “capacity” – something that accompanies a capacity necessarily. For example, given a certain passive aptitude, for instance the capacity of not being hit easily, it is as if Aristotle had called “capacity” a necessary concomitant thereof, which is the capacity of hitting someone else with ease; or rather, as Avicenna says, it is as if Aristotle had used a concomitant (capacity of hitting with ease) to express the property that truly belongs to this species of quality (capacity of not being hit with ease). The capacity of wrestling, as well as any other “active” capacity that is numbered in this species, should rather be understood as “a property because of which something resists what is acted on it, in such a way that it comes to act on the other easily or not being acted upon by the other easily” (189.5-6: *al-ma nā llaḍī bihī yuqāwimu l-šay’ mā yuf’alu fihi ḥattā yatawaṣṣala bihī ilā an yaf’ala fi l-āḥar bi-suhūla, aw lā yanfa’ilu ‘anhu bi-suhūla*).

<sup>595</sup> Arist. *Cat.* 9 a18; *Mantiq Aristū* 56.8.

<sup>596</sup> Arist. *Cat.* 9 a 25-27.



**[§3.3] (189.8-14).** In the light of the preceding discussion, it is clear that in the *Categories* Aristotle has treated as a simple knowable property (“the aptitude for boxing”) a complex of attributes that consists of a passive capacity (the aptitude for not being hit easily) and an active concomitant of its (the aptitude for hitting someone else easily). Avicenna claims that this depends on the fact that the *Categories* is a treatise for beginners: if Aristotle had made a distinction between the capacity of not being hit and that of hitting, this could maybe have confused the readers. Nonetheless, unfortunately, he ended up baffling all subsequent commentators.

**[§4] (189.15 – 190.7).** Some commentators argued that the capacity of being acted upon and the incapacity of not being acted upon are, in a sense, two ways of conceiving of the same quality: softness is a “capacity” inasmuch as it has the capacity of being acted upon in a certain way, and an “incapacity” inasmuch as it has the incapacity of not being acted upon<sup>597</sup>. Avicenna argues that this may be true, but he also objects that there is a difference between “not being a capacity” (*laysa quwwa*) and being an “incapacity” (*lā-quwwa*), for “not having a capacity” is a neutral privative meaning, whereas the term *lā-quwwa* is more often understood as qualifying an absence of strength, notably a natural weakness (*du’f ṭabī’ī*) or impotence (*‘ağz*)<sup>598</sup>. Therefore, even if what these commentators say is true, Aristotle’s use of the word *lā-quwwa* remains misleading and metaphorical.

**[§5] (190.8-19).** There exists for sure a notion common to “passive” capacities and incapacities: that is, what leads us to identify this as the only essence of the species (see above, V.3 [§2.4]). There could be also, however, a sophisticated way to include the capacity of acting into this species, which might consist of positing the following definition for it: “in the thing there is a principle by virtue of which a certain new thing occurs, insofar as there is a tendency to its occurring” (*fī l-šay’i mabda’un bihī yatimmu ḥudūtu amrin ḥādīṭin ‘alā anna ḥudūtahū mutarağğahun bihī*). If this common notion is adopted, it may embrace both the capacity of acting (as a principle for the advent of something in something else) and its impotence, and both the capacity of being-affected (as a principle for the advent of something in the capable thing itself) and its impotence. However, the other “monstruosities” (*šanā’āt*) and deficiencies remain if there is a way to justify the presence of active capacities: those beings that seem rather to belong to other categories, i.e. substantial forms and potencies that are responsible for certain acts, end up falling again in this species.

**[§6] (190.19 – 191.11).** The “outcomes” or “purposes” (*ğayāt*) of capacities may belong either to other categories (such as the fight/hitting produced by the wrestler, which belongs to the category of position) or to other species of quality (such as sickness, the outcome of sickliness, which belongs to the first species [state/habit]). Since capacities are not aptitudes for acting, but rather passive aptitudes that facilitate certain affections, the outcomes must not be understood as outcomes of the capacities themselves, but rather as outcomes of the affections that those capacities facilitate – or perhaps, in the case of wrestling, as outcomes of the actions that derive from those capacities.

<sup>597</sup> Cf. Phil. In Cat. 144.22-25.

<sup>598</sup> In the beginning of *Ilāhiyyāt* IV.1, Avicenna explains that *‘ağz* (“impotence”) and *du’f* (“weakness”) are the names imposed on the opposite of *quwwa*, when *quwwa* is understood as meaning “physical strength” (*Ilāhiyyāt* IV.1, 170.4-8).

## V.5

### ON AFFECTIVE QUALITIES AND AFFECTIONS

After the long digression on the status of capacities and incapacities, Avicenna turns to consider the third species of quality: affective qualities and affections.

[§1] This third species comprises both affections and affective qualities, which have not been unified under one and same name. This species resembles the first (habits/states), not only because both species do not have a unified name, but also because there is a difference in duration between affective qualities (that last longer in the subject, like habits) and affections (whose duration is shorter, like the duration of states). Affective qualities and affections are either such as to bring about affections in the senses, or such as to be brought about by affections. [§2] Among affective qualities we might comprise further attributes that should belong to other species, but are apparently capable of affecting our senses: roughness and smoothness, wetness and dryness, hardness and softness, heaviness and lightness. As for wetness and dryness and hardness and softness, they belong to the species of capacity and incapacity, but they are not perceived as capacities or aptitudes. Hardness and softness, as has been said, belong to the species of capacities and incapacities. Roughness and smoothness depend on the position of the parts of a surface with respect to one another: for this reason they do not deserve to fall under affective qualities and affections, but rather under the category of position. Nonetheless, if they are perceived they are so mediately, not inasmuch as they are positions but inasmuch as they are accompanied by perceptible qualities. Heaviness and lightness would fall under the species of capacities and incapacities, if this latter species also included active capacities; however, since it does not, they are certainly to be numbered among affective qualities.

[§1] (191.1 – 194.2). Aristotle firstly presents affective qualities and affections (παθητικαὶ ποιότητες καὶ πάθη) by means of a number of examples: sweetness, bitterness, sourness, hotness, coldness, etc. Thereafter, he distinguishes within this genus between qualities that bring about an affection in something else (e.g. sweetness, hotness, coldness) and qualities that are rather brought about by a certain affection (for instance paleness and darkness, or other colourings that certain emotions or diseases may produce on our skin). In the end, he clarifies that these properties deserve the name of “qualities” when they are long-lasting, or at least more difficult to remove; whereas when they are unstable, or temporary, they deserve to be called simply “affections”<sup>599</sup>.

Throughout this chapter, and in the beginning of the following, Avicenna provides a general explanation of affective qualities and affections, before concentrating more closely (from V.6 [§2]) on the order of Aristotle’s text.

[§1.1] (191.1 – 192.3). Avicenna presents this species by comparing it with the species of states and habits, with which it has at least two characters in common: (1) the fact that the species has two names instead of one and (2) the fact that the difference between affective qualities and affections, like the difference between habits and states, lies in their different degrees of stability<sup>600</sup>. Moreover, of these two names one (affective qualities) is said of the species by homonymy, since “affective qualities” may refer either to the species as a whole or to those particular affective qualities that ; the other (affections) is said by metaphor, since “affection” is a notion related to another category, the category of being acted upon.

[§1.2] (192.3-5). Affective qualities are those qualities that either bring about an affection in the senses, or are brought about by an affection.

---

<sup>599</sup> Arist. *Cat.* 9 a28 – b33.

<sup>600</sup> On habits and states see Arist. *Cat.* 8 b26 – 9 a13 (above, V.1 [§1]). Avicenna will also take up the relation between the species of habits and states and affective qualities/affections in the following chapter (V.6 [§4]).

**[§1.3] (192.6-20).** It is important to make a distinction between the “affection” (*infi ‘āl*) that belongs to the category of quality and “affection” understood as motion, or a process of change that results in the existence of a certain quality – i.e. the kind of affection that corresponds to the category of being acted upon<sup>601</sup>. An example of affection-quality is a certain colouring, say yellowness, that lasts for a very short time; an example of affection-motion is becoming yellow, namely the process of qualitative alteration that changes the colour of the skin from white into yellow.

Since in the discussion of habits and states it was argued that being long-lasting or short-lasting are accidents and not actual differentiae, it is not necessary to posit affective qualities and affections as different species<sup>602</sup>. Affections are qualities all the same, but they are denied the name “qualities” because of their limited duration; for this reason, also, they borrow their name from the category that regroups unstable determinations and motions, i.e. the category of being acted upon.

**[§1.4] (193.1 – 194.2).** Even though it is not possible to distinguish between affection and affective qualities specifically, the unitary notion of this species remains fundamentally unclear. Aristotle, in fact, presents us with three pieces of information: this species includes persistent qualities that bring about an affection in the senses, persistent qualities that are brought about by an affection and unstable qualities. None of these three characters represents a proper differentia, with regard to the category of quality. Nonetheless, it is true that all of these qualities seem to have in common (1) the fact of affecting somehow the senses, and two further characters: (2) being able to transfer their own quality into something else and (3) being capable of existing accidentally in bodies. This applies also to beings that appear not to have these qualities as a consequence of a direct affection, like fire (with respect to heat) and honey (with respect to sweetness). As for heat, it always comes about by affection (also in things other than fire); as for honey, we may concede that sweetness is not an affection of honey itself, but an affection of some of its components. Eventually, Avicenna concludes that what these properties have mostly in common is the fact that they come about from affections of a subject.

**[§2] (194.3 – 196.16).** After explaining Aristotle’s lines on affective qualities and affections, Avicenna goes on to discuss the case of some qualities that, despite seemingly belonging to other species, might be considered “affective” inasmuch as they are sensibly perceptible.

**[§2.1] (194.3-7).** The four doubtful couples of qualities are wetness and dryness, hardness and softness, heaviness and lightness, roughness and smoothness. The first two couples, in particular, seem to belong to the second species of quality (hardness and softness being mentioned directly by Aristotle as examples of capacities). The couple roughness/smoothness is discussed by Aristotle himself, along with density and rarity (that Avicenna will take up in the beginning of the following chapter)<sup>603</sup>; the case of heaviness and lightness was introduced by later commentators, as reported by Simplicius<sup>604</sup>.

**[§2.2] (194.8 – 195.16).** As for the couples wetness/dryness and hardness/softness, there are two possibilities: (1) either they are in themselves aptitudes for being palpable or impalpable, and they are perceptible in so far as they are aptitudes; or (2) they have a certain other perceptible essence which is necessarily accompanied by a qualitative determination. In

---

<sup>601</sup> Cf. below, VI.6 [§3].

<sup>602</sup> Cf. above, V.3 [§1.1].

<sup>603</sup> Arist. *Cat.* 10 a16-24; for Avicenna’s discussion of density and rarity see below, V.6 [§1].

<sup>604</sup> Simplicius. *In Cat.* 269.29 – 270.14. Simplicius does not specify who did introduce the problem, which was firstly set forth by “some people” (τινες).

order to ascertain their nature, Avicenna goes on to analyse how such qualities fall under the senses.

(1) If our perception of the hard and the soft were the perception of an aptitude for palpability or non-palpability, since non-palpability (hardness) is a privative meaning we should expect to perceive hardness as a privation: as our perception of darkness (privation of light) consists of an interruption of vision, so our perception of hardness should be an interruption of touch. However it is not so, since we rather perceive hardness positively, as a present resistance, whereas we perceive softness as an absence of resistance. This does not mean that softness is in itself a privation: we may also appreciate the palpability of soft bodies visually, for being palpable means being capable of moving according to a certain configuration (e.g. being deformed in a certain manner by the contact of a fingertip). The same considerations apply to being easily shaped, another character associated with softness.

(2) Once it has become clear that an aptitude is not perceptible as an aptitude, the second option remains: these qualities have a perceptible aspect, which in the case of wetness and dryness falls under the species of affective qualities and affections, and a non-perceptible, intelligible aspect, which consists of their being aptitudes.

[§2.3] (195.16 – 196.7). At *Cat.* 10 a19-20 Aristotle only says that roughness and smoothness (as well as rarity and density) are not qualities, since they reveal somehow “a certain position of the parts” (θέσιν [...] τινα [...] τῶν μορίων); however, he does not explain precisely to what category they belong. The options of later commentators are mainly three: either roughness and smoothness belong to the category of relatives, for Aristotle has called position a relative in the beginning of chapter 7, or they belong to the category of position, or – despite Aristotle’s claim – they are qualities. That they belong to relatives is contended for instance by Porphyry<sup>605</sup>. In his Paraphrase of the *Categories*, Fārābī argues that inasmuch as roughness and smoothness consist of parts having certain reciprocal positions, they belong to the category of position; but inasmuch as they are equivalent to certain shapes, they also seem to belong to quality<sup>606</sup>. According to Abū l-Farağ Ibn al-Ṭayyib, roughness and smoothness (as well as rarity and density) are both positions and qualities, but they are worthier of being called qualities than positions<sup>607</sup>.

Avicenna’s position on the issue is clear-cut: since roughness and smoothness are determined by the disposition of the parts of a surface with respect to one another, they deserve to fall in the category of position. If they are perceptible for us they are such only mediately, i.e. in so far as they are accompanied by certain perceptible qualities. Affections and affective qualities, instead, are perceptible immediately as they are: we perceive sweetness, bitterness and colours as qualities without intermediaries.

[§2.4] (196.7-16). Heaviness and lightness were already taken into account before, in the discussion of quantity: there, we learnt that they are not quantities, as some predecessor thought, but qualities<sup>608</sup>. They cannot be capacities or incapacities, for – as has been shown – the second species of quality does not include active capacities: if it did, then lightness (inasmuch as it is associated with heat) could be posited as an active capacity, and heaviness as its privation. On the contrary, it is clear that heaviness and lightness are brought about by affections, i.e. by termic changes: when a body becomes hot it tends to be light and move upwards, when it is cold it tends to be heavier and to moving downwards. They fully deserve,

---

<sup>605</sup> Porph. *In Cat.* 134.17-19.

<sup>606</sup> He does not opt decidedly for either alternative (cf. Fārābī, *Qāṭāgūryās* 178.12-23, DUNLOP 1957). “Smoothness” may be thought of as equivalent to a shape if it is imagined as a sphere with a smooth surface, or a circle with a regular circumference. “Roughness” may be thought of as equivalent to a shape, argues Fārābī, if it is thought of as a sphere with a rough surface, or a circular figure with a broken circumference: in that case, the whole rough object can also be seen as a complex polygon or polyhedron, with multiple angles (*ivi*, 178.17-23).

<sup>607</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 320.30 – 321.14 (see esp. 321.12-14).

<sup>608</sup> Cf. above, III.4 [§7].

therefore, to be classified among qualities as affective qualities (when long-lasting) and affections (when weak and temporary)<sup>609</sup>.

---

<sup>609</sup> Avicenna's interpretation resembles the first of the three possible solutions presented by Simplicius in his commentary. Cf. *Simpl. In Cat.* 270.3-7 (Tr. FLEET 2002 pp. 130-131, slightly modified): "This will become clear if it is appreciated just what heaviness and lightness themselves are. For if warmth which causes bodies to expand makes what is light like itself, and if cold which causes bodies to contract makes what is heavy like itself, these too will be put under affective qualities" (τοῦτο δὲ ἔσται σαφές, ἐὰν περὶ αὐτῆς τῆς βαρύτητος καὶ κουφότητος γνωσθῇ τίνες εἰσὶν. καὶ γὰρ εἰ μὲν ἢ θερμότης ἀναπλοῦσα τὰ σώματα ποιεῖ ταῦτόν ἑαυτῇ τὸ κοῦφον καὶ ἢ ψυχρότης συνάγουσα ποιεῖ ταῦτόν ἑαυτῇ τὸ βαρὺ, εἰς τὰς παθητικὰς καὶ ταῦτα ποιότητος ἀναχθήσεται).

## V.6 ON SOLVING THE REMAINING DOUBTS

Although the title refers to “doubts” (*šukūk*), this chapter is not exactly an aporetic section; in the first part Avicenna concludes the general explanation of the species “affective qualities/affections” that he began in chapter V.5, whereas in the second part he provides the reader with a paraphrastic exposition of Aristotle’s text.

[§1] One may wonder whether density and rarity belong to the species of affective qualities or not. Since density and rarity may be spoken of in three senses, according to one of these senses they belong to the category of position, according to the second sense they belong to quality, and according to the third they belong to the category of relatives. [§2] Then, Avicenna moves to commenting on Aristotle’s text, following the arrangement of topics of *Cat.* 8 9 a28 – 10 a10. Affective qualities in general are those qualities that are characterized by the fact of affecting the senses. Some affective qualities (e.g. colours) are the products of affections, or the outcomes of certain mixtures or temperaments (e.g. the redness of someone who blushes by shame, or the yellowness of someone who is frightened). [§3] It is not true that affections (i.e. short-lasting affective qualities) cannot be said in response to the question “how?” – as some commentator said – for the question “how?” can also be used as referring to a temporary condition of the respondent. [§4] Eventually, Avicenna focuses on Aristotle’s claim that even the qualities of the soul (which have been previously characterized as “habits and states”) may be called “affective qualities and affections”. He firstly examines the way that these two species of quality are homonymous, and secondly he argues that – given their strong analogy with “states” – the “affections” that fall under the third species of quality are undoubtedly qualities, although Aristotle seems to deny that.

[§1] (197.4 – 198.5). After having focused on roughness and smoothness in the preceding chapter<sup>610</sup>, Avicenna takes up separately the case of density and rarity (*al-taḥalḥul wa-l-takāṭuf*). At 10 a16-24, Aristotle argues that rare and dense (τὸ [...] μανὸν καὶ τὸ πυκνόν, “open-textured” and “close-textured” in Ackrill’s translation<sup>611</sup>) do not belong to quality, since rarity and density depend – like roughness and smoothness – on the mutual positions held by the parts of rare and dense bodies. As is proven by Simplicius’ account of the debate, Aristotle’s view was much disputed by previous commentators<sup>612</sup>; as a matter of fact, it seems to justify in a sense the existence of void, which however Aristotle himself denies, in the *Physics*, precisely against the idea that rarity attests to the presence of void within a thing’s material consistency<sup>613</sup>. The commentators attempted, therefore, to reconduct rarity and density to quality either on account of their being exclusively qualities, or of their belonging in some sense to more categories (either quality, or position, or relatives)<sup>614</sup>. Just as he does with roughness and smoothness, Ibn al-Ṭayyib also claims that density and rarity are worthier of being qualities than of being positions<sup>615</sup>. Avicenna’s reply to this doubt is not dissimilar: at first he presents a distinction between the main senses in which density and rarity are

---

<sup>610</sup> Cf. above, V.5 [§2.3].

<sup>611</sup> ACKRILL 1963, p. 27.

<sup>612</sup> Simpl. *In Cat.* 267.18 – 269.28.

<sup>613</sup> Arist. *Phys.* Δ 9, 216 b22 – 217 a21.

<sup>614</sup> For instance, Philoponus makes a distinction between “physical” density and rarity (i.e., those dealt with by Aristotle in the *Physics*), which alternates on a single subject and is undoubtedly a quality, and another density/rarity belonging to many bodies (e.g. the teeth) which is the one belonging to the category of position (Phil. *In Cat.* 154.22-28).

<sup>615</sup> Ibn al-Ṭayyib, *Tafsīr al-maḥūlāt* 320.30 – 321.14 (see esp. 321.12-14).

spoken of, and then he states that only one of these meanings properly belongs to the category of position.

[§1.1] (197.4-13). According to Avicenna, a body may be said “dense” or “rare” in three senses: either **(a)** with respect to the position of its parts, or **(b)** with respect to its consistency, or **(c)** with respect to its volume. **(a)** The parts of a rare body (e.g. fluffy wool) are more distant from one another than the parts of a dense body (e.g. compact wool); **(b)** a dense body (e.g. ice) may be thicker and more difficult to cut or shape than a rarefied body (e.g. water or steam); **(c)** a dense body (e.g. water) occupies less space than a rarefied body (e.g. air), since it has a smaller volume<sup>616</sup>. The examples of air, water and fire remind us that senses **(b)** and **(c)** are not at all the same thing: fire has a bigger volume with respect to air, but is also more consistent than it because of its extreme dryness. In his Epitome of the *Categories*, Fārābī provides a classification of the meanings of rarity and density that comprises Avicenna’s senses **(a)** and **(b)**<sup>617</sup>.

[§1.2] (197.14 – 198.5). According to sense **(a)**, density and rarity belong to the category of position: as a matter of fact, they represent different spatial configurations of the parts of a body. According to sense **(b)**, density and rarity belong to quality: Avicenna does not say the species, but it is evident that they are closer to the species of hardness and softness (capacities/incapacities) than to the species of affective qualities. Eventually, according to sense **(c)** density and rarity belong to “quantity associated with relation or relation associated with quantity” (*al-kammu l-muqārinu li-l-iḍāfati aw al-iḍāfatu l-muqārinatu li-l-kammi*), which means that inasmuch as they have a measurable volume they are quantities, inasmuch as they are comparable attributes of the type big/small they are relative. We must not believe that Avicenna is arguing for “dense” and “rare” belonging to different categories in different respects, which would be an onto-relativist mistake; **(a)**, **(b)** and **(c)** presumably identify different notions, to which the names “dense” and “rare” are applied by pure homonymy.

Avicenna makes here no explicit or implicit reference to the related issue of void; however, as he will clarify in the *Samā‘ tabī‘ī* the positional rarefaction of bodies is not associated with void, but with the size or “volume” (*huḡm*) of their parts – which seems to make sense **(a)** close to sense **(c)**<sup>618</sup>.

[§2] (198.6 – 199.15). After the case of density and rarity, Avicenna interrupts the general “explanation” (*ṣarḥ*) of the third species of quality that he started in the previous chapter. In paragraphs [§2-4] he will follow more closely the order of Aristotle’s text (“let us run parallel [...] to the arrangement of the first teaching”, *wa-l-nuḥāḍi [...] nazm al-ta‘līm al-awwal*), to the end of explaining away conclusively its ambiguities.

Affective qualities are firmly grounded in their subject, like the sweetness of honey and the blackness of a raven. These qualities do not exist in the subject because they affect it, but they are basically called “affective” because they affect in a way either the senses absolutely, or the senses “and some other thing” (*wa-ḡayruḥā*). The fact of affecting the senses or something else is what characterizes them primarily, independently of how they come to be established in their subjects.

Besides this, there are some affective qualities that have a “privileged relation” (*maziyya nisba*) with affection, in the sense that they are brought forth by affections that involve the four elementary qualities. Such derivative qualities are for instance blackness and whiteness, or other colours that depend on certain mixtures or temperaments, occurring for instance

---

<sup>616</sup> For a similar distinction of the senses of density and rarity see *Kawn wa-fasād* 9, 150.12 – 151.1.

<sup>617</sup> Cf. Fārābī, *Qāṭiḡūryās* 178.24 – 179.8 (DUNLOP 1958).

<sup>618</sup> *Samā‘ tabī‘ī* II.8, 135.4-6. More in general on Avicenna’s arguments against void, see LAMMER 2018, pp. 392 – 427.

before birth<sup>619</sup>: as Avicenna argues, one may become instantly red out of shame and instantly pale out of fear, but he may also have a natural red or yellow colouring that is established “in the principle of generation and filiation” (*fī aṣl al-kawn wa-l-wilāda*). In other cases, these qualities may be produced after birth and become more or less concomitant: Aristotle’s examples for this typology comprise the pallor or darkness that result from long illness or sunburn, and “do not easily give way” (μη ῥαδίως ἀποκαθίστανται)<sup>620</sup>. As for those conditions that occur “because of [something] ceasing to be” (*li-l-zawāli*), they are not to be called qualities but only affections; although Avicenna does not make any examples, he might be referring to the case – presented by Aristotle – of properties resulting “from things that quickly subside” (ἀπὸ ταχὺ καθισταμένων), e.g. the intense anger that may derive from a temporary state of suffering<sup>621</sup>. However, this case will be dealt with in more detail below, in par. [§4] (esp. [§4.2-3]).

[§3] (198.19 – 199.15). The difference between affective qualities and affections may make us suppose that only the former are said in response to the question “how?”; for apparently, if someone is asked “how he is” he will tendentially answer by mentioning his natural complexion, rather than a temporary affection of his. This is what was argued by an anonymous previous commentator, on account of the fact that affective qualities are effectively called “qualities”, whereas affections are not. However, Avicenna replies that it is not so: in response to the question “how?” one may answer by mentioning both a temporary state of his and his personal, stable complexion; and this can happen even in the case where the question “how?” is conveniently specified (“how are you absolutely [i.e. not temporarily]?”).

[§4] (199.16 – 201.10). Next comes Aristotle’s claim that it is possible to speak of “affective qualities and affections” also with regard to the qualities of the soul, which Avicenna previously reconducted exclusively to the species of habits and states<sup>622</sup>. This poses a problem with respect to the relation between the first and the third species of quality, which Avicenna explores here in detail.

[§4.1] (199.16 – 200.8). It is possible to make a comparison between the first and the third species of quality, since habits may be called affective qualities and states may be called affections. What makes these two sorts of qualities comparable is basically their resemblance in terms of duration<sup>623</sup>, but they also seem to be associated in causal terms: according to Avicenna’s examples, many “temporary” affections (e.g. yellowness) are related with emotional or pathological states (fear, hepatic disease, etc.) that result from affections of primary qualities. Given this resemblance, there are two possibilities:

- (1) habits and states are called “affections” by homonymy;
- (2) “affective qualities and affections” is a species of quality that comprises both the first and the third species: this species would then regroup in general stable and long-lasting attributes (affective qualities) and ephemeral states (affections). In this case, the species corresponding to Aristotle’s “affections and affective qualities” would have no name; if it were called as it is called by Aristotle, then it would also be said of states and habits (by homonymy).

<sup>619</sup> Arist. *Cat.* 9 b9-16.

<sup>620</sup> Arist. *Cat.* 9 b25-26.

<sup>621</sup> Arist. *Cat.* 10 a6-10.

<sup>622</sup> Arist. *Cat.* 9 b33-35 (tr. ACKRILL 1963, p. 27): “Similarly with regard to the soul also we speak of affective qualities and affections” (ὁμοίως δὲ τούτοις καὶ κατὰ τὴν ψυχὴν παθητικαὶ ποιότητες καὶ πάθη λέγεται). For habits and states as qualities of the soul, see above V.1 [§6]; V.3 [§1.1].

<sup>623</sup> I.e. as states are temporary, non-durable properties and habits are more firmly rooted in their subjects (see above V.3 [§1]), so affections are ephemeral and affective qualities are stable.



**[§4.2] (200.9 – 201.2).** This example is designed to explain in concrete terms the complicated situations of homonymy and synonymy presented in par. **[§4.1]**.

If we take a person qualified by an item belonging to the species habits/states, i.e. anger, independently of its being produced or not by a certain affection, and we say that he has an affective quality, then there are two possibilities: his anger either is called “affective quality” by homonymy, or is called an “affective quality” because “affective quality” is a general character of habits and states.

Someone who becomes angry temporarily, by virtue of a ceasing cause (*bi-sabab zā'il*), does not have an affective quality; for if affective qualities are habits, but temporary anger is a state, then it is homonymous; if a more general notion is meant, then “affective quality” is said by synonymy. However, “affective qualities and affections” is said of the third genus of quality by homonymy, in two respects: it is said of both the more general and the more specific meaning, which are both predicated of the specific meaning and exist therein. A parallel example is that of a black man called Aswad because of his being black: this man is called “black” by homonymy in two respects, i.e. with respect to his name and with respect to his being black<sup>624</sup>.

**[§4.3] (201.3-10).** Aristotle’s claim that temporary conditions of anger must be deemed “affections but not qualities” (πάθη μὲν [...] ποιότητες δὲ οὐ) is metaphorical<sup>625</sup>. There is no reason to doubt about this once it has been clarified that the name “affection” may be said of a state, which is a short-lasting quality; and that it is not customary to speak of someone that has a fit of rage as of someone that has “the quality of rage”.

---

<sup>624</sup> This case was also mentioned above at I.2 **[§4]**; see the COMMENTARY *ad loc.*

<sup>625</sup> Arist. *Cat.* 10 a9-10.

## VI.1

### ON MENTIONING THE SPECIES OF THE FOURTH GENUS OF QUALITY

The sixth treatise of *Maqūlāt* is devoted in part to the treatment of quality (VI.1-4), in part to the six minor categories (VI.5-6). Chapter VI.1 is closely related to the chapter that follows immediately: it contains the first part of a discussion organised in six “enquiries” or bullet-points, concerning the fourth species of quality (“quantitative” qualities).

[§1] The fourth species of quality comprises three kinds of attributes: figures (triangle, square, cube, etc.), non-figures (straightness and curvedness, concavity and convexity, etc.) and the sum of figure and non-figure (what Aristotle calls “external form”). [§2] Aristotle’s mention of another possible kind of quality does not refer, as the previous commentators said, to a further species of the category, but rather to a further sub-species of the fourth species that Aristotle left aside in the *Categories* on account of its difficulty (i.e., the qualities of numbers). [§3] The fourth species of quality raises six specific problems, which it is necessary to deal with here. [§4] The first problem concerns the essence of this species, i.e. the nature common to all of its sub-species. This species comprises qualities that belong to substances inasmuch as they belong, firstly, to a quantity. This also holds true, despite the appearances, of the so-called “shape” or “external form”: this attribute consists, as a matter of fact, of two things whose first substrate is indeed quantity (for instance a figure and a colour, applied to a certain surface). [§5] The second problem is the definition of figure. A figure in qualitative terms is not the figure of geometers, which has a measurable, quantitative aspect: a qualitative figure is an abstract configuration of extensions, the squareness that exists in a certain squared extension. [§6] The third problem is the following: does figure belong to the category of position, or not? Provided that it is difficult to find the right definition and categorial collocation of complex ontological items, it is quite certain that figures are not positions. This can be ascertained by recalling the different specific meanings of the word “position”.

[§1] (205.6-13). Within the fourth species of quality, Aristotle numbers three different kinds of items: figure (σχῆμα), the “external form of each thing” (ἡ περὶ ἕκαστον ὑπάρχουσα μορφή), and such qualities of figures as straightness and curvedness (εὐθύτης καὶ καμπυλότης)<sup>626</sup>. Avicenna interprets these three kinds of quantitative qualities as figure (*al-šakl*), what is not a figure (*mā laysa bi-šakl*), and what results from the union of figure and non-figure (*mā huwa ḥāṣil min šakl wa-ğayr šakl*).

The commonly accepted definition of figure mentioned here by Avicenna, “what is enclosed by one or more boundaries” (*mā aḥāta bihī ḥadd aw ḥudūd*), is nothing but Euclid’s definition, which he will criticize extensively in par. [§5]<sup>627</sup>.

As for non-figure, it is any other kind of quantitative quality that is not a figure, such as straightness and curvedness, concavity and convexity and their kin.

A sum of figure and non-figure, eventually, is Aristotle’s μορφή, rendered by Ishāq as *ḥulqa*<sup>628</sup>: following the previous exegetical tradition, Avicenna interprets it as a figure perceived visually on the surface of a body, alongside another characteristic quality (for instance, a certain colour)<sup>629</sup>.

---

<sup>626</sup> Arist. *Cat.* 10 a11-16.

<sup>627</sup> Eucl. *El.* I, def. 14.1 (Tr. HEATH 1908, p. 154): “A figure is that which is contained by any boundary or boundaries” (Σχῆμά ἐστι τὸ ὑπὸ τινος ἢ τινῶν ὁρῶν περιεχόμενον). The definition is reprised by Avicenna himself in *Handasa* I, 17.9.

<sup>628</sup> *Mantiq Aristū* 58.12.

<sup>629</sup> See for instance Fārābī *Qāṭāğūryās* 178.11 (DUNLOP 1958). As for modern exegetes cf. ACKRILL 1963, p. 107 (“the configurations of physical objects”), later reprised by OEHLER 1984, p. 262 (“die Gestalt physischer Gegenstände”).

[§2] (205.14 – 207.2). Aristotle concludes his discussion of the four species of quality by saying, vaguely, that it would be maybe possible to mention a further “manner” or “type of quality” (τρόπος ποιότητος)<sup>630</sup>. Recent commentators tend not to attach particular importance to this remark: whereas Ackrill and Oehler do not even comment on it, Bodéüs seems to read it as a mere acknowledgement – on Aristotle’s part – of the non-exhaustive character of his discussion of quality in the *Categories*<sup>631</sup>. On the contrary, this was often interpreted in the Greek and Arabic exegetical tradition as a precise allusion to a further species of quality, and that is also how Avicenna reads it.

[§2.1] (205.14 – 206.8). Avicenna cites two erroneous interpretations proposed by his predecessors, the first of which clearly stems from a Platonic reading of the *Categories*.

According to this first interpretation, Aristotle would be alluding to entities that are dealt with in metaphysics, like intelligible beings: either absolute, abstract qualities like “the presumed ideas” (*al-muṭul al-maznūna*), or mathematical beings (*al-ta’līmāt*)<sup>632</sup>. Avicenna claims that such beings are only called “qualities” by homonymy, and for this reason it is not necessary to posit them as a further species of quality.

According to the second interpretation, reminiscent of the one that Simplicius ascribes to Andronicus of Rhodes, the further species alluded to by Aristotle would be heaviness and lightness<sup>633</sup>. This is absurd mainly for two reasons, in Avicenna’s view: firstly, because the commentators who hold this have already comprised heaviness and lightness under another species of quality, either under capacities and incapacities or under affective qualities and affections<sup>634</sup>; secondly, because they all presented in the first place a division of quality into four species, and the remark that a further species of quality exists is inconsistent with that preliminary division.

[§2.2] (206.9 – 207.2). According to Avicenna, Aristotle is not alluding here to a further species of quality, but to a further sub-species of the fourth species. This would be clear first of all for a matter of textual coherence: right above Aristotle has spoken of the fourth species, not of the genus as a whole.

Secondly, it is true that quantitative quality has a further sub-species, which Aristotle has left out of the *Categories*: “the properties of the configurations of numbers” (*ḥawāṣṣ hay’āt al-‘adad*), most notably oddness and evenness, squareness and cubeness, and the like. These properties are not taken into account in the beginning of logic, for they are highly difficult and technical notions that deserve to be dealt with in other sciences (most notably in metaphysics)<sup>635</sup>. Avicenna has already alluded to these properties above, as he divided qualities in chapter V.1 [§6].

[§3] (207.3-8). Aristotle says practically nothing about this fourth species; nonetheless, it

<sup>630</sup> Arist. *Cat.* 10 a25-26.

<sup>631</sup> BODÉÜS 2001, pp. 137-138.

<sup>632</sup> The source of this remark is uncertain. With regard to this passage, Porphyry and Simplicius only hint at the metaphysical relevance of the further species of quality by arguing that its discussion is to be carried out in the *Metaphysics*, although they do not clarify what it is (Porph. *In Cat.* 134.25-26; Simpl. *In Cat.* 264.1-4). As for the other commentators, they either say that there is no such thing as another species of quality, and by this statement Aristotle only means to keep the reader attentive and willing to pursue the research on this topic (Phil. *In Cat.* 156.8-13, Olymp. *In Cat.* 126.25-30), or they identify the further species with “substantial” qualities, like forms and differentiae (Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 331.27-31).

<sup>633</sup> According to Simplicius, however, the further species posited by Andronicus would also comprise rarity and density, thinness and thickness (Simpl. *In Cat.* 263.19-26). See MORAUX 1973, p. 110.

<sup>634</sup> See the previous discussion of heaviness and lightness in V.5 [§2.4], where Avicenna claims that they belong to the species of affective qualities/affections.

<sup>635</sup> In the chapter of the *Ilāhiyyāt* devoted to quantitative qualities (III.9) Avicenna will only take geometrical qualities into account.

raises a number of obvious puzzles, ranging from the problem why figures are not quantities, despite being measurable and comparable objects, to the issue of the categorial status of complex geometric objects (e.g. angles), to the ambiguous status of the notion of “external form”. Avicenna will tackle the first three problems in this chapter, the three remaining ones in ch. VI.2.

**[§4] (207.9 – 208.17).** The first problem concerns the nature common to all kinds of quantitative quality<sup>636</sup>. After proposing a common definition, Avicenna discusses the ambiguous case of Aristotle’s “external form” (μορφή/*hulqa*), to which this definition seems difficult to apply.

**[§4.1] (207.9-14).** According to Avicenna, all qualities belonging to the fourth species are “quantitative”, in the sense that they *exist primarily* in quantities (numbers or extensions) that, in turn, may exist in substances<sup>637</sup>. There are of course other qualities associated with quantity, for instance strength and weakness (*al-quwwa wa-l-duʿf*), which are physical aptitudes associated – say – with a certain size of the limbs<sup>638</sup>. However, these qualities are capacities and aptitudes, and these aptitudes do not belong to quantities in first place: for in this case it is not the mathematical body that has a certain capacity, but the substantial subject of both accidents<sup>639</sup>. Therefore, these kinds of aptitudes exist primarily in substance, despite being somehow related – all the same – with quantitative determinations.

**[§4.2] (207.15 – 208.17).** The notion of “external form” (*hulqa*), as characterised above (i.e. a figure as it is perceived in a natural body, along with other qualities), seems to pose some problems with respect to this general description of the fourth species of quality. As a matter of fact, this sort of attribute appears to inhere primarily in a substance (i.e., the coloured body), rather than in some quantity.

In order to defend the attribution of “external form” to this species, Avicenna makes a distinction between quantitative qualities that inhere in a quantity on condition that this is the quantity of something else, and quantitative qualities that inhere in some quantity without that condition. Even if the external form is a quantitative quality in the first sense, this does not prevent it from inhering primarily in a quantity: rather, it is composed of two distinct items (a figure and a non-figure) that exist primarily in an extension, i.e. the surface of the body.

**[§5] (209.1 – 210.2).** The second problem regards the definition of “figure”, that the commentators customarily define – following Euclid – as “that which is enclosed by one or more boundaries”<sup>640</sup>. The problem also concerns, more in general, Aristotle’s claim that geometrical figures belong to the category of quality, rather than quantity: a claim that, for instance, led J. L. Ackrill to argue that Aristotle does not mean here by “figures” figures in themselves, but rather “properties of geometrical lines and surfaces”<sup>641</sup>.

**[§5.1] (209.1-7).** Euclid’s definition is appropriate for geometers, who measure, calculate and compare the extension of figures; still, it is inappropriate in ontological terms. What is designed by saying “that which is enclosed by one or more boundaries” is a measurable extension, i.e. a quantity; this certainly suits well the subject-matter of the science of

---

<sup>636</sup> The issue is also tackled by Simplicius (*In Cat.* 272.7 – 273.4), who provides a lengthy ontological explanation centered around the concept of “termination” (περιγραφή).

<sup>637</sup> Cf. also, above, the characterization of this species that Avicenna gave when dividing quality (ch. V.1 [§6]).

<sup>638</sup> I.e. *quwwa* in the sense of capacity/incapacity, belonging to the second Aristotelian species of quality: see above chs. V.3 [§2], V.4.

<sup>639</sup> On the mathematical body, being the body that belongs to the category of quantity, see above III.4 [§2.2-3]; *Ilāhiyyāt* II.2, 64.6 – 65.3.

<sup>640</sup> See above, par. [§1].

<sup>641</sup> ACKRILL 1963, p. 107. More in general on this issue, see NARCY 1980.

geometry, namely extensions, in so far as they are abstracted from matter<sup>642</sup>. A figure, in qualitative terms, is “the configuration that results from the boundary and the enclosed thing existing according in a certain relation” (*al-hay’ a al-ḥāšila min wuḡūd al-ḥadd wa-l-mahdūd ‘alā nisbatin mā*). In other words, a figure is an attribute produced by a certain disposition of the boundaries that enclose any measurable section of space (plane or solid): it is neither identical with the extension in itself, nor with the boundaries, nor with the whole composed of the extension and its boundaries. This original interpretation of Aristotle’s qualitative figure is somehow reminiscent of Archytas’ statement – reported by Simplicius – that the Aristotelian quality of shapes “does not reside in figure, [...] but in configuration” (οὐκ ἐν σχήματι [...] ἀλλ’ ἐν σχηματισμῷ)<sup>643</sup>, i.e. in a qualitative aspect that is supervenient on bodies.

**[§5.2] (209.8 – 210.2).** Avicenna explains his conception of figure by proposing an example, which involves a distinction between the extension called “square” (*murabba’*) and its qualitative configuration, named “squareness” (*tarbī’*). Squareness is a structural property that inheres in the square, which is in itself a portion of a plane delimited by four equal sides and having four equal angles. When including figures among qualities, Aristotle did not mean the underlying extension (the “figure”) but this abstract, supervenient “figure-ness”. This also holds true of other properties, numbered among non-figures in par. **[§1]**, such as concavity and convexity, straightness and curvedness: they are neither identical with boundaries nor other extensions, but configurations of boundaries (surfaces and lines).

Now, a figure in its qualitative aspect is the weak form or “configuration” (*hay’ a*) that structures a certain bodily extension. However, as Avicenna will clarify in the following chapter, a categorial complex must be conceptualized along with all of its ontological aspects, and among these aspects there may be a sort of intrinsic hierarchy according to which the substrative aspects are predominant over the attributive ones. In this sense, the categorial complex “figure” is probably worthier of being called a quantity, because it is an extension that plays the role of a substrate in it<sup>644</sup>.

**[§6] (210.3 – 212.15).** The third enquiry concerns the views of some anonymous predecessors, who made figures fall under the category of position. The identity of these predecessors is unknown: no such discussion is found in the extant commentaries on the *Categories*, and the ultimate source of this doctrine is probably to be found in some Arabic work of mathematics and geometry.

**[§6.1] (210.3-14).** Avicenna makes a short premise, concerning the intrinsic difficulty of defining categorial complexes: the same issue will make the specific subject of the subsequent sixth enquiry (VI.2, **[§3]**). As a matter of fact, common people – being unaware of the appropriate ontological distinctions – tend to use the same name for both the whole and each of the components, and to call for instance “square” not only the extension, but also the boundaries and the configuration of squareness. This poses a problem for those philosophers who seek for scientific definitions of realities, especially when the starting-point of their enquiry is the common usage of words (as happens here in the *Categories*)<sup>645</sup>. However, when analysing the constituents of the categorial complex “figure”, it should become intuitively clear that neither the shaped extension, nor the limits, nor the shaping configuration are items that belong to the category of position.

**[§6.2] (210.14 – 211.14).** In Avicenna’s view, those who first posited figure under the category of position were ignoring the fact that position (*wad’*) is homonymous, as was

<sup>642</sup> For Avicenna’s characterization of the subject-matter of geometry, see *Aqsām al-‘ulūm* 111.11-14, but also *Hikma ‘Arūdiyya* 32.8-9 (= *Naḡāt* 513.6-7); *Ilāhiyyāt* I.2, 10.10.

<sup>643</sup> Simpl. *In Cat.* 271.25-26.

<sup>644</sup> See below, VI.2 **[§3]**.

<sup>645</sup> See the INTRODUCTION, 2.1 [c-d].

already made clear above in ch. IV.1<sup>646</sup>. For this reason, the refutation of this anonymous doctrine is structured in two parts: in the first part Avicenna distinguishes and describes the various senses of the word “position”; in the second part, Avicenna refutes the commentator by recurring to some of the listed meanings of position.

According to the following distinction of the senses of position (which differs from the previously given one), position is: **[a]** either the mere existence of something in place, and then coincides with the category of where<sup>647</sup>; or it is **[b]** the relative position of things proximate to one another, and then it falls in the category of relatives (under the species of proximity, *muḡāwara*); or it is **[c]** the position-category.

The latter consists of the internal configuration (*hay’a*) of the parts of a body, in potency or in actuality: its characters consist in the main of its being an attribute of the whole having parts, and of involving – besides an intrinsic relation of the parts – a certain relation of the whole to an external landmark. The position of a man sitting on a chair changes, when he stands up: some parts of his move with respect to one another (e.g. the thigh with regard to the calf), some others maintain the same internal relation (e.g. head and neck) but move with respect to an external landmark (the surface of the chair)<sup>648</sup>.

**[§6.3] (211.14 – 212.9).** Now, he who argued that figures belong to the category of position did so on account of the fact that in figures, boundaries seem to have a certain relative disposition with respect to one another. In Avicenna’s view, his mistake consists fundamentally of three false claims.

(1) First of all, in the category of position the parts of a whole are involved, not boundaries, which are basically the limits of an extension.

(2) Secondly, the sort of position that the commentator recognized in figures is in fact relational position (type **[b]**); therefore, it is a kind of proximity that does not bear any reference to external landmarks, and does not make figures apt to falling under the category of position.

(3) Thirdly, the commentator was unable to distinguish between something’s being “dependent on a category” (*muta’alliḡan bi-maḡūla*) and its belonging to a category (*min [...] maḡūla*). As a matter of fact, even though figures may be said to depend on a certain relation that holds between boundaries, or even on the position of the whole, each figure-ness is a further structural determination that stems, or results (*hāṣil*) from the sum of these other attributes, and that belongs to another category (i.e. quality).

**[§6.4] (212.9-15).** Apparently, some later commentators argued in favour of the previous doctrine, and conceded that the relative position of boundaries actually belongs to the category of position. According to Avicenna, they supported this claim on the basis of a particular doctrine of homonymy, in particular of homonyms that have a similar (*mutaṣābih*) meaning or more meanings regrouped into one.

I think it is possible to recognize, in this anonymous “group of people”, the philosopher and mathematician Tābit Ibn Qurra. The hypothesis is viable not only because Tābit surely argued that the angle belongs to the category of position, and his argument might well have applied to figures as well<sup>649</sup>; but also because he proposed (in the *Responses to the questions posed by Ibn Usayyid*) an original classification of homonyms, which might be the one Avicenna is referring to here. According to this classification, there are three kinds of homonyms:

---

<sup>646</sup> See above, IV.1 **[§2.1]**.

<sup>647</sup> The category of where comprises the generic or specific relations that hold between substances and the places they are in (see below, VI.5 **[§1]**).

<sup>648</sup> On Avicenna’s discussion of the category of position see below, VI.6 **[§1]**.

<sup>649</sup> As is reported by Avicenna in the *Epistle on the angle* (R. RASHED 2015; LUTHER 2004, p. 121). See also the Introduction, **3.6.3**.

- (1) Homonyms whose meanings are completely different from one another (e.g. *'ayn*);
- (2) Homonyms where one of the named things comprises the others (e.g. “differentia”, which comprises common, specific and more specific differentiae);
- (3) Homonyms that refer to a single notion, though in different respects. This kind of homonymy, argues Thābit, is typical of mathematical and geometrical objects, like “similar circular arcs”: “similar circular arcs” applies to arcs that have equal angles, arcs that subtend equal angles at the centre and arcs that have the same proportion with their respective circles. In this case the definition is the same, but requires a demonstration in order to be applied to sense other than the primary one<sup>650</sup>.

If this reconstruction is correct, then, Tābit would have countered other previous objections resting upon the homonymy of “position” by arguing that the relative position of boundaries is definitely position according to the unitary sense of the category, and very likely by providing a related demonstration.

Even if such a demonstration existed, however, Avicenna does not take it into account here: as he has already explained above [§6.3], the disposition of boundaries in figures is not in itself an item belonging to the category of position, but rather a relative attribute.

---

<sup>650</sup> Tābit Ibn Qurra, *Masā'il* 645.7-25 (see also the commentary in M. RASHED 2009, pp. 671-672).

## VI.2

ON NOTIFYING THE STATE OF THE ANGLE, AND THE WAY IT FALLS UNDER QUANTITY, OR QUALITY, OR POSITION OR OTHER CATEGORIES; [ON] NOTIFYING OF THE STATE OF EXTERNAL FORM, AND HOW IT MAY BECOME A SPECIES DESPITE ITS COMPOSITE NATURE; [ON] THE REMAINING DOUBTS CONCERNING THIS GENUS OF THE FOUR GENERA.

In ch. VI.2, Avicenna goes on to discuss the last three problems among those raised in VI.1 [§3]: the categorial status of angles, the nature of Aristotle's external form or shape, the nature of categorial complexes.

[§1] Angles differ from figures in that they are enclosed by two boundaries only (plane angles), or by more boundaries that meet another boundary in a single point (solid angles). However, they resemble figures with respect to their categorial status: in so far as they are extensions, they belong to the category of quantity; inasmuch as they are configurations of the boundaries and the extension, they belong to quality, inasmuch as the boundaries have a certain relative position, they belong either to the category of relatives or to the category of position. After clarifying this point, Avicenna goes on to criticise the definition of the angle as “an extension ending over a point”, which is not incorrect but does not comprise solid angles; and then to refute the position held by Abū Ḥāmid al-Isfizārī, who argues that angles belong to the category of quantity. [§2] Despite being composed by two accidents, i.e. colour and figure, Aristotle's shape/external form is a unitary notion that results beside the sum of its two constituents. [§3] As for the element that is dominant in a categorial compound, it is the one which is worthier of playing the role of the substrate, rather than the one that mostly plays the role of an attribute.

[§1] (213.6 – 215.18). The first half of this chapter is to be read in close comparison with another independent work of Avicenna, the *Risāla fī l-zāwiyya*, which treats the same themes more in detail and in a wider theoretical perspective<sup>651</sup>. It is to be noted that the whole of this section is also quoted literally in a later treatise on angles, Kamāl al-Dīn al-Fārisī's *Risāla fī l-zāwiyya*<sup>652</sup>.

[§1.1] (213.6 – 214.14). In the first part of the discussion, Avicenna takes up the definition of angles and the determination of their categorial status, which in fact resembles that of figures.

[§1.1.1] (213.6 – 214.5). Angles resemble figures, but they differ from them inasmuch as they comprise an extension which is considered as delimited by two boundaries only (plane angles) or by more than two boundaries (solid angles) that meet, all of them, upon another single boundary, such as a point or a line<sup>653</sup>. For the sake of clarity and simplicity, Avicenna limits his discussion to plane angles and plane figures: to the aim of better explaining the difference between them, he constructs both from a generic section of a plane enclosed by two boundaries. Now, there are three possibilities with this extension: it may be either (a) enclosed by other boundaries, or (b) not enclosed by other boundaries. If it is not, then either (b1) the two boundaries are such as to meet upon a single boundary, or (b2) they do not meet upon

---

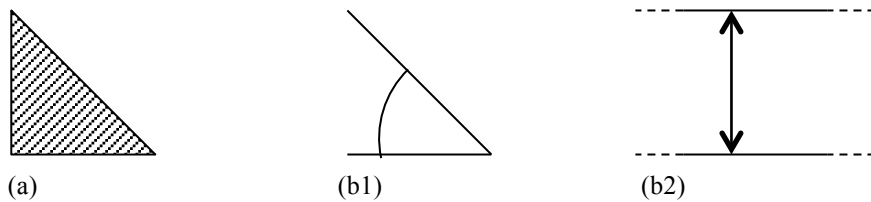
<sup>651</sup>R. RASHED 2015; LUTHER 2002. Cf. above, INTRODUCTION 3.6.3.

<sup>652</sup>Edited and translated into French in R. RASHED 2015, pp. 182-223.

<sup>653</sup>This definition, as well as the others provided in this chapter, differ significantly from the one that Avicenna provides at *Handasa* I, 17.3-4: “The plane angle is that which is enclosed by two lines that are not continuous on a right line, and that bend over a surface” (*wa-l-zāwiyyatu l-musaṭṭaḥatu hiya llatī yuḥītu bihā ḥaṭṭāni mutṭaṣilāni lā 'alā l-istiqāmati mutaḥaddibāni 'alā saṭṭhin*). Cf. Eucl. *Elem.* I, hor. 8.1 (tr. HEATH 1902, p. 153): “A plane angle is the inclination to one another of two lines in a plane which meet one another and do not lie in a straight line” (Ἐπίπεδος δὲ γωνία ἐστὶν ἡ ἐν ἐπιπέδῳ δύο γραμμῶν ἀπτομένων ἀλλήλων καὶ μὴ ἐπ' εὐθείας κειμένων πρὸς ἀλλήλας τῶν γραμμῶν κλίσις).



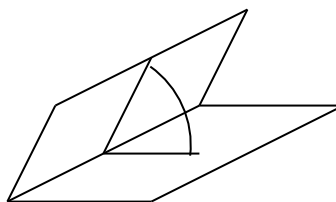
another boundary, but they may be extended *ad infinitum* on both sides. Now: in case (a) the extension is a shape, in case (b1) it is an angle, in case (b2) the extension is the interval that lies in between two parallel lines (be they straight or curved).



This distinction between angle and shape is not exclusive, and it is only a matter of consideration (*nazar*): if a same extension is considered in the respect of its being enclosed by more than two boundaries, it is a shape, if it is considered in the respect of two of its boundaries meeting over a point then it is equivalent to an angle.

[§1.1.2] (214.5-14). Given the similarities between shapes and angles, it is now easier to determine the categorial status of the latter: angles are analogous to shapes, in that they have an extension analogous to the extension of shapes, the whole angle (formed by the extension and its boundaries) is analogous to a whole shape, and they have a structural configuration (*hay'a*) analogous to that of shapes. Thus, in so far as they consist of a measurable extension they belong to quantities, and it is in the same respect that they are taken into account by geometers; inasmuch as they have a structural configuration, they are qualities; inasmuch as their boundaries have a certain position with regard to one another they belong either to position or to relation. In this sense, the categorial status of angles is substantially identical with that of figures, although in chapter VI.1 Avicenna insisted on the qualitative character of figures being a prevailing trait<sup>654</sup>. This section must be compared with the fourth *faṣl* of the Avicennan *Risāla fī l-zāwiyya*, where Avicenna calls the angle a kind of ambiguous name (*ism mušakkik*), notably a “repeated name” (*ism muraddad*) that is applicable to all parts of a complex object. This name applies to: two lines having a certain configuration (quantity), the configuration itself (quality), a surface enclosed by lines (quantity) and the whole formed by surface and lines (quantity)<sup>655</sup>.

[§1.2] (214.15 – 215.9). After declaring how angles must be defined, Avicenna briefly discusses an alternative definition given by an anonymous predecessor, that is also taken up in *Risāla fī l-zāwiyya* ch. 3<sup>656</sup>. According to this definition, an angle is “an extension ending over a point” (*miqdār yantahī 'inda nuqṭa*). Both here and in the *Risāla*, Avicenna states that the definition does not really differ from his own, but it is too specific, and therefore needs to be corrected in order to be applicable to all kinds of angles. As it is formulated, it comprises all angles that terminate over a point, namely all plane angles and most solid angles (conic and pyramidal). However, the definition does not include dihedral angles, which are produced by extensions that meet over a line (cf. the figure):



<sup>654</sup> Cf. above, VI.1 [§5.2].

<sup>655</sup> *Zāwiyya* 4, 215.13 – 217.8.

<sup>656</sup> *Zāwiyya* 3, 201.10 ff.

To make the definition more comprehensive it is necessary to correct it, by saying more in general that an angle is the extension having some boundaries (more than one) which “end upon a single boundary common to them, insofar as it is such” (*tantahī ‘inda ḥadd wāḥid muštarak lahā min ḥayṭu huwa ka-dālika*). We might well accept the first version, but only on the condition of excluding from the domain of angles and shapes some kinds of angle (i.e. dihedral angles) and some shapes (i.e. those that contain dihedral angles).

**[§1.3] (215.10-18).** Before closing the discussion on angles, Avicenna recalls a doctrine that he mentions and refutes in detail in the *Risāla fī l-zāwiyya*, attributed there to the mathematician and philosopher Abū Ḥāmid al-Isfīzārī (here vaguely alluded to as “one sophist”, *ba‘d al-mutakallifīn*). According to this doctrine, angles are independent species of quantity, notably extensions that are intermediary between lines and surfaces. Isfīzārī proves his theory by presenting an intuitive construction of line, surface and angle: a line is a length produced by the motion of a point, a surface is a width produced by the motion of a line, and the angle, being produced by the partial rotation of a line around a fixed point, is somewhat intermediary between them. The same he argued about solid angles, which according to the same principle could be generated by the partial rotation of a surface around one of its sides (and would be, for this reason, intermediate between surface and solid). According to Avicenna this is absolutely not true, since angles – in their quantitative aspect – do not constitute two further species of quantity, but they rather belong to existing ones: surface (plane angles) and body (solid angles). Avicenna will also cite and refute Isfīzārī when claiming, in *Ilāhiyyāt* III.4, that the angle is not a species of continuous quantity other than line, surface and body<sup>657</sup>.

**[§2] (216.1 – 217.6).** The fifth enquiry concerns the ambiguous nature of the species “external form” (*ḥulqa*), which Avicenna has described in the previous chapter as the sum of a shape and a non-shape<sup>658</sup>.

**[§2.1] (216.1-5).** The objection – formulated by Avicenna himself – regards the state of external form, characterised above as a property resulting from the association of a figure and another quality (i.e., colour). It is not clear in what sense Avicenna would have “insisted” on the fact that specific accidents have no composition (*tarkīb*), although their definitions are composed of genus and differentia.

**[§2.2] (216.5 – 217.6).** Accidents may undoubtedly be composed by accidents and be unitary: see the example of numbers, which are composed by other numbers but have ultimately a unitary form<sup>659</sup>. However, whereas in substances the nature of the genus and that of the differentia may exist as distinct things or “parts” (in which case they cease to be, respectively, the nature of the genus and the nature of differentia, for they are understood as simple natures)<sup>660</sup>, in accidents this does not occur, and the two parts of their definitions cannot be named separately. The principle according to which the parts of the thing do not necessarily correspond to parts of the definition will be more thoroughly inspected in metaphysics<sup>661</sup>.

An accident that is composed by a figure and a colour may work as a single, unitary qualification, such that it is possible to describe the thing qualified by it as “having a good external form”. The composition in question is not a mere juxtaposition of two distinct

<sup>657</sup> *Ilāhiyyāt* III.4, 116.14 – 117.5.

<sup>658</sup> Cf. above, VI.1 [§1].

<sup>659</sup> *Ilāhiyyāt* III.5, 119.12 – 120.8.

<sup>660</sup> *Ilāhiyyāt* V.1, 196.6-16. Avicenna makes here a reference to the discussion in “our teaching of demonstration”, which is probably a reference to the discussion of definition in *Burhān* IV.4.

<sup>661</sup> *Ilāhiyyāt* V.9, based on Arist. *Metaph.* Z 10.

attributes, which remain evidently distinct in the final compound, but a union that brings forth a unity, which can also be conceptualized as such.

**[§3] (217.7 – 218.5).** The sixth enquiry is closely related to the preceding one. Although distinct accidents may concur to form a categorial compound (**[§2]**), Avicenna suggests that each compound of this sort has a dominant or prevailing component, towards which it is “more inclined” (*amyal*). Now, these complexes may be of different types: they can be either (a) built according to a substrative model where a certain accident is “described” (*mawṣūf*) by one or more accidental attributes, and the describing accidents are somehow posterior to the substrate or caused by it; or (b) a mere accidental juxtaposition.

In case (a), argues Avicenna, the compound as a whole tends to belong to the category of the substrate, i.e. the described thing. In Avicenna’s example, a square – a certain superficial extension having a particular qualitative configuration – is worthier of being numbered among quantities, than among qualities. This example might seem to contradict patently the discussion carried out above in ch. VI.1, where it was argued – following Aristotle – that shapes belong to qualities; however, there Avicenna insisted on the fact that the actual qualitative aspect of shapes is their shape-ness, which is absolutely not identical with the complex item it describes.

Case (b), on the contrary, does not represent an example of actual unity, and therefore the question whether there exists or not a dominant categorial component is fundamentally irrelevant, given that such a thing as a “writing length” is a collection (*mağmūʿ*) of categorial items without a clear ontological identity. On the whole, items that deserve to be described by the categories have a certain quiddity, whose articulation into what plays the role of a genus and what plays the role of a differentia does not prevent it from being fundamentally unitary. Avicenna made a similar point above in the final section of ch. II.4, when refuting the idea that a category may be posited for the association of a substance and an accident (“white”, understood as a “white thing”)<sup>662</sup>.

---

<sup>662</sup> See above, II.4 **[§8]**.

### VI.3

#### ON NOTIFYING THE DIFFERENCE BETWEEN QUALITY AND QUALIFIED, AND THE STATES WHICH SUBSIST IN BETWEEN THEM; ON THE ACCIDENTS OF QUALITY, AND ITS PROPERTIES

After the long discussion of the fourth species of quality, Avicenna eventually turns to the relation holding between qualities and qualified things, and to the three properties of the category of quality: admitting of contraries, admitting of more and less, being spoken of as similar and dissimilar.

[§1] Qualified things are substances or quantities that are described by qualities. Usually, they derive their names (in so far as they are qualified) from the name of the abstract property by which they are described, and in Arabic and Persian it is always the case; in Greek, on the contrary, there are cases where the name of the qualified is not derived from the quality, but is an independent word. [§2] Some qualities admit of contraries: it is the case for habits, states, capacities, affective qualities and affections, but not for qualities related with quantities – such as concavity and convexity, straightness and curvedness, shapes and the qualities of numbers. [§3] It is the same thing with the second property, i.e. admitting of more and less: most species of quality admit of intension and remission, whereby the fourth species does not. [§4] As for the last and most specifying property of quality, all qualities are such that they can be spoken of as similar and dissimilar, and this is an exclusive property of theirs.

[§1] (218.10 – 219.10). After presenting the four species of quality, Aristotle devotes a long explanation to the difference between qualities (ποιότητες) and qualified things (ποιοί), which he characterises linguistically as a relation of paronymy: in most cases, qualified things derive their names from the name of the quality they bear. This rule is not perfectly mechanical: there exist either cases where the name of the qualified does not derive from a specific quality-name (e.g. runner or boxer, for there is not a unitary name for the “aptitude for boxing” or “running”), or cases where the qualified has a name that differs from that of the quality (e.g. a man having virtue, ἀρετή, is not called virtuous but “good”, σπουδαῖος)<sup>663</sup>.

In his commentary, Avicenna reprises Aristotle’s linguistic explanation and argues that in Arabic and Persian the rule is valid in all cases: especially in Arabic, where adjectives were thought to derive from the verbal name of a given root. Here, Avicenna recurs to the Arabic grammatical category of derivation (*ištiqāq*) to explain that in some cases the qualitative attribute is not precisely derived from a verbal name, but it is either identical with the substantive form (e.g. *‘adl*, which means both “just” and “justice”) or it is formed in some other way (e.g. *abyad*, “white”, formed from the name *bayād* along the standard pattern of colour adjectives)<sup>664</sup>. Aristotle’s examples are just cited as exceptions typical of Greek: in Greek the name of someone having virtue (*li-dī l-faḍīla*) is not derived from virtue (*faḍīla*), but – being *muḡtahid* – it is derived from the name “zeal” (*iḡtihād*)<sup>665</sup>.

There is however a comparable case in Arabic, concerning the words *miṣhāḥ* (“healthy”, in the sense of “endowed with an aptitude for health”) and *miṣhāḥiyya* (the corresponding property). *Miṣhāḥ* does not derive from a specific name of the property it stands for, but rather from the name of the perfection (*kamāl*) to which the healthy person tends in virtue of his aptitude, i.e. health (*ṣiḥḥa*). The term *miṣhāḥiyya*, in turn, is derived from the adjective *miṣhāḥ*, and this fact represents an exception to the natural rule of derivation (usually going from the name to the adjective, and not *vice versa*).

---

<sup>663</sup> Arist. *Cat.* 10 a27 – b12.

<sup>664</sup> On the grammatical notion of ‘derivation’ see SCHÖCK 2008.

<sup>665</sup> *Manṭiq Aristū*, 59.17-18.

[§2] (219.10 – 221.2). Aristotle ascribes contrariety to most qualities, but argues that not all contraries have qualities – also within the same species: for instance, some colours do (white and black) but some others do not (e.g. red and yellow)<sup>666</sup>.

[§2.1] (219.10-14). Avicenna reprises Aristotle’s claim that qualities have contraries: this holds true particularly of the first three species, namely habits and states, capacities and incapacities, affective qualities and affections. As regards the third species, Avicenna does not mention Aristotle’s counterexamples of red and yellow as non-contrary colours, either because he finds it irrelevant or because he finds it incorrect.

[§2.2] (219.14 – 220.18). The only species of quality that does not admit of contrariety is the last one, i.e. the species of “quantitative” qualities<sup>667</sup>.

[§2.2.1] (219.14-16). That figures have no contraries is not a point made by Aristotle: he only argues below, when discussing the second property of qualities, that they do not admit of more and less<sup>668</sup>. Now, given the close link between the two properties (admitting of more and less and having contraries), which Avicenna has highlighted above in ch. III.3 [§4.1], one may logically infer that the fact of not having more and less may depend on the fact of not having contraries. This is apparently Avicenna’s deduction, which leads him to ascribe the property of not having contraries to most items of the fourth species of quality: not only figures, but also the properties of lines and shapes (concavity and convexity) and the properties of numbers (odd and even).

[§2.2.2] (219.16 – 220.18). The case of oddness and evenness deserves a special discussion, since it was argued that, as odd and even cannot exist together in one and the same subject (i.e. number), they must certainly be contraries.

Avicenna rejects this claim, since the fact that two things cannot subsist together in the same subject is not a condition sufficient for positing them as contraries<sup>669</sup>. For example, the same condition applies to contradictories (A and ¬A), which differ from contraries in that the negation of something is necessarily indeterminate, whereby contraries are always determinate properties<sup>670</sup>.

To explain this point Avicenna provides a somewhat obscure example, which must probably be understood as follows: let us take two qualities found in different species, like whiteness and a figure (square), along with their negations (non-whiteness and non-shape). Now, if whiteness and non-whiteness, square and non-square were actual contraries, then the notions of non-whiteness (B) and non-square (C) should be determinate, in such a way that if we said:

The subject is either **white** or **B**  
The subject is either a **square** or **C**,

the exact notion corresponding to B and C should be immediately clear. However, it is not so: in the first case, even if whiteness has a contrary, non-whiteness is so indeterminate as to refer possibly to all colours other than whiteness. In the second case, “square” does not have a definite contrary and the notion of non-square comprises all shapes other than squares.

Now, Avicenna’s refusal to admit the contrariety of odd and even mainly rests upon the assumption that they are contradictories, since “odd” is defined as “not even”, and it is an

---

<sup>666</sup> Arist. *Cat.* 10 b12-17.

<sup>667</sup> On the fourth species of quality and its three sub-species, see above VI.1 [§1].

<sup>668</sup> Cf. par. [§3.2] below.

<sup>669</sup> Avicenna will establish the general definition of opposites and of the various kinds of opposition below, in chapter VII.1.

<sup>670</sup> This is why an indefinite negation may always be predicated of a non-existent subject, whereas a definite contrary cannot. On the difference between contraries and contradictories see Arist. *Cat.* 13 b12-19, and below VII.2 [§10.3].

indeterminate notion that cannot play the role of an actual contrary<sup>671</sup>. Even if oddness were understood as a positive determination, however, and even if it were taken in association with the actual subject of oddness (i.e. an individual number, not the species “number”) there would be no real contrariety, for oddness and evenness cannot alternate on the same particular number: an odd number cannot be altered into an even one, and vice versa. It is thus proven that odd and even are not contraries, and this will also hold for other notions related with quantity (like unity and multiplicity)<sup>672</sup>.

**[§2.3] (220.18 – 221.2).** This is the principle of symmetry formulated by Aristotle after contending that some qualities have contraries whereas some others do not: given any pair of contraries, if one of them is a qualification the other is necessarily a qualification as well<sup>673</sup>.

**[§3] (221.3 – 222.15).** According to Aristotle, some types of quality admit of more and less, but some others do not. Qualities seem to admit of more and less with respect to something else (a certain pale is more or less pale than another) and, in most cases, in themselves (a certain pale may become more or less pale with regard to its own paleness). However, even if qualified things certainly admit of more/less, it is not clear whether certain qualities do: for example justice, health and grammar, with regard to which some people say that cannot be more or less justice and health than another justice and health.

**[§3.1] (221.3-17).** In par. **[§2.1]** Avicenna listed the three species of quality that admit of contraries: states/habits, capacities/incapacities, affective qualities/affectations. Now, these species certainly admit of more and less, for something may be more or less hot, more or less cold, dry, wet, etc. Admitting of more and less is not proper of all contraries, but at least of contraries that have an intermediate: the intermediate in itself, however, is not more or less with respect to anything. It is the case with justice and health, which are both intermediate properties between excesses. However, even if they do not admit of different degrees of intensity in themselves, by definition, they may do when they are associated with matter and individualised: for in that case, properties that do not evidently tend to one of the two extremes of contrariety but are found somehow halfway, around the middle, may be counted as intermediates, and admit all the same of more and less. This holds true of both justice and health, for it is definitely possible to say that the justice of a certain man is more justice than the justice of another man, and the health of a certain man is healthier than the health of another man.

**[§3.2] (221.17 – 222.15).** As is argued by Aristotle himself, figures do not admit of more and less: all triangles, circles and squares are *equally* triangles, circles and squares inasmuch as they admit of the same definition<sup>674</sup>. Avicenna proves that this is impossible, since figures have no contraries. As a matter of fact, if a certain figure-ness<sup>675</sup> like squareness, were capable of being more and less quantitatively, it would be susceptible of being transformed in itself - by decreasing in squareness - into another shape, which would be the furthest from squareness but would share its substrate (matter): so it would have a contrary, which however has been denied above **[§2.2]**. Moreover, it is problematic to consider squareness as actually existing in matter, for there exists in nature no perfect square: every natural square is different

---

<sup>671</sup> That odd and even are not contraries was also argued by Avicenna above, when discussing the properties of quantity (IV.2 **[§2.2.2]**).

<sup>672</sup> In the *Ilāhiyyāt* Avicenna will prove that unity and multiplicity are opposed neither as contraries, nor as relatives, nor as contradictories, nor as privation and possession, but rather in the same way as a measure, i.e. unity, is opposed to the thing it measures, i.e. multiplicity (*Ilāhiyyāt* III.6, 130.5-10).

<sup>673</sup> Arist. *Cat.* 10 b17-25.

<sup>674</sup> Arist. *Cat.* 11 a5-13. On the fact that figures and shapes do not admit of alteration, cf. also Arist. *Phys.* H 3, 245 b9 – 246 a9.

<sup>675</sup> I.e., according to Avicenna’s account of qualitative figure, the configuration that structures a given bodily extension (see above, VI.1 **[§]**).

from the geometrical concept of square, but sensation does not perceive the difference. Therefore, even if we were to call a certain square-shaped stone “more square” than another square-shaped stone, we would not be saying that the first stone has *in itself* more squareness than the other stone, for none of them shares in the definition of squareness and is truly a square; rather, we would be saying that the first stone is a “more correct” (*aṣaḥḥ*) sensible instantiation of the perfect geometrical square. In fact, it is not the case with those other qualities that admit of more and less, like black and white, courage and fear, heat and cold: these admit of more and less in themselves also when existing in matter. Two sensible heats that differ in intensity are both heat, whereas two sensible squares that differ in resembling a true square are shapes other than squares.

[§4] (222.15-17). The last property that Aristotle ascribes to qualities, being also the most proper and exclusive one, is being called similar and dissimilar<sup>676</sup>. Avicenna has already extensively discussed the property of being similar, as a possible definition of quality, in ch. V.1: there, he argued that quality is not described univocally by the fact of being called similar *simpliciter*, for this also holds true of other categories; on the contrary, it is necessary to specify the notion of similarity in order for it to describe truly the attributes that belong to this category<sup>677</sup>.

---

<sup>676</sup> Arist. *Cat.* 11 a15-19.

<sup>677</sup> See above, V.1 [§3-4].

## VI.4

### ON THE SOLUTION OF A DOUBT REGARDING THE INTRUSION OF CERTAIN SPECIES OF QUALITY AND OTHER CATEGORIES IN CERTAIN SPECIES OF THE RELATIVE

In the last chapter devoted to the category of quality, Avicenna takes up Aristotle's discussion of qualities that were also listed among relatives, notably habits and states (e.g. knowledge).

[§1] The attributes that were thought to belong to the category of relatives – habits, capacities, knowledge – are in fact qualities, to which relation belongs accidentally. It is the case because they have a certain nature and existence other than relation, whereas it is characteristic of true relatives that they have no other existence besides being relative. [§2] It is the case with knowledge: knowledge may be called in itself a relative, but is not integrally a relative because its species – for example, grammar – are not strictly speaking relative to anything, and they are parts of knowledge only inasmuch as they are qualities. On the whole, nothing prevents a certain being from belonging to a category in itself, to another category by accident. [§3] Those who read this discussion as implying that knowledge can belong in itself to relatives and quality committed at least two gross mistakes: they overlooked the doubt concerning the universal and particular head, that Aristotle provided in *Cat.* 7 and they did not apply coherently their interpretation of predication “of a subject”, that they regard as essential. [§4] In the end, Avicenna replies to a possible objection concerning the fact that a certain particular knowledge, like grammar, may be said – in a certain sense – relative to its subject-matter: it is not true that grammar is grammar-of its subject-matter, for the quiddity of the subject-matter in question is not spoken of with respect to grammar.

[§1] (223.4-12). In the end of *Cat.* 8 Aristotle takes up an objection concerning the ambiguous status of some attributes that were mentioned both in the treatment of relatives and in the discussion of quality, most notably states and conditions<sup>678</sup>. This ambiguity depends on the fact that the genera of these characters are spoken of with respect to something else, whereas the particulars are not: for if knowledge in general is said to be relative to something (i.e. to what it is knowledge of), a particular knowledge, such as grammar, is not relative to anything (for no grammar is said to be grammar of something). These particulars are in themselves qualities, and they are spoken of as relatives only in so far as their genus is relative. Aristotle's words in this passage, however, leave it undetermined – at least expressly – whether the genera are in themselves relatives or qualities<sup>679</sup>. In the end of this passage, however, the philosopher seems to concede that something may be in the same time a quality and a relative, and thus belong to two different categories<sup>680</sup>.

Most previous commentators split this argument into two parts, and argue that Aristotle is basically formulating two alternative replies to the doubt concerning habits and states: (1) the various elements of a single genus-species series may fall under different categories (i.e. general knowledge in relatives, special knowledge in quality), (2) the same being/genus-species series may fall under different categories (e.g. relatives and quality), either integrally or in different respects<sup>681</sup>.

---

<sup>678</sup> States and conditions (“habits and states” in the Arabic version of the *Categories*) are the first species of quality listed by Aristotle (*Cat.* 8 b26 – 9 a13), but some states and conditions (e.g. “habit” and “knowledge”) are also mentioned in the beginning of chapter 7 (*Cat.* 6 b4-6) as examples of relatives.

<sup>679</sup> Arist. *Cat.* 11 a20-36.

<sup>680</sup> Arist. *Cat.* 11 a37-38.

<sup>681</sup> See Porph. *In Cat.* 139.29 – 141.4; Simpl. *In Cat.* 291.28 – 292.30; Phil. *In Cat.* 162.2-22; Elias/David, *In Cat.* 238.8-36; Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 339.14-30. Olympiodorus (*In Cat.* 129.15-38) argues that the possible solutions for this doubt are three, but Aristotle has chosen to mention only the second and the third one: the first one consists of saying that one and the same thing may belong to two different categories in different



Now, in the framework of a rigorous categorial classification – such as the one Avicenna is undertaking – it is unacceptable that certain genera belong to categories other than their species, and viceversa: for this reason, Avicenna’s strategy in this chapter consists – right from the beginning – of showing that knowledge and other disputed genera are in themselves qualities, and they are relatives only inasmuch as they are accompanied accidentally by relation. As a matter of fact, Avicenna recalls the difference between Aristotle’s first definition of relatives in *Cat. 7*, which includes knowledge, and the second one, which on the contrary does not extend to it<sup>682</sup>: whereas the first definition characterises relatives as having their quiddity said with respect to something else, in a certain respect, the second one characterises relatives as having no other existence besides their existence as relatives. Hence, the point is that knowledge – and the other ambiguous states – have a proper existence other than relation which is, in itself, qualitative.

**[§2] (223.12 – 225.8).** Like Aristotle, among habits and states Avicenna focuses exclusively on the case of knowledge.

**[§2.1] (223.12 – 224.16).** As a proof for the fact that the genus “knowledge” is not a relative in itself, Avicenna mentions the very fact that its species are not relative to anything: grammar and the like are only relative extrinsically, with respect to the fact of being knowledge. To solve this doubt, Avicenna recalls the example of the secondary substance “head”, that in *Cat. 7* urged Aristotle to specify further the definition of relatives: in that example also, a particular head is not the particular head of something, but – in general – the head of something. However, in such cases of difformity between higher and lower stages of the same genus-species hierarchy, what reveals the true categorial identity of the entity in question is the nature of the specifications; and the fact that they certainly admit of a certain attribute by accident, because of the genus, makes it certain that the genus itself is accidentally accompanied by the same attribute. It is so because what determines a participation in a certain genus is something’s essence being constituted by the essence of that genus; if the species of knowledge are in themselves qualities and relations by accident, then the genus “knowledge” is a quality as well (and it is relative by accident).

**[§2.2] (224.7 – 225.8).** If it is so, then it is not necessary to explain why closely related beings should belong to two different categories: for nothing prevents a certain reality from belonging to different categories, to one of them in itself, to the other by accident.

**[§3] (225.8 – 226.12).** In the following section, Avicenna defends his own interpretation against those commentators who think that Aristotle’s “second solution” is better than the first, for knowledge may well belong to both the category of relatives and the category of quality in different respects<sup>683</sup>.

**[§3.1] (225.8-17).** The commentators in question seem to have forgot Aristotle’s doubt on the universal head and the particular head, discussed above in the chapter on relatives<sup>684</sup>; as we have seen, Avicenna attaches particular importance to this example, for it shows a comparable situation where Aristotle himself does not ascribe the universal substance “head” to the category of relatives, despite its being somehow relative. Curiously enough, the commentators seem to ignore this example, which is mentioned “almost three folia” (*qarīb*

---

respects, the third one – apparently – that one and the same thing may belong to two different categories integrally.

<sup>682</sup> For Aristotle’s two definitions of relatives see respectively Arist. *Cat.* 6 a36-37 and 8 a31-33. For Avicenna’s discussion of these two definitions, see above IV.3 [§1-3] and IV.5 [§1-4].

<sup>683</sup> Ibn al-Ṭayyib (*Tafsīr al-maqūlāt* 339.21-26) argues that Aristotle’s first solution is “not satisfactory” (*ḡayr murḍin*) since genus, species and individual have a strong conceptual unity, and they cannot belong to different categories; on the contrary, the second solution is “satisfactory” (*murḍin*).

<sup>684</sup> Arist. *Cat.* 8 a13-28.

*min talāt waraqāt*) above; besides being a curious, unique reference to Avicenna's physical copy of the *Categories*, this allusion shows well his irritation with the superficiality of his predecessors, and their incapacity of reading Aristotle's text as a unitary work. Hence, we can maybe read this criticism not only as a charge of forgetfulness and negligence, but also as an attack on an excessively literalist exegesis of Aristotle.

[§3.2] (225.17 – 226.12). Avicenna's second objection is fundamentally a charge of incoherence: following the standard interpretation of predication "of a subject" as essential, which Avicenna does not accept, these commentators should recognise that – according to the rule of transitivity – if knowledge is essentially a relative, and knowledge is said "of" its species, then its species should be relatives too<sup>685</sup>. Moreover, they also contended that things having different properties cannot be predicated of each other, but their solution entails a clear absurdity in this respect: if they say that a particular knowledge (e.g. grammar) is a quality and that no quality is a relative, but also that knowledge is a relative, then – for the sake of coherence – we are forced to admit that grammar is not a species of knowledge, and this is clearly absurd.

[§4] (226.12 – 228.4). In the end, Avicenna tackles an objection that might arise about the relative character of particular knowledge.

[§4.1] (226.12 – 227.11). Someone might object that grammar is also relative, since it is grammar-of its subject-matter (here "speaking a language correctly", *i'rābu l-luġati*). This objection is deceptive: the subject-matter of grammar has a quiddity that is totally independent of its being studied by (and thus, being relative to) grammar. It is relative to grammar only in respect of a certain general attribute: inasmuch as grammar is a knowledge, and inasmuch as the subject-matter is known. However, both grammar, its subject-matter and knowledge in general have a proper quiddity other than relationality<sup>686</sup>.

[§4.2] (227.12 – 228.4). Avicenna concludes the chapter with an exegetical note, related to Aristotle's claim that the determinate knowledge of a certain relative immediately entails the determinate knowledge of its correlative<sup>687</sup>. We must not infer from this statement its converse, i.e. that everything that is such is an actual relative exclusively in virtue of this: the principle was formulated by Aristotle not to provide a further exclusive property of actual relatives, but to solve the specific doubt concerning universal and particular heads. To that purpose, it was necessary to clarify that head and other improper relatives mentioned in that chapter, like habits/states and positions, are not actual relatives because they do not have that property, which however does not imply that having that property is in itself sufficient for something being an actual relative.

---

<sup>685</sup> On Avicenna's account of synonymous predication see above, I.3 [§5-7]; INTRODUCTION, 3.2.2.

<sup>686</sup> See the discussion in chapters IV.3-5, above.

<sup>687</sup> Arist. *Cat.* 8 a35-37.

## VI.5 ON WHERE AND WHEN

Unlike some of his predecessors (notably Simplicius), Avicenna does not devote much space to the remaining six categories. Where and when are regrouped into a single chapter, given their mutual resemblance: where consists of the relation of a substance with place, when is the relation of a substance with time, and in the previous exegetical tradition they have been respectively mistaken for place itself and time itself.

[§1] The category of where comprises the relation of something with the place it is in. Where can be divided in many ways: primary where and secondary where, where by itself and where by accident, but also – clearly – into genera, species and individuals. Against those commentators who argue that many substances may inhere in a single where, Avicenna contends that where is other than place: if many people are in the market, this does not mean that they all share the same where because the market is one, but each one of them has an individual relation with the same market that is their “where”. [§2] As for the properties of where, where admits of contrariety (being in the center is contrary to being on the periphery) and of more and less. [§3] The category of when, like where, comprises the relation of something with the time it is in. This time may be a primary time, i.e. the time specific to the thing itself, a secondary, more general time shared by other things (a day, a year, a century, etc.) or absolute time. Be as it may, just as in the case of “where” each thing has an individual relation with the time it exists in, for “when” is not identical with time. Al-Farābī qualified the particle “when” as describing the relation of something with the time of its existence, whose “ends” correspond to the “ends” of the thing’s existence. Avicenna criticises this formulation, for it is not clear what “ends” Farābī is hinting at. [§4] In the end of the chapter, Avicenna proves that the categories of where and when, despite being characterized as relations to something, must not be deemed categorial compounds.

[§1] (228.8 – 230.2). Chapter VI.5 inaugurates Avicenna’s brief treatment of the six minor accidents (covering also chapter VI.6). Avicenna does not discuss the issue of the correct order of presentation of these categories, despite analysing them in a succession that is unusual with respect to his predecessors’ commentaries: whereas those used to adopt and justify the order attested by chapter 9 (starting with action and affection, then moving to position, when, where and having)<sup>688</sup>, Avicenna faithfully reprises the order of chapter 4 (1 b25 – 2 a4) by expounding, first of all, the categories of where and when (followed in ch. VI.6 by position, having, acting and being acted upon).

Almost nothing is said, in the *Categories*, concerning where and when: in the very likely spurious passage<sup>689</sup> that constitutes the second half of chapter 9, it is said that “about where and when and having, owing to their obviousness nothing further is said [...] than what was said at the beginning” (ὕπερ δὲ τῶν λοιπῶν, τοῦ τε ποτὲ καὶ τοῦ ποῦ καὶ τοῦ ἔχειν, διὰ τὸ προφανῆ εἶναι οὐδὲν [...] ἄλλο λέγεται ἢ ὅσα ἐν ἀρχῇ ἐρρήθη)<sup>690</sup>, i.e. nothing besides the examples provided by Aristotle in *Cat.* 4 (“in the Lyceum”, “in the market-place” for where; “yesterday” and “last year” for when). The status of these two categories is far from being obvious, especially as regards the relation between where and when and, respectively, place and time (listed by Aristotle among the species of quantity)<sup>691</sup>. Avicenna’s discussion of these

---

<sup>688</sup> This order is clearly adopted by Porphyry (*In Cat.* 141.5 – 142.14), Simplicius (*In Cat.* 295.1 – 380.15), Philoponus (*In Cat.* 164.10 – 165.18) and Ibn al-Ṭayyib (*Tafsīr al-maqūlāt* 349.22 – 351.11).

<sup>689</sup> See for example BODÉÜS 2002 (pp. 141-142) about these lines and their spurious character.

<sup>690</sup> Arist. *Cat.* 11 b10-12.

<sup>691</sup> Arist. *Cat.* See HOFFMANN 1980.

two categories relies in great part on the subsequent exegesis, represented by both Greek and Arabic commentators.

[§1.1] (228.8 – 229.3). The category of where is characterised by Avicenna as “something’s being in its place” (*kawn al-šay’ fi makānihī*): it is the relation of any localized thing with the place it exists in. This description corresponds to an interpretation of the category that became standard from Iamblichus on, against authorities like Andronicus and Plotinus who tended to identify it positively with place<sup>692</sup>.

Like any other category where is divided into species: however, by not providing a rigorous division but a rhapsodic catalogue of possible criteria of subdivision Avicenna seems to betray a certain hesitation, as to the possibility of classifying the category rigorously. As a matter of fact, he presents three distinct subdivisions:

(1) The first subdivision is based on the kind of place the substance exists in: it is a subdivision into primary and secondary where, the former of which consists of something being in its proper place (i.e. the surface that properly contains it), the latter of something being in another, improper place (i.e. the whole thing of which the proper place is a limit, e.g. the sky, the air, etc.)<sup>693</sup>. The where of distinct substances that exist in the same natural place is one by species and not by number, whereas the where of things that exist in the same secondary place is one by number (in the sense that each one of them has an individual relation with that secondary place)<sup>694</sup>.

(2) Where may also be subdivided into where *per se* and where by accident: fire is localised “up” by nature, whereas a rock thrown into the air is in the air by accident (its natural place being on the ground). This distinction is not identical with the previous one,

(3) Also where can be relative, for it is possible to say that the air is “higher” than water, and water is “lower” than the air: of course, this must be read as implying that where is not relative in itself, and – in so far as a certain where is compared with another where – it is accidentally accompanied by a relational attribute<sup>695</sup>.

The existence of a generic, specific and individual where was already presupposed by Avicenna’s claim (in [§1.2]) that inherence in a primary, proper place has no individuals, whereas inherence in a secondary place has individual instantiations: however, the example provided here shows that also the inherence of an individual body in an individual natural place is an individual instantiation of the category of where.

[§1.2] (229.4 – 230.2). Before turning to the properties of the category of where, Avicenna takes up a doubt stemming from the preceding exegetical tradition. The discussion is interesting because Avicenna sketches the unfolding of a debate from the ancient source to the more recent developments.

“A predecessor” (*ba’d al-mutaqaddimīn*), namely an ancient commentator, said that many different substances may inhere in a single where in the same time: for example, many people can be found simultaneously in the same market-place. Thereafter, “a later [commentator]” (*ba’d al-ḥadaṭ*) propounded what Avicenna himself argues, namely that as regards the primary, proper place of something, it is impossible that it be shared by many things simultaneously; as concerns any secondary, improper place, it is shared in such a way that each substance has an individual relation with it, other than the relations held by the other substances. In this sense, where resembles whiteness: whiteness is not unitary by species in all

---

<sup>692</sup> Plot. *Enn.* VI.1 [42], 13.1-7; 14.1-8. On the view, held by Archytas and Andronicus, that time (comprising when) and place (comprising where) are categories in their own right, see Simpl. *In Cat.* 342.21-25; 347.6-17.

<sup>693</sup> On the distinction between proper place and improper place, the first being the containing surface that is the limit of the containing body, the second being the containing body itself, see e.g. *Nağāt* 244.8-10. In the *Physics* of the *Šifā’* (*Samā’ tabī’ī* IV.11, 308.10 – 310.6), Avicenna proves that every body has a natural “space” (*ḥayz*), and if it is a body that has a place then its natural space is a natural place (*ibid.*, 310.6).

<sup>694</sup> See the discussion below, at [§1.2].

<sup>695</sup> For a similar division into absolute and relative where see also Fārābī, *Qāṭāgūryās* (DUNLOP 1958, 23.1-4).

its instantiations, but every white is qualified by a proper, individual whiteness. However, “one of the pedantic [commentators]” (*ba’d al-mutaḥadliqīn*) criticised the later commentator for the improper comparison with whiteness: if a certain individual whiteness is destroyed, the other individual whitenesses remain; on the contrary, if Zayd’s and ‘Amr’s “where” is the market-place, then if Zayd’s where is destroyed also ‘Amr’s where is destroyed, for the market-place is only one.

Now, according to Avicenna both the ancient and the modern, pedantic commentator make the same mistake: they take “where” as equivalent to “place”, which is incompatible with a correct conception and description of the category.

**[§2] (230.3 – 231.3).** The discussion of the properties of where is not totally unproblematic, especially as regards their admitting of more and less.

**[§2.1] (230.3-7).** After having denied the existence of contrariety in place<sup>696</sup> Avicenna grants contrariety to where-attributes such as “being in the periphery” and “being in the centre” of the world. Such attributes cannot subsist together in the same subject, but they can alternate with one another therein: a same substance is capable of moving from one extreme to the other, by local motion. That there is contrariety in the category of where is also admitted by previous commentators, for instance Simplicius<sup>697</sup>.

**[§2.2] (230.5 – 231.3).** The fact of having contraries, and a number of supplementary conditions, implies that attributes belonging to the category of where to admit also of more and less<sup>698</sup>. However, there is a clarification to be made: this property does not belong to being in place absolutely, but to a particular instantiation of its in the relation it entertains with other particular instantiations. In other words, it is not being in place absolutely that admits of more and less, but an individual being-in-place with respect to itself, or with respect to another individual being-in-place.

This remark raises a similar issue with respect to another category that has been said to admit of more and less, i.e. quality: with quality it is the same, for neither whiteness nor blackness do – in themselves, as abstract properties – truly admit of a more and a less. Avicenna postpones this delicate discussion to a “place of philosophy more suitable for it” (*makān alyaq bihī min al-falsafa*), i.e. natural philosophy. At *Samā’ ṭabī’ī* II.2, Avicenna will claim – against those philosophers who state that the process of blackening is a moving or “flowing” blackness – that the intensification of blackness occurs because motion is a concomitant of blackness, but the property does not change in itself<sup>699</sup>.

Someone might argue that where admits of more and less only inasmuch as it is relative, whereas quality does – in a sense – because of its qualitative nature; Avicenna leaves aside the issue of quality, for the time being, and concedes that where admits of intension and remission only inasmuch as it is relative.

**[§3] (231.4 – 232.14).** After discussing the properties of where, Avicenna turns to the category of when.

<sup>696</sup> Cf. above, IV.2 [§2.8].

<sup>697</sup> Simpl. *In Cat.* 358.31-32.

<sup>698</sup> For the relation between admitting of contraries and admitting of more/less, see above III.3 [§4.1].

<sup>699</sup> *Samā’ ṭabī’ī* II.2, 95.1-3 (Tr. MCGINNIS 2009, p. 131): “Now, if the blackness remains the same, then there is no flow (that is, a flowing quality), as they maintained. Instead, it is something always remaining the same to which there accidentally belongs a certain increase whose amount does not remain the same – and, in fact, at each instant there is some other amount – in which case this continuous increase is the motion, not the blackness” (*wa-in kāna l-sawād ṭābit al-dāt fa-laysa bi-sayyāl kamā za ‘amū min annahū kayfiyya sayyāla bal huwa ṭābit ‘alā l-dawm, ta ‘riḍu ‘alayhī ziyāda lā yuṭbatu mablaḡuhā, bal yakūnu fī kull ān mablaḡ āḡar, fa-takūnu hādīhi l-ziyāda l-muttaṣila hiya l-ḡaraka lā l-sawād*). Cf. also *Ta’līqāt* 44.3-14.

**[§3.1] (231.4-14).** The category of when consists of the relation of something with the time it is in, or with one of the extremes of time (i.e. instants), and it is other than time itself: this characterization of when mirrors the parallel characterization of where, and descends from Boethus' claim that "time" and "the fact of being in time" are different things<sup>700</sup>. Among the kinds of time to which this category refers Avicenna numbers: (1) a primary time (*zamān awwāl*) which is perfectly adequate to the thing, and (2) a more common time.

(1) As for the primary time (e.g. "noontime", *al-zawāl*), it seems to be a sort of temporal equivalent of natural place, the relation with which was above described by Avicenna as a primary instance of the category of where<sup>701</sup>. However, Avicenna explains here that there is a difference between this primary time and primary place, for primary place is proper of one thing only, and cannot be shared by other things; primary time can be shared instead by many things, although each of these things has a proper, individual relation to it. Such a distinction is not possible in the case of when and time, for there is only one – absolute – time with which all things are related: therefore, the category of when can only be subdivided in respect of the extension of the period of time with which a substance is related.

(2) As for the more common time, it is only characterized by Avicenna as a more extended period that comprises the time or moment identified before as "primary". Hence, it is like the year or the month where the noontime described above as the primary time of something is situated, just as the "secondary" place of something is its containing body as a whole.

It is clear that the same doubts discussed in par. **[§2]** also arised with respect to when, and the relation of substances with time. However, Avicenna's solution to such doubts is the one already developed above, which consists of arguing that when is not identical with time, and that many different subjects may have different individual "whens" (i.e. relations with the same time).

**[§3.2] (231.15 – 232.14).** Concerning when, Avicenna cites and discusses Fārābī's description of the category, which seems to present a slight misconception of the category.

**[§3.2.1] (231.15 – 232.6).** Avicenna usually calls by the epithet "eminent later scholar" (*fāḍil al-muta'ahhirīn*) his predecessor al-Fārābī, especially in the *Qiyās*<sup>702</sup>. The present quotation comes in all likelihood from Fārābī's epitome of the *Categories* or from the lost *Šarḥ al-maqūlāt*, even though the same doctrine is also attested in the *Kitāb al-Ḥurūf* (as the following textual comparison shows):

<i>Maqūlāt</i> VI.5, 231.15-16:	Fārābī, <i>Qāṭāgūryās</i> (DUNLOP 1958, 21.2-3):
<p><i>Fa-qāla inna matā nisbat al-šay' ilā l-zamān allaḍī yusāwiqū wuḡūdahū wa-tanṭabīqu nihāyatāhu 'alā nihāyatay wuḡūdiḥī aw zamān maḥdūd hādā l-zamān ḡuz' minhu.</i></p> <hr/> <p>He said: "when is the relation of something with the time which accompanies its existence, and [such that] its two ends</p>	<p><i>Wa-matā huwa nisbat al-šay' ilā l-zamān al-maḥdūd allaḍī yusāwiqū wuḡūduhū wuḡūdahū, wa-tanṭabīqu nihāyatāhu 'alā nihāyatay wuḡūdiḥī, aw zamān maḥdūd yakūnu haḍā ḡuz'an minhu</i></p> <hr/> <p>When is the relation of something with the definite time whose existence accompanies the existence [of the thing], and [such that] its two ends correspond to the two ends of its</p>

<sup>700</sup> On Boethus, see Simpl. *In Cat.* 348.2-7.

<sup>701</sup> See above the first division of where at **[§1.2]**.

<sup>702</sup> Although I. Madkour has argued for this philosopher being Alexander of Aphrodisias (*Madḥal*, Introduction, pp. 9-10) T. Street has convincingly shown that he is indeed Fārābī (STREET 2001).

correspond to the two ends of its existence, or [the relation of something with] a definite time of which this time is a part”.	existence, or [it is the relation of something with] a definite time of which this [time] is a part.
	Fārābī, <i>Hurūf</i> I.2, 62.2-4:
	<p><i>Wa-ḥarf matā yusta‘malu su‘ālan ‘an al-ḥādīṭ min nisbatihī ilā l-zamān al-maḥdūd al-ma‘lūm al-munṭabiq ‘alayhī, wa-‘an nihāyat&lt;ay&gt; ḍālika l-zamān al-munṭabiqatayn &lt;‘alā nihāyatay&gt; wuḡūd ḍālika l-ḥādīṭ – ḡisman kāna ḍālika aw ḡayr ḡism – ba‘d an yakūna mutaharrikan aw sākinan, aw fī sākin aw fī mutaharrik.</i></p> <hr/> <p>The particle “when?” is used when asking, of a certain generable thing, about its relation with the definite, known time that corresponds to it and about the ends of that time that correspond to the ends of the existence of that generable thing; [regardless] whether the thing is a body or not, and besides [the fact that the thing] is moving or resting, or [is occurring] in something in motion or in rest.</p>

Avicenna finds Fārābī’s text puzzling for one particular reason: he does not understand what Fārābī exactly means as he speaks of the “two ends of the thing’s existence” (*nihāyatay wuḡūdiḥī*), most notably what is the exact referent of the term “existence” (*wuḡūd*). In this paragraph, Avicenna focuses in particular on explaining Fārābī’s sentence, and takes four possible interpretations into account.

(1) Firstly, the ends of the thing’s “existence” could be understood as the limits of the thing’s physical “extension” (*miqdār*). However, it would be quite absurd to think that the time adequate to something has the same measurable extension as the thing, as if the extension of a body and the extension of time were commensurable. In the passage from the *Kitāb al-Hurūf* reported above Fārābī discards this hypothesis himself, by arguing that “when” is said of a contingent being (*ḥādīṭ*) regardless of its being a body or not.

(2) Secondly, the ends could be understood as the extremes (beginning or end, starting point or ending point) of the thing’s “motion” (*ḥaraka*); however, there would be still two possibilities, for the ends could either (2.1) belong to the moving thing, in so far as it has motion, or (2.2) to motion itself. Case (2.1) presents the same difficulty as case (1); in both cases (2.1-2), the category of when would only comprise moving beings – which is surely not what Aristotle meant. In the cited passage from the *Kitāb al-Hurūf*, Fārābī himself argues that when is predicated of a generable thing (*ḥādīṭ*) independently of its being a thing that is moving or resting, or something that exists in a moving or resting thing.

(3) Thirdly, the ends could be the two ends of the time in which the existence of the thing is actually realized (*zamān wuḡūdiḥī ḥāṣilan*). If it were so, however, then there would be no difference at all between the “two ends of existence” and the “two ends of time” that correspond to them, for they would be exactly the same things.

(4) Eventually, the ends could be the ends of the relation the thing has with time, and this is not absurd: for then it would be possible to understand “when” as the relation of something

to a certain time, whose two ends are the relations held by the subject with the two ends of that certain time – in such a way that the subject has no relation with any time before the first end and after the second end. This, Avicenna argues in the end, must be the correct interpretation of Fārābī’s description.

**[§3.2.2] (232.6-14).** Despite not being incorrect, interpretation (4) poses at least one problem – notably, with respect to the relation of something with any time other than an interval, i.e. its relation with a “now” or instant (*al-ān*). If we take a thing’s relation to a certain instant to belong to the category of when, then this description is incorrect, for an instant is a limit and not an interval; on the contrary, if we accept the description we also have to admit that the category of when does not comprise a thing’s relation with a certain instant<sup>703</sup>.

Now: as we have seen, Avicenna accepts the thing’s relation with an instant, for he said above that the category of when comprises a thing’s relation with time or with its extremes (i.e., instants)<sup>704</sup>. The only condition for the relation with an instant to be intelligible is that the times of which it is a limit be determinate: in that case, the thing would have a definite relation not with a time, but with an extreme of its. In the end, Avicenna rejects Fārābī’s description, on account of the fact that it excludes a thing’s relation with the instant; Fārābī might have wished to exclude it on purpose, but among the ten categories the genus that is most suitable for containing it is undoubtedly the category of when.

**[§4] (232.15 – 233.4).** This final remark implicitly replies to aporiae like those presented by Plotinus, whose rejection of the categories of where and when consists in the main of reducing them to compounds of other categories, inasmuch as they display a relation of inherence (*ἄλλο ἐν ἄλλῳ*)<sup>705</sup>. A similar doubt is reprised by Simplicius, who mentions an anonymous objection according to which the attribute “when”, being the relation of something with time, seems to display a compound of more categories, since it comprises (1) a subject, e.g. Socrates (belonging to the category of substance), (2) time (belonging to the category of quantity) and (3) their compound (the subject in time, which belongs to the category of when)<sup>706</sup>. Against such an objection, Simplicius limits himself to arguing that the category of when is not complex but simple, and is constituted by “the mere relation that the thing has with time” (*ψιλῆ δὲ ἡ σχέσις τοῦ πράγματος πρὸς τὸν χρόνον*)<sup>707</sup>.

The argument expounded by Avicenna is the following. It is not necessary to think that, being characterised as relations of a thing X (the subject) with a thing Y (time/place), where and when are complex attributes or categorial compounds; as if X and Y played together the role of matter, whilst the relation that associates them would play the role of form. This “complex” nature of where and when would bear the absurd consequence of the relation being, in the same time, a part (the form) and the whole (the attribute when/where), and thus a part of itself. For this reason, it is totally absurd to conceive of where and when as of complex attributes.

<sup>703</sup> For Avicenna’s account of the instant, see *Samā’ ʿIabīʿ* II.12.

<sup>704</sup> See above, **[§3.1]** (231.4-5).

<sup>705</sup> Plot. *Enn.* VI.1 [42], 13.30-33; 14.15-24.

<sup>706</sup> Simpl. *In Cat.* 347.32 – 348.2.

<sup>707</sup> Simpl. *In Cat.* 347.37.



## VI.6

### ON THE REST OF THE TEN CATEGORIES

The last chapter of the sixth treatise regroups Avicenna's discussion of the four remaining categories: position, having, acting and being acted upon.

[§1] Position has already been defined as a configuration that results from the mutual disposition of the parts of a body, both with respect to one another and with respect to an external landmark. Among the properties of position there is the fact of admitting contraries: since directions are contrary, the parts of a certain body may be disposed or oriented in contrary directions. However, in order to be classified as contrary two positions must – besides being naturally incompatible and alternating on the same subject – differ by species and definition, not exclusively by number. Moreover, position admits of more and less, but – like the category of where – only with respect to its being somehow relative to something else. [§2] The category of having is difficult to define rigorously, and most commentators have listed heterogeneous attributes therein. [§3] The categories of acting and being acted upon are taken up and described together, as two aspects related to a certain disposition for continuous change. Being acted upon is the state of the thing that changes, in the process of change; acting is the state of the thing that originates the process of change. They are not called “action” or “affection”, since these words refer to the qualities that result from acting and being affected. Acting and being acted upon admit, both of them, of contrariety and of more and less.

[§1] (233.8 – 235.6). As in the case of where and when, Avicenna's discussion of the remaining four categories is not based on the text of the *Categories* (which says nothing about them), but mainly on developments found in the subsequent exegetical tradition.

[§1.1] (233.8-13). The different meanings of the term “position” (*wadʿ*) have been listed and discussed above, on two occasions: in chapter IV.1, with regard to the “position” used by Aristotle to classify quantities<sup>708</sup>; in chapter VI.1, to counter the claim that shapes belong to the category of position<sup>709</sup>. In both cases, a coherent characterisation of categorial position emerged, consisting of both the mutual position of the parts of a body and their relation to external landmarks, described here in VI.6 as “either containing places, or localized and contained things and directions” (*immā amkina ḥāwiya wa-immā mutamakkināt maḥwiyya wa-ḡihāt*)<sup>710</sup>. A man is said to be standing or sitting not only in himself, with respect to the relative disposition of the parts of his body, but also with respect to the relative position these parts have with certain external realities (i.e. the floor, a chair, or both). This account of position seems to be an original acquisition of Avicenna's, given that the category was characterised by previous commentators either as the relation of something with its position, in comparison with where and when<sup>711</sup>, or merely as the fact of having position<sup>712</sup>. It also differs from the account provided by Fārābī, who attaches it very closely to the category of where – of which position would be, in some sense, an attribute. As a matter of fact, Fārābī in

---

<sup>708</sup> See above, IV.1 [§2].

<sup>709</sup> See above, VI.1 [§6.2].

<sup>710</sup> Cf. above, 233.11.

<sup>711</sup> Simpl. *In Cat.* 335.13-15 (tr. GASKIN 2000, pp. 65-66): “[...] just as the relation to place creates the [category of] where, and [the relation] to time [creates] the [category of] when, so [the relation] to a position creates the [category of] being-in-a-position” (ὡς γὰρ ἡ πρὸς τὸν τόπον σχέσις ποιεῖ τὸ ποῦ καὶ ἡ πρὸς τὸν χρόνον τὸ ποτέ, οὕτως ἡ πρὸς τὴν θέσιν ποιεῖ τὸ κεῖσθαι). See also Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 350.27-28: “The category of position is a relation that comes about in something, when position is realized for it” (*wa-maqūlat al-mawḍūʿ hiya nisbat taḥduṭu fī l-ṣayʿ ʿinda ḥusūl al-waḍʿ laḥū*).

<sup>712</sup> Phil. *In Cat.* 164.18: “Being-in-a-position is the fact of having some position” (κεῖσθαι δέ ἐστι τὸ θέσιν τινὰ ἔχειν).

the epitome of the *Categories* defines position as “the fact that the determinate parts of the body stand opposite to determinate parts of the place it is in, or correspond to these” (*an takūna aḡzā`u l-ḡismi l-mahdūdātu muḥādīyatun li-aḡzā`in mahdūdatin min al-makāni llaḏī huwa fīhi*), i.e. as a certain configuration assumed by the relation that the body has with place (in other words, its “where”)<sup>713</sup>.

**[§1.2] (233.13 – 235.4).** Position may admit of contrariety, since directions admit of contrariety. However, Avicenna makes a distinction between two cases: (1) a case where positions differ by species/nature, and not by number, and (2) a case where positions differ by number and not by species/nature: in case (1) there is contrariety, whereas in case (2) there is no contrariety.

Avicenna provides here many examples for case (1). Firstly, a same man that lies supine, with his face, chest and knees oriented towards the ceiling, may move and come to lie prone, in the opposite direction: the two positions, being prone and being supine, differ by species and definition, cannot exist together in the same subject but may alternate on it. This corresponds to the actual definition of contraries, and qualifies being prone and being supine as contrary positions. Another example of case (1), presented in this paragraph, is that of a man or a tree that are first “planted” or “erected” (*nuṣībā*) on their legs, before turning their face and bending down. Even in this case, the difference between being erected and being bent down is an essential, specific difference: if these two notions respect the other criteria identified for defining contraries (being naturally incompatible, alternating on the same subject, etc.) then they are contraries.

Avicenna’s example for case (2) is that of a cube, whose fundamental geometric structure does not change in any position: when a cube is moved from a certain position, what changes is only the relative disposition of its individual faces, but not the overall proportion and ratio of its parts. Here, the different positions of the cube do not differ by nature or species, but numerically – notably, with respect to a particular specification of theirs. According to this characterisation of contrariety, therefore, the positions of a die with face-6 up and face-6 down are not contrary positions. To explain this point better, Avicenna recurs to the example of other non-contrary properties, i.e. temporally distinct accidents: although the past whiteness and the present whiteness cannot exist together in the same subject, they are not contrary because they do not differ by species (but only individually).

Avicenna’s discussion of contrariety in position might be inspired by Simplicius, who presents a distinction between the “contrariety” (ἐναντιώσις) of prone and supine and the plain “difference of positions” (διαφοράν [...] θέσεων) found in the cube, in the sphere and in “many other inanimate things” (ἄλλα πολλὰ τῶν ἀψύχων)<sup>714</sup>.

**[§1.3] (235.4-6).** Unlike Simplicius, who held that position does not always admit of more and less<sup>715</sup>, Avicenna seems to claim that it does, but only in a certain respect: i.e. “in the same way as [the category of] where admits thereof” (*alā nahw qubūl al-ayn*, 235.4). He might be referring to the fact that the category of where seems to admit of more and less not inasmuch as it is where, but inasmuch as a where has a relation with another where<sup>716</sup>. In this sense, also position does not admit of more and less in itself, but only in so far as a position is relative to another position. It is also possible to interpret this statement as implying that position admits of more and less only to the extent that it is localised, and the category of where admits thereof. Avicenna’s conciseness makes it difficult to understand exactly what he

<sup>713</sup> Fārābī, *Qātāḡūryās* 23.6-7 (DUNLOP 1959).

<sup>714</sup> For the whole discussion of contrariety, see *Simpl. In Cat.* 335.28 – 336.3; for this distinction in particular, 335.35 – 336.3.

<sup>715</sup> See *Simpl. In Cat.* 336.3-10, particularly 336.7-10: Simplicius argues that not all kinds of “position” admit of more and less, for example “surface, line and point” (ἡ [...] ἐπιφάνεια καὶ ἡ γραμμὴ καὶ τὸ σημεῖον) and in general the incorporeal instances of this category.

<sup>716</sup> On this point see above, VI.5 [§3.2].

means here. The clarification that follows, however, makes the first possibility more plausible. As a matter of fact, if position were not a fixed state, but a motion directed towards position – for instance if “standing” (*al-qiyām*) were identical with the process of standing up and not with the final erect position – then it would admit of more and less in itself (for motion and change do admit of more and less in themselves). However, since position is equivalent to the final, stable state it does not surely admit of more and less in itself – which suggests that it does as “where” does, i.e. accidentally and in virtue of a certain relation.

**[§2] (235.7-16).** The category of having or “possession” (*ḡida*) is a bit of a puzzle: Aristotle does not say much about it in *Cat.* 4 or 9, but he writes a whole short chapter devoted to the various meanings of the word “having” (ἔχειν) in the end of the book, and another one in the *Metaphysics*<sup>717</sup>. Although the category and the homonymous term are surely not the same thing<sup>718</sup>, the commentators – on account of their strongly unitarian reading of the *Categories* – tended to read the discussion of the senses of “having” found in *Cat.* 15 as a pseudo-division of the category into its kinds or species. Also Avicenna does, as he claims here that none of the things posited as species of having are species thereof, but merely meanings of a homonymous term. These senses correspond rather to relations of quantitative consistence (coming from something), inherence (as with Aristotle’s example of wine “having” a recipient at 15 b23-24), possession (as in Aristotle’s example “having a house” at 15 b26-27) or union (as in the example “having a wife”, which also for Aristotle basically amounts to “co-habiting”<sup>719</sup>). As a matter of fact, it seems difficult to define having in a rigorous categorial sense, as “having” is employed in ordinary language to describe a variety of substance-attribute relations and may be referred to items already classified in other categories, like qualities, quantities, relations, etc.

For these reasons, Avicenna renounces characterizing it in more detail and dividing it into species: he even invites the reader to search for further elucidations in the books of other authors (presumably Simplicius, who devotes a lengthy section of his commentary to this category, Ibn al-Ṭayyib and possibly also Fārābī, who defines and defines ‘having’ in his *Paraphrase* of the *Categories* and might have done so in his lost *Šarḥ*<sup>720</sup>). In the end he limits himself to presenting a short description, reminiscent of the one he employed to isolate the genus from other accidents at ch. II.5<sup>721</sup>; however, instead of dividing the category properly and in detail Avicenna dismisses it quickly and vaguely as having genera and species (particulars and universals), and also as comprising both essential (the skin of a cat) and accidental (a man’s shirt) attributes.

**[§3] (235.17 – 238.6).** In the *Categories*, Aristotle does not define the categories of acting and being acted upon; he only remarks, about them, that they admit of both contrariety and intension/remission (*Cat.* 11 b1-7). Avicenna takes them up together, since they represent two distinct but closely related aspects of the same phenomenon (motion).

**[§3.1] (235.17 – 236.8).** Acting and being acted upon are related to a disposition or configuration (*hay’a*) that comes to be in a certain substrate (namely an attribute like a quality, a quantity, a where or a position) and produces a gradual change into another attribute. The thing in which such disposition inheres is the passive, affected thing, and its state is called

<sup>717</sup> Arist. *Cat.* 15 b17-33; *Metaph.* Δ 23 (1023 a8-25).

<sup>718</sup> As is also argued by BODÉÜS 2002, p. 156.

<sup>719</sup> *Cat.* 15 b29-30 (tr. ACKRILL 1963, p. 42) : “[...] but this seems a very strange way of ‘having’, since by ‘having a wife’ we signify nothing other than he lives with her” (ἔοικε δὲ ἀλλοτριώτατος ὁ νῦν ῥηθεις τρόπος τοῦ ἔχειν εἶναι· οὐδὲν γὰρ ἄλλο τῷ ἔχειν γυναῖκα σημαίνομεν ἢ ὅτι συνοικεῖ).

<sup>720</sup> Simpl. *In Cat.* 365.1 – 377.7; Fārābī, *Qāṭāgūryās* 24.7-15 (DUNLOP 1959). Cf. also Ibn al-Ṭayyib’s short discussion of ‘having’ at *Tafsīr al-maḡūlāt* 351.9-11.

<sup>721</sup> Cf. above, II.5 [§4.3.3] and the COMMENTARY *ad loc.*

“being-affected” or “being acted upon”; the thing which produces this disposition, as long as the disposition is produced, has the state of “acting”. Avicenna identifies tacitly the category of being acted upon with motion, for he anticipates that the categories in which such affections are found will be determined more precisely in natural philosophy<sup>722</sup>. As a matter of fact, some anonymous commentators – who clearly did not conceive of motion and being acted upon as identical – understood the category as being associated only with qualities, whereby some others did not. If being acted upon is practically the same as motion, however, it will be clear that the categories in which acting and being acted upon are found are the four categories where motion is found, notably quality, quantity, where and position. Besides being alluded to above, these four categories will also be mentioned in the following paragraph – with regard to the distinction between acting/being-acted-upon, on the one hand, and action/affection on the other hand.

**[§3.2] (236.9 – 237.2).** The point made in this paragraph is related with what Avicenna claimed about position above in the end of par. **[§1.3]**, but also with the discussion of affections and affective qualities carried out in chapters V.5<sup>723</sup>. These two categories are called “acting” (*an yaf‘ala*) and “being acted upon” (*an yanfa‘ila*), not “action” (*fi‘l*) or “affection” (*infi‘āl*): as a matter of fact, action and affection are names that can be attributed also to the results of acting and changing, not necessarily to the processes alone. “Affection” is said of both the process of something that blackens, and the affective quality that results from the interruption of blackening, i.e. black; “action” is said of both the completed process of making something black and of the same process, when *in fieri*. When being acted upon affects a certain category, the firm and stable product of change always belongs to that category, whereas the change that brings it about belongs to being acted upon: being-sit (result of sitting down) belongs to position, final growth (result of growing) to quantity, rest in a certain place (result of local motion) to the category of where, heat (as a result of burning) to the category of quality. The source of this discussion seems to be once again Simplicius, who explores the reason why Aristotle posits as a genus ποιεῖν (acting) instead of ποιοῦν (agent) or ποιήσις (action) and concludes that only “acting” designates univocally the activity that leads to a certain attribute being established in a subject<sup>724</sup>.

**[§3.3] (237.3-5).** This argument is understandable when acting and being acted upon are found in categories that admit of contrariety, e.g. in quality, where (the two examples mentioned by Avicenna) and position. Indeed, if they correspond to the transition between two contrary extremes, then motion from the first extreme to the second is definitely contrary to motion from the second extreme to the first. However, it poses a problem with quantitative change – augmentation and diminution – for both Aristotle and Avicenna have denied that quantity admits of contraries<sup>725</sup>.

**[§3.4] (237.5 – 238.6).** The issue with being “more” or “less” affected is quite complicated. Avicenna makes a distinction between two kinds of intensity that can be supposed or detected in being affected, or motion.

(1) In the first sense, being “more/less” in the motion of blackening must not be understood as being relatively closer to (or further from) the blackness that corresponds to the stable, resulting quality of the process, but as being relatively closer to (or further from) the blackening that represents the endpoint of the motion producing blackness. This is the more and less of two distinct processes of change that take place at the same speed, and are said to be “more” and “less” only because one of them starts at a point further from the extreme, the

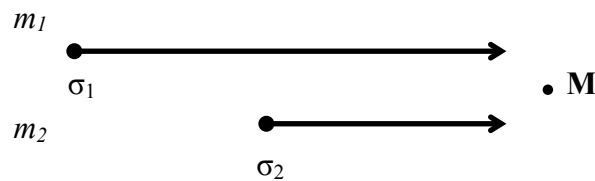
<sup>722</sup> *Samā‘ tabī‘ī* II.2, 93.4 ff.; 97.13. See also above, II.4 **[§2]** and the COMMENTARY *ad loc.*

<sup>723</sup> Cf. in particular the distinction between “affection” understood as a quality and “affection” understood as a process at V.5 **[§1.3]**.

<sup>724</sup> VAMVOUKAKIS 1980, p. 257.

<sup>725</sup> See above, IV.2 **[§2]**.

other from a point closer to it. Let us take two motions of the same species ( $m_1$  and  $m_2$ ), directed towards the same point or result M, starting respectively from point  $\sigma_1$  and  $\sigma_2$  and equal in speed:



In ordinary language, we may be tempted to say that  $m_2$  is “more” motion than  $m_1$  (either goes “more upwards”, or “blackens more”, or “moves more” than  $m_1$ ) because it starts from a point closer to M, and if it does not stop it will reach M before  $m_1$ .

(2) The second sense is related with speed: in this sense, being “more/less” moving, blackening, growing and the like means being quicker or slower in moving, blackening or growing. Let us assume two changes of the same species (e.g. two blackenings  $b_1$  and  $b_2$ ) that reach a certain common endpoint B from the same starting point W, in different times: in that case, we say that one blackening blackens more than the other, since it is faster than the other.

Despite presenting both types of more and less, Avicenna clarifies – in the end – that the only kind of more and less that can be properly ascribed to being affected is kind (2), depending on different speeds in the same interval. Avicenna does not speak of acting, but we may suppose that the intensity of a certain action depends in a sense on the intensity of the affection that it produces in another subject.

[§4] (238.6-7). This conclusion, quite curiously referring to the contents of the following chapter, is one of the clues that might point to the division of chapters in *Maqūlāt* not having been made by Avicenna himself<sup>726</sup>.

<sup>726</sup> I have alluded to this hypothesis in the INTRODUCTION, par. 2.3.1.

## VII.1 ON OPPOSITES

The seventh treatise of Avicenna's *Maqūlāt*, subdivided into four chapters, reworks the so-called *Post-paedicamenta*, namely the last six chapters of Aristotle's *Categories* (actually with the exception of chapter 15, which he alluded to when discussing the category of having in chapter VI.6). In the first chapter of treatise VII Avicenna deals with the classification of opposites (ἀντικείμενα in Greek, *mutaqābilāt* in Arabic) and the descriptions of their properties that Aristotle makes in *Cat.* 10.

[§1] Opposites are attributes that cannot be found together in the same subject simultaneously. There exist two main species of opposites: opposites that cannot be said of the subject simultaneously but may exist therein in the same time (contradictories), and opposites that can neither be said nor exist in the subject simultaneously (contraries, possession and privation, relatives). [§2] The basic sense of opposition is the first, which only displays a logical incompatibility; in a following imposition of names, "opposition" was used to designate the second sense, corresponding to ontological incompatibility. [§3] After presenting the primary division of opposites, Avicenna turns to Aristotle's division of existential opposites, based on the distinction between opposites that have their quiddities said with respect to one another (relatives) and opposites that do not (privation and possession). Thereafter, he explains in more detail how Aristotle characterizes the notions of privation and contrariety. [§4] In the end, Avicenna mentions and refutes the objections moved by a previous critic of Aristotle, who thought the classification of opposites found in the *Categories* to be incomplete. In particular, Avicenna refutes the commentator's claim that Aristotle should have numbered as further kinds of opposition the oppositions motion/rest, substance/accident and form/matter.

[§1] (241.7 – 242.17). In the end of chapter VI.6 ([§4]), Avicenna presented a programmatic synthesis of the subsequent discussion of opposites. Following that programme, in the first two paragraphs of VII.1 [§1-2] Avicenna deals with the general definition and subdivision of opposites, whereas in the second part ([§3-5]) he discusses what he holds to be Aristotle's non-scientific division of "existential" opposites found in *Categories* 10<sup>727</sup>.

[§1.1] (241.7-11). Avicenna defines opposites, in general, as two attributes that cannot be found together, or "regrouped" (*lā yağtami 'āni*) in the same subject simultaneously, in the same respect and in the same time; this description, found also in *Ilāhiyyāt* VII.1<sup>728</sup> and almost identical with Fārābī's description of opposites as it is found in the short Paraphrase on the *Categories*<sup>729</sup>, is clearly reminiscent of Aristotle's definition of opposites – in *Metaphysics* Δ 10 – as "all those things that cannot be present together in a same thing that may admit of both" (ὅσα μὴ ἐνδέχεται ἅμα παρεῖναι τῷ ἀμφοῖν δεκτικῷ)<sup>730</sup>. Unlike Aristotle, Avicenna divides opposites – understood in this absolute sense – into two main species: (1) opposites that cannot be said of the subject simultaneously, but can exist therein in the same time and (2) opposites that neither are said of the subject, nor exist in the subject simultaneously. Opposites of the first kind are contradictories, for instance a pair of attributes A and ¬A such that a certain subject cannot be A and ¬A in the same time, but can have A and ¬A as accidents simultaneously; opposites of the second kind are such that the subject can neither be A and ¬A in the same time, nor have A and ¬A as accidents simultaneously. We may call

---

<sup>727</sup> Arist. *Cat.* 11 b17 – 13 b35.

<sup>728</sup> *Ilāhiyyāt* VII.1, 304.13-14.

<sup>729</sup> Fārābī *Qāṭāğūryās* 27.18-19 (DUNLOP 1958): "Opposites are those two things that cannot exist together in the same subject, in the same respect and in the same time" (*Wa-l-mutaqābilāni humā l-ṣay'āni l-lağāni lā yumkinu an yūğadāni fī mawḍū' in wāhidin min ġihatın wāhidatin fī waqtın wāhidin*).

<sup>730</sup> Arist. *Metaph.* Δ 10, 1019 a22-23.

opposition (1) *logical* opposition, whereas we may label opposition (2) as *existential* or *ontological* opposition. Although this division seems to be genuinely Avicennan, many previous commentators present a similar but simpler distinction between opposition with regard to speech and opposition with regard to things, that might well have been the basis for Avicenna's refinement<sup>731</sup>.

**[§1.2] (241.12 – 242.15).** Logical opposition comprises cases where one opposite is the negation of the other, either a plain negation or a negation corresponding somehow to a positive determination. An example for the latter typology of negation is represented by odd and even, where “odd” – despite being characterised as “uneven” – is not a completely negative notion (like e.g. non-horse)<sup>732</sup>.

Plain affirmation and negation (*al-nafy wa-l-ittbāt*) can be either simple, when applied to a single term (horse and non-horse), or complex, when applied to an entire statement, such as “Zayd is a horse” and “Zayd is not a horse”. As is clear, the first sort of affirmation and negation does not have a truth-value, whereas the second kind does – since truth and falsehood are a property of complex expressions<sup>733</sup>. Non-horseness is not an existing attribute, with a proper essence; for if it did, then infinite negative determinations would exist in “heaven”, which is absurd. Now, being opposites of the first type listed in par. **[§1.1]**, these are not opposite with respect to existence, but only with respect to the intellect and language. Avicenna explains this point by means of an example. Let us take for instance two sensible properties such as smell and taste: in so far as smell is by definition other than taste, we may admit that it is non-taste and, vice versa, taste is non-smell: it is not possible to say that something is – in the same time – taste and smell. However, smell and taste may exist in the same subject in the same time, for a single apple has a smell and a taste simultaneously. Now, the general rule is the following: if two attributes are ontologically incompatible, then they must be also logically incompatible; if they are logically incompatible, however, it is not necessary that they also be ontologically incompatible.

**[§1.3] (242.16-17).** The second kind of opposition – ontological incompatibility – comprises the remaining sorts of opposites, such as contraries, possessions/privations and (presumably, since they are not mentioned as examples here, but in the following paragraph) also relatives.

**[§2] (242.17 – 244.10).** After providing the initial definition and subdivision, Avicenna lists firstly a number of items that are normally listed among opposites; he then highlights the numerous differences that subsist among them, and proposes a comprehensive notion of opposition.

**[§2.1] (242.17 – 243.19).** Things that are customarily called “opposites” seem to differ greatly from one another: to the purpose of demonstrating this, Avicenna provides a short catalogue of opposites, chosen randomly among Aristotle's four species (contradictories, contraries, relatives, possessions/privations). As a matter of fact, opposite things seem to present a number of different forms: sometimes they qualify substances (e.g. horse and non-horse, soul and non-soul) and sometimes they qualify accidents, for instance propositions (Zayd is a horse/Zayd is not a horse); some of them (odd and even) do not alternate on the same individual subject, but on the same genus (i.e., number); some of them seem to be equivalent privations of certain properties (e.g. blindness of sight, rest of motion) but not all of them actually alternate on the same subject (for motion and rest alternate, but blindness and

<sup>731</sup> See Amm. *In Cat.* 93.18-21, where opposites are said to be opposed either *ἐν λόγοις* or *ἐν πράγμασι*; Phil. *In Cat.* 168.18-19; Olymp. *In Cat.* 135.12; see also Ibn al-Tayyib, *Tafsīr al-maqūlāt* 359.16-17, where a distinction is presented between opposition “in utterances” (*fī l-alfāz*) and opposition “in things” (*fī l-umūr*).

<sup>732</sup> On the contrariety of odd and even see above, VI.3 **[§2.2.2]**.

<sup>733</sup> See Arist. *Cat.* 2 a4-10; *De int.* 16 b33 – 17 a7 (where nonetheless it is argued that only certain kinds of statement admit of truth and falsity); see also above, II.5 **[§5]**.

sight don't); relatives seem to differ from other opposites, in that they need not have the same subject.

[§2.2] (243.19 – 244.12). When it comes to finding a general notion of opposition applicable to all mentioned types, Avicenna presents a general rule of non-contradiction: opposition in its primary sense is analogous to predicative or logical opposition, described above in par. [§1.2]. This opposition consists of the fact that a certain subject cannot be called “A” and “the opposite of A” simultaneously, whereas A and its opposite may exist together in that subject as opposite accidental properties (smell and non-smell, as in Avicenna’s example above). Avicenna clarifies that the idea that a certain attribute A and its opposite may exist simultaneously in the same subject means that for instance “smell” and “non-smell” may exist simultaneously in a subject S, not that “has smell” and “does not have smell” hold true of S simultaneously (for these are two contradictory statements).

[§2.3] (244.12 – 245.4). Later, the notion of opposition was transferred to designate existentially incompatible items, capable of existing in the same subject in different times but incapable of existing therein simultaneously. Here, Avicenna makes a distinction between the kinds of opposition related with this secondary, more specific notion of opposition:

[a] Some of these opposites are “characterised by speech”, but not insofar as the incompatibility is logical or predicative: for instance, affirmation and negation cannot belong to the same predicates and subject simultaneously, but they are incompatible as properties (not as predicates).

[b] Some others are “extrinsic” (*min ḥāriḡin*), i.e. attributes such that the subject can be both of them in potency, but not actually and simultaneously. This second type comprises two subtypes: [ba] opposites that share in the same “common” or “universal” subject (e.g. odd/even, that alternate on the genus number but not on singular numbers) and [bb] opposites that share in the same singular subject (e.g. whiteness/blackness, and so forth) This is the second notion of opposition, which can be subdivided into species either correctly and scientifically, or in a manner suitable for beginners (as Aristotle does in the *Categories*).

[§3] (245.5 – 248.9). After presenting his own scientific discussion of opposites, Avicenna turns to inspecting Aristotle’s division of existential opposites, as presented in the tenth chapter of the *Categories*.

[§3.1] (245.5-15). Actually, there is no such thing as an explicit, systematic division of opposites in *Cat.* 10: Aristotle limits himself firstly to listing the four main types of opposition with the relative examples (11 b17-23), as he did when “dividing” the ten categories in *Cat.* 4, and then to discuss them in detail, both separately and comparatively (11 b23 – 13 b35). The criteria for the division mentioned by Avicenna, however, are implicit in Aristotle’s definitions and comparisons and were already made explicit by previous commentators, since a very similar division may be found in Philoponus’ commentary<sup>734</sup>.

The first division, i.e. the one between [a] opposites that are spoken of with respect to one another and [b] opposites that are not such, is implicit in Aristotle’s short comparison between mutual relatives and contraries at 11 b32-35: “[...] things opposed as relatives are called just what they are, of their opposites or in some other way in relation to one another. Things opposed as contraries, however, are never called just what they are, in relation to one another, though they are called contraries of one another” (Ὅσα οὖν ἀντίκειται ὡς τὰ πρὸς τι αὐτὰ ἄπερ ἐστὶ τῶν ἀντικειμένων ἢ ὅπωςδῆποτε πρὸς ἄλληλα λέγεται· τὰ δὲ ὡς τὰ ἐναντία, αὐτὰ μὲν ἄπερ ἐστὶν οὐδαμῶς πρὸς ἄλληλα λέγεται, ἐναντία μὲντοι ἀλλήλων λέγεται [...]). On the other hand, the criterion that Avicenna mentions for the second subdivision, i.e. [ba] being

---

<sup>734</sup> Phil. *In Cat.* 168.19-21: “Opposites as things are either considered to be in a certain relation, or to be unrelated. If they are unrelated, then either they change into one another, or they do not change [into one another]” (τὰ δὲ ὡς πράγματα ἀντικείμενα ἢ ἐν σχέσει τινὶ θεωρεῖται ἢ ἄσχετά εἰσι. καὶ εἰ ἄσχετά ἐστίν, ἢ μεταβάλλει εἰς ἄλληλα ἢ οὐ μεταβάλλει).



capable of bidirectional change or **[bb]** being incapable thereof, derives from one of the criteria used by Aristotle, in the follow-up of this chapter, at 13 a18-32, to distinguish the opposition of contraries (bidirectional) from the opposition of privation and possession (unidirectional): “Further, with contraries it is possible (while the thing capable of receiving them is there) for change into one another to occur [...]. With privation and possession, on the other hand, it is impossible for change into one another to occur” (ἔτι ἐπὶ μὲν τῶν ἐναντίων ὑπάρχοντος τοῦ δεκτικοῦ δυνατόν εἰς ἄλληλα μεταβολὴν γενέσθαι, [...] ἐπὶ δὲ γε τῆς στερήσεως καὶ τῆς ἔξεως ἀδύνατον εἰς ἄλληλα μεταβολὴν γενέσθαι [...]).

[§3.2] (245.15 – 247.6). Avicenna’s long discussion of privation and possession is fundamentally motivated by the variety of meanings of the terms “possession” (*qunya*) and “privation” (*adam*), and consequently by his desire to warn the reader about possible misunderstandings.

[§3.2.1] (245.15 – 246.3). Aristotle’s examples for privation in *Cat.* 10 are sight and blindness: he characterises this sort of privation as the absence of something that the subject naturally has, at the time where it is natural for it to have it (12 a26-34). Therefore, Avicenna explains that the sight of which blindness is a privation is neither the sense of sight (i.e., the “primary capacity of seeing”) nor seeing in act (i.e., the actualization of the capacity of seeing). As a matter of fact, we should not call an animal that has practically no sense of sight (say, a star-nosed mole) a “blind” or “sightless” animal, inasmuch as it does not lack a natural character of its species. Moreover, seeing in act and its opposite, seeing in potency, resemble another couple of opposites (motion and rest) in that they are subject to bidirectional change (i.e., as we can turn indistinctly from motion to rest and from rest to motion, so we may exercise or not our capacity of seeing by opening or closing our eyes), whereas Aristotle’s division implies that change in privation and possession is unidirectional.

[§3.2.2] (246.3 – 247.3). In the follow-up Avicenna lists eight alternative types of privation, which seem not to constitute a systematic classification, but rather a sort of rhapsodic catalogue (seemingly quite independent of Aristotle’s discussion of στέρησις in *Metaph.* Δ 22<sup>735</sup>).

(1) Firstly, there is privation as is defined in the *Physics*, i.e. the privation of form in matter<sup>736</sup>; for instance, the privation of blackness in something that is black by nature, regardless whether that privation is associated with the existence of whiteness (the opposite property) or the absence of any property. If whiteness exists, then, whiteness is not identical with this privation of blackness, and it is always an independent property.

(2) The second type of privation mentioned here is absolute, generic privation, like the privation of “rest” conceived as an absolute absence of motion, not as the condition of a rolling body that stops moving.

(3) The third type of privation is the absence of something that it is natural for the subject to have, and to have in a certain time, in that specific time. For this species, Avicenna does not provide positive but negative examples: a non-human sperm is not “deprived” of humanity in this sense, for it is never natural for the sperm of a horse to bring about the species humanity; a young boy is not “deprived” of the capacity of procreating in this sense, for it is natural to become fertile at a certain age. To this kind of privation, in a certain sense, kinds (4) and (5) are opposed.

<sup>735</sup> See Arist. *Metaph.* Δ 22, 1022 b22 – 1023 a7. Compare also the meanings of privation listed in *Ilāhiyyāt* VII.1, 304.18 – 305.9.

<sup>736</sup> Cf. Arist. *Phys.* A 7 (; compare also *Samā’ tabī’ī* I.2, 17.2 – 19.9. For Avicenna’s definition of the privation that is opposite to form, see in particular *Samā’ tabī’ī* I.2, 18.15-16 (Tr. MCGINNIS 2009, slightly modified): “This privation is not absolute privation, but one having a certain mode of existence; since it is a privation of some thing, bringing along with itself a certain predisposition and preparedness in some determinate matter” (*wa-hādā l-‘adamu laysa huwa l-‘adamu al-muṭlaqu, bal ‘adamun lahū naḥwun min al-wuḡūdi, fa-innahū ‘adamun šay’in ma ‘a tahayyu’in wa-isti ‘dādin lahū fī māddatin mu ‘ayyanatin*).

(4) The fourth type is the privation of something before the appropriate time, e.g. the natural beardlessness of young boys.

(5) The fifth type is the privation of something after the appropriate time, e.g. the natural baldness of old men.

(6) The next type of privation is privation according to the genus, and not the species: rationality and irrationality are two opposite differentiae within the same genus, and the privation of rationality does not affect the species defined as “rational” (i.e., man) but rather the genus that comprises rational and irrational animals.

(7) Another kind of privation affects the species but not the individuals, and this is the privation observed in the opposition male/female within the species man<sup>737</sup>.

(8) Eventually, there is a privation that affects individuals only, a type to which some of the aforementioned examples (3) undoubtedly belong.

[§3.2.3] (247.3-6). The privation that Aristotle takes into account in the *Categories* is undoubtedly privation (3), understood as the result of the irreversible loss of a natural property, in the appropriate time.

[§3.3] (247.7 – 248.9). The second subdivision of non-relational opposites (see above, [§3.1]) comprises those opposites that Aristotle calls “contraries”, without making a consistent distinction between “privative” and “existential” contrariety.

[§3.3.1] Aristotle’s examples for contraries at *Cat.* 11 b33 – 12 a25 are quite heterogeneous: they comprise – among others – such attributes as health and sickness, even and odd, hot and cold, motion and rest; all these things are contraries according to common sense, but – Avicenna argues – they are not contraries in the same sense and in the same way. As a matter of fact, some of these are couples of positive, existential notions (hot and cold) whereas some others consist of a positive notion and its privation (even and odd, motion and rest); some of these have intermediates (hot and cold), whereas some others have no intermediates, and the absence of one extreme necessarily entails the existence of the other (health and sickness). This bears an inevitable implication for him “who teaches the *Categories*” (*al-mu‘allim li-kitāb Qāṭīgūryās*): the difference between the opposition of contraries and that of possession and privation does not lie in the fact that contraries are both positive attributes, whereas possession and privation are respectively a positive and a negative attribute. This explanation would be especially wrong and confusing, since Aristotle’s notion of contrariety in the *Categories* indifferently comprises existential and “privative” contraries.

[§4] (248.9 – 249.8). In the last section of the chapter, Avicenna turns to solve two objections presented by an anonymous previous commentator, who esteemed Aristotle’s division of opposites to be defective. There is no trace of such a criticism in the extant Greek and Arabic commentaries on the *Categories*, at least in the sections devoted to Aristotle’s treatment of opposites.

[§4.1] (248.9-18). The first objection consist of saying that Aristotle should have included in his classification another kind of opposition, i.e. the opposition of motion and rest: as a matter of fact, it falls neither under contrariety nor under privation and possession, for rest is a privation other than the kind of privation dealt with in the *Categories*, and for this reason it should constitute a separate species. Against this remark, Avicenna argues that Aristotle surely knew the difference between rest and other sorts of privation, but within the introductory context and scope of the *Categories* he chose to treat rest as a contrary, in order not to charge the student with exceedingly subtle distinctions<sup>738</sup>.

---

<sup>737</sup> *Ilāhiyyāt* VII.1, 305.4-5. On the opposition of male and female, which are not specific differentiae but rather necessary concomitants of the genus “man”, see also *Ilāhiyyāt* V.4, 222.15 – 223.14.

<sup>738</sup> For Aristotle’s analysis of the opposition between motion and rest, see *Phys.* E 6-7 (229 b23 – 231 a17). This issue is tackled by Avicenna in *Samā‘ ṭabī‘ī* II.4 and IV.7; see also the discussion below, VII.4 [§3.5].

[§4.2] (248.18 – 249.8). The same opponent remarked that Aristotle omitted other kinds of opposition, notably the opposition of substance and accident and the opposition of form and matter.

Avicenna replies: as for the couple substance/accident, it is certainly a case of logical incompatibility (according to the subdivision presented above, in par. [§1.1]), for it can be said that a substance is not an accident and an accident is not a substance. However, it is not a case of ontological incompatibility: it is not true that substance and accident cannot exist in the same subject simultaneously, for substance never exists in a subject but it certainly does exist *as* a subject, along with all of its accidents.

As for the relation between matter and form, it is described here by the terms “being-attached” (*alāqa*) and “inseparable concomitance” (*mulāzama*). Now, being-attached and concomitance can be either asymmetric (with a certain thing being attached to another thing, and not vice versa) or symmetric and reciprocal (e.g. with two things that are attached and concomitant to each other): if the relation of matter and form is asymmetric, then it is neither – strictly speaking – a relation<sup>739</sup>, nor an opposition; on the contrary, if their relation is symmetric then it is a proper relation, and (seems to argue Avicenna implicitly) they become opposed as mutual relatives. At *Ilāhiyyāt* II.4, Avicenna will clarify that between matter and form there subsists neither relation nor concomitance, but form is a cause for matter<sup>740</sup>.

---

<sup>739</sup> According to the criterion of reciprocity, described by Avicenna above in ch. IV.3 [§9].

<sup>740</sup> Cf. *Ilāhiyyāt* II.4, 80.4 – 83.3, where Avicenna clarifies that matter and form are neither relatives, nor concomitants for each other; 83.4 ff., on the causality of form with regard to matter.

## VII.2

### ON DOUBTS APPENDED TO WHAT WAS SAID ABOUT OPPOSITION

After presenting in general his own division of opposites and Aristotle's division, Avicenna goes on to discuss the main resemblances and differences between the primary types of opposition.

[§1] Firstly, Avicenna presents two doubts concerning the opposition of relatives and its relation with the other kinds of opposition: to what extent are contraries relative? How is it that opposition, being relative, has “relative” both as a genus above and a species below? He then moves to expound another general doubt: is opposition truly a genus for its species? [§2] As for the first doubt, the answer is the following: contraries in themselves (for example, heat and coldness) are not relative, but they only are relatives inasmuch as they have opposition (i.e. contrariety). [§3] The reply to the second doubt is the following: [§4] The reply to the third doubt is the following: opposition is not a genus, since it does not constitute the essence of any of its four kinds. [§5] Contraries differ from relatives in two respects: firstly, two contraries are not said with respect to each other; secondly, contraries may have mixed intermediates, whilst relatives don't. [§6] Contraries differ from privation and possession in that change from possession to privation is unidirectional, whereas the subject of contraries may change indifferently from one of them to the other. [§7] There is a difference between privation and possession, on the one hand, and “being deprived” and “possessing” on the other hand. [§8] Relatives differ from privation and possession in that privation and possession do not have their quiddities spoken of with respect to one another, whereas relatives do. [§9] Avicenna returns in more detail on the difference between the opposition of contraries and that of possession/privation. [§10] Affirmation and negation differ from all the other kinds of opposition in that they admit of truth and falsehood, and in some conditions they are such that one of them is necessarily true, whereas the other is necessarily false.

[§1] (249.12 – 250.7). After presenting in ch. VII.1 some general remarks about opposition and its different types, Avicenna tackles three doubts. The first two doubts are somehow interconnected, since they concern the same fundamental problem: to what extent is opposition a relative item?

(1) The first problem focuses on the question whether it is necessary to consider a specific type of opposition, i.e., contrariety, as relative: the example made by Avicenna concerns two contrary natures, heat and coldness, which are undoubtedly “absolute” natures in themselves, but become relative when taken as contraries. However, since relatives have been distinguished as a further species of opposition, what is the relation between contraries and mutual relatives?

(2) The second doubt extends this problem to the whole genus “opposition”. How is it that opposition, in itself, belongs to the genus “relative” but also has “relative” as a species?

(3) The final doubt, seemingly unrelated to the previous discussion, regards both the status of “opposition” as a genus for its kinds, and the categorial issue whether it is a supreme genus (or not). Apparently, the logical status of opposition is one of the few themes dealt with in the *Categories* that Avicenna holds to be suitable for the discipline of logic: it does not imply an analysis of opposition's kind of existence, but only a proper determination of its quiddity and its verifiable application to all of its species. The question whether opposition is a genus or not was extensively debated in the previous exegetical tradition, as attested for instance by Simplicius<sup>741</sup> and Ibn al-Ṭayyib<sup>742</sup>.

---

<sup>741</sup> According to Simplicius' account of the dispute, whereas “some Peripatetics” (τινὲς δὲ τῶν Περιπατητικῶν) posited opposition as a genus, to the mild agreement of Porphyry and Simplicius himself, Iamblichus argued for its being perfectly homonymous (Simpl. *In Cat.* 381.2-31).

[§2] (250.7 – 251.7). As a solution to the first doubt, Avicenna admits that heat and coldness – inasmuch as one of them is contrary to the other – have a relative nature, but their relative nature is, in a sense, secondary with respect to their contrariety. If they were relatives in their quiddity, then it would be possible to apply to them the definition of relatives: thus, heat would have its quiddity spoken of with respect to coldness, and vice versa<sup>743</sup>. This because contrariety is a relation, and relationality is an attribute of contrariety; but contrariety is an attribute of two distinct things that have non-relative natures. Thus, there are two subjects at stake: the subject of contrariety (i.e. in this case two qualities: heat and coldness) and the subject of relation (contrariety itself). This solution entails that contrary things are not relative, inasmuch as they are contrary things; but relative, in certain sense, inasmuch as they have contrariety.

[§3] (251.7 – 252.10). The second doubt expounded in par. [§1] poses, more in general, the problem of determining whether and to what extent opposition is a relative notion. Avicenna’s reply to this problem clearly depends on the solution he provided for the previous doubt, and sounds slightly paradoxical: opposition is relative “inasmuch as it is opposition” (*min haytu huwa taqābulun*). This means that opposition is neither something identical with relation, nor a sub-species of relation: this is made clear by the fact that opposite things have, as highlighted in the case of contraries ([§2]), a mediate and accidental relational nature, depending on the fact that relation is an accidental concomitant of relation. Therefore, opposition is not a kind of relation, but relation (as argued by Aristotle himself) is only a species thereof: although all relatives are opposite, it is not true that all opposites are relatives.

Then, Avicenna reconducts the fact that the species (relation) accidentally belongs to the genus (opposition) to a general rule: a “proper” or particular item may describe the universal, if the universal is taken in a more specific sense that prevents it from being said of its other particulars. In the present case, for instance, opposition is taken “inasmuch as it is opposition” (perhaps we had better say, “inasmuch as it is relative opposition”); this consideration specifies the genus “opposition” in a certain sense, such that it is no more possible to say– on this condition – that other kinds of opposition are oppositions.

In order to explain better this point, Avicenna recurs to a particular example: if animality is considered in a certain respect, i.e. as devoid of all its properties or specifying characters, then it is no more said of all of its species. For instance, since rationality is a differentia of animality, when animality is considered as devoid of rationality it becomes predicated of irrational animals only.

[§4] (252.10-18). Eventually, Avicenna proposes a solution also for the third doubt presented in par. [§1]: opposition is not a proper genus, i.e. it does not constitute the essence of any of the aforementioned kinds of opposition. Rather, it must be said that opposition is a concomitant thereof, as is proven by the case of mutual relation: for relatives in themselves are not opposite, but they are accompanied by the fact of being opposite. The case of relatives seems sufficient, for Avicenna, to discard the possibility that opposition be a genus for the other three kinds (contrariety, possession/privation and contradiction): we may admit perhaps that this is not a real, rigorous proof.

---

<sup>742</sup> Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 360.5 – 361.2.

<sup>743</sup> For the definition of relatives, see above IV.3 [§3] and the INTRODUCTION, 3.5.2.

Curiously enough, the only issue that Avicenna in par. [§1] declared to be appropriate for logicians is postponed to a more complete discussion in “other places”, being probably the “future” discussion of opposites carried out in the *Ilāhiyyāt*<sup>744</sup>.

[§5] (252.18 – 254.7). After discussing and solving the introductory doubts, Avicenna turns again to paraphrasing the *Categories*, notably to discuss Aristotle’s comparison of the main kinds of opposition. The first issue that Avicenna takes up is the difference between relatives and contraries.

[§5.1] (252.18 – 253.2). The first difference is clear: relatives are spoken of with respect to something else, whereas contraries are not. As Aristotle states, “the good is not called good of the bad, but its contrary, and white is not called the white of the black, but its contrary” (οὔτε γὰρ τὸ ἀγαθὸν τοῦ κακοῦ λέγεται ἀγαθόν, ἀλλ’ ἐναντίον, οὔτε τὸ λευκὸν τοῦ μέλανος λευκόν, ἀλλ’ ἐναντίον)<sup>745</sup>. Avicenna reprises this explanation in similar terms, but following the explanation of par. [§2] he adds: good/white are relative to bad/black inasmuch as they are contrary, but not in themselves.

[§5.2] (253.2 – 254.7). After expounding the difference between relatives and contraries, Aristotle makes a digression concerning the difference between contraries that have intermediate items between them and contraries that have no intermediates: in the first typology, Aristotle numbers sickness and health, or odd and even; in the second typology, he mentions blackness and whiteness<sup>746</sup>.

As the beginning of this paragraph shows, Avicenna appears to interpret this digression as a further argument for proving that relative opposites and contraries are different, probably on account of the fact that there are no such things as relatives with intermediates (as Aristotle argues in *Metaphysics* I, intermediates are exclusively found in between contraries<sup>747</sup>). However, this point is left unstated and –following Aristotle’s text – Avicenna limits himself to expounding a detailed distinction between contraries with intermediates and contraries without intermediates.

After presenting the first typology, contraries without intermediates, Avicenna replies to an anonymous objection: as a matter of fact, someone appears to argue that there are indeed intermediate states between health and sickness<sup>748</sup>. In reply to this doubt, Avicenna numbers three conditions for two contraries having (or not having) intermediates: if a certain subject, one by number, considered in a single respect and in a given unitary time may not admit of two contraries simultaneously, then those contraries have intermediates; if on the contrary the subject must admit of one of them at least, then they do not have intermediates. Now, take health and sickness: by definition, health is a balanced complexion that allows for the functions of the body, or a certain organ, being accomplished without any damages; the definition of sickness is its contradictory. If so, it is clear that a single body or organ, at a certain time, must function either normally or abnormally: there is no alternative. As for other cases, for instance blackness and whiteness, it is perfectly licit to imagine a certain single surface (say, a wall) painted in a colour that is intermediate between black and white.

---

<sup>744</sup> Cf. *Ilāhiyyāt* VII.1, 304.10 – 309.16, where the problem – nonetheless – is neither solved nor taken into account.

<sup>745</sup> Arist. *Cat.* 11 b35-37.

<sup>746</sup> Arist. *Cat.* 11 b38 – 12 a25.

<sup>747</sup> Arist. *Metaph.* I 7, 1057 a30 – b1. For an analysis of this argument see CHIARADONNA 2005, p. 160.

<sup>748</sup> This discussion derives from the remark – made by some previous commentators – that whereby Aristotle posits no intermediacy between health and sickness, physicians identify numerous intermediates between them: see for instance Simpl. *In Cat.* 386.11-15 and Olymp. *In Cat.* 138.14-20. Above (VI.3 [§3.1]) Avicenna has argued that the apparent existence of intermediates between health and sickness depends on sensation (cf. Olymp. *In Cat.* 138.16-17). The doubt is also tackled by Ibn al-Ṭayyib (*Tafsīr al-maqūlāt* 370.30 - 371.3).

[§6] (254.7 – 255.3). Following Aristotle, Avicenna turns to the difference between contrariety, on the one hand, and privation/possession on the other hand. Privation and possession have been already described, above, as – respectively – the absence and the presence of a certain attribute, in a certain subject, at a time when it is natural for that subject to have it<sup>749</sup>. Privation comes about when the subject loses its property at that specific time, and the process is unidirectional: once the property is lost, the subject cannot absolutely recover it. Now, these two criteria do not apply to contraries: it applies in fact neither to contraries with intermediates, nor to contraries without intermediates.

A contrary without intermediates may change into its contrary at any time, in other words: sickness is not caused by the privation of health at a time where it is natural for the body to be healthy, for health is the regular condition of the body (and there does not exist a time particularly suitable for it).

As for contraries with intermediates, they can change, mix up and give rise to an intermediate, which does not happen in possession and privation (for there is no intermediate between sight and blindness).

Be as it may, a fundamental difference between possession/privation and contraries is the direction of change: change in possession and privation is unidirectional, and occurs exclusively from possession to privation; change in contraries is bidirectional, and can occur from one contrary to the other and vice versa.

[§7] (255.3 – 256.2). This paragraph reprises a passage where Aristotle distinguishes privation and possession from, respectively, “being deprived and possessing” (τὸ δὲ ἐστερηῆσθαι καὶ τὸ ἔχειν τὴν ἕξιν). The two couples are not identical, Aristotle argues, because they cannot be predicated of the same subject: for instance, while we may say that Zayd is blind, we cannot say that he is blindness (we should rather say that he has blindness). Moreover, according to Aristotle, it is necessary to distinguish “what underlies an affirmation and negation” (τὸ ὑπὸ τὴν κατάφασιν καὶ ἀπόφασιν), apparently understood as the thing that is affirmed or negated, from affirmation and negation themselves: whereas the latter are statements, the former are not. Despite the distinction, however, both couples are opposed in the same manner (i.e. as contradictories)<sup>750</sup>.

Avicenna interprets Aristotle’s distinction between privation and being-deprived, possession and possessing, as a distinction between the proper intrinsic nature of opposites and the fact of being-opposite, which is an accident or concomitant of theirs<sup>751</sup>.

As for the application of this rule to contradictory opposites, there is a difference. Unlike Aristotle, Avicenna seems to argue that regardless whether “what underlies an affirmation and negation” (“the thing upon which affirmation and negation fall”, *mā taqa ‘u ‘alayhī l-mūğibatu wa-l-sālibatu* in Ishāq’s translation<sup>752</sup>) is understood as the subject of an affirmative or negative statement, or as its predicate (as Aristotle himself seems to do<sup>753</sup>), it is not a statement (*qawlun*) but always a reality (*amrun*) or a notion (*ma‘nan*). However, Avicenna also claims that even when the thing having affirmation and negation is a statement, it is in itself other than the very fact of affirming and negating something – for it is in itself a proposition, which may be accidentally qualified either as “affirmative” or as “negative”.

[§8] (256.2 – 257.7). Aristotle provides two arguments, as regards the difference between relatives and privation/possession: (1) privation and possession are, none of them, spoken of

---

<sup>749</sup> See above, VII.1 [§3].

<sup>750</sup> Arist. *Cat.* 12 a35-b16.

<sup>751</sup> See above, par. [§2].

<sup>752</sup> *Mantiq Aristū* 65.15.

<sup>753</sup> Arist. *Cat.* 12 b14-16; see also ACKRILL 1963, p. 110.

with respect to the other (for blindness is not called blindness of sight, nor is sight called sight of blindness); (2) privation and possession do not reciprocate, as relatives do (for even if we admit that blindness is blindness of sight, we cannot say that sight is sight of blindness)<sup>754</sup>.

**[§8.1] (256.3-9).** Privation and possession are not spoken of with respect to each other. Possession has an essence in its own right (for instance, sight) and it does not need its privation to be conceptualized; privation is conceptualized with respect to possession, but only insofar as it is a privation, not inasmuch as some attribute having a proper essence is said to be a “privation”.

**[§8.2] (256.10 – 257.4).** A previous commentator recalled Aristotle’s argument about those ambiguous beings that seem to be both qualities and relatives, e.g. knowledge and other properties: just as grammar and other particular knowledges are non-relative in themselves, but relative inasmuch as their genus is relative, so blindness is non-relative in itself, but relative inasmuch as its genus (i.e. privation) is relative<sup>755</sup>.

Avicenna objects to this interpretation, and his objection consists of arguing that privation, despite being conceptualized in itself with respect to possession, is not actually relative to it. Being relative means having the quiddity spoken of with respect to something else: this means that a thing (for instance Zayd) comes to have a certain state X (e.g. sonship) because of the existence, in another thing, of another state Y (e.g. fatherhood). Privation is not relative to possession in this sense, since it does not become privation because of the existence of possession as possession. Moreover, as for itself, it does not posit possession in any particular state: possession can be undoubtedly conceptualized by itself, without privation being conceptualized as its counterpart.

**[§8.3] (257.5-7).** The absence of reciprocation, and the fact that privation and possession are not said with respect to each other, account for the difference between privation/possession and the opposition of relatives.

**[§9] (257.7 – 258.6).** After the distinction between relative opposition and privation/possession, Aristotle establishes quite lengthily the difference between contrariety and possession/privation. His arguments are basically the following two:

(1) After recalling the aforementioned distinction between contraries without intermediates and contraries that have intermediates, Aristotle argues that privation and possession resemble neither contraries of the first type nor contraries of the second type. Contraries without intermediates are such that either one or the other must always belong to the things they naturally occur in, or they are predicated of; this is not the case with possession and privation. Contraries with intermediates, instead, are such that it is never necessary, for one of them, to belong to anything, and it is not necessary for one of them to belong to something that may admit of them (except when they are essential properties); and this is not the case, again, with possession and privation, for one or the other necessarily exists in what is naturally disposed to having them (e.g. sight/blindness)<sup>756</sup>.

(2) In the case of contraries, change is bi-directional: it may occur from one contrary to the other, whereas in possession and privation it occurs in one direction only (possession → privation)<sup>757</sup>.

**[§9.1] (257.7-18).** Avicenna firstly refers to what was said above in par. **[§6]** as a mere “indication” or “pointer” (*išāra*), meaning in this case a not particularly detailed explanation; then, he reprises the first of Aristotle’s two arguments. Contraries without intermediates are either such that one of them is natural and inseparable from the subject (e.g. heat for fire,

---

<sup>754</sup> Arist. *Cat.* 12 b16-25.

<sup>755</sup> Cf. the discussion above, in ch. VI.4 and the COMMENTARY *ad loc.*

<sup>756</sup> Arist. *Cat.* 12 b26 – 13 a18.

<sup>757</sup> Arist. *Cat.* 13 a18-36.



oddness for number 3), or such that none of them is natural but the subject necessarily has one (e.g. health and sickness). Both cases differ from privation and possession, in that a subject may be devoid of privation and possession simultaneously (e.g. the dog puppy that has not yet its eyes disclosed, and is neither seeing nor blind). As for contraries with intermediates, they differ from privation and possession precisely because they have intermediates, whereas there are no intermediates between privation and possession.

[§9.2] (257.18 – 258.6). Eventually, Avicenna reprises the argument concerning the direction of change, by adding that those cases where a privation seems to turn gradually into the corresponding possession are not cases of real privation: for instance, a blind man who regained somehow his sight was not properly blind.

[§10] (258.7 – 259.15). Eventually, Avicenna turns to the last kind of opposition discussed by Aristotle: affirmation and negation (*Cat.* 13 a37 – b35). According to Aristotle, affirmation and negation are characterized primarily by the fact of admitting of truth and falsehood, in such a way that one of the two opposites is necessarily true and the other is necessarily false; none of the other sorts of opposition does<sup>758</sup>. This is true not only as concerns simple oppositions, but also as regards statements opposed as contraries or as possession and privation<sup>759</sup>.

[§10.1] (258.7-10). Avicenna splits Aristotle’s single criterion for contradiction into two distinct criteria: (1) admitting in general of truth and falsehood and (2) being such that, “on certain conditions” (*‘alā l-šarā’iṭi*), one of the extremes is necessarily true and the other is necessarily false. Criterion (1) is true, since affirmation and negation are only found in complex utterances, and it is complex utterances that – unlike their simple constituents – admit of truth and falsehood<sup>760</sup>. This distinction seems to imply that for Avicenna (1) and (2) are not always realized simultaneously, but there exist cases where (1) holds and (2) does not; as is made clear right below in par. [§10.2], this occurs for instance in cases where the subject of contradictory propositions is not existent.

[§10.2] (258.10 – 259.8). It is possible to formulate a contradiction in such a way that it resembles an opposition of contraries without intermediates, for example:

(C) Zayd is **healthy** - Zayd is **not healthy**  
 (c) Zayd is **healthy** - Zayd is **sick**.

This, Aristotle argues, is not a good counter-example for the aforementioned rule concerning contradictories: if “healthy” and “sick” are associated with an existing subject, then one of the two affirmations is necessarily true and the other is necessarily false. If on the contrary they are associated with a subject that does not exist, then both statements are false<sup>761</sup>. Unlike Aristotle, Avicenna argues that (C) differs from (c) in that (C) can be predicated of any subject *and* of non-existent subjects in such a way that one of the two extremes is necessarily true, whereas (c) cannot. For example: it is possible to say of a stone that it is non-healthy, but not that it is sick; it is possible to say of a non-existent Zayd that it is non-healthy, but not that

<sup>758</sup> Arist. *Cat.* 13 a37 – b12.

<sup>759</sup> Arist. *Cat.* 13 b12-35.

<sup>760</sup> See above, II.5 [§5].

<sup>761</sup> Arist. *Cat.* 13 b15-19 (tr. ACKRILL 1963, p. 37): “Yet not even with these is it necessary always for one to be true and the other false. For if Socrates exists one will be true and the other false, but if he does not both will be false; neither ‘Socrates is sick’ nor ‘Socrates is well’ will be true if Socrates himself does not exist at all” (ἀλλ’ οὐδ’ ἐπὶ τούτων ἀναγκαῖον αἰεὶ θάτερον μὲν ἀληθὲς θάτερον δὲ ψεῦδος εἶναι· ὄντος μὲν γὰρ Σωκράτους ἔσται τὸ μὲν ἀληθὲς τὸ δὲ ψεῦδος, μὴ ὄντος δὲ ἀμφοτέρω ψευδῆ· οὔτε γὰρ τὸ νοσεῖν Σωκράτη οὔτε τὸ ὑγιαίνειν ἀληθὲς αὐτοῦ μὴ ὄντος ὅλως τοῦ Σωκράτους.).

it is sick; this because “all negations hold true of non-existing things” (*al-sulūb kulluhā taṣiḥḥu ‘an al-ma‘dūmāt*)<sup>762</sup>.

**[§10.3] (259.9-15).** According to Aristotle, if a privation and a possession are predicated of something, the two opposite predications that result are necessarily false if the subject does not exist and even if the subject exists, though on a certain condition: i.e. if it is not yet natural for it to have that specific possession<sup>763</sup>. On his part, Avicenna explains this by saying that two opposite statements involving privation and possession are false simultaneously not only when they are said of a non-existent subject, but also when they are said of an “alien” (*ġarīb*) subject. Since the notion of possession/privation alluded to here is closely related with the natures of things and what is proper of them at the natural time<sup>764</sup>, a subject “alien” to a certain possession/privation is a subject that by nature does not absolutely have that possession, and for this reason obviously cannot be deprived of it. Avicenna’s example here involves the attribution of the couple of opposites “having sight”/“being blind” to a stone, which is naturally incapable of seeing.

---

<sup>762</sup> Cf. CHATTI 2016, pp. 47-48.

<sup>763</sup> Arist. *Cat.* 13 b20-27.

<sup>764</sup> See the discussion of possession and privation above, at VII.1 [§3.2].

### VII.3

#### ON INTERPRETING RULES AND PROPERTIES REGARDING CONTRARIES

Following Aristotle's discussion, Avicenna turns to chapter 11 of the *Categories*, which presents some further properties of contraries.

[§1] Firstly, Avicenna focuses on the contrariety of good and bad. Whereas what is contrary to a good thing is necessarily bad, what is contrary to a bad thing is not necessarily good: excess is contrary to deficiency, and both excess and deficiency can be bad (whereas moderation is mostly good). Then, Avicenna refutes a commentator's explanation of Aristotle's claim that the exception occurs "in a few cases" with inappropriate examples – e.g. killing – where the intermediate item is as bad as the extremes. [§2] According to the second rule, the existence of a contrary does not entail the existence of its opposite; this clearly marks a distinction between contrariety and the opposition of relatives, whose existences are always dependent on one another. [§3] The "third rule" implies that contraries always alternate on one and the same subject, which can be one either by number, by species or by genus. [§4] Eventually, Avicenna deals with Aristotle's claim that contraries may be found either in the same genus, or in different genera, or they may be themselves genera. He focuses in particular on the last statement, and most notably on Aristotle's suggestion that good and bad are contrary genera (widely debated in the preceding exegetical tradition): he argues firstly that Aristotle is not speaking about good and bad in general, but about a certain kind of qualitative good (the one that applies to habits and behaviours); then, that this sort of qualitative good is not a genus, but a necessary concomitant of habits and behaviours. [§5] Eventually, Avicenna makes a recapitulation of the difference that subsists between contraries (on the one hand) and privation/possession (on the other hand).

[§1] (260.4 – 263.5). *Cat.* 11 is a short chapter containing scattered reflexions on the properties of contraries<sup>765</sup>, that Aristotle's ancient and medieval commentators label either as "theorems" (θεωρήματα, Simplicius and Philoponus<sup>766</sup>) or as "rules" (κανόνες, Olympiodorus and Elias/David; *qawānīn*, Ibn al-Ṭayyib<sup>767</sup>), and about whose number they disagree<sup>768</sup>. In the title of *Maqūlāt* VII.3 these are referred to as both "rules" (*aḥkām*) and "properties" (*ḥawāṣṣ*)<sup>769</sup>.

Aristotle's first "rule" rather looks like a specific remark about the contrariety of good and bad things: the philosopher states that whereas what is contrary to a good thing is always bad, what is contrary to a bad thing may be either good or bad<sup>770</sup>. As a matter of fact excess (e.g. recklessness), which is bad, is contrary to both deficiency (e.g. cowardice), which is bad, and to moderation (e.g. courage, the intermediate), which is good and contrary to both. However, Aristotle further argues, this only happens "in a few cases" (ἐπ' ὀλίγων, 14 a4): for in any case it is mostly good things that are contrary to bad things.

[§1.1] (260.4-16). In the first paragraph, Avicenna presents a direct exegesis of Aristotle's passage. Unlike Aristotle, Avicenna makes a preliminary distinction between good and bad "absolutely" (*'alā l-iṭlāq*) and particular good or bad things (*ḡuz' iyyāt*): if good and bad are contrary in absolute terms, then it is possible to associate "biunivocally" a certain

---

<sup>765</sup> Arist. *Cat.* 13 b36 – 14 a25.

<sup>766</sup> Simpl. *In Cat.* 412.13, 414.22; Phil. *In Cat.* 187.27-28.

<sup>767</sup> Olymp. *In Cat.* 141.31-32; Elias/David, *In Cat.* 249.1-2; Ibn al-Ṭayyib, *Tafsīr al-maqūlāt* 364.26-27.

<sup>768</sup> Whereas Simplicius, Philoponus and Olympiodorus identify four rules/theorems, Elias and Ibn al-Ṭayyib identify only three of them.

<sup>769</sup> Cf. also Avicenna's reference to "rules" (*aḥkām*) in the beginning of par. [§1.4] (263.5).

<sup>770</sup> Arist. *Cat.* 13 b36 – 14 a6.

instantiation of good and a certain instantiation of bad as contraries: it is the case with health and sickness, injustice and justice and so forth. However, there are cases where a certain particular bad is contrary to another particular bad: this happens, for instance, in the examples mentioned by Aristotle regarding contrary excesses (i.e. recklessness and cowardice).

**[§1.2] (260.16 – 261.17).** The identity of this anonymous opponent is unknown. According to him, Aristotle meant to say that there are “moral” characters that deviate from the rule according to which the extremes are always bad, and the intermediate is always good: for instance killing, for the intermediate (moderation in killing) is bad and one of the extremes (not killing) is certainly good. Against this view, Avicenna explains again the correct interpretation of Aristotle’s words, and mentions one clear couple of biunivocal good and bad contraries: knowledge and ignorance. Moreover, he claims that killing is not a good example, for there exists a virtuous manner of killing: killing the right person at the right time, and doing that in the interest of the city.

**[§1.3] (261.17 – 262.19).** In the third sub-section, Avicenna turns to inspecting more closely the contrariety of good and bad things: as he states in the end of this paragraph, this is only a more detailed analysis of the issue that the reader must not take into account, inasmuch as the *Categories* is a work for beginners. He then presents an argument aimed at showing that courage, the moderate attribute, is only contrary to excess and deficiency (respectively, recklessness and cowardice) not in itself but in a certain respect, i.e. inasmuch as it is accidentally accompanied by the fact of being good, and the extremes are accidentally accompanied by the fact of being bad. As a matter of fact, there are two possible considerations of such moral attributes: (1) a consideration that only takes their nature into account, in so far as they are habits that give rise to certain actions, independently on their being qualities that make their subjects praiseworthy or blamable; (2) a consideration of them inasmuch as they are moral qualities. In the first respect, courage is not contrary to both extremes: it is only an intermediate point in the *continuum* of habits that range from one contrary (cowardice) to another (recklessness). In the second respect, courage is a quality that has a certain relation with the subject, and according to this relation it is good: it is therefore contrary to the extremes, which are bad with respect to the subjects they exist in.

**[§1.4] (262.19 – 263.5).** Among intermediates that are absolutely not contrary to their extremes, Avicenna mentions the intermediates of affective qualities such as tepid, with respect to hot and cold, and gray with respect to black and white.

**[§2] (263.5-11).** According to the second “rule”, contraries differ from mutual relatives in that the existence of a contrary (e.g. healthy) does not entail the existence of the other: if all mankind were healthy, there would be no sickness, and if everything were white, there would be no room for blackness<sup>771</sup>. Moreover, if a property exists in a subject its contrary certainly cannot exist in the same time, in the same subject: when health exists in Socrates, sickness does not exist therein. Avicenna reprises Aristotle’s examples with health and sickness, and further recalls the two properties of mutual relatives that mark their difference from contraries: being such that one of them entails the existence of the other, and being capable of co-existing in the same subject (for the same person can be in the same time a father and a son, similar and dissimilar, and so forth)<sup>772</sup>.

**[§3] (263.12-17).** The third “rule” says that contraries have a single subject, which can also be one by species or genus<sup>773</sup>. Avicenna presents a more detailed typology of possible

---

<sup>771</sup> Arist. *Cat.* 14 a6-15.

<sup>772</sup> The second property was alluded to above at IV.2 [§2.3], where the main issue at stake was the relative nature of largeness and smallness.

<sup>773</sup> Arist. *Cat.* 14 a15-18.

substrates for contraries: either an individual substance, such as a natural body; more species, for example inanimate and animate substances, in which hotness and coldness can exist; one species only, like in the case of justice and injustice, which belong to a specific kind of soul (i.e., the human soul); a genus, like in the case of oddness and evenness, which are properties of the genus number.

**[§4] (263.17 – 264.13).** In the final section of the chapter, Avicenna deals with Aristotle’s fourth rule, i.e. his claim that contraries are either found in the same genus, or in different genera, or are themselves genera<sup>774</sup>.

**[§4.1] (263.17-20).** This principle concerning contraries raised numerous doubts and discussions in the subsequent exegetical tradition, notably with regard to Aristotle’s suggestion, in this context, that good and bad are contraries because they are themselves genera: as a matter of fact, in other works of his Aristotle famously argues for “good” being a homonymous notion, which evidently contradicts the account given in the *Categories*<sup>775</sup>.

**[§4.2] (263.20 – 264.13).** Avicenna solves the difficulty by interpreting the “good” mentioned here not as the most universal and perfectly equivocal notion, but as a qualitative good that is referred more or less “synonymously” to a species of quality, i.e. habits (*al-malakāt*) or behaviours<sup>776</sup>. This notion is not perfectly synonymous, since – as Avicenna explains here – good and bad are not genera ranged under the category of quality, but concomitant predicates thereof. The example Avicenna makes to explain “rigorously” the contrariety of good and bad habits, such as courage and cowardice, is the opposition between a sharp sword (*ṣārim*) and a blunt sword (*dadān*): the two are opposed with respect to attributes of theirs, i.e. with respect to contrary genera (or species) of quality existing in them<sup>777</sup>.

**[§5] (264.14 – 265.12).** This paragraph, being a sort of recapitulation of distinctions presented in chs. VII.1-2<sup>778</sup>, has no direct correspondence with Aristotle’s text. Avicenna expounds again the difference between contrariety and possession/privation, very likely because of Aristotle’s previous discussions of good and bad ([§1.3] and [§4.1]) where the two attributes are wrongly presented as contraries. Good and bad are actually to be understood, in most cases, as possession and privation: in *Ilāhiyyāt* IX.6 Avicenna will define Evil in itself (*al-širr bi-l-dāt*) as “privation, though not any [type] of privation but only privation of that to which nature necessarily leads in terms of the perfections that belong permanently to its species and nature” (*al-‘adamu wa-lā kullu ‘adamin, bal ‘adamun muqtaḍā ṭabā‘a al-šay‘i min al-kamālāti l-ṭābitati li-naw‘ihī wa-ṭabī‘atihī*)<sup>779</sup>.

<sup>774</sup> Arist. *Cat.* 14 a19-20.

<sup>775</sup> Arist. *Top.* I 15, 107 a5-12; *Eth. Nic.* I 4, 1096 a24-27. See for instance the long discussion found in Simpl. *In Cat.* 414.22 – 416.20; Phil. *In Cat.* 190.13 - Olymp. *In Cat.* 142.29 – 143.3; Elias/David, *In Cat.* 249.31 – 250.18, but also ACKRILL 1963, p. 111.

<sup>776</sup> On habits and states, see above ch. V.3 [§1].

<sup>777</sup> This very point was also made above, in par. [§1.3] (see in particular 262.8-13).

<sup>778</sup> Cf. most notably VII.2 [§6], [§9].

<sup>779</sup> *Ilāhiyyāt* IX.6, 416.5-6 (= *Nağāt* 670.17-18), tr. MARMURA 2005, p. 340. On the problem of Evil in Avicenna, see INATI 1984b, 1999; STEEL 2002 (for a comparison with Thomas Aquinas).

## VII.4 ON THE PRIOR AND THE POSTERIOR

The last section of *Maqūlāt* covers *Categories* 12-14, chapters devoted respectively to the different meanings of priority and posteriority (12), simultaneity (13) and motion (14). Avicenna only leaves aside Aristotle's short discussion of the meanings of having, conducted in chapter 15.

[§1] Priority and posteriority should be dealt with more in detail, and more appropriately, in other places (most notably in metaphysics). Like Aristotle, Avicenna lists and describes five main kinds of priority: by time, by nature, by order, by distinction and causal priority. [§2] The various meanings of simultaneity correspond basically to those of priority and posteriority: there exist simultaneity with respect to time, with respect to nature, with respect to order and also with respect to causality. [§3] Following Aristotle, Avicenna lists six kinds of motion: generation, corruption, augmentation, diminution, alteration and local motion. He discusses, then, the contrariety of motion and rest with respect to the different species of motion. [§4] Opposition, priority and the like are discussed by Aristotle in the end of the *Categories* because they are useful in explaining the ten categories, but they have a non-technical usage and they are better comprehensible for students; homonymy, synonymy and the like are presented in the beginning, because they are technical concepts that the reader must absolutely learn before getting to know the ten categories. [§5] The chapter and the work are closed by a brief conclusion, which ironically suggests the uselessness of Aristotle's *Categories*.

[§1] (265.16 – 269.12). Avicenna's discussion of priority and posteriority follows quite closely Aristotle's text (*Cat.* 14 a26 – b23).

[§1.1] (265.16-18). Like Aristotle, who devotes a section of *Metaphysics* Δ to the meanings of prior and posterior<sup>780</sup>, Avicenna will tackle priority and posteriority in *Ilāhiyyāt* IV.1, as well as in the metaphysical sections of other *summae*<sup>781</sup>. The metaphysical significance of priority and posteriority is clear, given the number of relevant ontological problems where the notion of priority is involved, for instance the relation between substance and accidents and the relation between causes and effects.

[§1.2] (266.1). Priority with respect to time is priority in the most basic and intuitive sense, and it does not pose any special problems.

[§1.3] (266.2-6). What Avicenna calls priority "by nature" (*bi-l-tab'ī*) reprises the second sense highlighted by Aristotle in the *Categories*: existentially prior, or prior as "what does not reciprocate as to implication of being" (τὸ μὴ ἀντιστρέφον κατὰ τὴν τοῦ εἶναι ἀκολούθησιν)<sup>782</sup>, which in turn corresponds to the priority "by nature and substance" (κατὰ φύσιν καὶ οὐσίαν) described by Aristotle in *Metaphysics* Δ 11<sup>783</sup>. This is the logical priority of a thing A that does not need a thing B to be existent, in order to exist, whereas B needs A to be found in its essence: in Aristotle's example of the *Categories*, it is the priority of one over two, whereas according to one of the examples found in the *Metaphysics* it is the priority of substance over the accidents that exist therein<sup>784</sup>.

---

<sup>780</sup> Arist. *Met.* Δ 11, 1018 b9 – 1019 a14.

<sup>781</sup> *Ilāhiyyāt* IV.1, in particular 163.4 – 165.9 (for a list and short discussion of the main kinds of priority and posteriority); the chapter is commented and translated into English in MARMURA 1981. For the other *summae*, see for instance *Nağāt* 540.7 – 542.13.

<sup>782</sup> Arist. *Cat.* 14 a30 ff.

<sup>783</sup> Arist. *Met.* Δ 11, 1019 a1-11.

<sup>784</sup> Cf. *Ilāhiyyāt* IV.1, 164.12-17.

**[§1.4] (266.7 – 268.10).** Priority “by order” (*fī l-martaba*) corresponds to Aristotle’s third kind of priority (named “according to a certain order”, κατὰ τινα τάξιν)<sup>785</sup>.

**[§1.4.1] (266.7 – 267.4).** Avicenna clearly identifies this sort of priority with the first meaning of being prior described by Aristotle in the beginning of *Metaphysics* Δ 11: being prior as being closer to the principle, or the beginning, within a certain genus (a category which comprises, according to Aristotle, priority by place, by time, by motion, by power and by order)<sup>786</sup>. Aristotle’s examples for this third kind of priority in the *Categories* only concern science and speech; Avicenna adds a further distinction between natural and “conventional” or “artificial” (*wad‘ī*) order, where the latter kind comprises the priority and order found in human manufactures (a row of seats, etc.).

**[§1.4.2] (267.4 – 268.10).** Someone might object that the premises of syllogisms are prior by nature, not by order, to the conclusions: for the existence of premises is independent of the existence of the conclusions, whereas the conclusions necessarily derive from the premises. Avicenna’s reply to this doubt is structured in two parts, presenting two distinct possible answers. (a) Firstly he replies that premises are surely prior by nature in absolute terms, but they are also prior by order according to a certain didactic presentation of the syllogism. As a matter of fact, a syllogism may be constructed either by “analysis” (*tahlīl*), namely by inferring the premises from the conclusion, or according to “composition” (*tarkīb*), namely by positing the premises before the conclusion: now, premises are prior in order when the syllogism is composed, but not when it is analysed. In the logic of the *Nağāt*, Avicenna describes *tahlīl* as “singling out the problem” (*an tumayyiza l-maṭlūb*), i.e. the desired conclusion, before finding the Minor, the Major and the middle term and eventually reconstructing the two premises that yield it<sup>787</sup>; (b) The second answer concerns the state of concatenated syllogisms, where the conclusion of a syllogism may become the premise of one or more following deductions. Here, priority in order is based neither on how things are in themselves nor on the order in which we employ them, but – according to the definition provided above in **[§1.4.1]** - on their relative position in a series with respect to the extreme or principle of the series. In a chain of deductions, the first extreme is the first premise, whereas the last extreme is the remotest conclusion: there, the premises are always prior in order to the conclusion because they are necessarily closer to the principle (i.e. the first premise).

**[§1.5] (268.11-12).** Avicenna’s prior “by distinction” (*bi-l-šarafī*) corresponds to Aristotle’s fourth type, namely the “better and more valued thing” (τὸ βέλτιον καὶ τὸ τιμιώτερον) that is customarily esteemed to be prior by nature<sup>788</sup>.

**[§1.6] (268.13 – 269.12).** The last kind of priority is causal priority, hinted at by Aristotle with the example of the relation that holds between the existence of a man and the truth of the statement “a man exists”<sup>789</sup>. Given two things with different essences that exist simultaneously, Avicenna calls “priority by causality” the state that the mind assigns to the thing understood as a cause with respect to the thing understood as an effect. The examples presented here are: the existence of Zayd and the statement “Zayd exists”; a certain motion produced by Zayd (e.g. that of his hand) and a motion caused by that motion (e.g. of his pen)<sup>790</sup>. In causal priority the existence of the effect depends on the existence of the cause, but they are only prior and posterior in the respect of existence: inasmuch as they are essences

---

<sup>785</sup> Arist. *Cat.* 14 a35-b3.

<sup>786</sup> Arist. *Metaph.* Δ 11, 1018 b9-30.

<sup>787</sup> *Nağāt* 94.14 – 95.5. See also *Qiyās* IX.6, a chapter where Avicenna provides detailed “instructions and warnings” (*waṣayā wa-tahḏīrāt*) for the practice of analysis.

<sup>788</sup> Arist. *Cat.* 14 b3-8.

<sup>789</sup> Arist. *Cat.* 14 b10-23; *Ilāhiyyāt* IV.1, 164.18 ff.

<sup>790</sup> Cf. *Ilāhiyyāt* IV.1, 165.4-7 for the similar example of Zayd and the motion of a key.

they are neither prior, nor posterior, nor simultaneous, and inasmuch as they are relatives (for the connection “cause”/“caused” displays a categorial relation) they are only simultaneous<sup>791</sup>.

**[§2] (269.13 – 271.2).** Like Aristotle, Avicenna devotes most of his presentation of simultaneity to the status of co-ordinated species.

**[§2.1] (269.13-14).** Whereas in the beginning of *Cat.* 13 Aristotle limits himself to presenting things that “come into being at the same time” (ὅν ἡ γένεσις ἐν τῷ αὐτῷ χρόνῳ) as simultaneous “absolutely and most strictly” (ἀπλῶς μὲν καὶ κυριώτατα)<sup>792</sup>, Avicenna provides a general definition that can apply to all kinds of simultaneity: being neither prior nor posterior.

**[§2.2] (269.14 – 271.2).** Aristotle only presents two kinds of simultaneity: absolute simultaneity, in respect of time, and a derived or metaphorical simultaneity (by nature). Unlike him, Avicenna mentions five sorts of simultaneity, corresponding to the five kinds of priority described above in parr. **[§1.2-6]**. Simultaneity by nature may be displayed either by two things that are reciprocal with respect to existence (relatives like “brother” or, in Aristotle’s example, double and half) or by two things that are “mutually incompatible” (*mutanāfiyāni*) in that regard, i.e. whose existences are not necessarily interrelated, but are simultaneous in another respect, for instance the species that fall under the same genus. The case of co-ordinated species, treated by Aristotle as a mere example of simultaneity by nature, also represents for Avicenna a case of simultaneity in order. Co-ordinated species are posterior to their common genus, both in order and by nature; they are simultaneous in order with respect to one another and simultaneous by nature, not in so far as they need one another in order to exist but in so far as they are *simultaneously posterior* to the genus *by nature*.

**[§3] (271.3 – 273.8).** In chapter 14, Aristotle deals with the six main kinds of motion (κίνησις) and what is contrary to motion, both in general and in particular<sup>793</sup>.

**[§3.1] (271.3-9).** At *Cat.* 15 a14, Aristotle qualifies the kinds of motion he is about to number as “species” (εἶδη): according to Avicenna, it is not to be verified here whether these kinds of motion are actual species or not, although he will clarify in natural philosophy that they are not such<sup>794</sup>. Certainly they are not species that divide the genus “motion” directly, for they actually differ in order: some of them are “contiguous” (*mulāsiq*), since generation and corruption should fall together under the unnamed proximate species of substantial change (mentioned below, in **[§3.2]**, “change from a substance to a substance”, *tagayyur min ġawhar ilā ġawhar*) and augmentation and diminution should form a couple under the unnamed species of quantitative motion (called by Avicenna, below, “motion from a quantity to quantity”, *ħaraka min kam ilā kam*). Thus, the species of motion are four – rather than six.

**[§3.2] (271.10 – 272.1).** That generation and corruption are not – strictly speaking – motions is verified by Aristotle in the *Physics* and by Avicenna in *Samā’ tabī’ī*<sup>795</sup>. Avicenna will provide detailed accounts of change and motion not only in *Samā’ tabī’ī* II.1-3 but also in his paraphrase of Aristotle’s *De generatione et corruptione* (most notably with regard to alteration, i.e. qualitative change – and augmentation, i.e. quantitative change)<sup>796</sup>.

**[§3.3] (272.1-6).** The doubt resumes Aristotle’s discussion about the possible confusion between alteration, on the one hand, and the other kinds of motion on the other hand. Aristotle’s argument against such a confusion, reprised by Avicenna, consists in highlighting

---

<sup>791</sup> Simultaneous like most relatives; see above, IV.4 **[§1]**.

<sup>792</sup> Arist. *Cat.* 14 b24-26.

<sup>793</sup> Arist. *Cat.* 15 a13 – b16.

<sup>794</sup> Cf. *Samā’ tabī’ī* II.2.

<sup>795</sup> Arist. *Phys.* E 2; *Samā’ tabī’ī* II.3, 98.9 – 101.7; see also *Nağāt* 205.4-7.

<sup>796</sup> Cf. in particular *Kawn wa-fasād* 8, 140-146 (corresponding to Arist. *Gen. Corr.* A 4, 319 b6 - 320 a7).



that a simple alteration, e.g. the change of colour of a man's skin, may well occur without any other change taking place, and vice versa any other change may occur without an alteration taking place<sup>797</sup>.

[§3.4] (272.6-8). Motion in the category of position is a further kind of motion identified by Avicenna, against both Aristotle and the previous exegetical tradition: Avicenna introduces it in order to explain the motion of the outermost celestial sphere, which cannot be thought of as moving by local motion<sup>798</sup>.

[§3.5] (272.9 – 273.8). In the second part of chapter 14, Aristotle examines what is contrary to each kind of motion. Motion in general is contrary to rest (ἡρεμία); motion in place is contrary to rest in place; each of the “particular kinds” of motions (ταῖς δὲ καθ' ἕκαστα, *al-ḥarakāt al-ḡuz'iyya*) has its contrary, for generation is contrary to corruption and augmentation is contrary to diminution. There is an issue with regard to alteration, but Aristotle ultimately proposes – on the basis of a comparison with local motion – to identify the contrary of alteration, which is in itself a “change with regard to qualification” (μεταβολὴ κατὰ τὸ ποιόν), with “rest with regard to qualification” (κατὰ τὸ ποιὸν ἡρεμία)<sup>799</sup>. Avicenna reprises Aristotle's discussion, by adding that although alteration has no apparent contrary, the comparison with local motion allows us to posit for it not only a generic contrariety to rest, but also a specific contrariety of particular alterations to other particular alterations (for instance, becoming black and becoming white)<sup>800</sup>.

[§4] (273.9-14). Before concluding, Avicenna briefly discusses the position of the *Ante-* and *Post-praedicamenta* within the overall structure of Aristotle's *Categories*. Andronicus famously challenged their authenticity, arguing that they were written by the same person who read the *Categories* as an introduction to Aristotle's *Topics*<sup>801</sup>. Homonyms, synonyms and the “ontological square” were correctly presented in the beginning of the work, since they are technical terms and expressions that have no current usage and must be explained to the student before the treatment of the ten categories. On the contrary, the notions treated in the *Post-praedicamenta* (opposites, priority, simultaneity and motion) are all current in ordinary language, and the student can well afford a presentation of their various meanings after having studied the categories. Avicenna's position resembles Philoponus' view, as presented in his commentary: “in the third part, [...] [Aristotle deals] with some utterances that he employed in teaching the categories, of which we have some notion, though not an articulate one” (ἐν δὲ τῷ τρίτῳ [...] περί τινων φωνῶν ὧν παρέλαβεν ἐν τῇ διδασκαλίᾳ τῶν κατηγοριῶν, ὧν ἔννοιαν μὲν τινα ἔχομεν οὐ μὴν διηρθρωμένην)<sup>802</sup>.

[§5] (273.15-16). In the conclusion Avicenna suggests, ironically, that even the whole “amount [of things]” (*al-qadr*) he wrote himself about the *Categories* might be excessive (*faḍlan*), presumably with respect to the actual usefulness of the book and the philosophical relevance of the many doubts discussed therein<sup>803</sup>.

---

<sup>797</sup> Arist. *Cat.* 15 a17-33.

<sup>798</sup> *Samā' tabī'ī* II.3, 103.8 – 105.13; *Naḡāt* 206.6 – 207.9. See MCGINNIS 2006, M. RASHED 2015, pp. 99-100.

<sup>799</sup> Cf. the parallel discussion of opposite motions at Arist. *Phys.* E 5 ff.

<sup>800</sup> See *Samā' tabī'ī* IV.6, *Naḡāt* 219.1 – 224.2 (on contrariety in motion); *Naḡāt* 224.3 – 225.2 (on the opposition of motion and rest).

<sup>801</sup> Simpl. *In Cat.* 379.9-12 (Andronicus' view is also reprised and refuted by Ibn al-Tayyib, *Tafsīr al-maqūlāt* 357.19-24).

<sup>802</sup> Phil. *In Cat.* 167.27 – 168.3; Simpl. *In Cat.* 379.23-27.

<sup>803</sup> See INTRODUCTION, 3.1.3.