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Bahmanyār's *al-Taḥṣīl*:
A study and translation of Book Two – *Metaphysics*

A Dissertation

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ABSTRACT

The purpose of the present thesis is twofold: on the one hand, it provides the first integral annotated English translation from Arabic of the second book (*Metaphysics*) of Bahmanyār's principal work – *Kitāb al-Taḥṣīl* (*Book of attainment*), and on the other, it gives a systematic account on its structure, style, sources, and contents by focusing especially on the differences and commonalities with Ibn Sīnā's philosophy, since *al-Taḥṣīl* was compiled by Bahmanyār in order to make a succinct exposition of his master's philosophy, particularly his logic, metaphysics and physics. Bahmanyār is one of the most outstanding and prolific disciples of Ibn Sīnā. His *al-Taḥṣīl* represents the first generation's attempt to summarise and interpret almost the entire philosophy of the great master. Moreover, the work is the earliest and largest indirect witness of *Kitāb al-ṣifā'* (*Book of the cure*) – Ibn Sīnā's masterpiece on philosophical sciences. Yet until recently, *al-Taḥṣīl*, and Bahmanyār's figure, generally speaking, has received little philosophical attention. Historically Bahmanyār stands at the beginning of a long and rich tradition of the Avicennian school that had a serious impact on all succeeding philosophers and even theologians and mystics. Philosophically, his *summa* represents a unique case to study the earliest reconsideration of Ibn Sīnā's thought. Within these perspectives, the dissertation explores the early stage of the Muslim Peripatetic school, where the science of metaphysics is being redefined once more while being both continuous and discontinuous with Ibn Sīnā's central metaphysical ideas. I argue that Bahmanyār, although to a large extent loyal to his teacher, revises Ibn Sīnā's philosophy in the spirit of Aristotle, hence this element can be defined as Aristotelian revisionism, while also bringing his own contribution that is rooted neither in Aristotle nor in Ibn Sīnā himself.

In Part One of the present dissertation, I reconstruct the biographical account of Bahmanyār's life and his works within the historical context, after which I focus on his *magnum opus* – *Kitāb al-taḥṣīl*. In the following chapters, I discuss the structure, style, and sources of Book Two – the *Metaphysics* of *al-Taḥṣīl*, as well as its contents. Part Two of the dissertation contains the first integral and annotated translation of the *Metaphysics* from Arabic into English based on the modern edition by Murtaḍā Muṭahharī. Appendices include the inventory of manuscripts of all works attributed to Bahmanyār and their original texts and English translations. Thus, the dissertation embraces all treatises that are associated with Bahmanyār that have not been translated or studied till nowadays.

For Claudio Gugerotti

The perfection proper to the rational soul is to become an intellectual world in which there is impressed the form of the whole, the intellectually apprehended order in the whole, and the good emanating on the whole, beginning with the Principle of the whole while proceeding then to the noble, spiritual, absolute substances, then to the spiritual substances related in some way to bodies, then to the supreme bodies with their configurations and powers, and so on until it fulfils in itself the structure of the entire existence. It, therefore, transforms into an intelligible world that parallels the entire existing world, witnessing that which is absolute beneficence, absolute good, and true absolute beauty, becoming one with it, imprinted with its example and form, engaged with its way, and becoming of its substance.

– Ibn Sīnā, *al-Ilāhiyyāt* (IX.7)

Know that existence is happiness, and the knowledge of existence is also happiness.

– Bahmanyār, *al-Taḥṣīl* (III.2.4.15)

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Bibliography

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Following the series of seminars on Ibn Sīnā's school held by Prof. Amos Bertolacci at the Scuola Normale Superiore of Pisa in the academic year of 2017–2018, I was inspired to study Bahmanyār and his works. Yet my first acquaintance with this philosopher goes back to my school years since he is considered to be a national philosopher in my homeland – Azerbaijan. Back then, I could hardly imagine that one day I would decide to write a doctoral dissertation about the follower of Ibn Sīnā.

In preparing this dissertation, I received kind support from different people. I want primarily to express my deep gratitude to my supervisor Prof. Amos Bertolacci. My special acknowledgements go to Prof. Jules Janssens, Prof. Cécile Bonmariage, Dr. Ivana Panzeca, Dr. Silvia Di Vincenzo, Dr. Stefano Di Pietrantonio, and Dr. Heybət Heybətov. This dissertation is dedicated to Claudio Gugerotti, whose exceptional help made my journey into the world of philosophy possible. I am also grateful to my family members for their care and patience in supporting my scholarly pursuits. Finally, I thank Azerbaijan National Library, the National Library of Belarus, Qatar National Library, Leiden University Libraries, Süleymaniye Library, the Directorate of National Palaces in Istanbul, and Köprülülü Library for the digital images of various books and manuscripts.

TRANSLITERATION OF ARABIC LETTERS

ء	’	ط	ṭ
ب	b	ظ	ẓ
ت	t	ع	‘
ث	ṭ	غ	ġ
ج	ǧ	ف	f
ح	ḥ	ق	q
خ	ḫ	ك	k
د	d	ل	l
ذ	ḏ	م	m
ر	r	ن	n
ز	z	ه	h
س	s	و	w
ش	š	ي	y
ص	ṣ	ة	a*
ض	ḏ		

* except in *idāfa*: t

Vowels:

long ا: ā, short: a;

long و : ū, short: u;

long ي: ī, short: i;

alif maqṣūra ى: à

INTRODUCTION

[...] that in the result there is therefore contained in essence that from which the result derives – a tautology indeed, since the result would otherwise be something immediate and not a result. Because the result, the negation, is a *determinate* negation, it has a *content*. It is a new concept but one higher and richer than the preceding – richer because it negates or opposes the preceding and therefore contains it, and it contains even more than that, for it is the unity of itself and its opposite.

G. W. F. Hegel, *The Science of Logic* (tr. G. Di Giovanni, p. 33)

Historical survival and continuity of philosophy as a discipline throughout the centuries were possible due to its incorporation and concretisation within contextual traditions, schools or movements. It is impossible to speak about a serious and systematic philosophical endeavour without a master-disciple relationship, either taken in a strictly physical sense or be it an indirect or intellectual dialogue – philosophical practice understood as a product of intertextuality. In the history of Islamic civilisation, the first well-known philosophical school that carries clear shapes of an intellectual tradition is associated with the name of the grand master – *al-šayḥ al-raʿīs* Ibn Sīnā (980 ca.–1037). During this span of time, more specifically the late and mature phase of Ibn Sīnā's intellectual activity in Hamadan and Isfahan, we can observe historical figures in the role of disciples, interlocutors, and even cooperators and companions who played a prominent role in the development and dissemination of their master's philosophical and scientific thoughts. Copious mediaeval sources scattered in different libraries and private collections demonstrate the richness and complexity of this prolific interaction between the founder of a new form of Peripatetism and his followers that manifests in various textual genres such as summaries, compendia, commentary, supercommentary, gloss, supergloss and also correspondence. For the first time in the history of Muslim Peripatetism more or less undeviating genealogy can be traced from the master and his immediate disciples all the way to further generations who lived centuries later, hence encompassing an entire period of the mediaeval succession of philosophical affiliation. Hardly a similar analogy could be drawn with regard to previous yet also prominent thinkers such as al-Fārābī (870 ca.–950/1) or al-Kindī (ca. 800–870). Among the disciples of Ibn Sīnā, probably the most productive, original, and interesting one is Bahmanyār ibn al-Marzubān (d. 1066). Little is known about his life, and not all of his works are extant nowadays, nevertheless, he remains one of the most influential members of Ibn Sīnā's school and represents the first generation of Avicennian peripatetics together with al-Ġūzġānī, Ibn Zayla, and al-Ma'sūmī (d. 1038).

Amos Bertolacci in his fundamental monograph on the reception of Aristotle's *Metaphysics* in Ibn Sīnā's *Kitāb al-šifā'* conceptualises the history of Aristotelian metaphysics as 'a sequence of 'reforms', ending in its definitive 'abandonment''. Ibn Sīnā plays a central role in this progressive dynamism by being a transitory stage between exegetical 'reform' (Greek, Arab, and Latin commentators) and self-assertive 'abandonment' (modern philosophers) of the Stagirite's metaphysics. His metaphysical *oeuvre* is both the last and widest transformation of Aristotle's system in the Middle Ages and the first possibility of its autonomous progress. This attempt is continuous, and at the same time, discontinuous with Aristotle's *Metaphysics* since it simultaneously embodies tradition and innovation [Bertolacci, 2006, pp. vii–ix]. This paradigmatic matrix can be equally applied to the relationship between Ibn Sīnā and his disciple Bahmanyār – the author of the first extensive *summa* that tries to introduce the main contents of the Avicennian philosophy. *Kitāb al-tahṣīl* – the *magnum opus* of Bahmanyār – is the pioneering work of synoptical, exegetical, and transformative nature that can be regarded as an early inclusive 'reform/revision' and 'abandonment' of Ibn Sīnā's theological metaphysics. It also apparently reveals a two-fold or dialectical attitude: continuity and discontinuity. If the first element of continuity is the loyalty to the teacher in preserving his innovation of Aristotelian metaphysics, the latter one, i.e. discontinuity, displays itself in two directions: Aristotelian revisionism (hence the 'reform' of 'the reform') and projection of Bahmanyār's own agenda within the realm of Peripatetic tradition as a whole. It should also be noted that the text of *Kitāb al-tahṣīl* is an early indirect testimony of different philosophical works of Ibn Sīnā, especially that of *Kitāb al-šifā'*, due to the extensive verbatim excerpts that it contains. Bahmanyār's exposition and modification of Ibn Sīnā's metaphysics, particularly in the way it is presented in *Kitāb al-šifā'*, in the second part (*Metaphysics*) of his principle and authentic work – *Kitāb al-tahṣīl* – is the object of the present dissertation.

I. Outline of the present study

The dissertation consists of two parts. Part One, which is of historical-theoretical nature, represents a comprehensive restoration and analysis of Bahmanyār's life, works, and his exposition of Ibn Sīnā's metaphysics in the second book of *Kitāb al-tahṣīl*. Its main aim is to present in detail the bi-bibliographic profile of Bahmanyār on the one hand and to clarify the specificity of the disciple's presentation and interpretation of his master's teaching by explicating the commonalities and differences between the two on the other. Part Two is a philological component of the present study since it encompasses the first integral annotated translation of Book Two (*Metaphysics*) of *al-Tahṣīl*

from Arabic into English, being a tentative and provisional attempt whose aim is to support the forthcoming analysis of Bahmanyār's role in the history of Muslim Peripatetism and make a wider public familiar with this work considering the historical significance of the *summa* recalled above.

II. Survey of previous scholarship

Bahmanyār, to a large extent, remains an unstudied author for several apparent reasons. First of all, it is conventional that many researchers are not enthusiastic about secondary or marginal authors, preferring to focus on the great minds of the past. On the other hand, the explicitly imitative or repetitive nature of Bahmanyār's writings, who follows his master, creates a conviction and furthermore nurtures a scholarly bias that it is sufficient to study Ibn Sīnā himself. One of the well-known encyclopaedic entries about Bahmanyār written by Hans Daiber is a specimen of the above-mentioned conceptualisation:

This difference between Bahmanyār and Ebn Sīnā can not modify our view that Bahmanyār stands in the shadow of his great master. He has become known to posterity as commentator of Ebn Sīnā, but seems not to have had much influence; we only hear that Bahmanyār's pupil Abu'l-'Abbās Lawkarī has taken care for the propagation of his ideas and thus of Ebn Sīnā's philosophy in Khorasan. [Daiber, 1988, p. 502]

At the same period of time, when this entry was published, it is possible to notice an alternative evaluation of Bahmanyār's work that it is not merely something commentative but exemplary. A Soviet-Russian orientalist Artur Sagadeev, who prepared the integral translation of Bahmanyār's *al-Taḥṣil* into Russian, regards him in high esteem in his monograph on Oriental Peripatetism:

In terms of the amount of material included in it, Bahmanyār's *Cognition* is closer to Ibn Sīnā's most complete encyclopedia – the *Book of Healing*. This fundamental work is, in a certain sense, an abridged transcription of the *Book of Healing*, from which verbatim extracts are given in abundance, as well as from the *Book of Salvation* and the *Book of Admonitions and Remarks*. Turning to this source for the reconstruction of Ibn Sīnā's worldview is in a certain respect even preferable to relying on the works of Abū 'Alī himself. The *Cognition* is based not only on the writings of Ibn Sīnā, but also on the private conversations of its author with the teacher, and in addition, it reproduces his philosophical system in its finished form. In particular, the *Cognition* can convincingly prove the groundlessness of the assertions found in Western historical-philosophical and Orientalistic literature that the worldview of the great thinker in the last years of his life was gradually inclining towards mysticism (Sufism). [Sagadeev, 2009, p. 18]

This kind of appraisal was common only in the Soviet Union, while in the West, for a long period of time, Bahmanyār remained with the reputation of a 'commentator' or merely a 'follower'.

The historiographic trend in question that underestimates ‘mediaeval scholasticism’ has been seriously reconsidered in the scholarly community, especially in the last decades. More experts tend to assess that Bahmanyār’s influence is definitely more significant than was commonly assumed in the past. Occasionally, there are highly positive remarks, which echo Sagadeev’s views, of Bahmanyār’s work even to the extent that he is contrasted with his master:

This reference to Bahmanyār is indicative of Ṣadrā’s familiarity with his work, especially *al-Taḥṣil*. Bahmanyār was certainly more lucid than his master Ibn Sīnā in articulating key Peripatetic positions, and Ṣadrā quotes freely and at some length from his work. [Kalin, 2010, p. 185, n. 59]

Recent and relatively recent studies demonstrate already systematic and in-depth approaches to the topic of school, disciples, tradition and philosophy understood in a more specific or narrow context. For instance, it is worth mentioning extremely valuable monographs published by Ahmed H. al-Rahim [2018] and Frank Griffel [2021]. Al-Rahim observes in his book that:

In considering this period of intellectual and philosophical history and the sheer number of extant works, some recent scholars have concluded that the centuries after Avicenna’s death and through the Mongol-Tīmūrid Empire constituted another ‘golden age of Arabic philosophy’ or ‘the triumph of Avicennism’. Notwithstanding that judgment, which includes addressing the question of their ‘originality’ as philosophical works, the majority of the extant philosophical works dating from this ‘dark age’ – including of course those composed in commentarial genres – have yet to be fully examined or in some cases even ‘discovered’ and cataloged. [al-Rahim, 2018, p. 3]

While this is only one part of the story, Griffel touches upon the problem of identifying philosophy itself (and implicitly its value) from a cultural perspective which also determines the scholarly preferences in historico-philosophical studies:

A proper understanding of the continuity of philosophy in Islam will not be achieved unless one realizes the crucial error that many intellectual historians of Islam have committed – and that not a small number of them still commit today: for the period after the mid-sixth/twelfth century, the Arabic word *falsafa* no longer represents the full range of what in English is referred to as ‘philosophy’, in German as *Philosophie*, or in French as *la philosophie*. All these words have their origin in the Greek word *philosophía*. Identical etymology, however, does not guarantee identical meaning. [Griffel, 2021, p. 8]

Another consequential factor within this context is that the countries, i.e. Azerbaijan and Iran, to which Bahmanyār’s figure is related historically and their respective scholarly communities have done little to popularise him on the international level. Penetrating research can help to alter this condition and make a fruitful contribution. The number of discovered manuscripts and *testimonia* show that Bahmanyār historically was a popular and widely read author. Furthermore, the systematic comparison of his writings with those of Ibn Sīnā that has been carried out till nowadays already demonstrates a remarkable difference between the two. The clarification of

Bahmanyār's idiosyncrasy and place in the history of the Peripatetic school can enlighten us more about subordinate yet decisive details and hidden bonds in the evolution of philosophy in the Islamic world.

The studies on Bahmanyār in Western academia started in the middle of the XIX century, more precisely in Germany, when Salomon Poper published two short treatises attributed to Bahmanyār – *Risāla fī mawḍūʿ ʿilm mā baʿd al-ṭabīʿa* (*Treatise on the subject matter of the science of metaphysics*) and *Risāla fī marātib al-mawḡūdāt* (*Treatise on the levels of existents*) – in 1851 in the city of Leipzig. The brochure contains the original Arabic texts and their German translations with commentaries, and it is based on one of the ancient manuscripts of these works known for now – the Leiden 184 codex. Later, in 1911, the texts of these *risālāt* were republished from Poper's edition with a minor redaction by ʿAbd al-Ġalīl Saʿd in Cairo. Since then until the publication of the modern edition of *al-Taḥṣīl* by Murtaḍā Muṭahharī in 1970 all studies about Bahmanyār were limited to the discussion of the mentioned works of actually dubious authorship. It should be noted that almost the entire text of *Treatise on the subject matter of the science of metaphysics* is a verbatim citation taken from the *Ilāhiyyāt* of the *Šifāʿ*, and in some manuscripts it is ascribed to Ibn Sīnā, while *Treatise on the levels of existents* besides Bahmanyār is attributed to al-Maʿšūmī and in most cases to al-Fārābī [see Appendix A]. The fact that the manuscript tradition of these tractates was not studied properly and their contents were not compared to the only unquestionably authentic work written by Bahmanyār, i.e. *al-Taḥṣīl*, scholars were rather presenting assumptions, sometimes even not being aware of the real state of affairs. For instance, in the earliest publication on the history of philosophy in Islam, the Dutch orientalist Tjitze Jacobs de Boer outlines some concepts given in those treatises while briefly mentioning Bahmanyār in the section dedicated to Ibn Sīnā. According to De Boer, Bahmanyār's ideas are almost in complete harmony with the teaching of his master, be it the Necessary Existent or incorruptible and immaterial substances [De Boer, 1901, pp. 131–132].

A little yet important contribution for that time was made by Carl Brockelmann, who prepared the first inventory of manuscripts attributed to Bahmanyār. The list is extremely short, yet together with the manuscripts, it includes editions of the works ascribed to Bahmanyār available back then [Brockelmann, 1937, I, p. 599; I (SB), p. 828]. The list suffers from a number of mistakes and imprecisions, like the imprecise death date of Bahmanyār, confused manuscripts, wrong inventory numbers or the non-existent Cairo edition of *al-Taḥṣīl*.

Bahmanyār's name and his works are mentioned occasionally by modern Eastern scholars as well, in numerous different publications that appeared throughout the twentieth century. Among them are Muḥammad Qazwīnī, Muḥammad ʿAlī Tarbiyat, Dabīḥ Allah Šafā, Saʿīd Nafīsī, Hilmi

Ziya Ülken, ‘Abd al-Raḥman Badawī, Muḥammad Riḍā al-Šabībī and others [For a brief survey on these authors and their publications, see Məmmədov, 1983, pp. 6–8]. Almost all of the mentioned authors did not specifically dedicate any research to Bahmanyār, therefore, their writings remain merely as informative sources akin to entries typical to philosophical encyclopaedias. A certain interest in the figure of Bahmanyār in the early 2000s was shown by Turkish scholars, among whom we can name Kemal Sözen [2004] and Mustakim Arıcı [2010/1]. As a matter of fact, Iranian scholars have not endeavoured in this field that much except few exceptions [Hidāyat Afzā & Lawā’ī, 1395Š; İbrāhīmī Dīnānī, 1391Š], which might seem quite surprising.

The first attempts to study Bahmanyār in a systematic way were made in Soviet Azerbaijan starting in the 1940s. Heydər Hüseynov, in his brief article, outlines and analyses the two minor treatises while stressing the materialist elements in Bahmanyār’s thought, for instance, the eternity and uncreatedness of the world. Yet, according to the author, Bahmanyār, like Ibn Sīnā and other ‘Arab Peripatetics’, tries to synthesise the teaching of Aristotle with Islamic religion and, as a result, his thought oscillates between idealism and materialism [Gusejnov, 1947]. Obviously, this and other pieces of research conducted in the Soviet time carry the imprint of the official ideology, i.e. dialectical materialism. The interpretation of Bahmanyār’s texts was subordinated to the Marxist vision of history, where the historical-intellectual evolution of mankind is understood as a permanent conflict between idealism and materialism.

A decade later, Əhməd Zəkuyev publishes the first monograph on Bahmanyār [1958]. This work, although mostly based again on those two treatises, enlarges the number of treated sources related to Bahmanyār, by discussing the correspondence between Ibn Sīnā and his disciple and even giving a brief reference to the logical section of *al-Taḥṣīl*. While introducing the biography and *oeuvre* of Bahmanyār, the book exposes the philosophical views of the author according to topics, such as cosmology, gnoseology, logic, psychology and also ethics. In the entire text, Zəkuyev counterpoises Bahmanyār with religious thinkers, and consequently, the author concludes that Bahmanyār, despite being an idealist philosopher, is in opposition to theology and the dogmas of the Islamic religion. Moreover, in Eastern Islam Ibn Sīnā and Bahmanyār are the last voices of philosophy in the Middle Ages before the invasion of Mongols and the dissemination of mysticism [Zəkuyev, 1958, pp. 88–89].

The most comprehensive and valuable study of that period is Zakir Məmmədov’s *Bəhmənyarın fəlsəfəsi* [1983] – *Bahmanyār’s philosophy*. Written close to the end of the communist regime, this publication is relatively free from the spirit of ideology. Besides discussing the historical period extensively, as well as the life and works and further influence of Bahmanyār on the Peripatetic school, the book also contains three broad chapters, each of them dedicated to the

ontology, epistemology, and logic according to Bahmanyār's writings, especially that of *al-Taḥṣīl*. This publication is the first one to address the *magnum opus* of Bahmanyār in a large scope. Before this monograph, Zakir Məmmədov published several articles dedicated, for instance, to the question of the death date of Bahmanyār [1971] and the concepts of 'cause' and 'effect' in Bahmanyār's philosophy [1973].

Later publications that were penned by Azerbaijani scholars after the fall of the Soviet Union do not bring any serious contribution to the field [Cəfərov, 1995, 1997; Soltanova, 2010, 2012, 2012b, 2013, 2015, 2017; Şükürov, 1995]. Most of them represent an academic decline; the authors do not manifest any knowledge of Arabic and their writings repeat already established ideas for that time, be it the life or intellectual activity of Bahmanyār.

Since the end of the 1990s, in the West, there has been a continuous dynamism of research that is related to Bahmanyār on this or another level. In 1997, Jean Michot published the article *La réponse d'Avicenne à Bahmanyâr et al-Kirmânî* that contains the translation of one of the letters from Ibn Sīnā to Bahmanyār which is a part of *al-Mubāḥaṭāt* (on the basis of Bīdārfar's edition). According to David Reisman, this translation is:

... perhaps the most important translation of any part of the *Mubāḥaṭāt* to date and, moreover, introduced it with another examination of the historical context of the composition of the *Mubāḥaṭāt*. ... his work has inaugurated a new direction in *Mubāḥaṭāt* studies since the publication of the Bīdārfar's edition. [Reisman, 2002, p. 11]

After several years Reisman's fundamental and groundbreaking dissertation on *al-Mubāḥaṭāt – The making of the Avicennan tradition* marked a new stage in clarifying the role of Bahmanyār as one, if not the most, of the primary followers of Ibn Sīnā. Reisman demonstrates that Bahmanyār is the figure who stands at the beginning of the so-called 'early recension' of *al-Mubāḥaṭāt*, which according to his research, was compiled shortly before or after Ibn Sīnā's death in 1037. Initially, the work was entitled *al-Taḥṣīlāt*. While being an incomplete collection, it would circulate through the end of the XI century. There was a gradual or synchronous inclusion of these and other materials into the other three earlier recensions, presumably between Bahmanyār's death in 1066 and the end of the XI century or beginning of the XII century [Reisman, 2002, pp. 18–19]. Besides the fact that this research is based on meticulous manuscript studies, Reisman also gives a valuable and insightful, and probably one of the first and most comprehensive reconstruction and analysis of the available biographical data about Bahmanyār [2002, pp. 185–195]. Regarding the life and works of Bahmanyār, publications by Ahmed al-Rahim offer the most comprehensive and detailed data [2010, 2018]. As regards *al-Ta'ālīqāt*, which together with *al-Mubāḥaṭāt* is also associated with Bahmanyār, particularly due to the claim by al-Badawī that Bahmanyār compiled

the work from his teacher's dictations between the years 1014–1021, when Ibn Sīnā was in Hamadān [1973, pp. 5–8], Janssens' research demonstrates that it is based on the transcription of Ibn Zayla of the philosophical discussions that took place between him and Ibn Sīnā [Janssens, 1997; see also Reisman, 2002, p. 195 n. 95; Gutas, 2014, pp. 162–164]. More exhaustive research, comparable to that of Reisman, is required to clarify the relation of Bahmanyār to this work.

The next most valuable and pioneering contribution in the given period belongs to Jules Janssens and Meryem Sebti. In his article *Bahmanyār ibn Marzubān: A faithful disciple of Ibn Sīnā?* Janssens offers a general analysis of the structure and content of the entire *Kitāb al-Taḥṣīl* while comparing it with the works and ideas of Ibn Sīnā. His conclusion is that Bahmanyār is not a faithful disciple of Ibn Sīnā. His attempt to 're-Aristotelise' Ibn Sīnā's thought is doubtful, and he was rather influenced by Abū l-Qāsim al-Kirmānī, a weak logician and obsequious follower of a bad Aristotelianism, as accused by Ibn Sīnā himself [Janssens, 2003, pp. 196–197]. In his subsequent article, Janssens focuses on the metaphysical part of *al-Taḥṣīl*, particularly four categories, i.e. substance, quantity, quality, and relation. Although a systematic use of Avicennian texts is noticed in *Kitāb al-Taḥṣīl* at first glance, Bahmanyār clearly deviates from Ibn Sīnā's conception of metaphysics as a science that includes ontology, theology, and the study of the principles of the sciences, while also dismissing any reference to *kalām* criticism. Moreover, he introduces many logical and physical issues that would not have been justified by Ibn Sīnā [Janssens, 2007, p. 117].

If Janssens' contribution is mostly about metaphysics, Meryem Sebti, on the other hand, studied the psychological topics present in *al-Taḥṣīl*. The section on the soul from the third book of *al-Taḥṣīl* is the object of study in *Intellection, imagination et apperception de soi dans le Livre du résultat (Kitāb al-Taḥṣīl) de Bahmanyār Ibn al-Marzūban* [2005/6]. Sebti's research also shares the same viewpoint that Bahmanyār seriously modifies his teacher's concepts, since she claims that the disciple shifts the horizon of Avicennian psychology as it prefigures the fundamental function that self-perception will occupy in the doctrines of the Illuminationist school. Bahmanyār places at the heart of his theory the question of the unity of psychic activity, which lessens the division that Ibn Sīnā draws between sensory perception and theoretical thought [Sebti, 2005/6, pp. 209–210]. Her next article, which appeared in English, also deals with the same topic by carrying out a systematic comparison between Bahmanyār and his master regarding the idea that activity that pertains to the soul as a substance is a self-consciousness. This activity is the foundation of psychic activity, both sensitive and intellectual. Probably, Bahmanyār attempted to overcome the strict ontological distance between the substance of the soul and the substance of the body. In this way, he integrated theoretical and sensitive thinking. Hence, Bahmanyār prefigures one of the main tenets of *iṣrāqī* philosophy [Sebti, 2012, p. 540].

Fedor Benevich's article on individuation, as it is presented by Bahmanyār and al-

Suhrawardī in the post-Avicennian period, is another important publication. Since Ibn Sīnā did not provide a systematic theory of individuation (matter, existence, and individual intentions equally appear as candidates for the principle of individuation), this gap was to be filled by his disciple Bahmanyār who was inspired by Ibn Sīnā's *Ta'liqāt*, while connecting individuation with matter, motion, time, and position.

The most recent publication in this field is my article [Malikov, 2022], which presents the first annotated English translation (together with a new transcription of the Arabic text from Leiden 184 codex) of *Risāla fī mawḍū' 'ilm mā ba'd al-ṭabī'a* or *Iṭbāt al-mabda' al-awwal* attributed both to Ibn Sīnā and Bahmanyār. I argue that the treatise is a selective synopsis of its direct source (*al-Ilāhiyyāt*) or even a compilation on its own aiming to explain the nature of the Necessary Existent and not a draft as suggested by David Reisman. Moreover, the treatise seems to be the earliest specimen of a rudimentary exegesis of *al-Ilāhiyyāt* in the form of a synopsis. Also, as a part of *al-Mubāḥaṭāt*, it is a certain 'school material' written for oral philosophical discussions rather than a text meant for the general public. As regards the authorship, both possibilities (Ibn Sīnā and Bahmanyār) can be challenged, and the author might be a later follower of the school, namely al-Lawkarī.

PART ONE

Bahmanyār and his exposition of Ibn Sīnā's metaphysics

I. Bahmanyār's epoch, his life and works

Little is known about Bahmanyār's personality and life beyond the few facts given in historical sources. Paradoxically, this limited amount of knowledge still creates considerable confusion and numerous misunderstandings. At the same time, state of the art regarding his *oeuvre* also is not devoid of ambiguity and the lack of decent studies leaves much to be desired. In this chapter, I will try to give a comprehensive exposition and analysis of all medieval and modern sources that provide relevant information about Bahmanyār's biography and writings. I will clarify the personal profile of the philosopher by elaborating on the few details, such as his home country and religious background, that are available to us in relation to historical facts, while rejecting certain speculations regarding Bahmanyār's 'royal' origin (as suggested by Yahya Michot and David C. Reisman). It will be shown that prosopographic or bio-bibliographic anecdotes or narratives, although not entirely reliable and old enough, about Bahmanyār can be called his 'narrative biography' and they reflect collective (presumably the school's) attempts to mould his image as a prototype disciple due to his special relationship with Ibn Sīnā on the one hand, and later scholarly and pedagogical activities on the other. Finally, I will give a detailed account of the extant and lost treatises attributed to him.

I.1. Historical period

XI century is the apogee of the classical Islamic civilisation. Almost five hundred years after the expansion of the Caliphate till the mentioned period Muslim society passed through several stages of development and transformation becoming an extremely diverse and complex 'imperial' community from all aspects. It saw a fundamental political shift in the examples of three dynastic periods (rightly guided caliphs, Umayyads, and 'Abbāsids), the growth and change of population in ancient and newly appeared cities, dissemination of various groups within the religious sphere (an entire spectrum of Sunni and Shia teachings ranging from juridical and theological to mystical realms), different ethnic tensions and movements (for instance, a literary-political movement of the *šū'ūbiyya* known for celebrating the excellence of non-Arab Muslims, especially the Persians), flourishing and sophisticated literature of numerous genres and styles in Arabic and Persian, the translation of ancient texts into Arabic (especially of Greek science), development of studies and sciences (be it linguistics, theology, philosophy or practical disciplines), and finally circulation of different ideas among the cultivated class of blossoming cities. It is not surprising that this rich,

dynamic, and contradictory period also witnesses the phenomenon of Ibn Sīnā and his universal, systematic, rationally rigorous scientific system designed to embrace all aspects of reality, as well as the central ideas of the Islamic religion. This holistic approach is the continuation of the Hellenic tradition that gained a second life in the Muslim world. Apart from his fundamental contribution to the field of knowledge, what makes him second only to Aristotle, the philosopher's other invaluable legacy is his school or tradition to be more general. Within the earlier and formative period of this outstanding school, and even in later times, his well-known disciple Bahmanyār possesses a special rank.

Most of the historical period to which Bahmanyār (d. 1066) belongs was once called by Vladimir Minorsky 'Iranian intermezzo', i.e. an interval between the political decline of 'Abbāsīd caliphs and the arrival of Turkic-speaking tribes, especially Ġaznavids and Salġūqs, during which local dynasties of Iranian origin were establishing their power on the former Sassanian territories¹. Bahmanyār witnessed already the coda of this crucial historical phase when the Salġūq ruler Toġrīl Beg (d. 1063) sieged Baghdad in 1055, removing the Būyīd prince al-Malik al-Raḥīm (r. 1048–1055). In 1058, he was received by the caliph al-Qā'im (r. 1031–1075), who bestowed him the title 'Sultan of the East and West'. Nevertheless, the effects of 'Iranian intermezzo' were still present in all spheres of life, owing to the fact that this political resurrection in the example of primarily such dynasties as Ṭāhirids, Ṣaffārids, Sāmānids, and Būyīds was accompanied by a rebirth of the Persian language and culture, particularly due to the patronage of local rulers who found their national identity once more free from external influence and domination. The Persian medieval renaissance, no matter how sophisticated, suffered from political turbulence, typical of feudal fragmentation, since due to the decentralisation the competition between different dynasties and cities that acquired their independence did not cease. The friction between various powers left traces on economic and cultural life as well, both in negative and positive senses; it stimulated economic, cultural and scientific growth, yet not without interruptions caused by sporadic wars and conflicts. This phenomenon is noticeable in the autobiography of Ibn Sīnā (d. 1037) who was forced to move from one city or palace to another in search of more favourable living conditions, and he himself was a subject to different political intrigues. Suffice to recall his imprisonment in Fardaġān castle near Hamadan and final release and travel to Isfahan for the patronage of the Kākūyīds [Ibn Sīnā, 1974, pp. 57–63]. If the biographical episodes of Ibn Sīnā help us to acquire a general understanding of his life path and to establish more or less clear connections between his life and the historical events

¹ Minorsky coined this term at the early stage of his intellectual activity in a short monograph. See Minorsky, 1932, pp. 12–30. For Iranian intermezzo in the territory of Azerbaijan see Minorsky, 1953, pp. 110–116. The north-western part of Iran, including Azerbaijan, was ruled by numerous minor dynasties like 'Alids, Ziyārids, Bāvandids, Ustandārs, Ġustānids, Sallārids, Sāġids, Rawwādids, Ṣaddādids, Yazīdids, and Hāṣimids.

and tensions, very little is known about Bahmanyār's life history. Unlike their master, Ibn Sīnā's disciples did not write down their own biographies. On the other hand, Ibn Sīnā himself also does not mention them in his autobiography, except al-Ġuzġānī [Ibn Sīnā, 1974, pp. 42–43]. Therefore, all that can be obtained about Bahmanyār's background and life are thumbnail pieces scattered in different sources that were written much later after his death, and very probably, they rely on indirect transmissions; considering that the compilers of mediaeval bio-bibliographic collections were including hundreds of different figures in their works, they could hardly gather information about each author from a direct source or personal witnesses².

1.2. The earliest version of Bahmanyār's biography

The first historical record of Bahmanyār's life can be found in al-Bayhaqī's (1105–1169) *Ta'rīḥ ḥukamā' al-islām* or *Tatimma Şiwān al-ḥikma*, which was written almost a century after the death of the philosopher³. The compiler of this work presents a very short biographical account of Ibn Sīnā's disciple, together with a number of gnomological sayings⁴ attributed to him:

The philosopher Bahmanyār al-Ḥakīm was a disciple of Abū 'Alī, Zoroastrian by religion and not proficient in the Arabic language⁵. He was from the land of Azerbaijan. Most of the *Discussions* (*al-Mabāḥiṭ*) that belong to Abū 'Alī are issues [raised] by Bahmanyār that discuss the obscurities of [different philosophical] difficulties. Among the writings of Bahmanyār are *Kitāb al-taḥṣīl* (Book of attainment), *Kitāb al-rutba fī l-manṭiq* (Book of the rank in logic), *Kitāb fī l-mūsīqā* (Book on music), and numerous treatises. From his wisdom sayings [this is what follows]: wealth is protected and the intellect is the protector; the intellect is a close friend in exile; honesty is the beloved one of intelligent people; if concern bothers you, remove the grief with decisiveness; the intellect empties [you from] deception and seeks for salvation; intellectual pleasures are cure that is not followed by disease, and health does not need sickness; whoever learns the intellectual sciences and does not imitate the morals of their masters is ignorant of the truths of the sciences; the morals of the wise manifest in those who learn wisdom, as the signs of spring appear in a garden; every wise man asked for more wealth than he needed while he knew wisdom and had no preference for it; do not grief because of something that may happen, and strive to remove it and overcome it, and be cautious of what has not happened, and do not grief; know

² al-Bayhaqī mentions in his *Tatimma* that he was in correspondence with 'Abd al-Razzāq al-Turkī who was a disciple of Lawkarī – Bahmanyār's student.

³ al-Bayhaqī finished the supplement to *Şiwān al-ḥikma*, entitled *Tatimma Şiwān al-ḥikma*, close to the end of his life. See Rosenthal, 1937, p. 27, n. 3; 1937b, p. 626.

⁴ Almost all of these maxims render ethical truths concerning intellectual life. They are probably of apocryphal nature since Bahmanyār is not known for ethical works or specific interests in ethics.

⁵ In the present edition, the original word is *kalām al-'arab* – the language of Arabs. William E. Gohlman gives it as *al-kalām al-'arabī* and translates it as 'Arabic theology', which sounds unusual since Arabic theology or Arabic philosophy is a Western expression. See Ibn Sīnā, 1974, p. 140, n. 11.

that there is no escape from destiny. Bahmanyār died in the months of year 458, thirty years after the death of Abū ‘Alī. [al-Bayhaqī, 1946, p. 97; 2009, p. 57]

Bayhaqī’s account apart from being extremely sparse remains the only source of this kind of the given period. Therefore, it can be neither supported or supplemented nor refuted by any other alternative source of the same age. Still, the information provided by him deserves special consideration. The fact that Bahmanyār was Zoroastrian is indicative of the survival of the pre-Islamic religion in the eleventh century⁶. It makes clear that he was of Iranian origin, as well as the etymology of his name can be traced to Avesta: *Bahman* is the New Persian name of the Avestan Vohu Manah (Good Thought), one of the divine beings or angels in the post-Gathic parts of Avesta. The second part of his name – the word *yār* in Persian has different meanings like ‘friend’, ‘beloved’, ‘companion’, or ‘comrade’. As a matter of fact, the name of Bahmanyār’s maternal uncle to whom he dedicated his *al-Taḥṣīl* also deserves special consideration since his name also remains purely Persian (and hence even Zoroastrian) except the kunya: Abū Maṣṣūr Bahrām ibn Ḥūršīd ibn Yazdyār.

Bahmanyār’s religious background is directly linked to his native country Azerbaijan, which used to be one of the centres of Zoroastrianism before the Arab invasion, the home of Median magi, the sacerdotal class of fire-worshippers. There is even a legend that Azerbaijan is a land where the prophet Zoroaster was born, however, it might be a later invention of magis [Boyce, 1979, pp. 93–95]. The word Azerbaijan probably derives from the name of its ruler during the Achaemenid dynasty – Atropates (in Greek rendering), the satrap of Media, who became independent in 321 BC after the collapse of the empire following the conquest of Alexander the Great. Later this territory was named Media Atropatene or, less frequently, Media Minor. Throughout the Sasanian period, the region was governed by a *marzbān* who had all the power of a satrap. At the same time, it was one of the religious centres of Sasanians; the temple at Šīz, now Taḥt-i Sulaymān, was the hearth of Ādur Gušnasp, one of the three most sacred fires of Iran. The sources inform us that every newly crowned Sasanian emperor used to make a pilgrimage on foot to this temple [Schippmann, 1987; Boyce, 1979, pp. 123–125].

The mentioned facts show that Azerbaijan historically was one of the most important provinces of the Iranian empires before Islam, and without any doubt, it was a culturally developed territory that gave rise to many intellectuals of a different kind after the Islamisation of the region as well. For instance, there were numerous poets from Azerbaijan who wrote in Arabic already during

⁶ A Mu‘tazilī theologian Ibn al-Malāḥimī al-Khwārazmī (d. 1141) calls him al-Maḡūsī al-Iṣfahānī [al-Khwārazmī, 2019, p. 696]. There is no evidence that Bahmanyār was from Isfahan. Probably al-Khwārazmī is confusing Bahmanyār with Ibn Zayla who was a Zoroastrian from Isfahan [al-Rahim, 2018, p. 55]. The manuscript Ahmed III 3190 gives his name as *Bahmanyār al-Ḥakīm al-Maḡūsī*.

the Umayyad dynasty. A well-known writer of *adab* literature Ibn Qutayba (828–889) gives a short but very strong statement in his work on Azerbaijani poets: ‘There is no *mawālī*⁷ poet in Medina whose origin is not from Azerbaijan’ [Ibn Qutayba, 1964, pp. 481–482]. Among these poets we can name Mūsā Šahawāt, Abū l-Farağ Ismā‘īl ibn Yasār, and Abū l-‘Abbās al-‘Amā [More on this topic, see Mahmudov, 1983]. In the eleventh century, during the lifetime of Bahmanyār, there were also remarkable figures from Azerbaijan, such as the poet Qaṭrān Tabrīzī (d. after 1072/3), linguist and literary critic Ḥaṭīb Tabrīzī (1030–1109), and finally relatively later ‘Ayn al-Qudāt al-Miyānağī (1098–1131), one of the three mystic martyrs of Islam along with al-Ḥallāğ (ca. 858–922) and al-Suhrawardī (1154–1191) (also from Azerbaijan). In those times non-Arabs and especially Persians used to be called ‘*ağamī*. Therefore, certain sources besides the *nisba* of al-‘*Aḍarbayğānī* also add the term al-‘*ağamī*⁸. As regards Bahmanyār’s ethnic background, we can easily assume that he was from one of the ethnic groups that used to live in Azerbaijan in the given period of time. Most of them were direct descendants of Medians, and the common language among them was Āḍarī (nowadays called Old Azeri, not to be confused with modern Azerbaijani, which is a Turkic language) termed after the name of the region. Sharing similar features with the dialects of Ray, Hamadan, and Isfahan it remained the prevalent language of Azerbaijan until approximately the 14th century⁹.

At the end of Bahmanyār’s biography, al-Bayhaqī notes that the philosopher passed away in one of the months of 458H/1066 or thirty years after Ibn Sīnā’s death in 428H/1037 [Ibn Sīnā, 1974, pp. 88–89]. The year 458H coincides with the Gregorian year 1066 except for the first month of Muḥarram which overlaps with December of 1065. al-Ġūzğānī does not mention the day or month of Ibn Sīnā’s death, while according to al-Bayhaqī, he died on the first Friday of Ramadan in 428H/ 18 June 1037 [al-Bayhaqī, 1946, p. 52]. If calculated from this date, then the year of Bahmanyār’s death definitely moves towards 1066¹⁰.

⁷ A non-Arab convert to Islam.

⁸ Literally ‘speechless’, ‘incomprehensible’ or ‘mute’. I was not able to find any mediaeval source that uses this *nisba*. There are, for instance, two XIX-century authors that include in Bahmanyār’s name this attribution. See al-Ḥwānsārī, 1306Š, p. 140 and al-Bağdādī, 2017, p. 236 and p. 254.

⁹ See Yarshater, 1988. The pioneering work on the Āḍarī language belongs to Aḥmad Kasravī [1925], where he brings together all survivals of the language and also sketches its history.

¹⁰ Sometimes sources indicate a different date either by mistake or simply by supposing, like 1038/9, 1065 or 1067. According to Qazwīnī [‘Arūḍī, 1909, p. 252], Brockelmann erred in identifying the year of Bahmanyār’s death as 430/1039 [Brockelmann, I/599] because he misread al-Šahrazūrī. For the discussion of Bahmanyār’s death date, see Məmmədov, 1971.

I.3. Bahmanyār the prince?

The next testimony on Bahmanyār's life is *Nuzhat al-arwāḥ wa rawḍat al-afrāḥ fī ta'rīḫ al-ḥukamā' wa l-falāsifa* by Muḥammad ibn Maḥmūd al-Šahrazūrī (d. after 1288). Written even much later than *Tatimma* al-Šahrazūrī's account totally relies on the previous source since it repeats exactly the same information as given by al-Bayhaqī with some tiny differences in rendering wisdom sayings and probably the most important issue is that it mentions Bahmanyār's patronymic – ibn al-Marzubān [al-Šahrazūrī, 1976, p. 38]. The incipits of the manuscripts of his *al-Taḥṣīl* also present him as Bahmanyār ibn al-Marzubān. Whether this name has any historical relation to the old Iranian title for satraps (just like in the case of Azerbaijan) remains within the realm of hypothesis. It seems that there is a certain relation due to the popularity of this name among the local rulers of Iran, especially from its north-western periphery, among them Marzubān ibn Rustam (Bāwandid dynasty), Marzubān I ibn Muḥammad (Sallārid dynasty), Marzubān II ibn Ismā'īl (Sallārid dynasty), Marzubān ibn Muḥammad (Šaddādid dynasty), Šamšām al-Dawla Marzubān (Būyid dynasty), 'Imad al-Din Marzuban (Būyid dynasty), to name only a few. Reisman pays remarkable attention to this issue by examining an astute hypothesis (as suggested by Michot) that Bahmanyār's father may have been Marzubān ibn Rustam, the brother of the Sayyida who was the mother of Maḡid al-Dawla (to whom Ibn Sīnā used to serve while being in Ray). Marzubān ibn Rustam belongs to the Bāwandid dynasty and is thought to be the author of the famous *Marzbānnāmah*, a 10th-century adab work written in the Ṭabarī dialect of 'old Persian'. However, the historical sources inform us with the names of only two of his sons, i.e. Sahl and Ibrāhīm, thus making any inference impossible [Reisman, 2002, pp. 188–189]. It also creates a discrepancy with the earliest biographical account given by al-Bayhaqī, since in this case Bahmanyār's origin is linked not to Azerbaijan but to Tabaristan or Mazandaran, the mountainous region located on the shores of the Caspian sea in northern Iran, where Bāwandids used to rule.

Reisman also tries to identify Bahmanyār's uncle with Abū Naṣr Ḥūršīd Yazdyār who was a treasurer of the Būyid ruler 'Aḍud al-Dawla and hence proposes the marriage ties between the Bāwandids and the Būyids in Ray. This hypothesis helps to place Bahmanyār in Ray as a 'chancellery secretary'¹¹ and establishes his connection (even as a student) with Abū l-Qāsim al-Kirmānī, who was probably a secretary himself in the same city [Reisman, 2002, pp. 190–120]. These conjectures cannot be supported with any evidence, so far everything 'emerges from these

¹¹ In one of the manuscripts of *al-Mubāḥaṭāt*, there is the title *al-kātib* (secretary) added to his name, while on one title page it is written al-Kiyā Bahmanyār [Reisman, 2002, pp. 185–186]. Reisman for certain unclear reasons translates the word as 'the chancellery secretary' as mentioned above. However, *al-kātib* does not necessarily imply a position on the level of a chancellery. It simply might be a clerk as well.

slim pieces of evidence’ as formulated by Reisman himself.

According to David Reisman, Ibn Sīnā in *al-Mubāḥaṭāt* refers to Bahmanyār only by the title al-Šayḥ al-Fāḍil (or simply al-Šayḥ)¹² [2002, p. 185]. Al-Rahim observes that ‘Avicenna’s use of these honorific titles indicates that he considered Bahmanyār to be more of a colleague than a pupil, or ‘faithful disciple’, as he is generally portrayed in the sources’ [2018, p. 49]. Reisman here again attempts to support his hypothesis while identifying ‘one of the sons of the military commanders, of the aristocracy’ (*ba’d awlād al-umarā’ min ahl al-faḍl*) mentioned in one of the letters, entitled by Gutas as ‘Memoirs of a disciple from Rayy’, with Bahmanyār since the latter was addressed by Ibn Sīnā as al-Šayḥ al-Fāḍil [2002, pp. 191–192].

Michot’s and Reisman’s speculations around this issue raise many critical doubts regarding its reasonableness. First of all, trying to establish different ties between historical individuals due to the similarity of names is a risky method since there were dozens of other Marzubans in that period, and exactly to which figure Bahmanyār is related is impossible to determine. Another candidate for Bahmanyār’s father might be Marzubān I ibn Muḥammad (r. 941–957) or rather Marzubān II ibn Ismā‘īl (r. 966–997) from the Sallārid dynasty (also known as Musāfirids or Kangarids) that ruled Azerbaijan, Arran and Daylam in different times. The next candidate can be Marzubān ibn Muḥammad (r. 978–985) from the Šaddādid dynasty – the lords of Arran. There is ‘Imād al-Dīn Marzubān (r. 1028–1048) from the Būyids of Kirman as well. The list can be extended if we also consider historically less-known individuals with the same name. Secondly, if Bahmanyār had been born to a wealthy and ruling family, this fact very probably would have been known and recorded in historical annals. Thirdly, princes from ruling dynasties usually did not follow a philosophical career. Some of them indeed are the authors of different works, but their writings normally belong to literary genres (especially poems), bare an amateurish spirit or are of practical importance (i.e. ethical or didactic), like *Marzbānnāmah* (penned by Marzubān b. Rustam) or *Qābūsnāmah* (presumably written by Kaykāvus ibn Iskandar – a prince of the Ziyārid dynasty). Princes back then used to follow a political career, they were involved in military and administrative activities, becoming governors of provinces already from a very young age. Hardly one can imagine a prince becoming almost a ‘full-time’ philosopher, although it creates a charming aristocratic air around the portrait of Bahmanyār and adds royal prestige to Ibn Sīnā’s teaching reputation. And finally, why would Bahmanyār be a ‘chancellery secretary’ (it is unclear what exactly this position means but it seems something not of a high rank) if the dynasty (the Bāwandids) to which he belonged was still in power and endured till the arrival of Mongols? Finally, reading of the word *ahl al-faḍl* as

¹² The name of Bahmanyār appears as *al-Fāḍil Bahmanyār* on the title page of the manuscript Fazıl Ahmet Paşa 863 of *al-Taḥṣīl*.

aristocracy understood as a class of nobility is problematic; in the Islamic world there has never been a clear notion of aristocracy as a privileged class. The term *faḍl* or *fāḍil* might simply refer to the possession of personal virtues and not the noble origin; in relation to Bahmanyār as a learned man it can be translated as ‘erudite’.

Nizāmī ‘Arūḍī Samarḳandī (1110/1–1152/3) in his *Čahār Maqāla* names Bahmanyār *kiya ra’īs* (*kiyā* is ‘lord’ in Persian) [‘Arūḍī, 1921, p. 92]. It is doubtful whether this is a hereditary title indicating his noble origin due to the absence of any usage of this kind of title in historical sources; it rather appears as a first name. However, it could have been an honorific title, similar to *al-šayḥ al-ra’īs* of Ibn Sīnā. In both cases, we see the usage of the word *ra’īs* following a premodifier. Could it be that Bahmanyār was called in this manner because he was considered the most outstanding student of his teacher and even later the head of the Peripatetic school after the death of his master? Or probably because he was holding a certain administrative office? There are no direct sources that could answer these questions. Reisman believes that it is a conflation of Bahmanyār and another student of Ibn Sīnā – al-Kiyā Abū Ğa‘far Muḥammad b. al-Ḥasan al-Marzubānī (the recipient of the ‘Letter to Kiyā’) [Reisman, 2002, 185–187]¹³.

I.4. Kunya Abū l-Ḥasan and conversion to Islam

Another biographical element that could be found in his name is his *kunya* Abū l-Ḥasan¹⁴, which indicates that he had a family and, moreover, he converted to Islam. This *kunya* among biographers is provided for the first time by Ibn Abī Uṣaybi‘a (d. 1270) [vol. 2, 1301H, p. 19]¹⁵. It might be another tenuous fact since even regarding Ibn Sīnā we do not have any information on whether he was married and had children, although he is also often called in numerous sources by his *kunya* Abū ‘Alī. The Persian translation (obviously in the form of adaptation) of *Nuzhat al-arwāḥ* provides some additional elements to the biographical sketch of Bahmanyār, namely it mentions how ‘good fortune’ helped him to leave the ‘valley of delusion’ and find his path to monotheistic Islam. Besides, it lavishly praises the intellectual capacities of Bahmanyār, unlike the original text [al-Šahrazūrī, 1937, p. 61]. The views reflected in *al-Taḥṣīl*, for instance, the unity of the Necessary Existent or the fact that evil is defined as non-existence [*al-Taḥṣīl*, III.1.1, II.5.4], are

¹³ David Reisman rightly notices that there are no comprehensive studies of different titles that scholars, politicians or militaries held in that period. That is why it is difficult to assert anything. See Reisman, 2002, p. 187.

¹⁴ In one of the letters of *al-Mubāḥathāt* his *kunya* is given as Abū al-Ḥusayn. See Reisman, 2002, p. 62.

¹⁵ Even before him, it appears in Leiden 184 (10a) codex, the oldest part of which is dated back to the XII century. For the description of the codex, see Witkam, 2007, pp. 79–80.

not compatible with certain fundamental tenets of dualistic Zoroastrianism, where there is an opposition of good and evil on the divine level. In another part of *al-Taḥṣīl*, the author manifests a very Sunni viewpoint by stating that ‘Abū Bakr precedes ‘Umar and all the companions [of the Prophet]’ [See *Ibid.*, II.3.1]. Therefore, it is not plausible that Bahmanyār remained a conscious and strong Zoroastrian till the end of his life. However, whether he was a pious or only a nominal Muslim also can be a matter of question since again in *al-Taḥṣīl* he does not show any interest to synthesise the Islamic religion (particularly the idea of prophecy) with philosophy, as it happens in the works of Ibn Sīnā. On the contrary, he implicitly hints at the sufficiency of philosophy in the last chapter of the book.

I.5. Anecdotes on Bahmanyār: history and legend

Later sources on Bahmanyār focus quite a lot on anecdotes, probably of a semi-legendary and even legendary nature. The lack of knowledge about Bahmanyār’s life on the one hand, and his contribution to the compilation of *al-Mubāḥaṭāt* and intensive philosophical discussion and correspondence around different topics that this work contains could have given rise to the dissemination of different stories and legends. The XVII century author Abū al-Qāsim ibn Naṣr al-Bayān Kāzarūnī narrates rather an amusing dialogue that took place between Ibn Sīnā and Bahmanyār. Once al-Šayḥ introduced an argument regarding the immateriality of the human soul, which contrary to the human body does not change. Bahmanyār became sceptical and asked for an explanation since he believed that just like the bodies of animals and plants are not the same in the morning and evening, the state of the soul is similar to bodies. Ibn Sīnā kept quiet and did not respond. Bahmanyār insisted on the answer, and al-Šayḥ turned to another group of pupils by saying: ‘Why does he expect an answer from me when he doubts that he asked me who is another person similar to me?’ After hearing this Bahmanyār became silent [Bahmanyār, 1983, pp. 37–38].

The other very late, actually a modern, yet valuable source on Bahmanyār is *Rawḍāt al-ḡannāt* by Sayyid Muḥammad Bāqir al-Ḥwānsārī (1811–1895) where the author narrates a story of how Ibn Sīnā met Bahmanyār for the first time. It is said that one day Ibn Sīnā was visiting a smith and saw there another person coming and asking the smith for fire. When asked for a vessel to put fire in it, it turned out that the man did not bring any vessel. So he paused and then extended his palm where he poured some soil, and asked to put the fire on the soil. Ibn Sīnā was surprised at the man’s acuteness and asked him to join him until he reached what he had reached [al-Ḥwānsārī, 1306Š, p. 140]. It is enticing to carry a symbolic exegesis of this story since it sounds allegorical that the future disciple comes to a smith (a person who moulds objects, thus the destiny) while

looking for fire (or light, hence the light of wisdom), and this allegory is strengthened by the fact that Bahmanyār was Zoroastrian, and instead, he meets his future brilliant master – the light of the age. In this connection, we can recall *al-Mubāḥaṭāt*, where there is an affectionate expression of feelings of Ibn Sīnā towards his disciple: ‘He [Bahmanyār] is like a son to me – no, he is closer and more beloved to me than even a son –since I have taught him and educated him and raised him to the level that he has attained’ [Reisman, 2002, p. 192]. If Bahmanyār was ‘taught’, ‘educated’ and even ‘raised’ by Ibn Sīnā, then it suggests that there was a considerable age difference between them. Bahmanyār’s reverence for Ibn Sīnā as a foremost authority and his admiration for the talents and personality he possessed are explicitly stated in *al-Taḥṣīl*. The passage echoes the autobiography of Ibn Sīnā¹⁶:

An individual may have a quality of the material intellect, close to the habitual intellect that perceives intelligible objects through intuition and does not need long reflection and training. We saw one person with whom this was the case and he is the author of these books. He mastered the philosophical sciences when he was in the prime of his youth, within the shortest time, despite the fact that science at that time was disorganised. If the sciences were brought into this order, then he would have mastered them in the same period miraculously. You can verify the truth of this fact by the works that he created at the age, which we mentioned, in the country where he was from. [Bahmanyār, 1996, p. 817]

A quartet (*rubāʿī*) written in Persian and attributed to Ibn Sīnā reflects the same statement, where the author asserts being aware of all aspects of reality, except the unavoidable death.

From the depth of the earth to Saturn¹⁷,
I dismantled all the secrets of the universe,
Discovered indeed each mystery of the world,
Except the riddle of death I failed to solve.¹⁸

From these pieces of evidence we perceive that Bahmanyār was Ibn Sīnā’s most beloved pupil, just like Ibn Sīnā was revered by Bahmanyār. However, their relations were not devoid of discontent. Bahmanyār’s association with Abū l-Qāsim al-Kirmānī (an intellectual adversary of Ibn Sīnā with whom the young philosopher had had a public debate while being in Ray or Hamadan and whom he continued to detest aftermath) caused certain tension between him and his master since the disciple was becoming critical of some of Ibn Sīnā’s ideas under the influence of Kirmānī. Ibn Sīnā’s disappointment is expressed in one of the letters contained in *al-Mubāḥaṭāt* where he accuses

¹⁶ Ibn Sīnā, 1974, p. 31 and pp. 37–39. Ibn Sīnā mentions this also in his *Dānīšnāmah* [1952, pp. 144–145].

¹⁷ The last planet in mediaeval cosmology, hence metaphorically the edge of the world.

¹⁸ See Ibn Sīnā, 1980, p. ۳۷.

Bahmanyār of not being loyal to him [Ibn Sīnā, 1992, 175–176].

There is another didactic story by al-Ḥwānsārī that tells how Ibn Sīnā reacted while discovering that his students did not come prepared for the lesson. Once Bahmanyār and a group of other students attended Ibn Sīnā's class on Saturday. After seeing them, he uttered: 'It seems that you spent your rest in idleness'. The students replied positively and explained the reason why they were not able to read and study. The Šayḥ sighed deeply and his eyes overflowed with tears. He said: 'I regret that a rope walker may reach his goal in his art, which is one of the physical faculties, until the minds of a thousand intelligent people are baffled by the wonder of his action. However, since you did not possess any value and status for true wisdom and knowledge, you preferred indolence and diversion over acquiring knowledge and virtue, so you were not able to deliver the spiritual faculty in yourselves to a level that would bewilder the ignorant of this time' [al-Ḥwānsārī, 1306Š, pp. 149–152].

Mīrzā Muḥammad ibn Sulaymān Tankābanī (d. 1302H), another author from the XIX century, in his *Qiṣaṣ al-‘ulamā'* also presents a didactic story based on the dialogue between Ibn Sīnā and Bahmanyār. It is narrated that one day, Bahmanyār asked his master the reason why he does not claim prophethood: 'Even if scholars start denying it, they will not be able to argue with you'. Ibn Sīnā replied that he will answer this question sometime later. One very cold winter night, Bahmanyār and Ibn Sīnā were sleeping in the same room in Hamadan. At dawn, a muezzin started to call for the morning prayer praising God and his Prophet. Abū 'Alī asked Bahmanyār to stand up and bring him some water from outside to what his disciple replied that it is not the time to drink water because he has just woken up and cold water is harmful to the body. Abū 'Alī said that he is the only doctor of the age and his disciple forbids him to drink water. Bahmanyār said that he is sweating, and if he goes outside, he will get sick. 'Now let us answer your question about the claim of prophecy', said Ibn Sīnā. Then he continued: 'The Prophet is someone who lived centuries ago, and he still influences people; at the time of dawn, they praise God when it is a very cold winter day. And I am still here, in front of you, you are one of my companions. So how can I claim to be a prophet?'.

Following this story, Tankābanī narrates another dialogue that is similar to the one given by Kāzarūnī. It is said that one of the disagreements between the Šayḥ and Bahmanyār was that the latter considered time as one of the attributes of individuation. He argued a lot with the Šayḥ, and finally, Ibn Sīnā said: 'You do not have an answer for me because the time you asked is different from this time. So now you are not the person who asked me the question'. So Bahmanyār was forced to assent [Tankābanī, 1309H, pp. 318–319].

We can take these stories with a grain of salt; they could have been invented even centuries

later after the death of the master and his disciple. Nevertheless, they can be viewed as a specific genre within philosophical literature, as an example of pedagogic and didactic narrations to deliver certain intellectual or moral messages contained in them. Whether indeed due to real occasions that took place or as a part of the imagination of later writers or certain oral transmissions these stories are an important example of a philosophy that was lived as a part of tradition and school. Among all disciples of Ibn Sīnā only Bahmanyār appears as a vivid interlocutor, an example of scepticism and an attempt to challenge the master. Hardly one can find similar narratives where other students of the great master are depicted as philosophical interlocutors and protégés. It might be that Bahmanyār as a principal figure in compiling *al-Mubāḥaṭāt* became a model for successive authors or writers in the creation of these stories if they are truly fictional texts. The diversity and importance of topics in these stories make them a conceptual or imaginative extension of Bahmanyār's biography, probably fabricated or modified by later followers of Muslim Peripatetism, of which we possess only a handful of facts. It becomes the philosopher's 'narrative biography' as opposed to the real or personal one. For instance, the text of the anecdote where they meet for the first time suggests that Bahmanyār was already a mature person since the text uses the term *rağul* (man). The story about prophecy illustrates that Ibn Sīnā and Bahmanyār stayed together in the city of Hamadan¹⁹, which is geographically an adjacent region to Azerbaijan and there is a high probability that the master and student's first encounter took place there, if not in Ray²⁰ where Ibn Sīnā used to live before. It is probably in Hamadan that Bahmanyār together with other disciples participated in the nocturnal lectures of Ibn Sīnā followed by music and wine drinking, as described by al-Ğüzğānī [Ibn Sīnā, 1974, pp. 54–55]. Some sources even indicate the texts that each disciple used to read in those meetings: Abū 'Ubayd – *Kitāb al-šifā'*, al-Ma'sūmī – *al-Qānūn*, Ibn Zayla – *al-Išārāt*, and Bahmanyār – *al-Ḥāšil wa l-maḥšūl*²¹ [al-Bayhaqī, 1946, p. 49; al-Šahrazūrī, 1976, p. 371]. However, according to 'Arūḏī, Bahmanyār was with Ibn Sīnā even in Isfahan attending his lectures every morning while the latter was a vizier of Prince 'Alā' al-Dawla ['Arūḏī, 1921, p. 92]. Since they had a long-lasting correspondence that ultimately became the core of *al-Mubāḥaṭāt* it rather leads to the presumption that after a certain period of time, they did not have any direct communication. Bahmanyār might have visited his master in Isfahan occasionally (or Ibn Sīnā

¹⁹ The historical Ecbatana and was the capital of the Median empire, the summer capital of the Achaemenids, and the satrapal seat of Media (already as a province) from the Achaemenid to the Sasanian period.

²⁰ There is a certain probability that they could have met in Ray since in the colophon of one manuscript of *Kitāb al-Uyūn* (written approximately in 1014–1015), the scribe writes that he collated his copy with one that he thinks may have been prepared by Bahmanyār under Ibn Sīnā's dictation. See Reisman, 2002, p. 46.

²¹ As Gutas notes this might be due to the similarity of titles since Bahmanyār is the author of *al-Taḥṣīl* [2014, p. 97–98].

could have travelled to Ray or Hamadan), but it seems that after the escape from Hamadan Ibn Sīnā was keeping in touch with him mostly through correspondence if the early composition of *al-Mubāḥaṭāt* is dated back to the later period of Ibn Sīnā's life 1027–1037 [Gutas, 2014, p. 165].

I.6. Bahmanyār's school

Eventually, Bahmanyār, again unlike the other known disciples, himself became a teacher and transmitter of the tradition. The fact that he survived Ibn Sīnā for thirty years means that he had to carry his mission still for a lengthy span of time. Among his direct students we can name al-Lawkarī (d. ca. 1123) and 'Omar Ḥayyām (1048–1129).

Abū l-'Abbās al-Lawkarī can be considered a second-generation transmitter among the followers of the Avicennan school. He is credited with spreading the philosophical tradition in eastern Iran, i.e. Khorasan. Little is known about his life and work. He might have made no original contribution to philosophy, yet the breadth of philosophical topics covered by al-Lawkarī played an important role in the survival of scientific and philosophical knowledge in the eastern part of the Islamic world. His major works are *'Awāṣ al-masā'il* (in Arabic), *Bayān al-ḥaqq bi-ḍamān al-ṣidq* (in Arabic) and *Šarḥ-i qaṣīdah-i Asrār al-ḥikmah* (in Persian), which is a commentary on his own poem [More on Lawkarī, see Marcotte, 2006].

'Omar Ḥayyām was an outstanding and versatile figure known especially for his skilful poetry. There are few personalities from the Muslim East who reached the same fame as Ḥayyām in the West thanks to the translations of his famous *rubā'īyyāt* (quatrains) by Edward Fitzgerald in the XIX century that gained him an exotic reputation. But the man was also proficient in philosophy and sciences, especially in the field of mathematics. His full name is Abū l-Faṭḥ 'Omar ibn Ibrāhīm Ḥayyām and he was born in the city of Nishapur (Khorasan) sometime around 1048 and died there between 1124 and 1129. This means that when Bahmanyār passed away, he was already 18 years old, which makes the possibility of their encounter plausible. There is no doubt that Ḥayyām was a loyal Avicennian. He himself refers to Ibn Sīnā as his master. Moreover, the poet's reverence for the great philosopher remained unshaken until his last days when he allegedly read *al-Išārāt* several hours before his death [Aminrazavi, 2005, pp. 20–21].

Gerhard Endress insightfully notes in his article:

The close connection between textual transmission and teaching tradition, between personal authority and the written document, the spreading of global networks under the impact of authorities, schools of learning, and hence, the integration of teaching traditions through common canons of knowledge,

discourse and method, is the very essence of Islamic civilisation from the early Middle Ages until today.
[Endress, 2006, p. 371]

Avicennian school, as part and parcel of this historical reality, was also built and developed through the mentioned institutions and practices. Just like in the Islamic religion *isnād* played an important role in the transmission of narrative reports about the prophet Muḥammad, the same became also common in the field of philosophy and sciences. It is normally represented by the teacher-student *isnād*, while being related to the study of a certain text (*naṣṣ*) and an uninterrupted chain (arguably) of one generation of philosophers to the next [al-Rahim, 2018, p. 15]. Table 1

Table 1

Chain A	Chain B	Chain C
<p>Ibn Sīnā (d. 428/1037)</p> <p>↓</p> <p>Bahmanyār b. Marzubān (d. 458/1066)</p> <p>↓</p> <p>Abū l-‘Abbās al-Lawkarī (d. ca. 517/1123)</p> <p>↓</p> <p>Afḍal al-Dīn al-Gīlānī (d. 6/12th c.)</p> <p>↓</p> <p>Şadr al-Dīn al-Saraḥsī (d. 545/1150)</p> <p>↓</p> <p>Farīd al-Dīn Dāmād al-Niṣābūrī (d. ?)</p> <p>↓</p> <p>Naşīr al-Dīn al-Ṭūsī (d. 672/1274)</p>	<p>Ibn Sīnā (d. 428/1037)</p> <p>↓</p> <p>Bahmanyār b. Marzubān (d. 458/1066)</p> <p>↓</p> <p>Abū l-‘Abbās al-Lawkarī (d. ca. 517/1123)</p> <p>↓</p> <p>Afḍal al-Dīn al-Gīlānī (d. 6/12th c.)</p> <p>↓</p> <p>Şadr al-Dīn al-Saraḥsī (d. 545/1150)</p> <p>↓</p> <p>Farīd al-Dīn Dāmād al-Niṣābūrī (d. ?); Kamāl al-Dīn b. Yūnūs (d. ?); Quṭb al-Dīn al-Miṣrī (d. 618/1221)</p> <p>↓</p> <p>Naşīr al-Dīn al-Ṭūsī (d. 672/1274)</p>	<p>Ibn Sīnā (d. 428/1037)</p> <p>↓</p> <p>Bahmanyār b. Marzubān (d. 458/1066)</p> <p>↓</p> <p>Abū l-Faṭḥ ibn al-Ḥayyāmī (d. 534/1129)</p> <p>↓</p> <p>Şaraf al-Dīn al-Mas‘ūdī (d. 582/1186)</p> <p>↓</p> <p>Faḥr al-Dīn al-Rāzī (d. 606/1209)</p> <p>↓</p> <p>Quṭb al-Dīn al-Miṣrī (d. 618/1221)</p> <p>↓</p> <p>Aṭīr al-Dīn al-Abharī (d. 663/1265)</p> <p>↓</p> <p>Naşīr al-Dīn al-Ṭūsī (d. 672/1274)</p> <p>↓</p> <p>Şams al-Dīn al-Şirwānī (d. 699/1299–1300)</p> <p>↓</p> <p>Şams al-Dīn ibn al-Akfānī (d. 749/1348)</p> <p>↓</p> <p>Şalāḥ al-Dīn al-Şafadī (d. 764/1363)</p>
Source: Şūstarī, 1365H, p. 202.	Source: Raḍawī, 1370H, pp. 167–169.	Source: al-Şafadī, 1949, p. 25,13-14.

illustrates how in intellectual-genealogical chains given in different sources Bahmanyār figures as the only direct disciple through whom all other philosophers, theologians, and mystics are historically linked to Ibn Sīnā, among whom there are such important thinkers as Faḥr al-Dīn al-Rāzī and Naṣīr al-Dīn al-Ṭūsī. The presented chains of transmission, to be more precise, are related to the study of Ibn Sīnā's philosophy, associated with *al-Iṣārāt wa l-tanbīhāt*, a work that belongs to the later period and is therefore the most concise and complete account on Ibn Sina's late philosophical views, where al-Šayḥ attempts to interpret religious and mystical concepts as well. The latter element could not have left the representatives of *kalām* to remain silent. Therefore, it is not surprising to discover the names of Faḥr al-Dīn al-Rāzī (d. 1209), who prepared both a summary and commentary on this work, and Naṣīr al-Dīn al-Ṭūsī (d. 1274) also known for his voluminous commentary on the same work of Ibn Sīnā.

As can be seen from the table, chains A and B are almost identical, and they are probably rooted in the same source. Chain C offers an alternative list of transmissions (via presumably 'Omar Ḥayyām), but still, occasionally it overlaps with other chains as well. It is possible to doubt many facts here. However, what is more important is that while composing this kind of genealogical lines the succeeding generations identified Bahmanyār as a key personality who kept the Peripatetic tradition alive after the death of his teacher. From the end of the XII century till early modernity this kind of chain of philosophers and theologians was popular in the intellectual milieu [Mor on this topic, see Endress, 2006; al-Rahim, 2018, pp. 15–23]. The intellectual diversity of figures mentioned in these *isnāds* not only discloses the relation between different generations and personalities but shows how the study of philosophy as a school discipline brought philosophical ideas beyond its own formal limits into the realms of theology and mysticism. Therefore, the influence of Bahmanyār can be placed at the intersection of different intellectual currents: Peripatetism itself, Islamic theology (*kalām*), and late post-classical Islamic philosophy.

I.7. The works of Bahmanyār

The current editions, translations, and studies regarding Bahmanyār's works leave much to be desired. There is no decent critical edition of his works, some of the treatises remain even unpublished and untranslated. Moreover, confusion and ambiguity are common among both the extant and non-extant works. In total there are eight works attributed to Bahmanyār, a number that surpasses the works that are written by other disciples of Ibn Sīnā. Only *al-Taḥṣīl* remains the absolutely authentic one among them since it is mentioned in bio-bibliographic sources and all manuscripts unanimously attribute it to Bahmanyār, not speaking about the large *testimonia* in the

works of later authors. One of the goals of future research is to authenticate the other treatises. Unfortunately, this task is challenging, and even deadlock, as soon as we take *al-Taḥṣīl* as the criterion and measure the authenticity of other works against it due to the fact that it is the only reliable work since this kind of approach might lead us to the impossibility of accepting that Bahmanyār might have had different views at different stages of his intellectual life.

1. *Kitāb al-taḥṣīl* – Book of attainment

Alternate titles: *al-Taḥṣīlāt*

Description: A *summa* dedicated to Bahrām ibn Ḥūršīd that contains logic, metaphysics, and physics. It is a voluminous work that aims to present the main tenets of Ibn Sīnās philosophy following the structure of the *Dānišnāmah* while referring to and relying on many different works of the great master, primarily the *Kitāb al-šifāʾ*. There is a certain confusion regarding the title and editions of this work. *Al-Taḥṣīl* should not be identified with *al-Taḥṣīlāt* which is one of the early versions of *al-Mubāḥaṭāt* [Reisman, 2002, pp. 110–119], as it usually happens in catalogues or secondary literature. So far I have not seen a manuscript that uses this title. Then, the so-called Cairo edition of *al-Taḥṣīl* does not exist; it is a myth created by the mistake of Carl Brockelmann [1937, I, p. 599; I (SB), p. 828], who thought that the Cairo edition (1911) of the two minor treatises of Bahmanyār (*Risāla fī mawḍūʿ ʿilm mā bʿad al-ṭabīʿa*; *Risāla fī marātib al-mawḡūdāt*) also includes *al-Taḥṣīl*. The mistake was also noticed by Zakir Məmmədov [1983, p. 63]. Aftermath, it was repeated in numerous later publications, even the recent ones. However, at the moment, there is only one – the Tehran edition (1970) of this work prepared by Murtaḍā Muṭahharī, which is based only on five manuscripts: four Iranian (Tehran: 211 ج; 304 ج; 404 د; 644 د) and one Syrian (Paul Sbath 278 771) [Bahmanyār, 1996, pp. 1–5]. The edition is of valuable importance but it can hardly be called a critical edition from a more pedantic perspective: the editor does not specify his methodology, the choice of manuscripts is random, numerous extant manuscripts remained aside, corrections usually lack in the text, and the editor also did not consult the medieval Persian translation of the work and not speaking about stemma codicum and lexicon. *Al-Taḥṣīl* was translated entirely only into Russian by Artur Sagadeev in 1983–1986, which makes it the first integral translation into a European language. It is distinct for its accuracy, yet is prepared not in a strictly literal fashion while manifesting the good flowing Russian.

MSS: The manuscript tradition of *al-Taḥṣīl* is rich and diverse. At the moment there are 63 manuscripts known, which is a serious number indicating the popularity of the author. In the future, without a doubt, more manuscripts will be found. They are dispersed in different libraries and collections all over the world, especially in Muslim countries among which Iran, as usual, is the

leading one. In Europe, it was possible to find only two: the Vatican and Ireland. Since the work is voluminous, not all of them are complete. Unfortunately, the catalogues do not always give a detailed description of manuscripts. Therefore, the contents and dates of most of them are unknown. From the available information we know that the oldest ones belong to the 15th century and the others to the later period. A chapter from the physical section of *al-Taḥṣīl* (III.2.2) used to circulate independently under the title *Faṣl min Kitāb Bahmanyār fī itbāt al-‘uqūl al-fa‘āla wa l-dalāla alā adadihā wa itbāt al-nufūs al-samāwiyya wa fī al-ġāya llatī tū‘ahā al-aflāk fī ḥarakātihā wa fī itbāt al-aḡsām al-‘unsuriyya wa fī anna al-‘ālam al-ġismānī wāḥid*. Al-Rahim [2018, pp. 53–54] and other scholars present it as a separate work which is wrong. For manuscripts, see Appendix A.

Published: Muṭahharī, 1970.

Translations: Mediaeval Persian, anon., 1983; Russian, Sagadeev, 1983–1986; Azeri (excerpt from *Logic*), Məmmədov, 1999, pp. 115–121; English (*Introduction* and excerpt from *Physics*), Rowson, 2008, pp. 390–406; English (*Metaphysics*), Malikov, 2023 (Part Two of this dissertation).

2. *Risāla fī mawḏū‘ ‘ilm mā ba‘d al-ṭabī‘a – On the subject matter of the science of metaphysics*

Alternate titles: *Risāla fī itbāt al-mabda’ al-awwal*, *Risāla itbāt al- mabda’ al-awwal*, *Itbāt al-mabda’ al-awwal*, *Fuṣūl ilāhiyya fī itbāt al-awwal*

Description: A treatise mostly extracted from *al-Ilāhiyyāt* of *Kitāb al-ṣifā’*. It speaks about five topics: a) the notion of existence as something most common and prior, and therefore, the subject matter of metaphysics (Chapters 1–4); b) substantial and accidental existence (Chapters 7–8); c) the priority of causes over effects in existence (Chapters 6, 9–10); d) the Necessary Existent and the possible existents (Chapters 5, 11); e) the perfection of the human soul (Chapter 12). Several manuscripts attribute it to Ibn Sīnā. The treatise is a part of *al-Mubāḥaṭāt* as well. Therefore it has two versions: independent and that of *al-Mubāḥaṭāt*, the latter lacks Chapter 12.

MSS: 8 manuscripts are known at present. See Appendix A.

Published: Poper, 1851, pp. 2–16; Sa‘d, 1911, pp. 2–11; Malikov, 2022, pp. 59–77.

Translation: German, Poper, 1851, pp. 1–23; Azeri, Məmmədov, 1999b, pp. 122–128; English, Malikov, 2022, pp. 59–77.

3. *Risāla fī marātib al-mawḡūdāt – Treatise on the levels of existents*

Alternate titles: *Risāla fī itbāt al-mufāraqāt wa aḥwālihā*, *Risāla fī itbāt al-mufāraqāt*, *Risāla fī al-mufāraqāt*, *Itbāt al-mufāraqāt*, *Maqāla fī itbāt al-mufāraqāt*

Description: A treatise on immaterial and incorruptible substances. It discusses four kinds of substances: a) the existent that has no cause; b) active intellects; c) celestial souls; d) human souls.

Each chapter of the treatise brings different proofs concerning the non-corporeality of four different kinds of beings. Therefore, the title containing *itbāt al-mufāraqāt* seems to be more relevant to the style and exposition of the treatise, while *marātib al-mawğūdāt* accents the general metaphysical relation of the non-corporeal beings. Most of the manuscripts indicate al-Fārābī as the author, while only two times is it ascribed to al-Maʿšūmī and Bahmanyār. Ğawādī [1977] by comparison with the relevant passages from *al-Taḥṣīl* argues that the treatise belongs to Bahmanyār. David Reisman [2009] suggests that it is presumably an early draft or a synopsis of the similarly named section in *al-Taḥṣīl*.

MSS: 35 manuscripts are known at present. See Appendix A.

Published: Poper, 1851, pp. 17–28; Saʿd, 1911, pp. 12–19; Hyderabad, 1921–1930, pp. 2–8; Ğawādī, 1977; Malikov, 2023 (Appendix B).

Translation: German, Poper, 1851, pp. 24–47; Persian, Ğawādī, 1977, pp. 66–73; Azeri, Məmmədov, 1999c, pp. 129–134; English, Malikov, 2023 (Appendix B).

4. *Maqāla fī ārāʾ al-maššāʾīn fī umūr al-nafs wa quwwāhā* – Article on the opinions of Peripatetics on the issues of the soul and its powers

Description: An essay on the different forms of perception of the human soul. Daiber calls it ‘a supplementary treatise’ of Ibn Sīnā’s *al-Šifāʾ* (*al-Ṭabīʿiyyāt, Fī al-Nafs*) [1988, p. 502]. There is no reference to this work in mediaeval sources.

MSS: Only one manuscript is known. See Appendix A.

Published: Malikov, 2023 (Appendix C).

Translation: English, Malikov, 2023 (Appendix C).

5. *Faṣl li-Abī l-Ḥasan Bahmanyār* – A chapter by Abū l-Ḥasan Bahmanyār

Description: Is not mentioned in mediaeval sources. This is a very short piece of writing, also a part of *al-Mubāḥaṭāt*, that aims to elaborate the doctrine of numbers and specify the nature of knowledge and assumption without manifesting any sympathy or polemics. Al-Rahim identifies this work (that he calls ‘*faṣl* on cosmology’) with *Faṣl min Kitāb Bahmanyār fī itbāt al-ʿuqūl al-faʿāla wa l-dalāla* [2018, p. 54], which is another confusion since the latter is a part of *al-Taḥṣīl*. Reisman while describing the manuscript of this brief note erroneously give the *kunya* of Bahmanyār as *al-Ḥusayn* [2002, p. 42]. Gutas presents another copy of this note from the Şignāḫī codex of *al-Mubāḥaṭāt* and assumes that it is by Ibn Sīnā [1987, p. 13].

MSS: Only one manuscript is known. See Appendix A.

Published: Badawī, 1947, p. 116; Malikov, 2023 (Appendix D).

Translation: English, Malikov, 2023 (Appendix D).

6. *Kitāb al-rutba fī al-mantiq* – *Book on the rank in logic*

Alternate titles: *Kitāb al-zīna fī al-mantiq*

Description: Not extant. The work is on logic as inferred from the name. Reported by al-Bayhaqī, 1946, p. 97 and al-Šahrazūrī, 1976, p. 38. Whether *al-rutba fī al-mantiq* and *al-zīna fī al-mantiq* are two different books or two titles of the same work remains unclear. al-Bayhaqī mentions the first version, while in al-Šahrazūrī we find the latter one.

7. *Kitāb fī al-mūsīqā* – *Book on music*

Description: Not extant. The book is on music as noticed from the title. Reported by al-Bayhaqī, 1946, p. 97 and al-Šahrazūrī, 1976, p. 38. Al-Rahim [2018, p. 53 and p. 57] states that this work belongs to Ibn Zayla and thus misattributed to Bahmanyār.

8. *al-Bahġa wa l-sa'āda* – *Joy and happiness*

Description: Not extant. Presumably on ethics as the title suggests. Reported by al-Šahrazūrī, 1937, p. 61 and Kāzarūnī [Bahmanyār, 1983, p. 37]. Al-Ḥwānsārī notes that in this book there is an explanation that the Necessary Existent is identical to its own holy self. Just like a sensible form that is abstracted from matter is self-subsistent then it is both sensing and sensible together, and the same is regarding the state of knowledge of the Necessary Existent who in his being is knower and knowledge [al-Ḥwānsārī, 1306Š, p. 140].

II. *Kitāb al-taḥṣīl* – Bahmanyār’s *magnum opus*

In this chapter, I present a general description of Bahmanyār’s principal work – *al-Taḥṣīl* by explicating the purpose and nature of the work, specifically in relation to Ibn Sīnā. After mentioning the historical importance and place of *al-Taḥṣīl* in the history of Avicennian school and Islamic philosophy in general, namely that it is the first *summa* produced by Ibn Sīnā’s direct disciple and hence the first post-Avicennian work due to its deviation from Ibn Sīnā’s principles, I analyse closely its structure and contents, both of which show continuity and discontinuity with Ibn Sīnā’s approaches. Finally, I discuss the mediaeval Persian translation of the treatise, which was prepared according to a different structure, where Ibn Sīnā’s theological metaphysics is technically restored probably under the influence of a more strict school tradition, if not the direct revision by Bahmanyār himself.

II.1. General observations

Among all works attributed to Bahmanyār *al-Taḥṣīl* is indubitably the most substantial, comprehensive, and historically influential and significant one, from which we can maintain that it is a product of his intellectually mature period and hence is the culmination of his philosophical evolution. As it was mentioned above both external and internal evidence clearly demonstrate that *al-Taḥṣīl* is the only absolutely authentic work of Bahmanyār. All bio-bibliographic sources name this book in the first place. All the extant copies of *al-Taḥṣīl* indicate Bahmanyār as the author, just like the incipit of the work (*Qāla Bahmanyār ibn al-Marzubān ...*). Its large manuscript tradition directly indicates the breadth of its historical reception and importance. There is a large *testimonia* of references to this work by different authors from various centuries. His philosophical work was considered to be a valuable source of clarification of Ibn Sīnā’s philosophy and an independent work in its own right as well. Later authors like al-Lawkarī, Faḥr al-Dīn al-Rāzī (d. 1210), Ibn Kammūna (d. 1284), Jalāl al-Dīn Dawānī (d. 1502), Šams al-Dīn Ḥafri, Najm al-Dīn al-Nayrīzī (d. ca. 1536), Mīr Dāmād (d. 1631), Mullā Šadrā al-Šīrāzī (d. 1640), Sayyid Aḥmad al-‘Alawī (d. 1638), Muḥammad Maḥdī Narāqī (d. 1794) [Janssens, 2020], as well as an eminent Twelver Shia jurist ‘Allāmah al-Maḡlisī (1627–1699/1700) [1363Š, p. 60], quote his *al-Taḥṣīl* either explicitly or implicitly in their works. ‘Abd al-Laṭīf al-Baḡdādī (d. 1231), in his *Autobiography*, remarks that he prepared a summary of Bahmanyār’s *al-Taḥṣīl* [Ibn Abī Uṣaybi‘a, 1299H, p. 685], however, the work is probably not extant.

The historical and philosophical value of *al-Taḥṣīl* can be defined through several factors: (1) it is the first and the only comprehensive philosophical encyclopedia or *summa* produced by the first generation of Ibn Sīnā's disciples; (2) it is the first introduction to Avicennian philosophical thought written not by Ibn Sīnā himself; (3) it is the pioneering attempt to explain, comment, and implicitly deconstruct Ibn Sīnā's philosophical system in the form of verbatim exposition, summary, and paraphrase and, therefore, *al-Taḥṣīl* can be considered the first post-Avicennian treatise; (4) it is the earliest large indirect testimony of *Kitāb al-ṣifā'* – Ibn Sīnā's principal work. Therefore, the treatise is not just a replication of Ibn Sīnā's writings, it is both a continuation of Avicennian tradition and at the same time a certain innovation within the Peripatetic school generally speaking. Having the Aristotelian philosophy as its core, it follows the principles established by Ibn Sīnā while developing them in a new direction or revising them in the Aristotelian spirit. Moreover, if Ibn Sīnā is the first philosopher in the mediaeval period to compose a philosophical *summa* (*al-Ḥikma al-ʿArūḍiyya*), then Bahmanyār is the first post-Avicennian author to produce a similar work where all fundamental theoretical sciences receive a systematic treatment. Taken together the works of both authors as a continuum constitute the foundation of scholastic philosophy in the Islamic world, as well as in the mediaeval period.

As a typical Avicennian *summa* of the later period, Bahmanyār's *al-Taḥṣīl* consists of three large parts: logic, metaphysics, and science on concrete beings (largely corresponding to physics). Preference for the following order demonstrates that Bahmanyār in his choice was guided by the idea that the later method of presenting or teaching sciences by Ibn Sīnā, contrary to the traditional order 'logic-physics-mathematics-metaphysics', is more efficient. This order for the first time was used by Ibn Sīnā in the composition of *Dānīšnāmah*, which was noticed by the author in the introduction, however, without bringing any clear justification. Bahmanyār is the first author in the history of philosophy to follow this model, thus laying the foundation of a new tradition, while the second well-known imitation is by al-Ġazālī (ca. 1056–1111) in his *Maqāṣid al-falāsifa*. Table 2 shows the structure of Ibn Sīnā's all *summae* in a presumable chronological order together with *al-Taḥṣīl*. It seems that in the later period of his intellectual life, Ibn Sīnā realised that as soon as logical science is comprehended well, it is feasible to study metaphysics and then proceed to other lower sciences. This order coincides with the ontological perspective where metaphysical reality stand prior to the physical one. The logic-physics-metaphysics format (with disregard for mathematics and practical philosophy) was introduced by Ibn Sīnā himself, while the mentioned new order was also his innovation that had a remarkable impact on later philosophical and theological tradition [Gutas, 2014, p. 137, n. 38], and it is not doubtful that Bahmanyār's restatement of this order also played an important role.

Table 2

Works	Structure			
<i>al-Hikma al-‘Arūḍiyya</i>	Logic	Physics	–	Metaphysics
<i>‘Uyūn al-ḥikma</i>	Logic	Physics	–	Metaphysics
<i>al-Hidāya</i>	Logic	Physics	–	Metaphysics
<i>al-Šifā’</i>	Logic	Physics	Mathematics	Metaphysics
<i>al-Nağāt</i>	Logic	Physics	Mathematics*	Metaphysics
<i>Dānišnāmah-i ‘Alā’ī</i>	Logic	Metaphysics	Physics	Mathematics*
<i>al-Mašriqiyyūn</i>	Logic	Metaphysics**	Physics	Ethics**
<i>al-Išārāt wa l-tanbīhāt</i>	Logic	Physics and Metaphysics	–	–
<i>al-Taḥṣīl</i>	Logic	Metaphysics	Science of the states of the concrete existents	–

* The mathematical parts of these works were compiled by al-Ġuzġānī.

** Non-extant parts.

The internal organisation of *al-Taḥṣīl* is also based on a fourfold division prefaced by an introduction: *kitāb* (book), *maqāla* (part), *bāb* (section), *faṣl* (chapter). The division of *bāb* is absent in the *Metaphysics* since as a homogeneous subject it uses the same division as the *Metaphysics* of *al-Šifā’*. Thus, *al-Taḥṣīl* in the status of a comprehensive work imitates the internal division of *al-Šifā’*, which is also fourfold: *ğumla*(volume)-*fann*(science)-*maqāla*-*faṣl*. This structure differs *al-Taḥṣīl* from another *summa* or rather *compendium* of Ibn Sīnā, i.e. *al-Nağāt* where there is a tripartite division: *ğuz’*(part)-*maqāla*-*faṣl*.

The aim and contents of *al-Taḥṣīl* are discussed by Bahmanyār in the introduction of his work the first part of which offers valuable information on the dedication, purpose, structure, and contents of the treatise:

I gathered [*muḥaṣṣil*] in this treatise for my [maternal] uncle Abū Maṣṣūr Bahrām ibn Ḥūršīd ibn Īzadyār²² the kernel²³ of wisdom as refined by al-Šayḥ al-Ra’īs Abū ‘Alī al-Ḥusayn ibn ‘Abd Allāh ibn Sīnā (May Allah have mercy upon him). For its organisation I followed the ‘*Alā’ī Wisdom* [as a model],

²² In some manuscripts, the name is preceded by the title *al-ra’īs*. See Beirut 380, f. 3; Fazıl Ahmet Paşa 863, f. 1.

²³ There are different variant reading, in some cases it is *kitāb*, while in others *lubāb*. See Bahmanyār, 1996, p. 1; Beirut 380, f. 3; Koca Ragıp Paşa 880, f. 1; Fazıl Ahmet Paşa 863, f. 1.

but for treating the ideas [I relied on] all of his works, as well as my discussions [*muḥāwira*]²⁴ with him. I also supplemented it with what I acquired [*ḥaṣṣaltuhu*] from my investigation of secondary principles that follow from the primary ones. You can be guided to these secondary principles by your own investigation into his books.

This book is divided into three books:

Book I is on logic. It has three parts. Part I has three chapters. Chapter 1 explains the purpose of the *Isagoge*. Chapter 2 explains the purpose of the *Categories*. Chapter 3 explains the purpose of the *On Interpretation*. Part II covers the *Prior Analytics*, and it has one chapter. Part III covers the content of the *Posterior Analytics*, and it has two chapters.

Book II is on the primary premises required in all the sciences. This is the science called the science of metaphysics. It has six parts.

Book III is about concrete existents, and has two parts. Part I proves the existent which has no cause or reason; it includes an explanation of the purpose of the *Theology* and the part [of Aristotle's *Metaphysics*] called *Alpha Minor*. It has one chapter. Part II covers caused existents, and has four chapters. Chapter 1 is about the primary premises required in physical questions; it includes an explanation of the purpose of the *Physics*. Chapter 2 is about the knowledge of the celestial bodies, their souls, their intellects, and their states; it includes an explanation of the purpose of the *On the Heavens*, as well as certain parts of the *Alpha Minor* and the *Theology*. Chapter 3 is about the knowledge of the elements and of those compounds which are close to them, and the explanation of the purpose of the *On Generation and Corruption* and of the *Meteorology*. Chapter 4 is about the science of the soul and its survival, and the state of the return.

The way to study this book is to begin with the '*Alā'ī Wisdom*, especially learning from its logic, and then to turn to this book, so the seeker of knowledge may acquire [*yuḥassil*] what he seeks in a shorter time than it would take to memorise the *Ḥamāsa*²⁵, Allah willing and assisting. [Bahmanyār, 1996, p. 1–2]

The traditional opening does not leave the reader in surprise. It carries the convention of the time since dedications or writing works upon someone's request is almost a stylistic element of mediaeval literature. Writing such a voluminous work, in fact, an encyclopedia of philosophy, for a mature man (the uncle was obviously considerably older than Bahmanyār) suggests that Bahmanyār, like his master Ibn Sīnā, did not believe in the elitist selection of teaching philosophy. If an introductory work is written for a person of considerable age and who very probably will not pursue a life engaged with regular and intensive philosophical studies, it means that the value of philosophy for Bahmanyār was widely social. It reminds us of the *Dānišnāmah* with its simple language and concise exposition written obviously for a wider and unprepared audience, although

²⁴ This apparently refers to both direct communication and the correspondence that took place between Bahmanyār and Ibn Sīnā that later became the core of *al-Mubāḥaṭāt*. Reisman writes that 'much of the philosophical discussion in *Kitāb al-Mubāḥaṭāt* is echoed in *Kitāb at-Taḥṣīl*. Thus, it is reasonable to assume that Bahmanyār refers to those materials in his introduction to *Kitāb at-Taḥṣīl* by the term 'conversation.' See Reisman, 2002, p. 111.

²⁵ An anthology of Arabic poetry compiled by the poet Abū Tammām (ca. 804–845) in the 9th century. The anthology derives its name from the title of its first book, which contains poems that describe fortitude in battle, the endurance of tragedies, etc. The anthology consists of ten books, embracing 884 poems in total (of Arab poets from pre-Islamic times to about 832), usually fragments from longer poems.

dedicated to a ruler, yet the one without any philosophical background. It is also appropriate to mention the earlier work of Ibn Sīnā, another summa called *al-Hidāya* written in the castle of Fardaġān, the style of which is distinct for its brevity and avoidance of technical terms.

The introduction and outline of Bahmanyār clarify that *al-Taḥṣīl* deliberately follows the ‘new tripartite structure’ of the ‘*Alā’ī Wisdom*, yet at the same time, it refers to *all* works of Ibn Sīnā and even private discussions that the author had with his teacher, and even the results of his own investigations – an element that increases the value and autonomy of the book. Moreover, Bahmanyār reveals an authentic philosophical spirit when he invites the reader to start his own investigation: ‘You can be guided to these secondary principles by your own investigation into his books’. After finishing his outline (strangely the second book of metaphysics is almost not described) Bahmanyār makes another piece of advice for his readers, namely before *al-Taḥṣīl* one should read the *Dānišnāmah*, especially the logical part. This implies that *al-Taḥṣīl* is not a guide for absolute beginners, since it is more detailed and broader than *Dānišnāmah*²⁶. Relying on this classification, we can specify the place of *al-Taḥṣīl* among the works of Ibn Sīnā as a *summa* that stands in the middle between such a fundamental work as *al-Šifā’* and a work of a purely introductory nature – the *Dānišnāmah*, which means that *al-Taḥṣīl* among all *summae* of Ibn Sīnā can be next only to *al-Šifā’* since the comparison of its breadth and volume shows that it surpasses other analogical treatises, for instance, the one like *al-Naġāt*.

As regards the title of the work, historically speaking, it is not original. Probably the most famous philosophical work that carries the word *taḥṣīl* is the *Taḥṣīl al-sa’āda* of al-Fārābī, an ethico-political treatise reflecting the holistic conception of philosophy as a means to happiness. The usage of this term was common before al-Fārābī as well, and it could be seen in works pertaining to different fields. For instance, an anti-Karaite work titled *Kitāb taḥṣīl al-šarā’i’ al-samā’īyya* by an influential Jewish exegete, philosopher, and polemicist Sa’īd ibn Yūsuf al-Fayyūmī (882–942). The titles that contain this expression can be found in later periods as well, such as *al-Bayān wa l-taḥṣīl* a renowned work/commentary on Mālikī *fiqh* by Ibn Rušd al-Ġadd (d. 1136), the grandfather of the philosopher Ibn Rušd (d. 1198), or *Kitāb al-taḥṣīl fī l-tawḥīd wa l-ta’dīl* by the Zaydī

²⁶ Mohammad Achena holds that all Persian works of Ibn Sīnā were not intended for specialists: ‘Avicenna’s writings in Arabic, the language of religion and scientific expression in the entire Muslim world at that time, were intended for his disciples and other specialists and may be described as ‘advanced textbooks’. In marked contrast, his two books in Persian, the spoken and literary language of the Iranian peoples, are introductory manuals written for the use of an uninitiated person and possessing the appropriate qualities: Clear language, near-colloquial phraseology (Arabic technical terms being replaced with Persian equivalents in the *Dāneš-nāma* and given together with Persian equivalents in *Dāneš-e rag*), choice of themes and questions which give access to relatively elementary knowledge in each field, exclusion of subjects which could only be of interest to specialists, reduction of chapter lengths, and frequent use of explanatory description rather than logical definition’. See Achena, 1987.

theologian al-Raṣṣāṣ (d. 1188). The word *taḥṣīl* is the verbal noun of the second form verb *ḥaṣṣala* the most common meaning of which is ‘to cause to happen’, ‘to collect’, ‘to acquire’, ‘to deduce’ and even ‘to summarise’. Thus, depending on the context the word acquires different meanings. In his introduction, Bahmanyār uses this verb several times both in the meaning of ‘gathering’ or ‘collecting’ and ‘acquiring’, and this is probably the reason why the book gained its present title since it is not mentioned within the text itself and might be that *Taḥṣīl* is the invention of later scribes. Therefore, it can be understood both as the *collection of wisdom* or *acquisition/attainment of wisdom*. Among modern scholars there is a different way of rendering the title, like *Cognition (Poznanie)* [Sagadeev, 1983–1986], *The Digest* [Gutas, 2014, p. 98, n. 12] *The Attainment* [Benevich, 2020], *Livre du résultat*, and *Validated knowledge* [Sebti, 2005/6; 2012]. According to Reisman, both translations of ‘validation’ and ‘acquisition’ are acceptable, albeit he inclines towards the first one [2002, p. 113, n. 22]. The problem is that the word *taḥṣīl* stands alone in the title and therefore its connotation is open to different interpretations. However, the usage of the original word remains the most common version.

The second part of the introduction of *al-Taḥṣīl* is not least valuable or informative since it is here that Bahmanyār articulates his philosophical programme in conceptual form after presenting the structure or outline of his work.

What is sought in the sciences of wisdom is knowledge of the existents. An existent may be existent without a reason [*sabab*] or existent with a reason. The Existent that has no reason requires Its reality to be one in all respects, It should be neither a body nor a power in a body, Its quiddity [*māhiyya*] should be [identical to] Its being [*anniyya*], Its knowledge of Itself should be Its existence, and Its knowledge of the existents should be one of Its concomitants [*lawāzīm*], Its will, power, and life must be themselves Its knowledge, and all that should belong to It in itself, and Its knowledge should be unchanging and incorruptible knowledge, not knowledge by the way of affection [*infī‘āl*] but [because] its knowledge is active knowledge. It is an efficient and final cause at the same time. The rest of what is said about Its qualities follows below.

The existent that has a reason is not required in itself to be one in all aspects, yet it is one in a different aspect, which we will verify in its proper place. Observation and syllogism indicate that it [this existent] is multiple. It includes what a body is and what is not a body; the one which is not a body is either an accident or it is a substance; the substance which is not a body is intellect, soul, form, or matter.

There are many bodies. Some of them are celestial bodies, which are multiple, and astronomical observation indicates their number. Some are elemental bodies, a [certain] kind of syllogism indicates that they are four. Others are bodies composed of these elements; there is no way of establishing their number, neither by a syllogism nor by senses, because they follow celestial motions that are not exact. Only those among them that can be grasped by senses and to which direct observation can attain can be discovered. These are clouds, meteors, winds, minerals, plants, and animals and other similar things. All of them together have an order and arrangement, also certain states, some of which can be considered as good and others as bad.

Intellects are also many.

As regards souls, they are either celestial, vegetable, animal, or human. The human soul endures after

this body and it has a certain state in its afterlife.

This science is occupied with the elaboration of these ideas. [Bahmanyār, 1996, p. 3]

Existence is apparently the central notion that serves as a fundament for Bahmanyār's exposition of 'wisdom' in its totality, which is twofold, namely the Necessary Existent that has no cause and its effect – all other existents, be it non-corporeal or corporeal beings. This implies that the subject matter of each science should be studied from the perspective of existence on this or another level. Even syllogistic argumentations, as is seen from the text, that serves as a scientific method of verification are oriented towards the validation of factors related to the existence of something.

II.2. The date of composition

Nothing can be said regarding the date of composition of *al-Taḥṣīl*. The only *terminus ante quem* is naturally the death date of Bahmanyār, the year 1066. It is possible to speculate around *terminus post quem*, and the first limit that can be established is approximately 1027 – the composition date of *Dānīšnāmah* in Isfahan. Probably this is why Daiber writes that it 'was compiled in Isfahan between 415/1024 and 428/1037' [1988, p. 501]. However, the second possible *terminus post quem* can be moved further since Bahmanyār could have started working on *al-Taḥṣīl* already after the death of Ibn Sīnā in 1037. This can also be supported by the approximate date of composition of *al-Mubāḥaṭāt* as Reisman maintains:

We have no precise date of composition for *Kitāb at-Taḥṣīl* that Bahmanyār dedicated to his uncle, but the fact that *Mubāḥaṭāt* materials were drawn upon in the *Kitāb at-Taḥṣīl* allows us to date *Kitāb at-Taḥṣīl* to a period after the conclusion of Bahmanyār's philosophical correspondence with Ibn Sīnā, scil. after the latter's death in 428/1037. The termini for the *Kitāb at-Taḥṣīl* would thus be 428/1037 and 458/1066-7. The early collection of *Mubāḥaṭāt* materials found in MS E and entitled *Taḥṣīlāt Bahmanyār* must have been completed before *Kitāb at-Taḥṣīl* was composed since it is included in the latter work. [Reisman, 2002, p. 112]

After 1027 and especially 1037 Bahmanyār was already a mature thinker with formulated philosophical views, and *al-Taḥṣīl* explicitly demonstrates the result of his evolution, especially if compared to the minor treatises attributed to him. All of them are extremely short and concise in exposition, even to the point that the arguments become elliptical, which raises scepticism that they can belong to the same author who composed an entire philosophical summa. It can be assumed that they belong rather to his early attempts to write on different philosophical topics and he presumably wrote more comprehensive works before the composition of *al-Taḥṣīl* that are not extant anymore.

Different works mentioned in bio-bibliographic sources, like *Kitāb al-rutba fī al-manṭiq* or *Kitāb al-zīna fī al-manṭiq*, *Kitāb fī al-mūsīqā*, or *al-Bahġa wa l-sa'āda* were perhaps more serious and substantial writings, taking into considerations that they are named *kitāb* and not *risāla*.

II.3. The contents of *al-Taḥṣīl*

Ibn Sīnā in his *Fī aqsām al-ʿulūm al-ʿaqliyya*, also known as *Fī aqsām al-ḥikma*, which was penned relatively early in his career, classifies sciences into three main branches: theoretical wisdom, practical wisdom, and logic. In this work wisdom (*al-ḥikma*) is defined as an art of investigation thanks to which humans can acquire knowledge about the entire existence as it is and eventually become prepared for ultimate happiness [Ibn Sīnā, 1989, pp. 104–105]. This definition already presupposes a binary division of wisdom – theoretical-abstract and practical – and further Ibn Sīnā defines each of them. Knowledge about matters that do not pertain to human activity is theoretical wisdom, while the purpose of practical wisdom is to achieve the good. Logic in this treatise is discussed at the end without any explicit clarification of its place among sciences since it is a special discipline in recognising what correct and sound judgements and demonstrations are. Besides this principal or primary sciences, Ibn Sīnā lists particular sciences and thus the total number of all sciences reaches fifty-three [Ibn Sīnā, 1989, pp. 104–118]. Table 3 shows all principal sciences.

The organisation of *al-Šifāʾ* almost follows the mentioned order of the philosophical sciences rooted in the Aristotelian tradition and presented by Ibn Sīnā in his other works as well (*al-Ḥikma al-ʿArūḍiyya*, *al-Ḥāṣil wa l-maḥṣūl*, *Kitāb fī al-naḥs ʿalā sunnat al-iḥtiṣār*). However, different variations appear in the internal arrangement of these sciences compared to the Aristotelian corpus. Table 4 shows the contents of *al-Šifāʾ* [as given in Gutas with certain modifications, 2014, p. 105].

In juxtaposition with the list given in *Aqsām al-ʿulūm* the order of *al-Šifāʾ* reveals a total concurrence, except for the metaphysical part and ethics. Ibn Sīnā decides to integrate the discussion of ethical issues into metaphysics, which itself appears in a more extended form, as a last and concluding treatise. It is well-known that Ibn Sīnā had little interest in practical philosophy. This was a continuous trait in his career, already his first summa *al-Ḥikma al-ʿArūḍiyya* does not include practical philosophy. *Al-Birr wa l-iṭm* is the only independent treatise on the branches of practical philosophy. According to Dimitri Gutas, the last section of the Metaphysics of *al-Šifāʾ* is the best attempt of the author to express his views on practical philosophy [2014, p. 497]. Besides, it should be noted that *al-Šifāʾ* is the only summa for which Ibn Sīnā composed a mathematical part

Table 3

LOGIC

1. Eisagoge; 2. Categories; 3. De Interpretatione; 4. Syllogism; 5. Demonstration; 6. Dialectic; 7. Sophistics; 8. Rethoric; 9. Poetics.

THEORETICAL WISDOM

Physics: 1. Physica; 2. De Caelo; 3. De Generatione et Corruptione; 4. Meteorology; 5. Minerals; 6. Plants; 7. Animals; 8. De Anima.

Mathematics: 1. Algebra; 2. Geometry; 3. Astronomy; 4. Music.

Theology: 1. Universals; 2. Principles and beginnings; 3. Necessary Existent; 4. Primary substances; 5. Corporeal heaven and earthly substances.

PRACTICAL WISDOM

1. Ethics; 2. Ruling the household; 3. Politics.

Table 4. The contents of *al-Šifā'*.

I. Logic

1. Eisagoge (Porphyry); 2. Categories; 3. De Interpretatione; 4. Syllogism (Prior Analytics); 5. Demonstration (Posterior Analytics); 6. Dialectic (Topica); 7. Sophistics; 8. Rhetoric; 9. Poetics.

II. Physics

1. Physica; 2. De Caelo; 3. De Generatione et Corruptione; 4. Four Elements [Meteorology, IV]; 5. Meteorology [Meteorology, I–III]; 6. De Anima; 7. Botany; 8. Zoology

III. Mathematics

1. Geometry [Euclid's *Elements*]; 2. Astronomy [Ptolemy's *Almagest*]; 3. Arithmetic [Nicomachus' *Introduction*]; 4. Music [Ptolemy's *Harmonics*].

IV. Metaphysics

a. Subject matter; b. Substance; c. The nine categories; d. Prior, posterior, origination, potency, act, the complete, the incomplete; e. General things and their existence; f. Causes; g. Mathematical principles and objects; h. The First Principle; i. Emanation and return; j. Prophecy, worship, ethics, and politics.

– another field in which he was not much interested and was less original. He explains this in *al-Mašriqiyyūn* with the fact that mathematics and practical science are not a subject to disagreement [Gutas, 2014, p. 127]. Therefore, al-Ġūzġānī's explanation of the omission of these parts by Ibn Sīnā and his attempts to compile them by himself, for instance, for *al-Naġāt* or the *Dānišnāmah*, is

Table 5. The contents of *al-Taḥṣīl*.

I. Logic

1. Eisagoge; 2. Categories; 3. De Interpretatione; 4. Syllogism; 5. Demonstration; 6. Definition.

II. Metaphysics

1. On existence 2. The nine categories; 3. Prior and posterior, potency and act; 4. Perception, universal and particular, individuation, genus, matter, species; 5. Cause and effect; 6. Plurality and unity, finiteness, pleasures and sufferings, completeness.

III. Science of the states of the concrete beings

1. Necessary Existent; 2. On the premises necessary for studying natural things; 3. On heaven and world; 4. On generation and corruption; 5. Science on the soul.

suspicious of apology to justify his Aristotelian orthodoxy²⁷ [Ibid., pp. 116–117 and p. 119].

Table 5 is an analogical representation of the contents of *al-Taḥṣīl*, which is noticeable for three aspects: (1) reduction of scientific branches; (2) continuity with Ibn Sīnā's 'new *Alāʾī* order' and omission of mathematics and practical philosophy; (3) discontinuity with Ibn Sīnā and hence innovation of Bahmanyār in revising the metaphysical profile and removing traditional physics while transforming it into certain supplementary part of metaphysics based on the concept of existence.

To begin with, all three sciences appear in reduced form by the omission of all practical or practically oriented branches, while mathematics is not included at all. In the case of Logic, the omitted branches are dialectic, sophistics, rhetoric and poetics – the most relatively 'practical' divisions of logical science usually labelled as 'art'. Nevertheless, the most voluminous part of *al-Taḥṣīl* is the logical part, as in the case of *al-Šifā'*²⁸, where the widest discussion is dedicated to the section on syllogism. The *Metaphysics* of *al-Taḥṣīl*, the broadest part of which is about the nine categories, is composed as solely an ontological subject deprived of its Neoplatonic and Islamic elements, and hence the practical sphere. The traditional physics is not present, it is replaced with a 'science' that carries an original title – *al-ʿilm bi-aḥwāl aʿyān al-mawǧūdāt* (science on the states of the concrete existents), something that is introduced by Bahmanyār himself. It contains a discussion of the Necessary Existent and physical beings, including the human soul, which is the largest

²⁷ This tendency to 'Aristotelianise' Ibn Sīnā's philosophy by the members of his school was discussed in recent scholarship. See Bertolacci, 2012, 2017.

²⁸ Bahmanyār's interest in logic can also be confirmed by the non-extant book on logic attributed to him. In the mediaeval period, in both classical and post-classical phases, logic was perhaps the most popular discipline among all philosophical sciences, as thousands of surviving manuscripts demonstrate it. It is not by chance that some of the philosophers even carry the nickname of "Logician": Muḥammad ibn Ṭāḥir al-Siǧistānī al-Mantiqī or Yaḥyā ibn ʿAdī al-Mantiqī.

section of the third book. However, the author does not avoid using the term ‘physics’ while discussing this science in different chapters of *al-Taḥṣīl* [I.3.1.8 and 11; III.2.1.1], which shows that his new division is rather conditional nature that bears a pedagogical purpose and is not meant to eliminate the traditional classification of sciences, especially considering the fact that the so-called ‘science on the states of the concrete existents’ is not formally defined as a science by Bahmanyār.

Therefore, sciences are introduced purely from a theoretical perspective. Here Bahmanyār departs further from the precedent already established by Ibn Sīnā. This reduction and ‘theorisation’ of science are also justified by the purpose of composing *al-Taḥṣīl*, namely to present ‘the kernel of wisdom’ and when necessary to consult the books of Ibn Sīnā (as it is stated many times throughout the text of *al-Taḥṣīl*). It becomes understandable that Bahmanyār’s exposition cannot be by definition comprehensive, it is comprehensive only insofar as it is an introduction. Criticism against Bahmanyār for omitting different topics might be equally addressed to Ibn Sīnā himself since similar omissions were consciously done by him as well.

The contours of post-Avicennian or post-classical Islamic philosophy are already visible in the deconstructive move of Bahmanyār, where a holistic approach to knowledge becomes the prevalent method of scientific investigation conditioned by reductionist and exclusivist arrangement of the philosophical theory. By excluding mathematics, the lower theoretical wisdom than metaphysics, and reshaping physics in quasi-ontological science, a substrate of metaphysics, which in its turn becomes enlarged through incorporation into its contents logical and physical concepts, creates a new, both post-Aristotelian and post-Avicennian science.

II.4. The Persian translation of *al-Taḥṣīl*

The mediaeval Persian translation of *al-Taḥṣīl* deserves special attention, which indicates the high acclaim that the work received in the past. On the other hand, the dissemination of this work in Persian is a clear impact of the ‘Iranian intermezzo’ that we mentioned at the beginning of this study. al-Ḥwānsārī mentions this translation while being not sure whether it belongs to Bahmanyār or someone else [1306Š, p. 140]. This version survives only in two manuscripts and only one of them is complete [see Appendix A]; the manuscript preserved in Tashkent probably belongs to the XVII century [Semenov, 1952, p. 70]. There are considerable differences between the translation and the original version. Already at the beginning, we notice that the translator decided to omit the valuable introduction written by the author and instead presents another one:

Praise to Allah, the Lord of the worlds, blessings and peace upon His prophet Muḥammad, his family, and all of his companions. After asking guidance and seeking success from the High and Exalted One, mighty and majestic is He, and praising the lord of the prophets, blessings and peace upon him, it starts with the

book of *Ĝām-i ġahānnamā* in the style of the book *al-Taḥṣīl*, however, it is its translation, a gift and favour to the great lord, venerable person, noble sage, virtuous scholar Kamāl al-Dīn Ĝamāl al-Islām, the master of sages, the honour of the virtuous, the chief of al-Buḥārā, the father of the courageous, Muḥammad ibn Mikāʿil al-Ḥwārazmī (may Allah keep his shadow upon us!), who is Ṭawd²⁹ and authority on the earth, the bridge to the sea of generosity, the sun in the sky of knowledge, and Kaaba of the world of wisdom.

This book consists of three books:

Book I is about the science of logic.

Book II is about that science which is called the science of metaphysics.

Book III is about the science of physics.

This short introductory note, embellished with flowery expressions, clearly indicates that the work is a translation of the book of *al-Taḥṣīl* without mentioning Bahmanyār and the name of the translator. It rather emphasises that the work was prepared as a gift to a certain honourable man and scholar, presumably from Bukhara, whose identity we were not able to establish. The title is replaced with a Persian name, which refers to ‘the cup of Ĝamšid’. According to Persian mythology, it was a divination cup possessed by the kings of ancient Iran. It is also called *Ĝām-i ġahānnamā*. In this context, it turns out to be a symbolic name, i.e. a book showing its readers the entire truth about the world. The rest of the introduction briefly lists the contents of the treatise, where the original title given by Bahmanyār to the third book is substituted with the traditional ‘physics’. The omission of Bahmanyār’s introduction is compensated by including short introductory notes before each book, except Logic.

The opening of the second book. Know that the prerequisite is that the students of real knowledge are in need of it among all sciences. This art of science with which we will start this book is called the science of metaphysics and it is known as *uṭūlūġiyyā* and [also] famous as the *Alpha Minor*. [Bahmanyār, 1983, p. 220]

It starts with the third book from the books of the *Tuḥfat al-Kamāliyya* [the gift for Kamāl al-Dīn], which is known as *Ĝām-i ġahānnamā*. This book contains [the knowledge about] the states of caused existents. [Bahmanyār, 1983, p. 422]

The translation presents a new structure of the text. Certain parts (*maqāla*), and most of the short chapters are merged together. For instance, the *Eisagoge* and the *Categories* of the logical part are given in one *maqāla*, as well as the *Demonstration* and the *Definition*. Moreover, the chapter about the Necessary Existent is removed from the third book and included as the last chapter of the second book. It raises the question of whether Bahmanyār himself was responsible for this kind of

²⁹ The name of a mountain near Mecca. Metaphorically means ‘firm’ or ‘immovable’.

revisionism, this time in the spirit of Ibn Sīnā, or it was done by the translator.

The comparison of the internal organisation of the chapters also reveals remarkable differences. Numerous sentences and even paragraphs sometimes appear in a different sequence, as can be seen from the first chapter of the metaphysical part. There is little probability that the present version of the translation available to us was done from a certain manuscript of *al-Taḥṣīl* that already had the same structure. Future research on the complicated manuscript tradition of *al-Taḥṣīl* can bring to light the evidence that defined the style and structure of *Ĝām-i ḡahānnamā*, which is obviously being not a loyal tradition should be considered even another version of Bahmanyār's *al-Taḥṣīl*. According to Garakani [2013], the style of the translation suggests that it is quite an early one, even probably from the period of Bahmanyār.

The table below shows the discrepancies between the order of its books and their respective parts and chapters.

Table 6

<i>al-Taḥṣīl</i>	<i>Ĝām-i ḡahānnamā</i>
<p>I. Logic</p> <p>1. Eisagoge: 14 chapters 2. Categories: 4 chapters 3. De Interpretatione: 12 chapters 4. Syllogism: 25 chapters 5. Demonstration: 11 chapters 6. Definition: 8 chapters</p>	<p>I. Logic</p> <p>1. On the principles of the science of logic [Eisagoge and Categories]: 10 chapters 2. De Interpretatione: 10 chapters 3. Syllogism: 16 chapters 4. Demonstration and Definition: 14 chapters</p>
<p>II. Metaphysics</p> <p>1. On existence: 13 chapters 2. The nine categories: 17 chapters 3. Prior and posterior, potency and act: 2 chapters 4. Perception, universal and particular, individuation, genus, matter, species: 5 chapters 5. Cause and effect: 4 chapters 6. Plurality and unity, finiteness, pleasures and sufferings, completeness: 4 chapters</p>	<p>II. Metaphysics</p> <p>1. On existence and its accidents: 11 chapters 2. The nine categories: 17 chapters 3. Prior and posterior, potency and act: 2 chapters 4. Perception, universal and particular, plurality, individuation, genus, matter, species: 5 chapters 5. On the number of causes their finiteness: 4 chapters 6. Plurality and unity, finiteness, pleasures and sufferings, completeness: 4 chapters 7. On the Necessary Existent and Its attributes and the mode of procession of things from It: 1 chapter</p>

<p>III. Science on the states of the concrete beings</p> <ol style="list-style-type: none"> 1. Necessary Existent: 1 chapter 2. On the premises necessary for studying natural things: 8 chapters 3. On heaven and world: 4 chapters 4. On generation and corruption: 7 chapters 5. Science on the soul: 15 chapters 	<p>III. Physics</p> <ol style="list-style-type: none"> 1. On the premises necessary for studying natural things: 8 chapters 2. On heaven and world: 3 chapters 3. On generation and corruption: 7 chapters 4. Science on the soul: 15 chapters
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III. The *Metaphysics* of *al-Taḥṣīl*: the content, structure, style, and sources

In this chapter, I provide the analysis of the second book of *al-Taḥṣīl* on metaphysics regarding its contents, structure, style and sources by comparison with its principal source and model of imitation – *al-Ilāhiyyāt* of *al-Šifā'*. Regardless of numerous commonalities between the two Bahmanyār's version of metaphysics reveals substantial differences, conditioned either by the necessary limits of his purpose (to write a summary/introduction) or certain premises already present in the thought and style of Ibn Sīnā. Therefore, Bahmanyār's exposition being an introduction transforms into a certain revision of his teacher's philosophical system.

III.1. The content, structure, and style of the *Metaphysics*

The fact that metaphysics is the supreme science and that the subject matters of other sciences are the essential accidents of the subject matter of this science is stated by Bahmanyār in the first chapter of the second book. Therefore, metaphysics appears as the first theoretical science in the *summa* of Bahmanyār following logic (which serves as an introductory discipline) as in the *Dānišnāmah-i 'Alā'ī*, where Ibn Sīnā abandons Aristotelian tradition of locating metaphysics at the end, hence not only conceptually but also formally recognising its primacy and importance.

As it was mentioned above the main source of *al-Taḥṣīl* is Ibn Sīnā's *al-Šifā'*. As regards, the contents and structure of the *Metaphysics* of *al-Taḥṣīl*, it is generally based on the same order as that of *al-Šifā'*, illustrated in Table 7.

Table 7. *Metaphysics* of *al-Taḥṣīl* compared to that of *al-Šifā'*

I. On existence	I. Subject matter II. Substance
II. The nine categories	III. The nine categories
III. Prior and posterior, potency and act	IV. Prior, posterior, origination, potency, act, the complete, the incomplete
IV. Perception, universal and particular, individuation, genus, matter, species	V. General things and their existence
V. Cause and effect	VI. Causes
VI. Plurality and unity, finiteness, pleasures and sufferings, completeness	–
–	VII. Mathematical principles and objects

–	VIII. The First Principle
–	IX. Emanation and return
–	X. Prophecy, worship, ethics, and politics

Bahmanyār’s *Metaphysics* replicates Ibn Sīnā’s model only in general terms. It omits almost the entire Treatise I reducing its contents to one chapter followed by the exposition of the category of substance. The second part corresponds to Treatise II, however, with a remarkable difference; Bahmanyār contrary to Ibn Sīnā discusses extensively all nine categories, while his master gives preference to quantity, quality, and relation. After concluding with the ‘species’ of the subject matter of metaphysics the third part elaborates on the ‘properties’ of this subject, like anteriority and posteriority, potency and act (III/IV), universals and particulars (IV/V), causes and effects (V/VI). The last part of Bahmanyār’s *Metaphysics* is derived from different parts of the *Ilāhiyyāt* (III.2–6, 9) on unity and multiplicity, or pleasures and sufferings (IX.7). Finally, the most distinctive issue is that it totally omits treatises VII–X. The omission of Treatise VII can be explained due to its brevity or the fact that it is quite dialectical and polemical in content, namely the disapproval of Platonic ideas and ideal numbers in the last two chapters. However, the negligence of Treatises IX and X is suggestive of a noticeable ontological, rather than theological, standpoint, which we will discuss in the following section.

As it is seen, *al-Taḥṣīl* is a renovation of *al-Šifā’*. In its complex structure, it retains, on the one hand, the traditional curriculum of philosophical studies, while on the other it reorganises its principal source in a new direction. From a larger perspective this ‘reform of the reform’ enters into the matrix of the entire preceding history of philosophy since Ibn Sīnā’s thought is rooted in the tradition of late Greek antiquity. *al-Taḥṣīl* is not a literal commentary, strict summary or paraphrase. Both its structure, internal organisation, and style reveal its considerable autonomy from its source due to the fact that its text is a new-old elaboration of the works of Ibn Sīnā.

It is possible to distinguish four elements regarding the genre of *al-Taḥṣīl*. First, the exposition of the text is normally direct, it never explicitly refers to its corresponding sources while starting a new section or chapter; the author is even using the first person pronouns (‘I’ or ‘we’). This renders the text sound autonomous. Second, in numerous *loci*, Bahmanyār invites the reader to consult *al-Šifā’* or other non-specified books for further information or a more detailed account and it indicates that *al-Taḥṣīl* remains an introductory or succinct exposition of a larger source in the author’s view. Apparently, the purpose of the author is not to reproduce the entire work of Ibn Sīnā but to focus on the most crucial principles and topics in a selective manner after the acquisition of which the reader can absorb the more meticulous text of *al-Šifā’*. In *al-Taḥṣīl*, we can notice

numerous verbatim citations, paraphrases, and sometimes summaries of Ibn Sīnā's texts. Nevertheless, the text never follows its source continuously; each verbatim citation is eventually disrupted/ followed by a remark from the author or another verbatim text or paraphrase. Hence there is no single chapter in *al-Taḥṣīl*, which is completely a word-for-word transcript of the original source. If the purpose of Ibn Sīnā in his *magnum opus* – *al-Šifā'* is to complete and systematise Aristotelian science in its totality, Bahmanyār's task was to move in the contrary direction, namely encapsulate the entire Avicennian system in a lesser or minor *summa*, which is concise yet comprehensive enough, and he was definitely familiar with the precedents established by his master, the works like *al-Nağāt* and the *Dānišnāmah-i 'Alā'ī* served him as a model. From the compositional perspective, it is a work that is equal to any other *summa* of al-Šayḥ al-Ra'īs based on the same style and manner of writing a comprehensive philosophical treatise.

We already mentioned that *al-Taḥṣīl* is not composed as a formal commentary that elucidates each chapter of a certain work following its order, neither it has any alternative form of 'commentary', nor is it merely a summary or strict paraphrase of Ibn Sīnā's works. Bahmanyār's method lies in four main techniques: (1) verbatim citation; (2) paraphrase; (3) synthesis and (4) personal additions. If the first two are merely the repetition of their sources, hence the originality of Bahmanyār's thought could be found in the last two. However, the first two techniques, widely used by Bahmanyār, should not be immediately regarded as a slavish following of the master's steps. It was common for students in the circle of Ibn Sīnā to use the same texts as their teacher and through their modification to a certain extent create a new text. In the given historical circumstances, this kind of authorship or editorship is understandable when it was important to diffuse a text due to the scarcity of copies.

One of the considerable features that distinguish Bahmanyār from his master is his terminological preference, i.e. he, unlike his master, uses usually the term 'metaphysics' rather than 'theology'³⁰, and philosophical expressions such as 'the First Cause' rather than 'Allah' or 'God'. In Ibn Sīnā's works prayers and laudations and other different religious expressions are very common. Some of these, without doubt, are later interpolations of scribes, while others are parts of the text: suffice it to recall the opening passage of the *Ilāhiyyāt*.

III.2. Aristotelian revisionism?

It was noted above that Bahmanyār, who claims to introduce the main content of *al-Šayḥ al-Ra'īs*' teaching, never speaks about emanation and especially religion and prophecy as something that

³⁰ On the Arabic titles of Aristotle's *Metaphysics*, see Bertolacci, 2022.

directly pertains to the first philosophy. This raises the fundamental question of whether Bahmanyār distances himself from his master or his choice actually does not contradict the principles according to which Ibn Sīnā composed his metaphysics.

There can be different explanations: (a) indifference or even hostile attitude to Neoplatonism (if Bahmanyār was a strict Aristotelian) and (b) to religion (if Bahmanyār was a formal Muslim with Zoroastrian background and secular philosopher) or (c) perhaps an unwillingness to pair religion and philosophy due to religious conservatism (if Bahmanyār was a strict Muslim reluctant to mingle his faith with Greek philosophy). The last chapters of *al-Taḥṣīl*, which discuss the human soul, can disclose Bahmanyār's vision, within the context of the separation of the human soul from the body, that he was enough Neoplatonic and distant from religion insofar as he was a philosopher. Throughout the treatise, the relation between form/soul and matter/body is presented hierarchically, and under the perspective of Aristotelian causality, both the soul and the body are called substances. In the case of human epistemology, Bahmanyār has a very Platonic position: the body can be an obstacle for the soul in its cognitive capacity; it often happens that due to habit, custom or some change, humans cannot appreciate, for example, the melody of harmonic music, or when a sick person cannot enjoy the taste of honey. After the separation, however, the soul reaches perfections prepared for it in life after death [Bahmanyār, 1996, p. 562]. Only in the last section (*On the permanence of the human soul and its states in the afterlife*) Bahmanyār explicitly speaks of the relationship between the soul and the human body as such in relation to separation. The soul no longer needs the body after death; it is now occupied only with itself and can contemplate itself perfectly because it does not perform the mental operation through the organs but rather directly [Ibid., pp. 830–831.]. It is right that the intellect develops through the body and the senses, but after the separation, although the intellect remains with the soul, it no longer depends on corporeality because it can contemplate things in pure form without carnal mixtures. Therefore, the soul receives authentic or highest happiness, thanks to this separation [Ibid.]. The body was simply an instrument in the development of the soul's capacities for its life in the *ma'ād*³¹. In one paragraph of the last section, Bahmanyār's tone sounds even more theological, where he describes the happy and satisfied souls who remember God and his attributes and who embellish themselves with the knowledge of God [Ibid., p. 835]. Then, in the last passage, it says:

We learned the state of the souls, which are in the place of their return, through the demonstration. Concerning other souls, it is impossible to understand their states through demonstration. If the wisdom has been embraced in this quantity, then the further way is easy for clarification, details, enlargement, and research. [Bahmanyār, 1996, pp. 832–833]

³¹ At the end of *Risāla fī marātib al-mawḡūdāt*, there is also a brief discussion about the importance of the body for the soul and the separation of the soul from it. See Behmenyār, 1851, p. 28.

With the last statement, it becomes clear that the wisdom given in this book is sufficient for the further comprehension of this topic, which implies that engaging any alternative form of knowledge, particularly religion, for a philosophy student is not imperative. The phrase ‘other souls’ presumably is an inkling to religion, viewed as not demonstrated, hence inferior and feeble knowledge³².

It would also be relevant to seek the answer from Ibn Sīnā himself. Aristotle is the primary source of the *Ilāhiyyāt*, and Ibn Sīnā’s metaphysics can still be operational without Neoplatonic and Islamic elements. Neoplatonic emanation and the Islamic concept of prophecy are more of a supplementary character. Ibn Sīnā speaks little about emanation in his principal works that were written after the *Ilāhiyyāt*. In other *summae* or *compendia*, as *Kitāb al-nağāt* and *Dānešnāmeḥ*, emanation or cosmological procession is not discussed to a large degree. Historically emanative cosmology was used by Muslim philosophers in order to bring into a formal agreement the monotheistic creationism and the philosophical idea of the eternity of the world, as happens in such initial texts as the *Theology* and *Liber de causis*. In a similar fashion, it was used to give a philosophical interpretation to prophecy and especially divine revelation and played an essential role in the vision of the afterlife. Moreover, like his predecessor al-Fārābī, Ibn Sīnā, considered religion to be something inferior to philosophy, its imitation or popular version for masses, a truth explained through images and symbols [al-Fārābī, 1962, pp. 44–45] (a concept that was still latent in such early Muslim philosophers as al-Kindī³³). Ibn Sīnā, while being very young, was accustomed to such interpretation, as it is seen, for instance, in one of his works entitled *al-’Adhawīyya*, which is dedicated to such topics as religion, the relationship between body and soul, and the life after death.

Considering this important distinction, the omission of these matters either by Bahmanyār or Ibn Sīnā is not an apparent anomaly. The conclusion is not that emanation or prophecy are extraneous elements that were artificially imposed on the Greek metaphysics, it is rather considering them as secondary, supplementary or practical elements that are totally dependant on the theoretical and metaphysical premises. Bahmanyār does not totally avoid the emanative concepts or

³² In the *Ilāhiyyāt*, Ibn Sīnā while discussing ‘the return’ highlights two accounts: religious and philosophical. The former speaks about bodily happiness and misery, which is established only by the religious law and belief, while the latter is about intellectual happiness, and its foundation is through reason and demonstrative syllogism. Curiously, the author affirms that the true religion of Islam and its Prophet ‘has set down for us the state of happiness and misery according to the body’. ‘The metaphysical philosophers’ desire for attaining this [latter] happiness is greater than their desire for bodily happiness. Indeed, it is as though they pay no heed [to bodily happiness,] even if it is granted them.’, says Ibn Sīnā a bit further, thus determining religion and its bodily account to be something inferior. Should not the reverence for religion seen as a formal homage to the society? See Ibn Sīnā, 2005, pp. 347,25-34 – 348,1-16.

³³ Utmost importance is given by al-Kindī to philosophy in the quest for truth, while the utility of religion is limited to the ethical (practical) sphere. See al-Kindī, 2015, p. 13.

terminology, as can be noticed in *al-Taḥṣīl* (see, for instance, III.1).

III.3. The sources of the *Metaphysics*

The sources of the *Metaphysics* of *al-Taḥṣīl* are diverse and not limited only to the *Ilāhiyyāt* as one might expect. As Bahmanyār states in his introduction ‘for treating the ideas [I relied on] all of his works, as well as my discussions [*muḥāwira*] with him’, which truly suits the panoramic vision of his sources once they are examined since *al-Taḥṣīl* was intended by the author, to be the quintessence of Ibn Sīnā’s logic, physics, and metaphysics. Among the works that he used we should primarily mention *al-Šifāʾ*, *al-Nağāt*, *al-Išārāt wa l-tanbīhāt*, and the *Dānišnāmah*, and also *al-Mubāḥaṭāt* as it is indirectly mentioned in the introduction. However, the main source of the *Metaphysics* remains *al-Šifāʾ* and thus it can be considered *grosso modo* its abridged version³⁴ (without mathematics).

Bahmanyār directly relies on different passages taken from the *Logic* of *al-Šifāʾ*, namely its second part called *al-Maqūlāt* or the *Categories* (I, III, IV, V, VI), the first and sixth parts of *al-Ṭabʿiyyāt* on nature and the soul respectively, and finally *al-Ilāhiyyāt* (I, II, III, IV, V, VI, VII, IX) – the last and concluding part of *al-Šifāʾ*. Bahmanyār himself refers explicitly to *al-Šifāʾ* in a general manner fifteen times throughout the text of his *Metaphysics*. Besides, he also makes references to the *Categories* (three times) and *al-Burhān* or the *Demonstration* (only once), which in total makes eighteen explicit references to the main work of Ibn Sīnā and the principal source of Bahmanyār. There is no other work or treatise of Ibn Sīnā mentioned by him in this second book, yet there is also a number of general or implicit references to various writings of the great master, and it seems not to be something accidental since other *summae* written by Ibn Sīnā are less detailed and encompassing than *al-Taḥṣīl*.

In Table 8 we give a checked and revised list of all corresponding sources as given in the edition of Muṭahharī, who did significant work by indicating these sources for each chapter. Muṭahharī’s references are usually correct and suffer only from some minor imprecisions. Future research can reveal even more detailed dependence of these chapters on other writings of Ibn Sīnā. However, the clarification of sources remains a challenging task since, as it was mentioned above, the text of *al-Taḥṣīl* is not a direct reproduction of its sources in a continuous form. Therefore, establishing the sources of each chapter should be accompanied by specific and focused research on the relevant topics and works [See Janssens, 2007]. For instance, Ibn Sīnā has no separate writing on individuation, while Bahmanyār dedicates an entire chapter (*al-Taḥṣīl* II.4.3) on *takattur*

³⁴ Fazıl Ahmet Paşa 863 manuscript describes it as *muḥtaṣar al-Šifāʾ*.

(multiplication) and *taṣahḥus* (individuation) where he gathers the extracts scattered in various writings of his teacher, for instance, the *Physics* and *Metaphysics* of *al-Šifāʾ* and *al-Taʿlīqāt* [See Benevich, 2020]. At the same time, Bahmanyār was using the Persian works of Ibn Sīnā. As Janssens shows a large portion of Chapter 4 (Book III) is directly based on the *Physics* of the *Dānišnāmah* [2003, pp. 194–195].

Table 8. Corresponding sources of each chapter of the *Metaphysics* of *al-Taḥṣīl* in the order of their appearance in the text

<p>I. On existence</p> <p>1. –</p> <p>2.: <i>al-Ilāhiyyāt</i>, I.5</p> <p>3.: <i>al-Ilāhiyyāt</i>, I.5, I.8</p> <p>4.: <i>al-Ilāhiyyāt</i>, II.1; <i>al-Maqūlāt</i>, I.4</p> <p>5.: <i>al-Maqūlāt</i>, VI.4, III.1</p> <p>6.: <i>al-Maqūlāt</i>, III.2, III.3</p> <p>7.: <i>al-Ilāhiyyāt</i>, II.2</p> <p>8.: <i>al-Ilāhiyyāt</i>, II.2</p> <p>9.: <i>al-Ṭabīʿiyyāt</i>, I.3.2</p> <p>10.: <i>al-Nağāt</i>, <i>al-Ṭabīʿiyyāt</i>, I.2; <i>al-Ṭabīʿiyyāt</i>, I.3.4, I.3.3, I.3.5, I.3.4</p> <p>11.: <i>al-Ilāhiyyāt</i>, II.2</p> <p>12.: <i>al-Ilāhiyyāt</i>, II.4</p> <p>13.: <i>al-Ṭabīʿiyyāt</i>, I.3.8</p>
<p>II. The nine categories</p> <p>1.: <i>al-Maqūlāt</i>, III.4, IV.1</p> <p>2.: <i>al-Maqūlāt</i>, IV.2</p> <p>3.: <i>al-Ilāhiyyāt</i>, III.2, III.3</p> <p>4.: <i>al-Ilāhiyyāt</i>, III.5, III.6</p> <p>5.: <i>al-Ilāhiyyāt</i>, III.4</p> <p>6.: <i>al-Ṭabīʿiyyāt</i>, I.2.5, I.2.6, I.2.7, I.2.8, I.2.9; <i>al-Nağāt</i>, <i>al-Ṭabīʿiyyāt</i>, II.9</p> <p>7.: <i>al-Maqūlāt</i>, V.5, V.2, VI.4</p> <p>8.: <i>al-Ṭabīʿiyyāt</i>, VI.2.2; <i>al-Ilāhiyyāt</i>, III.7</p> <p>9.: <i>al-Ilāhiyyāt</i>, III.8, III.9</p> <p>10.: <i>al-Maqūlāt</i>, IV.5, IV.3, IV.4; <i>al-Ilāhiyyāt</i>, III.10</p> <p>11.: <i>al-Maqūlāt</i>, VI.5, VI.6</p> <p>12.: <i>al-Maqūlāt</i>, VI.6; <i>al-Ṭabīʿiyyāt</i>, I.2.1, I.2.2; <i>al-Nağāt</i>, <i>al-Ṭabīʿiyyāt</i>, II.1; <i>al-Ṭabīʿiyyāt</i>, I.2.3, I.2.4</p> <p>13.: <i>al-Nağāt</i>, <i>al-Ṭabīʿiyyāt</i>, II.4</p> <p>14.: <i>al-Ṭabīʿiyyāt</i>, I.4.3, I.2.4</p> <p>15.: <i>al-Ṭabīʿiyyāt</i>, I.4.6</p> <p>16.: <i>al-Ṭabīʿiyyāt</i>, I.3.11, I.4.9</p> <p>17.: <i>al-Ṭabīʿiyyāt</i>, I.2.11, I.2.12, I.2.10, I.2.13, I.2.12, I.2.13</p>

III. Prior and posterior, potency and act

1. *al-Ilāhiyyāt*, IV.1

2. *al-Nağāt*, *al-Ṭabīʿiyyāt*, II.11, II.12, II.13; *al-Ilāhiyyāt*, IV.2; *al-Ṭabīʿiyyāt*, I.2.2; *al-Nağāt*, *al-Ṭabīʿiyyāt*, II.2; *al-Ṭabīʿiyyāt*, I.4.11; *al-Ilāhiyyāt*, IV.2

IV. Perception, universal and particular, individuation, genus, matter, species

1.: *al-Ṭabīʿiyyāt*, VI.2.2, VI.5.2

2.: *al-Ilāhiyyāt*, V.1, V.2

3.: *al-Ilāhiyyāt*, V.2; *al-Ṭabīʿiyyāt*, I.1.1

4.: *al-Ilāhiyyāt*, V.3, V.4, V.7

5.: *al-Ilāhiyyāt*, V.7, V.5, V.6, V.9

V. Cause and effect

1.: *al-Ilāhiyyāt*, VI.1

2.: *al-Iṣārāt wa l-tanbīhāt*, *al-Ilāhiyyāt*, V; *al-Ilāhiyyāt*, VI.3, VI.4

3.: *al-Ilāhiyyāt*, VI.4; *al-Ṭabīʿiyyāt*, I.1.13, I.1.14; *al-Ilāhiyyāt*, VI.5

4.: *al-Ilāhiyyāt*, VI.5

VI. Plurality and unity, finiteness, pleasures and sufferings, completeness

1.: *al-Ilāhiyyāt*, VII.1

2.: *al-Ṭabīʿiyyāt*, I.3.8; *al-Ilāhiyyāt*, III.1

3.: *al-Ilāhiyyāt*, IX.7; *al-Iṣārāt wa l-tanbīhāt*, *al-Ilāhiyyāt*, VIII

4.: *al-Ilāhiyyāt*, IV.3, *al-Ṭabīʿiyyāt*, VI.5.4

IV. The principal doctrines of the *Metaphysics* of Bahmanyār

In this last chapter, I discuss the central ideas that are present in the *Metaphysics* of Bahmanyār through the selective examination of all six parts of the second book. As it was mentioned above, Bahmanyār's main authority is *al-Šifā'* without being limited to its metaphysical part. Through specific selection and arrangement, additions and omissions, Bahmanyār designs a different metaphysical structure and contents and hence departs sometimes considerably from his master.

IV.1 The subject matter of metaphysics

The first part of the *Metaphysics* consists of thirteen chapters where the author discusses existence, thing, possible and necessary existence, substance and accident, body, criticism of atomism, prime matter, matter and form. In the first chapter, Bahmanyār defines the subject matter of this science:

You already know that the subject matter of this science is something common to all things, namely it is an existent insofar it is an existent, i.e. existence. It is known that a body's states insofar it is in motion or rest are studied in physics; the states of its measures insofar they are measures are studied in mathematics; however, the existence of neither of them is studied in those sciences. The mode of their existence and of all other similar things is studied in this science. Therefore, the subject matters of other sciences are like the essential accidents of the subject matter of this science.

Existence, says further the author, cannot be defined since it is first in conception, or *a priori* one might say, and it has no genus, species or something else that would be known more than itself through which it could be defined. Moreover, existence is predicated of what is below it analogically (*al-taškīk*), not univocally (*al-tawāṭū'*). Otherwise, the Necessary Existent in itself would have been distinguished from other existents by a specific difference, however, this is impossible. The rest of the chapter develops the discussion through syllogistic argumentation and no other element, except existence, is related to the subject matter of metaphysics.

Bahmanyār's limited examination of only existence as the subject matter of this science seems to be at odds with Ibn Sīnā's complex understanding of the subject as a science that studies not only existence but also ultimate causes (the First Cause as well), the accidents of the existent, the principles of particular sciences [Ibn Sīnā, 2005, p. 11,6–20]. However, before this classification, Ibn Sīnā states that the *primary* subject matter of this science is existent inasmuch as it is an existent [Ibid., p. 10,3–6]. Bahmanyār's definition, therefore, lies within the limits of this primacy and since his intention is to write an introduction further investigation into details seems not to be important for him. Yet in the last paragraph of the first chapter he divides the existent into

necessary and possible, by listing all the categories, and this clarification implicitly relates the subject of metaphysics to the idea of the First cause and accidents. And it was already explained at the beginning that the subject matters of all other sciences are like essential accidents of the subject matter of metaphysics. The relation between sciences is also discussed in the *Logic*, where Bahmanyār names this science as *the supreme science* (*al-‘ilm al-‘alà*) or *the first philosophy* (*al-falsafa al-ūlā*) [Bahmanyār, 1996, p. 220, and p. 236; see also p. 20 for the term *the first philosophy*].

This quite comprehensive discussion still retains Bahmanyār’s definition of metaphysics very close to that of Ibn Sīnā. Here another objection may be raised, namely that this reductive definition allows Bahmanyār to remove the Necessary Existent from *Metaphysics*, which is true but the ‘science’ where the First Cause is placed is not physics; it has a specific title: *al-‘ilm bi-ahwāl a‘yān al-mawǧūdāt* (science on the states of the concrete existents). Janssens translates it as ‘the science of the states of the most noble of Beings’ or ‘the science of the states of the essences of the existing Beings’ [2003, p. 181]. The first translation is problematic since this science includes the discussion of human souls and corporeal beings and as they belong to the lowest world they cannot be classified as the noblest within the Avicennian universe. The second title is more acceptable, but we consider that a more accurate translation is ‘the concrete existents’, as proposed and justified by Artur Sagadeev [1983, vol. 3, p. 193, n. 1], especially comparing this science to metaphysics. According to Bahmanyār’s division, metaphysics treats abstract or intellectual notions and concepts (separated from matter) and the third book is already about concrete existents, the reason why the third discipline is a continuation (in the form of illustration) of metaphysics. It is noteworthy that Bahmanyār never defines this science formally; throughout the text of *al-Taḥṣīl* he never uses this title, which appears only as the title of the third book. It implies that Bahmanyār’s introduction of this new ‘science’ has a technical purpose in the arrangement of large philosophical material. Just like Ibn Sīnā reverts the traditional order of sciences (logi-physics-metaphysics), Bahmanyār develops this innovation in a new direction, where metaphysics is reorganised as purely conceptual science yet enlarged with logical discussions and physical topics included for preliminary preparation of the reader and physics that is also transformed and enlarged as a section on all real existents.

IV.2 Existents and substance

The relation between thing and existence is addressed in the second chapter, according to which thing belongs to the secondary intelligible objects, which are based on the primary intelligibles, and

its case is similar to the case of such categories as universal and particular, genus and species. This is because there is no ‘thing’ as such among existents, on the contrary, there is a human, a celestial sphere or something else from which it is deduced that it is a thing. After this introduction Bahmanyār gives the famous distinction of Ibn Sīnā between essence and existence according to *al-Šifāʾ*: ‘Know that the reality of each thing, which is specific to it, is not the existence that is synonymous with affirmation’.

The third chapter speaks about other fundamental notions regarding existence, namely possible, necessary, and impossible. The author states that it is difficult to clarify necessity, possibility, and impossibility except by way of indication and evidence. The first among them that is conceived primarily is necessity since it is the assurance of existence which is known more (and by itself) than non-existence.

Till here Bahmanyār *grosso modo* follows his master in the sequence of topics, albeit in a succinct manner, but unlike Ibn Sīnā, who starts his ‘theological’ exposition on the Necessary Existent (*al-Ilāhiyyāt*, I.6) since the notion of necessity is already mentioned, he skips to the next topic on truth and falsity (*al-Ilāhiyyāt*, I.8) by keeping his thematics in accordance to pure ontology probably for pedagogical reasons in order to save the important topic on the First Cause for the later discussion. In the second treatise of *al-Ilāhiyyāt*, Ibn Sīnā commences a new topic on substance, and Bahmanyār in his following chapters also follows the same topic by starting from the distinction between substance and accident. An accident is by itself something realised in the subsistence of another thing and cannot be separated from that thing, while a substance is not in a substrate and exists by itself. An accident might exist in another accident, like speed in movement, but eventually, they all depend on a substrate. Further in this chapter, as Bahmanyār himself refers to the *Categories*, the tone becomes more logical rather than metaphysical since he starts to speak about existence in terms of expressions: ‘to exist in something’ may be said univocally, analogically, or equivocally, and to all of them homonymously. Below he also mentions that the existence of a whole in parts is a metaphoric expression. This switch of tone poses a question about its underlying motive. Is this because Bahmanyār refers to the *Logic* in order to keep the constant relation between all sciences at the beginning of the *Metaphysics*? Or perhaps due to the reason that Aristotelian logic (that conceives of predication as a metaphysical relationship) is fundamentally ontological? This tendency of logical backreferences will continue till the third part of the second book throughout the second part which is dedicated to the nine categories.

In the fifth chapter, the substance is described as prior to the accident since the latter (as existence) is the predicate for the former because the accident itself requires the notion of existence. In other cases, there is also the priority of one substance over another, like in the case of father and

son, since the father is the cause of the existence of the son both in terms of existence and time. Substances are either simple or composite. A simple one is separated and distant from matter, and if it is included in the constitution of something (like the relation of the image of door to the door), it is called form, and if it is a corporeal relation (that of wood to door), then it is called matter. Matter is associated with potential existence while form with the actual one.

The sixth chapter classifies what the primary (individuals), the secondary (species) and the tertiary (genera) substances are. Individual existents deserve to be the first substances because they precede the other ones and they can be indicated while it is impossible with the second and the third substances. Moreover, substances do not have opposites, regarding their very substantiality, which is their specific attribute. It can be compared to the absence of opposites in the case of numbers, like one, two or three. Also, one substance is not less substance than any other substance, again regarding the substantiality itself.

The next seventh chapter is dedicated to the topic of the body which needs no proof since it is perceived through the senses. It is usually defined as a substance that has length, width and depth. After noting that these words have different meanings, the author explains that the definition of the body as a substance does not depend on the mentioned accidents, because they do not exist in actuality but as an assumption.

In the following eighth chapter, Bahmanyār, like his master Ibn Sīnā, is involved in a lengthy discussion on the theories about the mode of existence of the body, after defining what a body is in the previous chapter. According to the author, there are three theories: (1) the body is something simple or non-composite; (2) the body is composed of indivisible particles; and (3) the body is composed of matter and form. The chapter refutes the idea that the body is simple by showing the potential divisibility of bodies to infinity and hence the necessity of its composition of matter and form. In the tenth chapter, Bahmanyār dismantles two theories of atomism (those that state that the body is constituted of finite indivisible particles and those who claim that their number is infinite and all of them are separate in actuality) in detail, but before doing that he briefly elaborates on the notions of proximity (*al-tatālā*), adjacency (*al-tašāfaʿ*), and contiguity (*al-tamās*) in the ninth chapter, which helps him to better explain the untenability of the theory about indivisible particles. The latter, as it is well-known, was maintained by most Muslim theologians, hence Bahmanyār following the steps of his teacher also engages with this philosophical-theological polemic without directly naming any thinker (*aṣḥāb al-ğuzʿ*), however, Ibn Sīnā writes down his views on this refutation in the *Physics* of *al-Šifāʿ* (I.3.4) where he mentions Democritus and his school. In *al-Ilāhiyyāt* he only implicitly refers to this polemic (II.2). In a brief manner it is also discussed in *al-Nağāt* (*al-Ṭabrīʿiyyāt*, I.2) from which Bahmanyār benefits as an additional source.

The eleventh chapter opens with a statement that prime matter is a substance since it is not in a substrate. However, it does not become something actual among other things but conditions it to become an actual thing with a form. Therefore, prime matter has no reality thanks to which it could have been an actual thing but its reality is that it is a receiver. Something becomes a thing in actuality by a specific difference and the specific difference of prime matter is that it is open to receive everything and this is its form.

In the twelfth chapter, Bahmanyār speaks about the relation between corporeal form and matter, which is not based on relativity but is the relation of cause and effect. Since corporeal form has matter and one of them is received and the other is receiving, it means that one of them (the form) is the cause and the other the effect (the matter). It is also not possible that they both come from something third because then it follows that the existence of each of them is from the third through the mediation of something another, but since the essence of one of them is connected to another it sounds absurd. While explaining the cause-effect relation in succession between different forms and their relation to matter, Bahmanyār introduces the giver of forms (*wāhib al-ṣuwar*). It becomes necessary that there is a third cause, a kind of mediator, that makes it possible for new forms to obtain matter and become something new, because forms cannot be causes of themselves and neither matter can be a mediator in for a new form in unifying with matter since matter is potentiality. The last chapter of the first part continuous the previous topic, namely on the mode of existence of corporeal form that it cannot exist without matter, it cannot transfer from one matter to another since it is bound to its matter by its nature, and that bodies should be finite because infinity impossible within certain limits which constitute their shape.

IV.3 The nine categories

This is the longest part of the *Metaphysics*, where Bahmanyār relies primarily on the *Logic*, the *Physics*, and the *Metaphysics* of *al-Ilāhiyyāt*. Consisting of seventeen chapters it scrutinises the notion of accident and all nine categories that were briefly discussed in the second *bāb* of the *Logic* (the *Categories*) of *al-Taḥṣīl*, where the survey on ten categories is given in one *faṣl*.

The first chapter of this *maqāla* is about quantity which is divided into kinds: continuous (*muttaṣil*) and discontinuous (*munfaṣil*). It is also classified as the one with parts having a position, and the one that has no position. Body, according to the first classification, is a continuous quantity, which means that a common limit between its parts can be assumed and in the body this limit is a surface, in the surface a line, and in the line a point. There are two classifications of discontinuous quantity, one when it is like the number seven, the parts of which cannot have a common limit, and the other is when some quantities have a position in their parts while some do not have it. The

continuous quantity has four kinds: (1) a line estimated through the motion of an indivisible thing in a certain direction; (2) a surface estimated from the motion of a line different from that first motion; (3) a body estimated from the motion of surface while rising or falling; and (4) time that is the amount of motion according to priority and posteriority; time is not a quantity that has a position. As regards the discontinuous quantity it includes only numbers.

In the second chapter, it is said that quantity has two important features: (1) quantity is measured by itself; and (2) quantity has no opposite. In the first case, quantity is called equal or not equal, and in the second, it does not receive a greater or lesser degree. Continuous quantity cannot be the opposite of the discontinuous one because both of them are the specific differences that accompany quantity and they are not from quantity itself.

In the previous chapters, Bahmanyār relied on the logical part of *al-Šifā'*. In the third chapter while opening a discussion on the one he turns back to the *Metaphysics* of Ibn Sīnā (III.2), where he explicitly refers to *al-Šifā'*. According to this chapter, one is said by analogy about the meanings that coincide in not having any division in actuality. At the same time, one can be by essence and by accident. In the first case, it is said about something associated with something else, like when it is said 'Zayd and the son of 'Abdallah are one' or 'The physician and the son of Naṣrallah are one, and they are predicated of Zayd'. One by essence includes one by genus, species, and relation, as when it is said that the relation of the ship to the sailor and the relation of the city to the king are one. In the following Chapter 4, Bahmanyār continues the discourse on numbers, unity and plurality. Another topic related to quantity is the accidentality of measures (Chapter 5): since the body is included in the category of substance, and it is a quantity, it is the measure understood as a form, hence it is an accident. However, this kind of accident, which is linked to matter, does not separate from it except in estimation. The next category that Bahmanyār discusses in Chapter 6 is 'space', which is one of the longest chapters of his *Metaphysics*, where he consciously deviates from the *Metaphysics* of Ibn Sīnā once more while making a remark:

This issue usually appears in the science of physics since it belongs to it. Nevertheless, we preferred to make it familiar to the reader and include it in this section. As you will know, it is [space] a surface in a certain state.

This apology resembles the remark Ibn Sīnā made in the introduction of the *Dānišnāmah* that after the exposition will be from higher to lower sciences, as opposed to the tradition, and when necessary there will be made a proper excursus [Ibn Sīnā, 2004, pp. 3–4]. Space is defined not as a certain thing but a relation with the body that rests in it and moves from it or it can be something that embraces the body and something on which the body rests. Then Bahmanyār points out that space is neither prime matter nor form and further on starts polemic against the views that consider

space as distance, void, prime matter and form, surface. Due to these historical controversies starting already in Greek philosophy and inherited by Muslims around this topic, Bahmanyār considers it to be an important one and dedicates a lengthy discussion to it while referring four times to *al-Šifa'* as his main authority. His standpoint is obviously Avicennian and Aristotelian when once he even uses the phrase 'our theory' (*madhabunā*) to differentiate himself and his master from other thinkers whom he designates as *aṣḥāb al-bu'd* or *aṣḥāb al-ḥala'* since he is especially interested in refuting the opinion that space is emptiness or void and very probably it refers also to Mu'tazilites of Baghdad.

Chapter 7, which is based on *al-Maqūlāt*, discusses the accident of quality. 'How?' is asked about something that has a quality says Bahmanyār. It can be any stable shape for the comprehension of which there is no need to conceive something that is external to it. Therefore, this accident differs from 'relative', 'where?', 'when?', and 'possession' in not requiring any external relation. 'How?' has four kinds according to Bahmanyār: (1) state and faculty; (2) power and non-power; (3) action and affection; (4) what is typical of quantities, i.e. figure, oddness, and evenness. In the following chapters, the author addresses issues related to this category, like affections (Chapter 8) and the qualities that are in quantities (Chapter 9).

Chapter 10 is dedicated to the category of relative – something the existence of which is relative. Relative is said for a quiddity in comparison with something, no matter whether this thing has another existence or not. The difference between the relative, as a category, and the relative that is not a category but is something accompanied by relativity, is that its objectivity is realised while its quiddity is expressed through comparison with something different and that it is specified only in this way.

Chapter 11 discusses the categories of 'where', 'when', position, and possession. At the end of the chapter, Bahmanyār implicitly refers to Ibn Sīnā's refusal to include 'possession' among categories. In *Dānešnameh*, Ibn Sīnā writes that the question of possession of one thing by another remains unclear to him [Ibn Sīnā, 2004, p. 30,8–9].

Chapter 12 is about the categories 'to act' (*an yaf'al*) and 'to be acted upon' (*an yanfa'il*), which can be seen in the example of blackening while something turns black and whitening while something turns white. The thing that receives change is the one acted upon, while the thing from which action proceeds is the acting one. After finishing a brief survey on this category Bahmanyār, however, moves to the topic of motion to which the rest of this long chapter is dedicated, with another apologetic gesture:

Let us now clarify the case of motion and what follows it, since it is by itself a category 'to be acted upon' and 'to act' that we explained. This consideration is within the affairs of the natural [science], but we still would like the studying person to understand it. Let us start, firstly, with motion and its descriptions.

Further Bahmanyār defines motion as the transition from potentiality to actuality, which is not immediate, and he is against using time in its definition because the latter is actually defined by motion. Several paragraphs after the author presents the definition of locomotion: 'the connection of limits in continuity, and rest is the interruption of this connection, and these limits are assumed in connection'. This definition is followed by an allusion to certain philosophers, probably the ones from the Eleatic school, such as Parmenides, Zeno of Elea, and Melissus of Samos who contended that true being is one and unchanged and therefore motion or change has no real existence. Moreover, motion is related to six things: moving, mover, something in which there is motion, something from which there is motion, something towards which there is motion, and time. Close to the end of the present chapter the discussion of motion in metaphysics is justified once more since Bahmanyār considers one by one all categories and examines whether motion is possible in them by concluding that it is truly plausible only for quantity, quality, 'where' and position since they accept increase and decrease. In the following chapters, Bahmanyār expands the topic of motion to such issues as the indivisibility of motion into parts, that speed and slowness are not conditioned by the intervention of rest (Chapter 13), one motion as individual, species, and genus, the meaning of unity in celestial motion (Chapter 14), opposite and not opposite motions (Chapter 15), that motion and time do not have anything preceding them, except the Creator, and that they do not have a beginning in their essences, on the motion preceding in nature, and the body preceding in nature (Chapter 16). Bahmanyār dedicates several chapters to the topic of motion in the third book as well (III.2.1.2, 5, 7, 8; III.2.2.2, 3.2, 3.3).

After the extended treatment of motion, the *Metaphysics* concludes with a chapter on time, which seems to be a necessary continuation after the topic of motion and change. The existence of time is established by the observation of different results that appear in crossing the same distance by the same object. The difference is due to the motion and not speed or rather it is a difference in the measures of the motions. Time, therefore, is defined as the measure or the number of motion, when motion is divided into prior and posterior, not in relation to time but to distance because, otherwise, there would be a circularity in explanation. Time emerges and perishes, its existence is bound to matter, and hence it exists in matter. It can also be said that if there were no change, then there would be no time.

IV.4 Priority and posteriority, potency and act

Unlike the first two *maqāla*, which treat existence, substance and all other categories and are the longest parts of the second book, the third *maqāla* is the shortest part of the *Metaphysics* that consists of two chapters embracing such topics as priority and posteriority, potency and act. This ordering is in line with the internal structure of *al-Ilāhiyyāt* and it corresponds to Treatise IV, which in its turn is also one of the shortest parts of *al-Ilāhiyyāt*.

Chapter 1 presents the priority (*taqaddum*) and posteriority (*ta'ahhur*): all kinds of priorities are analogically prior insofar as the prior has something that the posterior does not have, while the posterior has nothing except what exists for the prior. It is said analogically because the word 'priority' is not a genus since the priority in causality is before the priority in nature, and this priority is before other varieties of priority. Besides causality, prior can be in order (Baghdad is before Kufa), nature (the priority of one over two), merit (Abū Bakr precedes 'Umar and all the companions of the Prophet), time, or essence (When Zayd moved his hand, the key began to move).

Chapter 2 has probably the longest title in the entire *al-Taḥṣīl* since Bahmanyār decided to include a plethora of topics in this chapter, be it potency and act, nature, motion, the soul, existence as an accident, and so forth. Potency is the principle of change from one thing into something else, for instance, when a physician heals his body. The principle of change is either in the patient (affective power – *al-quwwa al-infi'aliyya*) or in the agent (active power – *al-quwwa al-fi'liyya*). The potentiality of affection can also be a predisposition to something, like the potentiality of water to receive a shape, and unlike water, a piece of wax can both receive and retain a shape, while prime matter is able to receive everything.

In the following passages, Bahmanyār touches upon such issues as motion and movers and their causes. The argument starts to develop from the idea that every moving body has an external body that moves it and the cause of motion cannot be something corporeal. Eventually, Bahmanyār arrives at the series of cause-effect relationships and the impossibility of this series being infinite. Hence the author introduces the Unmoved Mover in the Aristotelian manner:

Due to the impossibility of the existence of infinite bodies, it is impossible for infinite moving [bodies] to exist simultaneously and for every mover to move itself. Therefore, the motions finish with some kind of unmoved mover. Its explanation is that, firstly, the moving must be a body or something material, while there should be infinite bodies, and secondly, the causes must be finite. This is proved thus: if there were a last mover and it was moved by a mover that was also something moving, then it could not move without being previously moved by another mover, and regardless of whether this mean is one or infinite. There can be no existence of motion unless it has a mediated character. Consequently, it must inevitably end with a mover that does not have a mediated character. The same is with the things that come from the potentiality into actuality.

The unmoved mover moves either by endowing the body with the proximate principle, with which it moves, or it moves by being followed and loved. It is clear that every power of a body that moves also moves accidentally and that the unmoved mover cannot be a corporeal power.

A preliminary discussion regarding the beginning of motion was raised in the second *maqāla* (Chapter 16), and finally, in this part, Bahmanyār openly brings a syllogistic proof that another time justifies his scrutiny on the notion of motion, causality, potency and act in the manner given by him. Therefore, the *Metaphysics* of Bahmanyār acquires theological content as well, however, in a manner that is not in total synchrony with Ibn Sīnā's understanding of causality of the world, who in metaphysics preferred to speak about God as the efficient cause of existence [Ibn Sīnā, 2005, 195,1–8] and thus the accent shifts from the motion to that of existence. The Necessary Existent is the cause in every respect (*al-Ilāhiyyāt*, VIII.3).

IV.5 Universal and particular

Universal and particular, multiplication and individuation, the difference between genus, matter, and specific difference, and definition are most of the topics examined in the fourth *maqāla* of the *Metaphysics*. However, Bahmanyār draws his first chapter from the psychological part of Ibn Sīnā's *Physics* and its topic is perception. This is in order to provide an epistemological background for the following discussions.

Chapter 1 opens with a statement that the non-existent in the concrete things is still something that belongs to existence and must have some kind of existence, because alternatively it must exist in the soul. For instance, the form of a house that a builders wants to build exists in his mind, otherwise, this form would not cause the existence of a house in the concrete things. Abstracted knowledge is called an 'intelligible object' (*mā'qūl*) and it can be predicated of all individuals like 'whiteness', which can be predicated of everything white, while white cannot be predicated of anything else. An object of knowledge if it is mixed with something else is called a 'sensible object' (an object of eyesight, touch, smell, taste, auditory perception, or an imaginary or estimated object). In this relatively long chapter Bahmanyār elaborates on different forms and levels of perception and knowledge and underlines the unchanged knowledge of the Cause of causes and that Its knowledge has a general character. Further, he also mentions the acquired knowledge, which exists before the existence of the object of knowledge in the concrete things, i.e. the knowledge of celestial spheres, as well as the giver of forms hinting implicitly at the emanative cosmology of Ibn Sīnā.

Another central topic of this part is universal and particular. Something universal taken as a certain nature as such, for example, a man *per se*, is one thing, and insofar as it is potentially or

actually something common or specific, one or many, is another thing. There is no universal in existence, it exists in actuality only in the intellect or the soul, namely, as an intelligible form. Humanity in the intellect is simply humanity, and the intellect creates a relation between it with a certain multitude. Moreover, humanity is not defined as a genus, a species, an individual, or something multiple.

The rest of the *maqāla* is about multiplicity, individuation, genus and matter, as well as specific difference. The reason for multiplicity among particular beings is prime matter since the difference between particular beings is in their corporeality. On the other hand, motion also contributes to the multiplication of bodies since it is one of the reasons for origination. Furthermore, everything common is specified through specific difference or accident.

IV.6 Cause and effect

The fifth part of the *Metaphysics* corresponds to Treatise VI of *al-Ilāhiyyāt*, which is about causality – one of the central doctrines of the first philosophy. Bahmanyār starts his exposition with an epistemological perspective, namely one can obtain knowledge about the existence of anything through another thing and the latter can be known via the third thing. So the first thing is called cause and the second effect. Then Bahmanyār lists four Aristotelian causes: form, element (matter), agent, and finality. The formal cause is thanks to which a thing is actually what it is. The material cause – element is the one through which a thing is potentially what it is. The efficient cause is the one that bestows something existence. Here the author notices, in an Avicennian manner, that metaphysicians understand the efficient cause as the principle and source of existence (e.g. the Creator), and physicists – that which bestows not existence, but motion. And the final cause is for the sake of which the existence of a thing is realised. There are no other causes besides the ones mentioned. A cause is either a part of the existence of a thing, or it is not. In the first case, it is the part due to which the thing is what it is potentially, like wood in relation to bed, or thanks to which the thing becomes actual, like the form of bed in relation to the bed. If it is not a part of its existence, then it is either that for the sake of which the thing exists, namely finality, or it does not.

Chapter 2 speaks about existence from the perspective of causality. If something does not exist and then it exists for some reason, we say that it was ‘made’. Therefore, there is existence and non-existence, and there is existence after non-existence that is an attribute of this existence and is predicated of it. Existence depends on its cause insofar as it is not a necessary kind of existence and not insofar as it is preceded by non-existence. Every caused existence needs a cause and cannot remain after the non-existence of the cause, thus its need for a cause is a constitutive feature of its existence. Moreover, existence as such cannot differ in intensity and weakness or receive ‘more

perfect' and 'more imperfect'. It differs in three respects: priority and posteriority, self-sufficiency and need, necessity and possibility. The chapter concludes with the discussion of matter and form.

Chapter 3 is dedicated to the topic of finality, accident, involuntary, and unintentional, while Chapter 4 speaks about necessity, good, and existence, especially from the perspective of finality.

IV.7 One and plural

The last and shortest part of the *Metaphysics* is about plurality and unity, the finitude of bodies, numbers, causes, and effects, pleasure and pain, separate substances, the complete and above the complete. Like the previous *maqāla*, this one is also mainly derived from *al-Ilāhiyyāt*.

The identical concomitants of unity are either essential or accidental. From the accidental ones, there is one that is inherent in quality, and it is called 'similar', the one that is inherent in quantity is called 'equal', the one that is inherent in the relation is called 'corresponding', and the one that is inherent in the sides is called 'matching'. The substantial ones are certainly inherent in constitutive features. Of these, the one that is identical in genus is called 'homogeneous', in species is called 'alike', and in its specific features – 'matching'. The opposite of being identical is otherness.

Chapter 2 establishes that all bodies and numbers have a natural order and parts, and therefore, they are finite. Also, the efficient causes must be finite because the causes must go back to a cause that is not an effect.

Chapter 3 treats the topic of pleasure and pain. It states that there is no pleasure or pain where there is no perception. Perception can be bodily or intellectual. The object of perception is threefold: pleasant or unpleasant perception, or neither pleasant nor unpleasant. If pleasure is perfection for the perception, then pain is certainly an imperfection for the perception. The author further classifies different forms of pleasures and pains.

Chapter 4 gives the definitions of the following notions. 'Complete' – something that has an attribute, thanks to which it obtains perfection, its existence in itself becomes the highest perfection possible for it. 'Above complete' – has proper existence and has an excess, the existence of other things from itself, and it is the attribute of the Necessary Existent. 'Sufficient' – endowed with something by which it achieves its proper perfection, it is the attribute of the celestial souls. 'Insufficient' – needs something else that gives it perfection.

V. Conclusion

1. Ibn Sīnā was an encyclopaedic thinker whose works encompass the entire knowledge available in his times. He did not limit himself to scientific inquiries but also tried his talent in literature and poetry, by writing philosophical allegories and poems in different popular genres, the latter of which are less known and discussed, especially in the West. He even succeeded in putting his knowledge into practice by becoming the most famous physician of that period and a vizier. Therefore, the spectrum of his personality is extremely deep and manifold. Another mission through which he remained in history was teaching, although he had many students yet none of them was able to reach or even surpass his genius and glory. Bahmanyār among all his disciples is probably the one who stands closer to his master. An active intellectual interlocutor and companion of a long time his *al-Taḥṣīl*, the first *summa* to be written by a disciple in the history of Islamic philosophy, is the first milestone in the history of Ibn Sīnā's school. He is not simply a 'commentator' but an independent philosopher at the same time. He does not fit the label of a 'faithful disciple' but he is probably an 'inventive disciple' – the one who is mature and intellectually bold enough to disagree with his great master. It is thanks to this kind of endeavour that philosophy was able to remain a dynamic process, otherwise, the world would not have known Aristotle; he would be a mere shadow of Plato. In *al-Mubāḥaṭāt* and semi-legendary stories, we can see an image of Bahmanyār who tries to challenge his master and this tendency eventually and fully manifests in *al-Taḥṣīl*. Only Bahmanyār among the disciples of Ibn Sīnā was able to reproduce the *summa* project, where he presents and synchronously deconstructs the teaching of his master.

2. It is this dialectical or even contradictory nature of *al-Taḥṣīl* that makes this work a unique and peculiar specimen of mediaeval scholastic philosophy. The organisation of the second book – the *Metaphysics* of *al-Taḥṣīl* – is dictated by Aristotelian revisionism, a temptation from which suffered other disciples of Ibn Sīnā as well, that removes emanative and religious supplements and almost discards its theological and aetiological segments. Yet, on the other hand, the scientific profile of metaphysics is technically enlarged by logical and physical topics and eventually projected on physics, which is transformed into another science on existents becoming a certain supplement of metaphysics. This approach in the spirit of holism already shows the shape of future post-classical Islamic philosophy that is distinct for its lack of interest in mathematics and natural sciences and instead becomes extremely contemplative and inclusivist in terms of the distinction between physical and metaphysical.

3. The task of future research is primarily to study the rich and complex manuscript tradition of *al-Taḥṣīl*, prepare its meticulous critical edition, bring new and improved translations, and further focus on different parts of this *summa* to elucidate the idiosyncrasy of Bahmanyār's way of treating the same philosophical issues as his master did. Another task is to study thoroughly its *testimonia* scattered in numerous treatises of the succeeding thinkers and delineate the impact of his thought on the development of Islamic philosophy. The same should be said about the minor treatises attributed to him.

PART TWO

An annotated translation of Book Two (*Metaphysics*) of *al-Taḥṣīl*

Notes to the Translation

This is the first integral annotated English translation of Book Two (*Metaphysics*) of *al-Taḥṣīl* by Bahmanyār. The translation is prepared according to the Tehran edition of *al-Taḥṣīl* – the only edition available for now.

In general, I tried to keep the adherence to the Arabic text as much as possible so that one could note the characteristic of the original. Whenever a literal translation interferes with the meaning of a sentence, I give preference to less literal solutions to ensure the clarity of the text.

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Book Two of *al-Taḥṣīl*

On the Science called Metaphysics

In the name of Allah, the Merciful, the Compassionate

Praise be to the Lord of the worlds and blessings on Muhammad and his pure family

BOOK TWO

On the premises, which all sciences need, and it is the science called metaphysics, and it consists of six parts

PART ONE

*From the six parts that pertain to Book Two, i.e. the science called metaphysics, from the three books of which consists the book of *al-Taḥṣīl*. It is about existents, and it consists of thirteen chapters.*

CHAPTER ONE

On existence

You already know that the subject matter of this science is something common to all things, namely it is an existent insofar it is an existent, i.e. existence³⁵. It is known that a body's states insofar it is in motion or rest are studied in physics; the states of its measures insofar they are measures are studied in mathematics; however, the existence of neither of them is studied in those sciences. The

³⁵ Ibn Sīnā and Bahmanyār use the words 'existent' and 'existence' interchangeably, even though there is a specific difference between them, the former being a particular while the latter being a general meaning. The alternation of the terms *wuġūd/mawġūd* is also noticeable in manuscripts. See, for instance, Avicenn@. Philosophy on the Border of Civilizations and Intellectual Endeavours: Towards a Critical Edition of the Metaphysics (*Ilāhiyyāt of Kitāb al-Šifā'*) of Avicenna (Ibn Sīnā), 2.1.4 (available online at https://www.avicennaproject.eu/#/edition/ibn-sina-ilahiyyat_02_tr1/text, accessed online on 24 January 2023); or Bahmanyār, 1996, p. 279 and p. 281.

mode of their existence and of all other similar things is studied in this science³⁶. Therefore, the subject matters of other sciences are like the essential accidents of the subject matter of this science³⁷.

It is known that the subject matter of science is established at the beginning of each science through its reliable definition. However, it is impossible to define the subject matter of this science because it is the first in conception. Since it has neither genus nor specific difference and, generally, there is no such a thing more known so it can be known³⁸ through it, and no such a thing commoner so it could embrace it in its definition. A person who decides to explain existence, as if he is explaining something unknown, errs. For if someone says, ‘The reality of an existent is acting and being acted upon’, then he errs since these two are the kinds of an existent, and an existent is more known than ‘acting’ and ‘being acted upon’.

It is the same as if someone says, ‘A thing is that about which it is possible to give an account’. However, the possibility and account are known, and in the explanation of each one [the words like] ‘thing’, ‘something’, ‘what’ or ‘which’ are used. These, as you see, are synonyms of the word ‘thing’. Therefore, this kind of explanation is a sign of erroneous derivation.

Everything that we know we know either by the senses or the intellect. What we know by the intellect we know inevitably either by definition or by something else. Definition is necessarily consisted of common things³⁹, similarly, when something is known not by definition but by image or what is similar to it. In both forms of knowledge, it finishes with something common above which there is nothing common: either genus or something necessary conceived by itself, otherwise, there would be an infinite regress. The things, which fall under the common, are distinguished from each other either by a specific difference, or something received from a genus, or an accident, or a feature.

As for the establishment of the existence of the subject matter of this science, i.e. existence, it is superfluous. For if we say, ‘That is an existent’, then we mean by it two things, one of which is something that has existence, as if it is said, ‘Head belongs to that what has a head’. However, this is a metaphoric expression. In fact, an existent is existence and a relative is relativity; because existence is not by which something is among the concrete beings, but the being of something or its becoming among the concrete beings. If something were among the concrete beings with its being

³⁶ Cf. Aristotle, *Metaphysics*, 1026a, 1060b.

³⁷ This is because other sciences, like physics, do not demonstrate their own principles; they are demonstrated in metaphysics. See *al-Ilāhiyyāt*, I.3.

³⁸ *Tārīf* – a logical tool that helps to define a certain meaning through another meaning that is more known or evident.

³⁹ *Umūr* – ‘things’, as well as ‘matters’ or ‘states of affairs’.

among the concrete beings, there would be a regress to infinity, and the being of something among the concrete beings would not be possible. Therefore, the existence, which is a being among the concrete beings, is existence and the Necessary Existent by itself is its own existence⁴⁰.

Then, it does not follow from this that a being among the concrete beings is the being of something. However, proof and senses render it necessary that certain being among the concrete beings belongs to a certain thing and some [beings] is not connected to anything. For if the being among the concrete beings, which has no cause, were attached to a thing, then that thing would be the cause of that being, but we have assumed that it has no cause.

Then, know that existence is predicated of what is below it analogically⁴¹, not univocally⁴²; the meaning of this is that the existence, which has no cause, is preceding by nature the existence, which has a cause. Similarly, the existence of a substance precedes the existence of an accident. Moreover, certain existence is stronger while the other is weaker. It becomes clear that it is not correct to say, 'Existence is something common that is predicated similarly of the existence of man, donkey or heaven equally as zero and read'. You will learn that some bodies precede the other ones, and the meaning of this is that the existence of those bodies precede the existence of the others, not that corporeality precedes corporeality. Same as if we say that the cause precedes the caused, and its meaning is that its existence precedes the existence of the caused. Similarly, if we say that two precedes four and so on. If existence is not considered, then nothing would precede or proceed; the prior and the posterior and also the stronger and the weaker are like the constitutive kinds of existence, i.e. the existents.

It was made clear that existence is something common that is predicated of what is below not univocally but analogically. Therefore, it is predicated of what is below by necessary predication and not as constitutive predication. Its commonality is not the commonality of genus⁴³. If existence were predicated of what is below univocally, i.e. as constitutive predication, it would be necessary to be predicated of the Necessary Existent in itself and the rest of existents by constitutive predication. Then it would be necessary that the Necessary Existent in itself is distinguished from others by a specific difference, but this is impossible. For it is not necessary, that at the beginning of consideration, existence is the existence of a thing.

Predicating necessary concomitant is like predicating an accident of the nine categories,

⁴⁰ *Mawğūdiyyatuhu*.

⁴¹ *Ḥaml al-taškīk* (predication through the doubt) – a kind of predication that stands between homonymous and univocal predication, where an argument is based on a similarity in known respects to similarity in other respects.

⁴² *Ḥaml al-tawāṭū'* (predication through agreement) – a kind of predication in which the predicate is the constituent element of the thing, which is the subject of that predication.

⁴³ Because existence is not a genus and thus it cannot have species.

unity of its kinds, prior and posterior of their kinds, opposites of their kinds, a thing of what is below it, and so forth.

If existence is something common, it is necessary for its existence to be in the soul. Existence somehow exists in the soul, for it is like other conceivable meanings and which is an existent among the concrete beings.

The specification of each existent is through the relation to its substrate, namely it is constituted by its relation to its substrate and its cause, but not that this relation accompanies it externally. The existence of the caused is an accident and each accident is constituted by its existence that is in its substrate. Similarly, the state of existence: for the existence of a man, for instance, is constituted by its relation to a man, the existence of Zayd is constituted by its relation to Zayd, but not as if a thing is somewhere and then a relation happens to it externally, so it is embraced. Relation does not constitute it [existent], but the relation of existence to each thing constitutes it [the existence of an existent].

If it [existence] were a meaning subsisting by itself and the relation to different substrates accompanies it externally, then the relation would exist for the existent assumed to be subsisting by itself with that very existence. Then it would be necessary for the existence assumed subsisting by itself to be the existence of its relation to its substrate, but this is absurd. Therefore, the relation of each existence to its substrate does not accompany it but constitutes it. Whatever constitutes an accident, i.e. relation, is therefore an accident. The same is with the state of possibility. However, the existence that is without a cause is known to be not an accident, and our discourse is about the existence of the caused things.

The existents are meanings with unknown names, and their names are interpreted as ‘such existent’ or ‘the existent without a cause’, while common existence after all of this follows in mind, as if without knowing what quantity, quality, and other accidents are by names and descriptions, we say, for instance, about quantity, ‘It is an accident or an existent in a substrate’.

The relation of existence to its kinds is like the relation of a thing to what is below it, but the kinds of a thing, the names and qualities of which are known, are not like the kinds of existence. This is like the types of numbers: they are meanings with unknown names that are expressed by some of their necessary qualities. When it is said ‘ten’, it means a number that is divided into ten units by its features and necessary qualities.

So it became clear from what we said that the essence of the existent without a cause is not constituted of a genus – the absolute existence and a specific distinction that is paired with it. If it were so, then the absolute existence would be a genus and not a necessary quality. If it were a

genus, it would be predicated of what is below univocally, but this conclusion is impossible⁴⁴. If an agent bestows existence, then it bestows only its reality and its reality is its existence. It became clear from all of this that the existence of a thing is in the concrete beings and by which it is in the concrete beings.

Some people supposed that existence appears in the ten categories equivocally. If it were so, then the meaning when we say, 'Substance is an existent', would be that substance is a substance and so forth in other categories. If we said, 'Substance is an existent', the proposition could be either true or false, as if we say, 'Zayd is a scribe'. If we said, 'Substance is a substance', then either it is nonsense or a statement that could be neither true nor false.

What is the meaning of the statement, 'Substance is an existent by itself and accident is an existent through the other?' These two things have in common the word 'existent', and besides, the difference is 'by itself' and 'through the other'. The 'existent' necessarily embraces the meanings of substance and accident. If it did not embrace, then it would not be possible to differ one from the other that this is an existent in a substrate and that is an existent not in a substrate. If existence were not predicated of what is below it not by participation, then we could not say, 'A thing belongs to one of the contradictory sides'.

Existent is divided into the existent necessary by itself and the existent necessary by the other, i.e. possible by itself. The existent necessary by itself, which has no cause, as we will make clear, is one from all aspects. The possible existent is necessarily considered to be plural and it is divided into substance, quantity, quality, relative, 'where', 'when', position, possession, 'to act', and 'to be acted upon'. These are the ten categories⁴⁵. Possibility is not their genus⁴⁶ but a necessary quality. These categories are superior genera under which there are species, the species of species and so on till the species of species. The absolute existence has accidents like oneness and plurality, prior and posterior, causality and being caused, universal and particular. Below them are genus, species, specific difference, feature, accident, and so on about what the explanation comes below. In this book, we want to speak about the features of these meanings and to indicate the mode of their existence.

⁴⁴ Since the predication in this case should be analogical.

⁴⁵ Therefore, the ten categories could be applied only to possible and not necessary existence.

⁴⁶ Since possibility is a more general notion than the categories.

CHAPTER TWO

On thing, the difference between it and existence, and a clarification on non-existence

Thing belongs to the secondary intelligible objects, which are based on the primary intelligible objects⁴⁷, and its case is like the case of universal and particular, genus and species. Among the existents there is no existent that is a thing, but an existent is either a man or heaven, and since it is intelligible it follows that it is a thing; the same is with essence and existence in relation to its kinds.

Know that the reality of each thing, which is specific to it, is not the existence that is synonymous with affirmation. If you said, ‘A certain reality is an existent’, it would have a meaning that was unknown [before]. If you said, ‘A certain reality is a certain reality or a reality’, it would not be informative. If you said, ‘A certain reality is a thing’, it would also be not informative about something unknown [before]. For thing is not existence, however, it is connected to existence either in the concrete beings or in mind, otherwise, it would not be a thing⁴⁸.

It is absurd if someone says, ‘Thing might be something absolutely non-existent’, if only by ‘non-existent’ it is meant non-existent among the concrete beings. It is acceptable that a thing is established in the intellect while it is non-existent among the things outside [of the intellect]. If something else is meant by it, then it would be something false, there would not be absolutely any account about it, it would not be known except that it is conceived only in the soul. It is impossible to be a form in the soul that indicates something that is outside. How there can be an account about it, if an account is always about a thing that is real in mind? No account, neither positive nor negative, could be given about something absolutely non-existent. Even if a negative account is given about it, then again, it would be a judgement about something to which we can point. The indication to the non-existent, which has no form from any point of view, in mind is impossible. Then how anything could be said about non-existent?

The meaning of our statement ‘The non-existent is this’ is a non-existent has this description or this description exists in a non-existent. If that description exists for a non-existent, it is either

⁴⁷ Primary intelligibles (*al-maʿqūlāt al-ʿulā*) and secondary intelligibles (*al-maʿqūlāt al-tāniya*) are used by Ibn Sīnā in different contexts. For instance, primary intelligibles are self-evident and they are received from the active intellect without mediation, while secondary intelligibles are inferred through syllogisms and therefore depend on the primary ones. At the same time, Ibn Sīnā also states that primary intelligibles are abstracted first from what is perceived by the senses and the secondary ones are inferred from them.

⁴⁸ Therefore, a thing must have existence at least in the mind if not in actuality. For Ibn Sīnā existence is a necessary concomitant of a thing.

existent by itself or not. If it exists, it would be an existing quality for a non-existent, and to what belongs this quality exists inevitably. Hence a non-existent also exists. If there were a non-existent quality, how a non-existent by itself could exist for a thing? Something that is not an existent by itself cannot be an existent for a thing. Also, if this quality does not exist for a non-existent, then it would be negated. The being of the negated quality is also a judgement about an existent. However, if we say, 'This thing is in non-existence', its meaning would be that the thing exists in non-existence. As you see, all of this is false. Therefore, when a meaning is given only in the soul and nothing is indicated outside, the known thing itself is only in the soul. The assent that lies between the two conceived parts of the known thing, i.e. the subject and the predication, means that the nature of this known thing permits a known relation with the outside. However, when it is non-existent, there is no relation of it to the outside, and there is nothing known in the soul.

Those [mistakes] are done because of ignorance since accounts can be given on the meanings that exist in the soul, while they can be non-existent in the concrete beings. The meaning of accounts about them is that they have a relation to the concrete beings, either negatively or positively. It is said about this, 'The past time precedes the future or the past precedes the present'. The prior and the posterior belong to the relative, but existent and non-existent are not relative to each other.

It is known from this that a non-existent does not return because it is the first thing given about existence. Since if you say 'returning', then it was already given an account about something existing. Otherwise, there would not be any difference in nature between the returning and the forthcoming, because the returning is something that was described in non-existence, since it was an existent and then absent while it is described as returning. Without doubt, then it is possible to indicate it. The anticipating by nature is something that has not this quality in the state of non-existence. You understand that all of this makes necessary a non-existent to be existent.

CHAPTER THREE

On possible, necessary, impossible, and on truth and false

It is difficult for us to explain the state of necessity, possibility, and impossibility except by way of indication and the evidence that comes from a sign⁴⁹. In fact, you say, 'Possible is not necessary and, therefore, if it is assumed to be an existent, there is nothing absurd about it'. Then you say,

⁴⁹ Cf. *al-Ilāhiyyāt*, I.5.

‘Necessary is something that cannot be assumed as non-existent; it becomes absurd if it is assumed to be something contrary to what it is’. Then you say, ‘Absurdity is necessarily non-existent or something that cannot exist; impossible is something that cannot be or something that necessarily is not; necessity is the impossibility of non-existence or not possible not to be; possible is something that is not impossible to be or not to be, or something that is not necessary to be or not to be’. All of these, as you see, is an obvious circle.

The first that is conceived among them primarily is necessity because necessity is the assurance of existence and existence is more known than non-existence since existence is known by itself and non-existence is known somehow by existence.

As for truth, it is understood by it an existent among the concrete beings generally, a constant existent, the state of a statement or a belief that refers to something external when it [statement or belief] corresponds to it⁵⁰. So we say, ‘This is a true statement, and that is a true belief’. This meaning of ‘truth’ corresponds with what is ‘correct’. It is correct according to its relation to a thing and true according to the relation of a thing to it. The truest of the sayings are the ones that are constantly correct, and the truest of them are those that are primary, constant, and necessary. It is the statement that is not between affirmation and negation, and all sayings in the analysis result in it. This feature belongs to the accidents of an existent insofar it is an existent, and it is common to all existents.

If someone denies this, he could be silenced when asked, ‘When you speak do you mean something by your words or not?’ If he responds, ‘When I speak I do not understand anything’, then he contradicts himself. If he responds, ‘When I speak I understand by words everything’, then he leaves reasonableness. If he says, ‘When I speak I mean one obvious thing or a certain number of different things’, he has arrived at a degree of reasonableness. If that plurality coincides with one meaning, it [the word] also refers to one meaning. If it is not so, then there is a homonym, and it is possible to individuate a name for each one from this sum. If a name refers to one thing, like a human, then this name does not refer to something that is evidently not a human. Otherwise, if human refers to something that is not a human, then human and elephant are the same thing. If everything is everything or not any single thing is itself, then it comes out that there is no understandable discourse, it appears that there is no word, speech, doubt or proof. This is an example of someone who defends those words.

As for an obstinate person, it is appropriate to force himself into a fire, if fire and non-fire is the same; or hurt himself with a strike, if pain and non-pain are the same.

⁵⁰ Cf. *al-Ilāhiyyāt*, I.8.

CHAPTER FOUR

On the definition of substance and accident

Know that the existence of a thing can be by itself, like the existence of a human as a human, and it can be accidental, like the existence of Zayd as white. Let us consider the existent by itself. We say, 'The existent by itself is divided into two kinds: one of them is the existent in another thing (this other thing is by itself something realised in subsistence and species), but not like an existent that is a part of it and cannot be separated from that thing. This is distinguished by the name of existent in a substrate and it is an accident. The second existent is not in a thing among the things with this quality. It is not in a substrate at all and it is distinguished by the name of substance. If an accident exists in an accident, like speed in motion, straightness in line, image on surface, it is again another thing that subsists the two accidents or a substrate that is a substance. It was described that accident is an existent in a thing, not like a part of it and its subsistence cannot be without that in which it is. This description is in agreement with the book of *Categories*, the well-known viewpoint, and our affirmations mentioned above'.

Our statement 'it is an existent in a thing' occurs in many things: in some of them univocally, in some analogically and in others equivocally. This word does not occur in all these things except as a homonym, I mean if it is compared to all of them. This is a kind of clarification as when a name is clarified by a more famous and known name. This happens because most people know the things of which it is said, 'It is in something'. We want to clarify that our statement 'an existent in something' means not this and not that, and there remains only the description of an accident. The elimination of doubt from the homonymy of words happens either by definition, description or the negation of internal meanings of homonyms till there remains something not by itself, but the negation of something that it is not.

The statement 'an existent is in something' creates a difference between an accident and the state of the whole [that is] in parts. The existence of whole in parts is a metaphoric expression. It cannot be said about the whole that it is in the sum of parts because it is by itself is the sum of parts. A whole is a complete form that exists in its parts and not in one and another separately. Ten is a whole, and it does not exist in units separately. If the parts are complete and unified, only then the form of ten is acquired.

The statement 'not like a part of it' creates a difference between that and the existence of part in whole, between the nature of genus in the nature of one species due to which they are both natures, between the existence of the commonality of species in the commonality of genus due to

which they are both common, between the existence of matter in a composite and form in a composite.

The statement ‘the subsistence of something cannot be separated from it’ creates a difference between an accident in its substrate and between the being of a thing in time and the being of a thing in place. A temporal thing is not separated from the absolute time and a located thing from the absolute place. Some bodies cannot exist except in the place where they are, like the moon, which is in its sphere. However, by our statement ‘its separation is not possible from where it is’ we mean that each concrete existent that you take in a concrete thing, where it is an existent, it cannot be separated from that concrete thing. Moreover, the cause of its subsistence is that it is in it [a concrete thing] not to be something necessary after its subsistence is in actuality.

The existence here is considered in a way that the existence of an accident as such is the same as its existence in a substrate. It is not the same with the existence of the moon in its sphere, a thing in its time and place. However, a thing is in the absolute time according to the estimation and our discourse is about existence. As you know, among the existents there is nothing except concrete beings that exist in concrete beings all of which are individual. From the perspective of the estimation, many of the accidents could be separated from substrates, like the surface, which exists in the estimation without a substrate. As for the moon in its sphere, the cause of the existence of the moon’s nature (insofar it is the nature of the moon) is not its being in its place, just like the cause of the existence of an accident is its being in its substrate. Being in time and place is not existence in a thing. However, the being of an accident in a substrate is existence in it. It is different from being in place and time. Being in time and place is an accident like whiteness and existence occurs to it externally. Whiteness exists in its substrate in a way that it [existence] occurs to it externally. Thus, being in place and time exists in their substrates by the existence externally, and they [being in time and place] are not the same existence.

The statement ‘not like a part of it’ means not like a part of a thing in which it is, not like a part of what it is composed and of its substrate, as [the relation] between whiteness and white. The existence of a form in its carrier is not like the existence of an accident in a substrate. The carrier of a form is differed by the name of ‘locus’⁵¹. Locus is something whose species is not fulfilled while being an existent, rather it subsists in actuality by something that fills it or something that becomes species since it fills it. Therefore, form is not an accident, although its existence is in a locus. As for the scent, which is considered to come from apple and transmit into the air, and the heat, which is considered to come from fire and occur in water, the case here is not like it is supposed. This kind of transformations happen because of the existence of other heat in the water in which the heat

⁵¹ Prime matter.

participates, a different scent is occurring in the air by participation in the form. In sum, what is mentioned cannot be established through the mode of transmission.

Since it was clarified that a thing, existing by itself without any need for a substrate, is a substance, and if it needs a substrate, it is an accident, there cannot be anything that is a substance in relation to something and an accident in relation to something else. It is true that a thing might be substantial in something in the meaning of essential, and this thing can be a substance and an accident. It can also be an accident in something in the meaning of accidental, which is related to substantial, not in the meaning of accident, which is related to substance. One will be struggling in this till he struggles his ignorance about the accidental and the other [meaning of] accident.

Then, accident is not a genus of the nine categories. If it were a genus, it could be derived from their definitions, and there would not be any doubt in their conceptions with the definitions that they are accidents. However, this is not the case. Many of the accidents, like quality and quantity, are considered to be substances till their accidental nature is established by proof. Therefore, the existence of a thing in a substrate belongs to the necessary qualities of the nine categories and not to their constituting qualities. You know that the definition of accident is something that exists in a substrate, it is known in relation to its substrate from existence. Existence is not included in the definitions of quiddities.

Some people assumed that there might be one thing under many genera from different viewpoints. This is because of their ignorance of the truth that each thing has one essence, and it is impossible for one essence, insofar it is an essence, to be included in one and another category. Since if it constituted in its essence that it is a substance, it would be impossible to be constituted as non-substance. However, it can be included in one category essentially and in another accidentally, and it is not included in another [category] as species are included in genus because an accidental thing cannot constitute the substance of a thing, neither it cannot be a genus for it. What cannot be a genus for a thing cannot be a category for it.

There is one issue to be noticed: not for each group there is a category, but there is a category for that what has the existence of species, like the addition of specific difference to genus. The being of a thing with whiteness is not of this sort. For whiteness does not constitute a genus in actuality as rational constitutes an animal and just like species is derived from the composition of prime matter and form. Prime matter has no constituting existence in actuality, and then it acquires form accidentally while it does not partake of its constitution, nor it impresses its becoming as something in actuality. The issue here is not like the issue with white because whiteness has no influence on the becoming of a white body as something in actuality.

CHAPTER FIVE

*On priority and posteriority; on the substance predicated of matter, form, and body; on the existent taken in the definition of substance; on the universals of substances being substances; on the kinds of substance*⁵²

It might be said: ‘You have said that existent is not a genus because it is related to what is below it by priority and posteriority’. Then it is also necessary that substance is not a genus for prime matter, form, and body since form and prime matter precede body in nature. Substance is not predicated of them on the same level but by priority and posteriority.

We say that priority and posteriority in a certain meaning are either in the concept of this meaning or in another concept. As for the first one, for example, the priority of substance over accident in the meaning indicated by the word ‘existence’. The existence of substance is prior to that of accident. Substance is a cause that is predicated because accident is an existent with conceptual meaning that comes from existence⁵³.

As for the second, for instance, the priority of the human, who is a father, over the human, who is a son. Both of them are under the species of humanity. Father is preceding in time and in existence, but nor time and neither existence is included in the meaning of humanity. As for the definition of human, for both of them it is on the same level. However, the existence of humanity is for the one before and for the other after in time, not because they are humans but because they exist. In sum, the thing that makes Zayd, who is the son of ‘Amr, a human is because his quiddity is human and not that his cause is human or his father and so on. It is not impossible not to be an existent while having a cause to exist.

It is true that genus is said about its species on the same level, while they participate in its conceptual meaning, yet they differ in priority and posteriority in another concept. The same is in the case of the relation of prime matter and form to body. Prime matter and form are not the causes of body’s being as substance. Body is said to be a substance because of its essence and not the cause of its substantiality. However, in its existence it needs causes. The substantiality of a thing is not that it is the substantiality of the cause of the substantiality of something, so body becomes a substance because of the substantiality of matter and form. I do not say here as an existing substance, for prime matter and form are more disposed to existence than body. However, they are

⁵² In this and the following chapters the categories are discussed according to the logical part of *al-Šifā’*.

⁵³ This implies that existence is a part of the definition of accident.

not more disposed than body in order to exist not in a substrate, neither they are more intense than it. Intensification is in essence, but disposition in existence.

Our description of substance that it is an existent not in a substrate does not mean the existent that is an existent insofar it is an existent. If it were so, it would be impossible that the universals are substances. This is because they [the universals] do not exist in the concrete beings as we will clarify; their existence in the soul is like the existence of a thing in a substrate about which we will remind after. The meaning of ‘an existent not in a substrate’ means that it is necessary that if it existed among the concrete beings, its existence would not be in a substrate. You should be aware that you are judging about some kind of substances whose existence you are doubting: it is a quiddity and if it existed, it would have existed among the concrete beings, not in a substrate; you know that this is a constituting thing of its reality, but you do not know whether it is an existent among the concrete beings in actuality or not.

Therefore, if there is a thing, whose quiddity is existence and it is free from substrate, it would not be in a genus and would not participate in a substance, so that they are things and meanings that existence accompanies. There is no constitutive thing for what is free from substrate absolutely, and for the species of substances as well, because there is no quiddity accompanied by existence. ‘An existent not in a substrate’ is not predicated of it and substance like genus is predicated of what is below it. Existence does not appear in things univocally but analogically. ‘Not in a substrate’ does not bestow existence univocality, neither does it remove from it analogy.

Substance is a thing whose quiddity is that if it were among the concrete beings, it would not be in a substrate. You should understand from this that substantiality is a necessary quality to what is below it, just like with accidentality. If it is so, then human is a substance according to his reality and because he is a human. What accompanies him from qualities like individuality, commonality, and the firmness in mind are necessary qualities and accidents that do not fail his substantiality, and hence his essence.

The individuals among the concrete beings are substances. The intelligible universal of substances is also a substance. Then it is correct that it is a quiddity; if its reality were in existence, it would be among the concrete beings and not in a substrate. However, not because it is an intelligible substance, for an intelligible substance, as you will know, is an accident that appears in human. As for its quiddity, it is the quiddity of substance. What is similar to substance according to its quiddity is a substance.

Similarly, the definition of species, insofar it is nature, and the definition of genus, insofar it is also nature, are predicated of individuals about which there is no doubt that they are substances. What is common to them in their definitions is a substance. If they were substances only because they exist among the concrete beings, then the substantiality of things would be accidental to their

quiddities. We already clarified that existence is accidental. If the accidents were making something a substance that is not a substance in itself, the substantiality would appear in what is not a substance in itself. Therefore, it is impossible. The universality of substances are substances in their quiddities, not in their being as universal or particular. If there is a substantiality of human because he is Zayd, then ‘Amr would not be a substance. Therefore, his substantiality, and the substantiality of Zayd, is because he is a human.

So it is known from this that the genera of substances are substances and they are [substances] by themselves, not because they are essences. The same is with the issue of specific differences. The logical specific difference, like rational, is predicated of what is below it because it is what it is. As for simple specific difference, like reason, it is a part of substance. What is a part of substance must be prior to substance, what is prior to substance cannot be an accident; since substance, as you learned, constitutes accident. What constitutes a thing precedes it and substance precedes accident. It is known from this that accident cannot be a cause for the existence of substance. For the cause must precede the caused.

Then, substance is either simple or composite. A simple one is either not included in the constitution of the composite, while it is separated and distant from matter, or it is included in its constitution. The inclusion into its constitution is either like the relation of the image of door to the door, and it is called form, or like the relation of wood to door, and it is called matter. Matter, considered alone, is something that is not actual but potential existence for the composite, while form makes the composite what it is in actuality through its realisation. We have to establish all of these kinds [of substances], i.e. a body composed of prime matter and form, the two mentioned parts, and the substances separated from matter.

CHAPTER SIX

On the primary, secondary and tertiary substances, and the qualities of substance

Know that individuals are primary substances, in a sense that they are primary in substantiality and they precede other substances⁵⁴. You already know that this first kind cannot be predicated like genera are predicated of what is below them. To be primary in substantiality is like the establishment of the thing considered to be a substance as a substance, and it is like a realisation

⁵⁴ This idea is a bedrock of the critique of the Platonic theory of ideas.

among the concrete beings and not in a substrate. This is also from the viewpoint of perfection and virtue⁵⁵ because the aim in nature is oriented towards the existence of these individuals. The acts and the states, which must be realised, are derived from them and for them. The acts, as we will explain it, are coming from the individuals. They are also called first because the first what is known is an existence that is not in a substrate – particular individuals. The species are called secondary substances since they refer to the primary substances in a more complete way than genus. If you were asked what Zayd or ‘Amr is, and you say, ‘A human’, then the answer is more complete than saying ‘animal’. The genera by this comparison are called tertiary substances.

One of the qualities of substance, in comparison with many other categories, is that it can not be ‘greater’ or ‘lesser’ [degree]. There is no excess or lack in the nature of species. A human cannot be more human than another [human]. A certain type of quantity shares this with it [substance]; similarly, ‘when’ and a certain type of quality. Probably, all categories share this, as you will learn later.

One of the qualities of substance that it could be indicated. Indication is a sensuous or intellectual reference to a thing, which is not shared by something else. Accidents, if they are distinct and multiplied, could be indicated with a sensuous indication. Everything that is distinct and multiple is something in matter to which it belongs, and we will explain it later. As for the indication, known as intellectual, it is not related to individual accidents according to the first intention, but the second intention, as it is mentioned in the book of *al-Burhān*, where we speak about the knowledge of eclipse. This is not a true indication because what is indicated is not shared by something else, while the intelligible can be predicated of many, and no accident is worse of being predicated of something else.

As for the secondary and tertiary substances, they cannot be indicated. You do not think that if you have indicated to Zayd, you have indicated to human [in general]. If human were predicated of Zayd alone, then each human would be Zayd. However, universals do not refer to that what is indicated but to each thing that coincides with what is indicated.

Then, some of the universals are giving to what is indicated the meaning of being by which it is distinguished, like the species; while others do not give it, as substance, which is the genus of genera. If this is distinguished, I mean the second kind, it would be distinguished by essence regardless of whether it is below the common or not. Otherwise, the distinguished would be distinguished by a specific difference under genus. This distinguished one, I mean the first kind, is not said of species except accidentally because another distinguished one precedes it, and it is a

⁵⁵ *Faḍīla* – a term that corresponds to the Greek *arete* signifies not only high moral standards but its natural goodness, usefulness, and desirability.

specific difference.

It is among the qualities of substance that the same [substance] by itself can be a substrate for opposites due to primary change in it that takes place in something that is not related to something else; or due to a change that is not subordinated to the change in something else by the mode of relativity, not like the assumption, which can be once described as true, and if the thing, about which this assumption takes place, is changing, then it is described as untrue. What changes primarily is the thing, and as for the assumption, its relation changes to the thing. However, the change of relation is not the change of the essence of the thing. Therefore, this change is not in the assumption primarily. The intellectual substances do not share this quality because the intellectual substances do not change, and what does not change, does not receive opposites. The secondary and tertiary substances as such do not [receive opposites] because a whole embraces each individual. It is not true that each individual is white and each individual is black.

It is said, 'If a universal accident receives two opposites, like colours, then it is black and white.'

It is rejected that the colour, which is black, does not receive white, so the black is detached from colour and the white covers it. However, it is said that colour receives opposites in the sense that it is this and this. The nature of colour is abstracted in the estimation, and it receives in the estimation whatever specific distinction you want. Yet the discussion is not about this, but about the reception, which is in existence, and the reception, which is one receiving thing. If a universal received both of them, then each colour would be black and white. If the nature of colour received black and white, it would not be black and white, but blackened and whitened so one colour would not be black or and the other white, but both of them would succeed each other without being together.

The most specific quality of substance is that it has no opposite. This is correct, if by oppositions it is meant the successions in the same substrate and between them there is an extreme contrariety. If by substrate it is not meant the substrate of accidents, but something commoner, like locus, then substance has an opposite. The form of fire is opposite to the form of water. Some species of quantities share this [the most specific quality of substance] since there is no opposite to three or four.

Another quality follows this quality: substance does not receive greater or lesser [degree] because increase and decrease terminate with the termination of opposition in something that does not take place from one into another by motion. Not all oppositions are from one thing into another by this way, but sometimes it is immediate. This is the opposition, which is in substance, and we will clarify that the being of substances is immediate, that motion does not appear in the substances, that the issue is different from something that is in the transition from black to white.

Increase and decrease exist while there is motion. Thus, a substance is not stronger than another substance and is not weaker than another one. I mean by this that there is no substance that is more worse in substantiality than another substance. The primary substances are primary in substantiality than other substances, but they are not stronger in substantiality. The primary is related to the existence of substantiality and the stronger to the quiddity of substantiality.

CHAPTER SEVEN

*On the definition of body*⁵⁶

The first kind of substance is body. There is no need in its establishment because it is perceived through the senses. However, there is a need when it comes to its definition and the indication of the mode of its existence. It is conventional to define it as a substance that is long, extended, and deep⁵⁷. It is said sometimes, 'Length is just any line'; and sometimes it is said, 'Length is a bigger one from the two lines that embrace a surface by measure'; it is also said, 'Length is a dimension considered between the head and the foot of an animal'. As for 'extent', it is called the surface itself, the shortest of the dimensions by measure or the dimension between the right and the left sides. 'Depth' is said to be the dimension between surface and bottom. It is also said that its beginning is derived from the upper level, even if it starts from the bottom, and it is called thickness.

It is not necessary that in each body there is a line in actuality. A sphere has no lines in actuality, and an axis is not determined in it when it is not moving. For a sphere to become a body it is not important that it is moving till it appears in it an axis and a line.

Also, for a body as such it is not necessary that there is a surface in it, but [it is necessary] insofar it is a finite body. There is no need in its realisation as a body to be finite. However, finitude is a necessary accident of it. A person who conceives of body as not finite does not conceive of a body as non-body, and he does not conceive of non-finitude except by conceiving of a body. The mistake here is in the affirmation since it is necessary to know the finitude of bodies by a demonstration. As for conception, it is not impossible to conceive of a non-finite body; since if there is no finitude included in its conception, then it is not its constituting element. It is, therefore, a necessary accident of it.

⁵⁶ Cf. *al-Ilāhiyyāt*, II.2.

⁵⁷ Cf. Aristotle, *De Caelo*, 268a.

Then, it is unavoidable for a body in its realisation as a body to have a surface, and the body has one surface that covers it, which is a sphere. It is also not from the conditions of body, in order to be a body, to have differentiated dimensions. A cube is also a body, but there is nothing in it that is long, extended or deep.

It became clear from what we said that these dimensions are assumed to be in the bodies and not in actuality. The true definition of body is that it is the substance, which is possible for you to assume in it dimensions however you wish. So that will be the principle, one of which is length; the other one, which crosses it vertically, is extension; and assume that there is the third one, which is crossing these two vertically, so the three come across in one position. The being of body due to this aspect is something that is indicated as long, extended, and deep. As it is said, 'Body is divisible in all its dimensions', and it is not meant that it is divisible in actuality, but that it is assumed to have this division in it while body by this is what it is'.

Then, the other assumed dimensions in it are between its finite sides, figures and positions that are not the things that constitute it, but they are submitted to its substantiality. Probably, some of the bodies necessarily need some or all of them, and probably, while the others do not need any or some of them. If you take wax and shape it in a form that is assumed to have dimensions of limited measure in actuality, and then if you change its form, there would be nothing left in actuality as one individual thing. However, there would be other dimensions. These dimensions, which change in body, are from the category of quantity. Corporeality in reality is a form of connectedness in which the three dimensions could be assumed. It is not a measure or mathematical corporeality.

The body, which is considered in mathematics and known as a mathematical body, is a corporeal form taken by measure and diverted from matter. Body as such regarding corporeality does not differ from another body as something smaller or bigger, and it is not related to it on the same level or counted by it. This belongs to it insofar it is a measure, and this consideration is not taken in corporeality. That is why often the same body is rarefied and condensed by heating and cooling so the measure of its corporeality is changed. However, the corporeality, which we mentioned, does not differ and does not change. Some bodies, like a sphere, have one measure and it is not necessarily their constituting element. However, it might be a necessary accident, like the blackness of an Ethiopian, and like this, some bodies retain their non-changing figures.

CHAPTER EIGHT

On the theories of people about the mode of body's existence; on the establishment of prime matter and form; the indication to the meaning of continuity and discontinuity

People who think about the mode of body's existence hold three theories. Some of them say that body is simple and not composite, while some say that it is composed of indivisible particles, and the others say that it is composed of matter and form. As for the disproof of someone speaking about the simplicity of body, I say that it either means discontinuity (if the form of body were discontinuous, it could not be assumed to have the three dimensions), or it means continuity, whose meaning is homonymous. One of them means that the form of body can be assumed to have the three dimensions. It includes the specific difference of quantity and also that what is not a specific difference. The one, which is the specific difference of quantity, is said about one measure in itself without being compared to another measure. Its definition is that it can be assumed to have particles gathered together with a common border between them. From the one side, it is the end for both parts of it, and from the other, it is the end for one of them, I mean when it is imagined as a sign closest to you as if it is the first to it and the end for the other. This whole is called continuous. The condition here is not that there can be a division or border in actuality, but the condition is its possibility in the estimation.

The opposite of this continuity is discontinuity. It cannot be assumed having parts [in a body] gathered together in a common border and which is the end for both parts; this is not necessary to be actual in discontinuity. This is because each single body of the two is the same in this respect. None of them can be a part of the whole except by assumption. It does not follow that if there are two bodies, then there are two parts. Due to this, it cannot be said that if the unity of body disappears, it can be by the disappearance of the continuity of the parts. In the same way, if many bodies are made as one body, it is due to the disappearance of the discontinuity of the parts and the appearance of continuity in them. This is because the discontinuity, which disappears after the unity of the many, is potential and by assumption according to what we mentioned previously. The disappearance of the unity in body brings parts, which had not existed in body in actuality.

The error regarding discontinuity happens due to the replacement of potentiality with actuality since each one of these bodies is not a part of body except by assumption and not in actuality.

If it is asked, 'What do you say about one by nature body like one tree? Is not each body in it a part in actuality, for instance, like fire or water?'

We reply that the error here is in the replacement of accident with essence. The unity of a tree is not a quantitative unity, so all bodies in it can be an actual part of all the quantity. Its unity belongs to the other kind. Each body is a part of one tree not according to one quantity but because a part in it is in potentiality and the unity in actuality. It is clear from this that the disappearance of plurality is not by the disappearance of discontinuity in actuality and that the disappearance of the unity of bodies is not by the disappearance of the continuity in actuality. We will speak about continuity, which is not a specific difference, in the chapter about quantity.

The form of body is either continuity or nature from which follows continuity. In all cases, a body may exist continuously and then discontinuously, since each body receives discontinuity and division to infinity, as we will explain it, and it is not impossible that there is something potential that is either of them. The potentiality to receive is neither the form of receiving nor of what is received. The continuity insofar it is a continuity does not receive the discontinuity, because the one that receives discontinuity does not vanish with discontinuity, but continuity does vanish with discontinuity. Therefore, a thing that is not continuous receives discontinuity and it is as such receives continuity.

It is clear from this that there is a substance without corporeal form to which discontinuity and continuity appear in succession. It is associated with corporeal form, and due to it, one body becomes multiple. For one idea as such does not multiply by itself, but it multiplies through a different cause while remaining in both states.

This substance must be something in potentiality and have no existence in actuality by itself. For instance, when you take wax or a piece of clay and multiply it into pieces and then unite one with another continuously, the waxiness and the clayiness still remains in both states. If we remove [in mind] the waxiness and the clayiness, what remains common to them is prime matter. What is common here cannot be common and not receive wax and clay. If it were so, it would be common in a sense like 'animality'. Waxiness and clayiness are the things that are in actuality because they are the principles of the things that flow from them. Their beings in actuality without this continuity would be either corporeal, and it is impossible, or intellectual, and it is also impossible. For something purely intellectual does not receive dimensions, as we will explain it. It became clear that there is no existence in actuality for the receiving one.

Know that it might be said, 'A door is not a wall, and a man is not a horse'. This 'non-existence' is in the mind when there appears together door and man, and then there is a comparison between them: one is negating the other, and it is affirmation and negation. The non-existence, which is not related to the mind, must have a mode of existence and be a non-existent idea. It is not an absolute non-existence, but the non-existence of something that is generally by itself has either due to its genus or species. However, it does not have it in actuality, as it was mentioned previously

in the *Categories*. The absolute actuality as such, insofar it is actual, is the actual non-existence of something else only if there is something composed in it. We do not refute this since it is possible that there is a reality with duality: on the one hand, it is actual, and on the other potential. If we say that A is potentially B, the meaning is that A as the non-existence of something does not have B or it is B. It is unavoidable for A to be a non-existent idea, as we mentioned.

Body insofar it is a body has corporeal form and it is an idea in actuality⁵⁸. Since it is predisposed to receive whiteness, blackness, motion, and other things – whatever predisposition you want – it is in potentiality. Body as something potentially moving is not something that is continuous in actuality, but something else. When someone conceives of corporeal form, he does not conceive it to be potentially like something. A thing, when it is in potentiality, is not the same thing as it is in actuality, but it is something else. Potentiality for a body is not something that is in actuality. For the form of body, which is actual, is associated with something else, something different to it as a form, I mean as actual. This association means non-existence, as we mentioned.

We say that body is able to receive many things: its potentiality should be either continuity itself or exist in continuity or exist in something that is associated with continuity or be something self-subsistent. If continuity were the very being of body in potentiality receiving many things, then by understanding continuity we would understand it as a predisposition for many things. Continuity is not something that has continuity. The relation of something that has continuity to it in its disposition [its reception] is like its relation to another thing that can exist in it. Also, if continuity were in potentiality to be something, then the form of body would be an accident. If continuity were a carrier for potentiality, then it would be necessary that it remained after discontinuity, since the carrier of potentiality cannot vanish when it leaves from potentiality to actuality. If this potentiality were self-subsistent, then possibility would be a substance, and you will learn that it is an accident. It remains that this potentiality exists in something that is associated with this sensuous continuity.

It became clear that after the succession of different measures in wax, there is something stable with the disappearance of measures and figures. It also became clear that this stable thing is a substrate of these things, and it is a body in a sense that the three dimensions can be assumed in it. It was explained that this is the subsistence of body and it is a corporeal form. If we remove it, then the corporeality will also be removed, while it is not the same with waxiness and other things. It is clear from the possibility of assuming the three dimensions in it that it is continuous. It also became clear that after the succession of continuity and discontinuity in waxiness there is something stable at times with discontinuity and at times continuity, and it has existence in potentiality. Just like corporeality is established through the succession of measures and figures in waxiness, similarly,

⁵⁸ Cf. *al-Ilāhiyyāt*, II.2.

through the succession of discontinuity and continuity there established the existence of something in what both of them appear. We will explain later that something that has continuity and discontinuity has no subsistence and existence in actuality, except by the continuity, which is a corporeal form, i.e. something because of which it can be in body assumed with the three dimensions.

Since this was made clear, then it is correct that corporeal form is a substance because it is not in a substrate. If it were in a substrate, then matter would be something in actuality.

Body is a composite substance: from a thing that has potentiality and from a thing that has actuality. The one that is in actuality is its form, and the one that is in potentiality is its matter and it is prime matter. If a body, in the sense of matter and not of genus, differs from another body because one of them is hot and the other is cold, or one of them is a human and the other timber, this difference between the bodies is not like the difference between the measures that one of them is a line and the other a surface. Measure does not have existence or subsistence, except by being a line or a surface. The association of the form of human or the form of timber with a body is not like the association of the specific difference of line or surface with measure. Corporeality is conceived to exist due to the causes, which it has, and it exists through them or in them like only corporeality and nothing more. Measure is not conceived to exist but only as a measure and nothing more since measure itself needs specific differences, so it exists as something realised. Those specific differences are essential for it, and it only becomes through their realisation but a measure as such. It is possible for a measure to differ from another measure in something that it has as essence.

As for the form of body, it is one nature where there is no difference. An abstract corporeal form does not differ from the other abstract corporeal form by a specific difference included in corporeality. What accompanies corporeality accompanies it as something external to its nature. It is not possible for one corporeality to be in need of matter and for another corporeality not to be in need of matter. External accidents do not free it from the need of matter since the need of matter is for corporeality due to itself and insofar it is corporeality. It is not corporeality due to accidents.

It became clear that all bodies are composed of matter and form. This explanation is completed with the assessment of the fact that bodies can be divided to infinity. For the explanation is built on continuity and discontinuity. Until it is not explained that in the potentiality of body there is a division to infinity, it cannot be correct. Let us now disprove the words of those who say that the bodies are composed of indivisible particles.

CHAPTER NINE

*On proximity, adjacency, contiguity, and so on*⁵⁹

We say that two proximate things are those that do not have something from their genus between the first of them and the second one, for instance, proximate houses⁶⁰. There can be a coincidence of species and a difference of species. As for a contiguous thing, it is when there is no position between its edge and the edge of that which is called something that is touching it. Two contiguous things are those whose edges are not together in a place but in a position to which it can be indicated. The edges are not in a place as such; rather they have a certain position. Position is when something can be indicated as being in a certain direction. Two contiguous things are such that it could be pointed to their edges together.

If one of two things passes over the edge of the other, so the latter takes it into itself as a whole, then it is penetration. Penetration is when something completely enters into something else, and such penetration takes place only if one of the two things takes into itself in its entirety what is called something that penetrates into it. If [this thing] is equal [to the other thing], then there is nothing in it that would not include it in it. If one of them is bigger than the other, then it includes an equal-sized [part of the first thing]. If anything accepts entirely something else, and the latter is not bigger than the first, then what is accepted by the second thing is also accepted by the first. Otherwise, if there are accepted things, something free from the first would remain, but it was said that the first accepts the other one entirely, and the second is not greater than it, which is absurd.

Therefore, when two things accept each other entirely, then what is accepted by one is accepted by the other, and none of them prevents the other from being contiguous. The mass does not exceed by the connection of thousands of them. It is as if there were a connection of a thousand points. When one thing accepts another, and it accepts something that is not accepted by the first, then there must be a remainder of what the first accepts, and this remainder must be accepted by the second accepting thing as something not accepted by the first. All this is self-evident to the intellect.

As for adjacency, it is the state of contiguous proximity insofar it is proximity.

As for an attached thing, it is a contiguous thing that follows another thing when moving so that it is difficult to separate them from each other.

⁵⁹ Cf. *al-Ṭabīʿiyyāt*, I.2.8.

⁶⁰ Cf. Aristotle, *Physics*, 226b–227a, 231a.

As for continuous, we mentioned one of its kinds above, and we will mention the other below.

CHAPTER TEN

*On the disproval of the statement that body is composed of indivisible particles*⁶¹

The adherents of [the theory about] particles have two opinions. One group of them says that body is composed of finite non-divisible particles and the other group says that the particles of body are infinite and all of them exist in it in actuality. As for the opinion of those who hold that bodies are composed of finite particles and each of them is indivisible, the disproval is what follows. Each particle that is touching another particle is occupying it by contiguity [and each one that is occupying another by contiguity is either not leaving it free from its occupation somehow or it does leave it]. However, if another one is touching it without touching the first one, then it is left free. So it happens that it is touching another one without touching the first one. Each one that is like this should be contiguous with something that is divisible by itself. Therefore, each particle touching another particle by this way should be contiguous with something that is divisible by itself. Thus, each thing that is indivisible is not touching except by mutual penetration, and each thing that is not touching except by mutual penetration cannot be a composite bigger than it, and there cannot be a composite body from it. That is why there cannot be a composite measure or body from indivisible particles.

Then, let us assume that two indivisible particles are placed on another two indivisible particles and between them there is another indivisible particle. We say that if each of the two things can move and none of them is preventing the other from motion and there is no mutual repulsion of power between them that distances them, then none of them will prevent the other in moving towards each other till they collide. Each thing like this is not prevented from moving till they meet colliding with each other. The assumed particles, if they are assumed like this, are not prevented from moving till they meet colliding with each other. Let us assume that they move till they collide. Hence, either they meet on the middle particle or they meet on one of the extremes. It is not possible that they meet on one of the extremes, because if they meet on one of the extremes, then none of them can move. Therefore, they meet on the middle particle. It is necessary that each of

⁶¹ The rejection of the atomistic theory developed by ancient Greek and supported by some Muslim thinkers, especially the followers of *kalām*. For a discussion of Ibn Sīnā's refusal of atomism, see Marmura, 1991.

them is crossing some of it. Then the middle particle becomes divisible and it follows that each of the moving particles is also divisible. So both of them are prevented from motion. What should be said then about two attached particles between which there is another particle? It follows that this is also impossible.

Then, if there is a body like the sun⁶² and on the opposite of which there is a body like the earth, where something is displayed, then while the sun is passing over a particle, the shadow of the displayed thing would be less than the particle.

Also, if a quern from iron or diamond is rotating, then there is no doubt that the motion of particles, which are around the axis, is slower than the motion of the particles in the circumference.

The adherents of particles defend this explanation by saying ‘leap’ and ‘fragmentation’. However, you know that then the particles of flour should be bigger than the particles of the quern. It is necessary that the measure of the quern is growing while the fragmentation takes place, but we do not see here any excess in its measure.

As for the theory of the adherents of the truth, nothing like this can ever be. According to them, the quern does not have a part that is the axis, except by assumption, and the circle, which is assumed around the axis, does not have existence in actuality. The circle, which is assumed around the axis, has the circumference only in the estimation. The body is one, then the motion is one, while proximity and remoteness are from the category of position. Where there is no particle in actuality, there is no position in actuality. So if there were something clung to the circle, which is around the axis, then it would move by assumption with the motion of the whole body, not with the motion of the circle around the axis. There follows from this other impossible things present in trivial books.

As for the proof of those talking about particles, it is the following⁶³: each body is receiving division, and if it is divided, then its particles can receive composition. If this is so, then in each body before division there is composition. The difference between bodies is in the difficulty and easiness of fragmentation, not because their genera are different, the difference in the agent, the absence of a thing or the things that they mention, but it is in composition.

As for their statement, ‘Each receiving thing has division and there is composition in it’, it is not sound⁶⁴ because if there is a division that distances one of the particles from another existent in actuality, it is sound that bodies have composition before the mentioned division. It was mentioned when we spoke about continuity sufficiently. Hence, division is the appearance of particles in

⁶² Cf. *al-Ṭabī‘iyyāt*, I.3.4.

⁶³ Cf. *Ibid.*, I.3.3.

⁶⁴ Cf. *Ibid.*, V.3.5.

actuality after being in potentiality.

As for their statement, ‘The difference between bodies is in the difficulty and easiness of fragmentation’, and the thoughts that they bring with it are not attainable. You know that in the book of *al-Šifa*⁶⁵ there is its disapproval and that these thoughts are not correct. So why there is no difference in the easiness of fragmentation and its difficulty by the cause through which composition differs in firmness and weakness, while there is the absence of difference in the particles from which a body is composed?!

They also say, ‘If there were no particle, then two bodies would not differ in smallness and bigness’.

The answer is that a body is not compared to another body by itself, but by the comparison of a comparing person who assumes a relation between them. The particles are there also by assumption, and this is not impossible.

They also say, ‘If it is correct that the division of bodies into particles is not finite, then in a mustard seed⁶⁵ there is enough to cover the surface of the heaven and the earth’.

This is outrageous and is not a disproof. If someone says that a mustard seed is made of infinite particles, then it is necessary to disprove his statement because it is impossible that there are particles without end, not because it is outrageous. What can cover the surface of the heaven and the earth is less than what is infinite. If we make this objection as a claim, then it is permissible for us to say that a mustard seed can be divided into particles that cover the surface of the heaven and the earth and even more, and since it is not divided into infinite particles, then there follows impossibilities that we mentioned. The adherents of particles also cannot indicate the number of particles in a mustard seed. Probably, there can be particles, which are indivisible, that cover the surface of the heaven and the earth. Then it follows to say that the possibility of division of a mustard seed till infinity is the division of particles without end, and there is nothing impossible here.

Here is a form of their syllogism: if a mustard seed is divided into particles without end, then a mustard seed is divided into particles infinitely. However, the conclusion is wrong. After the examination of this syllogism, the mistake becomes evident. If we considered the claim on the possibility of the division of bodies to infinity, then a mustard seed in its potentiality would be divided into particles that cover the surface of the heaven and the earth, and it would be permissible [by the presented demonstrations]. However, we do not say that the possible from this might appear in actuality.

⁶⁵ An allusion to the metaphor used in Quran (21:47; 31:16), which is probably taken from the Bible (Matthew 13:31, 17:20; Mark 4:31; Luke 13:19, 17:6).

They also say, 'If a natural sphere moves on a natural surface, it moves on it with one touch after another. However, then there would be contiguous points, and there would be a line from the contiguous points'.

We say that motion cannot be by this mode. If a sphere moves from one point to another that follows it, while there is no division here, then there is no motion. Motion is from the first point and the second point is towards which is motion, and motion is the state of the moving between them. Therefore, if there is no particle, then there is no motion. The particles of motion are also by assumption like the particles of continuity, as we will explain later. Do not we know that the existence of a sphere and a surface in this mode is what follows from their cause, or it is something in the estimation like other mathematical things? The usage of mathematical demonstrations in natural things is not right.

Then, if it existed, would not we know whether it advances gradually or not? After all, this issue does not seem sound because what is sound is that a sphere is not touching a surface at one instant except in one point. However, it does not follow from this that a sphere is moving from one point to another next to it. If this were sound, then there would not be any need to mention sphere and surface, but it would be correct that there are succeeding points of which a line is composed. If it were sound that a sphere touches a surface in an instant, and the contradiction that motions and times are not composed of indivisible things and instants, then it would be like a contradiction in the distance. If from the vicinity of points, if correct, followed the vicinity of instants, then the use of this in the establishment of succeeding points would be like the postulate for the first searched thing and also the explanation of something through the unknown. This explanation is not complete except when it is said that a sphere is touching a surface in the first moment by one point and in the second moment by another point. The moments are next to each other, and the points are next to each other or the instants that follow the motion.

As for the contradiction that in a body there are infinite particles in actuality, its absurdity is explained by the impossibility of motion. It is impossible that a mover reaches a distance that has parts except if it passes other parts of it. Let us assume a mover at a certain distance. We say that if the parts of the distance are infinite, then it has a half and the half has a half and so on to infinity in actuality. If it were so, then the mover would cross in one time the finite sides through the division that is infinite [space] and in the division without end [time]. However, the conclusion is impossible and the premise is also impossible. From the finite particles of the distance there follows the finitude of the particles of the body. This objection is not necessary when we say that a body has no particle in actuality.

Then, there is no plurality except a unity that exists in it. If this is so, then it is possible to get the finite particles from the body, whose particles are infinite, and to gather those particles. If its

[body] size does not exceed in one unit, then the case of the infinite particles is such. If its size increases, then there is a body appearing from actual finite particles. Thus, not each composite body consists of infinite particles. Therefore, an individual body in actuality has no particles. It is obvious that division is possible either when it finishes in the division of something indivisible in actuality or there is no actual particle in it. The former is impossible, so the second remains.

The adherents of particles also say that if a point is self-subsistent, then it is a substance. So a particle is established. If it exists in a body, then there is something in a body that is equal to it.

We reply that point is an accident, as we will explain later, and an accident is that whose existence is in a thing that is not like a particle from it. It is not from the condition of an accident that there is something equal to it in substrate. A point is an end, and if an end is equal to something from a finite thing, then it is not an end. If for each accident being in a body, it was necessary to be equal to something from the body, while point is an accident because it is an end, there would not exist a finite body.

Moreover, a body cannot receive something equal or non-equal by itself. Measure also is not equal to something that is in a substantial body. The existence of a point is an end existent in a substantial body, not in its measure.

CHAPTER ELEVEN

On the discourse about the mode of existence of prime matter and that it does not exist without corporeal form; and that for the same form there is no material and non-material existence; the establishment of natural form; and that corporeality changes according to the change of natural form

You already know that prime matter is not in a substrate, and therefore, it is a substance. The substantiality, which it has, does not make it an actual thing among other things, but it disposes it to be an actual thing with a form. The meaning of its substantiality is that it is something, and that it is not in a substrate is a negation. It does not follow from its being something that it is a concrete thing in actuality because it is a common meaning. Something common becomes a thing in actuality by a specific difference. Its specific difference is that it is disposed towards everything and this is its form.

Therefore, there is no reality for prime matter to be in actuality by it or another reality by which it can be in potentiality. The reality of prime matter is that it is a receiver. The matter of

bodies does not exist in actuality without corporeal form. We explained that in each existent there is something in actuality that is positively subsistent and disposed to receive other things. Thus, this existent is composed of matter and form, but this matter is not composed of matter and form.

Also, it is necessary that its specific existence is existence to which it could be indicated and it has a position. Everything like this is either a point or a measure. A point does not have existence separately since it is an end. If it had existence separately, then the thing that ends with it would not end with it but with a different point and a different end. We will elaborate on this later. If it is something indicated and isolated, then it is a body and divisible, but we already assumed that it is something that receives corporeal form. If it is not indicated and it is not a body and it has no position, then it is an intelligible substance or a substance whose existence is away from matter, abstracted from it. If this were its form and its reality were an actual self-subsistence that does not receive division neither potentially nor actually, it would be impossible to associate it with something that by its cause receives division, i.e. corporeal form. It would be impossible to include into it something that detaches it from its reality except by corrupting it, as we will explain, because what does not receive division potentially cannot be associated with something that by its cause receives division. It is known from this that the form separated from matter, whose actuality and reality is in being separated from matter, cannot mingle with matter.

It is known from this that the intelligible objects are not perceived by a corporeal power because the intelligible objects are prevented from division. If they were attained by a corporeal form, they would be divided. As for prime matter, its reality is that it is disposed to receive what appears to be divided. This is its actuality, i.e. its form, as we mentioned. The actuality of a separated thing is that it does not receive division, neither potentially nor actually.

Then, if prime matter were an intelligible substance to which it is not [possible] to indicate, and if it received, for instance, the form of a clod, in the whole earth there would not exist a concrete place for that clod. Without doubt, for each clod there is a concrete place that a specifying agent determines for it. The association of the form of a clod with matter does not make a place in the earth or a part of the place in the entire earth better for a clod than another part of it. What is not a better place for something than another one cannot exist in one of them. Therefore, it is necessary that it does not exist in any place. So the clod does not exist in any place. However, the conclusion is absurd.

And how a place is specified for a clod if it exist?

It happens when a portion of water is disposed to receive the form of earth in a specified place, so the earth is changing in that place and it becomes specified for it or an amount of air is becoming earth, and the opposite of it becomes better for it than other places.

It would not be the same if prime matter were an intelligible thing since an intelligible thing

has no relation to a part from the whole earth better than its relation to another part from its whole.

Prime matter cannot receive a form that does not receive division. Otherwise, that form would be the opposite of the corporeal form, but there is no opposite of corporeal form. The matter of the bodies cannot be a thing in actuality and corporeal form cannot be from its necessary accidents. For if there were an indication to matter without corporeal form, then corporeality would be something essential for it, not accidental and external to its essence. If there were no indication to it, then there would follow the absurdities that we mentioned. It also follows that something to which there is no indication is a carrier for an accident to which there is an indication. This accident then would have a specific place, and the one which receives that accident would be free from place.

Therefore, the place of this accident is not by the cause of the receiver, so corporeality is the form of body without matter. We already disproved it when we were explaining that the form of body is in need of the receiver. Prime matter changes to become actual only with a form, but not that it exists necessarily in association with a form in the sense that corporeal form is from its necessary qualities. There is a difference between the two.

This is how it is explained that prime matter cannot remain without form and exist by subsistence without the association with corporeal form, i.e. to be an intelligible thing. If it remained without form, it would be necessary that one prime matter without measure differs from another prime matter without measure by the difference of measure. The connection of the conclusion to the premise is the following: if we divided a body into two parts and separated the prime matter of each part from the form and estimated that body itself, while the form is abstracted from the prime matters before the separation, it would not be impossible for the prime matter of both parts to be different from the prime matter of the whole body. If the divisions, by which these differences are possible, are considered, there can be only the differences of measures. There is a reference to it in the book of *al-Šifā'*. There is no difference between them except that one of them is a part and the other the whole.

From this explanation itself, it is clear that form does not mingle with matter at times and exist separately from it at times, because the discourse is about the difference of divided form and form.

Material substance becomes quantity due to measure not, therefore, due to quantity itself. Thus, it is not necessary that it is specified by the reception of a certain diameter or a certain measure. It is clear from this that it is possible for matter to become smaller by condensation and become bigger by rarefaction, and this is sensible.

Let us discuss now the establishment of natural form and that it is subsistence for matter by

the participation in corporeal form and it precedes corporeal form.

We say that the bodies differ by the reception of fragmentation with speed or difficulty, and they differ by required places. This difference cannot be due to corporeality or due to the association of corporeal form with matter. Therefore, it is something else and this thing must be a substance, because the difference in receiving fragmentation is not by something outside of corporeal form, and the same is with required places. Each body requires a place by necessity, however, body as such does not have a place. Thus, the difference between the two is due to the difference in the substance of body. By what bodies differs regarding these two is something that impresses the substance of body or changes its substance, and it must be a substance.

As for the difference of bodies in receiving these different forms, it is due to different dispositions that cause motion or something else.

This is because the requisite of body – in the sense that it is not in it except as prime matter and corporeal form – is absolute place, the common figure of genus, and the same measure. In sum, its requisite regarding any quality is something common whose existence is only in the mind and it does not have subsistence in actuality. The existence of something with this quality is impossible, and it is impossible for a body to be composed of prime matter and absolute corporeal form as something subsistent in actuality. Therefore, a body like this is something like genus, but it is not a genus in reality. It is necessary that what makes it subsistent and assesses as an actual thing is something like a specific difference. What makes it subsistent in actuality must be something included in its subsistence, and it is a substance. Then that subsistent must be a substance. Therefore, it is called natural form.

Obviously, it is impossible that there is one corporeal form in the bodies with succeeding natural forms. Otherwise, it follows that natural forms would be accidents. It is also not plausible for prime matter to be set separately as a corporeal form and separately as a natural form. We explained that one simple matter cannot become two forms, but corporeal form must first be set with natural form and be specified with corporeal form and then comes matter. Body is the third meaning that unifies from these three in actuality and not by assumption.

The unity of prime matter with form is not like the unity of body with whiteness in white. Body has existence and subsistence in actuality, while the issue of prime matter with form is not the same. That is why the unity of prime matter with form takes place as the unity of species. The unity of body with whiteness is not the unity of species, because form bestows prime matter subsistence in actuality.

It might be said that if prime matter is one, then how is it specified by this natural form and not another?

The answer is that what differs from prime matters as species, i.e. the difference by specific

differences, like the prime matter of heaven and the elements, the issue here is clear. As for the prime matter, which is one by individuation in different forms, it differs by dispositions that are in it, whose cause is motion, as we will explain in a proper place.

CHAPTER TWELVE

On the mode of existence of form and its priority over prime matter; the indication that no existence comes from the bodies; on the establishment of the giver of forms; that bodily powers are spread all over body and not within indivisible limit; that bodily form is not necessary in itself; that position and measure are associated with body in a way that they impress it; on the meaning of prime matter being in potentiality and form being in actuality⁶⁶

Know that corporeal form cannot exist but in matter, as you will learn. Between it and matter, therefore, there is a connection: it is either the connection of relativity or the connection of cause and effect. I say that it is impossible that between them there is a connection of relativity because the essence of each one of them is not intelligible in comparison to another, so it is something essential to them and not accidental. We know from the demonstration that corporeal form has matter and the two attached things are known together, however, the attachment appears to them when one of them is received and the other is receiving or when one of them is the cause and the other the effect. It is clear from this that the connection between them is not the connection of essential relativity.

They cannot be sufficient existence in the sense that each of them is the cause and the effect for another. It is known from the first observation; if you want, you can consult basic books⁶⁷.

It is also impossible that they both come from the third. Then it follows that the existence of each of them is from the third through the mediation of another. However, you already know that the essence of one of them is connected to another. Then it follows that the one is the cause and the effect for another, but this is absurd, just as the premise.

⁶⁶ Cf. *al-Ilāhiyyāt*, II.4.

⁶⁷ 'It is not possible to have two things, each of which makes the other subsist, so that each of which is prior in existence to the other and to itself. Nor is it permissible to have two things, each of which necessarily subsists simultaneously with the other. This is because if the essence of each of them does not depend on the other, then it is permissible for each of them to subsist by itself, even if it were without the other. If, on the other hand, the essence of each of them depends on the other, then the essence of each of them affects the completion of the existence of the other. But this is one of the things that have been shown to be impossible.' See Ibn Sīnā, 2014, pp. 71–72.

However, one of them must be closer to the third, and it becomes the cause by mediation and the second is the effect. Matter cannot be the mediation since matter has the power of receiving and disposition. Something disposed, insofar it is disposed, is not the cause of the existence towards which it is disposed. If that were plausible, it would constantly exist without any disposition.

Also, if matter were the cause of form, it would be necessary for it to have an essence in actuality and this means preceding causality, but non-existence is not the cause for an existent, while prime matter according to the definition of its essence is non-existence.

For body cannot be the cause of existence, because corporeal form acts by the mediation of matter, as you will learn. Then matter would be the closest cause for the existence of a thing, and it is absurd.

Also, body is composed of prime matter and form, and they precede corporeality. If body were the cause of the existence of another body, it would be the first cause of the existence of both parts, which precede it, and it is absurd.

Moreover, in matter there is no difference and corporeal form must not differ, but it is not like that.

If it is said that the difference of forms is due to the difference of the states of matter, then those states are the first form in matter. The discourse here is then like the discourse of form. Then the cause in the existence of the second form is the first form and for matter there is only reception.

If matter is not the mediator, then form is the mediator. We say that it is the form, which is not separated from matter, and it is plausible to suppose that it is one by itself the cause of the existence of matter. As for the form, which disappears in matter, cannot be the same, because if this form were one by itself the cause of the existence of matter, matter would disappear with its disappearance. Then for the renewed form there would be another matter. It follows that it would be the second appeared matter, and since each appearing thing is preceded by matter, as you will learn, it would need another matter and so on to infinity. Thus, it must have an associate in bestowing existence to matter and matter would exist from that principle by the mediation of undefined form, since form is not separated from matter except by the arrival of another form that acts as the first [cause] in the establishment of matter. This third is the giver of forms⁶⁸, whose description will be given later. If it were body, then the discourse would again remain there. Therefore, this bestower is not a body.

Since the mediator in the establishment [of being] must be, first of all, established in itself (primarily in itself, not in time), and then establish something else. Therefore, form must be established, first of all, in actuality from itself or from the principle and then establish prime matter.

⁶⁸ The giver of forms (*wāhib al-ṣuwar*) is the last active intellect that creates the lowest or sublunar world.

Form precedes prime matter. Corporeal form is the actuality and matter is the potentiality of its existence. Matter in potentiality becomes actual by form. Thus, existence is primarily in form and secondarily in matter.

The existence of form in prime matter is like the existence of cause with effect. Effect is not a bestower of the subsistence of cause and its existence, but just like cause is a cause in actuality, there must be an effect from it and effect is together with it. The same is with form; if there is an existent form, then there should be something else from it that is associated with it. Everything that bestows the existence of something else is partially separated from it and partially connected to it, and the intellect does not reject this. The demonstration establishes the existence of the two, and this is the state of the substances with the accidents.

Therefore, the substances are the mediation in the existence of the accidents after their establishment in themselves in actuality. It becomes evident that each appearing form in matter exists in it due to a certain cause. The same is with the one [form] that is not separated from its matter, because prime matter is specified by it and not by something else due to a certain cause.

Know that it is not impossible that the one in the common sense, like absolute form in this case, preserves its commonality as one in quantity by the [other] one in quantity, as its associate. Here it is a principle that establishes a thing that is one in quantity and in actuality, and this one is prime matter by the mediation of a common form.

If it is asked: does form remain after the disappearance of prime matter?

We reply that no, in the sense that prime matter is not removed except by the removal of form preceding it, like a hand moving a key. The absence of the motion of the key is not a cause of the end of the hand's motion. It is not possible to end the motion of the key except by ending the motion of the hand before it – this the state with all causes and effects.

Then, form can be simple and composite. A composite by force must form a unity in actuality. The same is matter that can be simple and composite [it forms one thing by the mediation of one mixture].

Then, corporeal form and corporeal powers are either spread all over a body or exist within a limit that is not divided, like a point or a surface. It is impossible that they exist within a non-divided limit, because if they were there without existing in body, then that limit would have existence different from the existence of the body, and the body would not be limited by it, and this is a contradiction.

Also, in a round body there cannot be assumed a point of axis and pole until it moves. If the existence of a moving power were at that point, its existence would be after the existence of the motion, and this is absurd. So it remains that the existence of corporeal power is in a divided thing. You learned that position and measure are from necessary qualities of body, and these things are

even like constituting elements of it. If something is associated with body, it cannot exist without having position and measure and the constituting elements of body; otherwise, it cannot exist in body. Hence, these things must appear to corporeal powers accidentally. The association of powers and accidents and forms with position, measure, and what is like them from body is not, for instance, as their association with blackness and motion and other similar things. Since these things are not something by the removal of which body is also removed. Thus, nothing from these things impresses the powers and accidents existent in the bodies.

The meaning of impressing is that when something disappears, what is associated with it also disappears. Hence, if the measure or the position of body disappears, there does not remain in it an existent power or accident. Do not you see that when the half of body disappears, together with it also disappears the half of blackness? However, it is not the same with blackness and motion: if blackness disappears, motion does not disappear. This cannot be disproved by a complete figure. What exists from the figure in each part of body is a part of it, and all of it exists in the totality of body, and the totality of body does not exist in all parts of body. If corporeal powers have completeness and something more in the respect that they are powers, they exist in the totality of body, and their parts are in the parts of body.

CHAPTER THIRTEEN

On corporeal forms and that they do not exist separately from matter; how prime matter's being is the cause of form; it is not correct that this corporeal form transmits from one body into another; and the necessity of the finitude of each body

Know that material form does not exist separately from matter, as we mentioned it in the section about prime matter, namely that whose existence subsists in something its existence cannot be substituted by something that is not in it. Then, corporeal form, in respect of its reality, must necessarily be finite in existence, as we will clarify it, and it must have a certain figure. It is not devoid of having them, even if it has no carrier. If it had to belong to its essence without a carrier, then everything in it would be similar, and a part would have what the whole has from the measure and the figure. This difference cannot be due to an agent that is not a carrier. Otherwise, form would receive division and connection without a carrier. Therefore, these states must be undoubtedly with the participation of a carrier, which is prime matter. Prime matter, therefore, is the cause for the existent that is inevitable for form in its existence, like figure and side. You will learn that this

appearing form does not appear except due to a specific cause and that this specific thing is matter. Matter is accidentally a cause for the existence of some forms since it is the cause of beginning and ending and the cause of what is similar to figure and its kinds.

Know that corporeal form cannot be transmitted from one matter into another. Just like the necessity of its existence, in a general sense, is generally in matter, similarly, the necessity of the existence of this form is in this matter or not. If the necessity of its existence is not in this matter, its existence cannot be there. If its existence were necessary to be in it, it could not be somewhere else since its specification by one of them is possible, not necessary. In sum, matter is the cause of the individuation of form and accident: if something by which they individuate disappears, their remaining becomes impossible.

The need of form in such a substrate or locus cannot be due to an external cause. Something by itself free from matter cannot include what needs matter, except by the transformation of itself, which is impossible. The transformation of itself can be by the existence of something in it and by the non-existence of something; what does not exist here must be form about which is the discourse.

As for the specification of its existence by one matter and not another, it is necessary since each concrete thing requires something concrete. If a concrete thing required anything from what coincides with the infinite [number of things] in potentiality, where nothing is different from anything in its judgement, the existence of this concrete thing would be impossible. Therefore, this conclusion necessarily follows from that premise. If something is not specified more than by other thing, then it is not specified by any of them.

It is clear from what we said that corporeal form cannot exist being mingled at times [with matter] and separated at times [from matter], and it cannot be transmitted [from one matter into another]. If the existence of corporeal form in itself is its existence in matter, then its disappearance in matter is its disappearance in itself.

While investigating the fact that corporeal form cannot be abstracted from matter at times and being mingled with it at times, you should look attentively at what is said in the section about prime matter: if form is abstracted from matter without being divided and it is abstracted while already divided, then there is a difference in measure here, and it is impossible that it is assumed as abstracted from matter and its connections, which is a contradiction.

The discourse on the impossibility of the transmission of accidents from one substrate into another is of the same kind.

The bodies must be finite because it is possible to assume two infinitely stretching lines, as two sides of a triangle, and it is necessary that between them there is a distance expanding to infinity. However, it follows from this that there exists an infinite distance limited by two lines,

which is absurd⁶⁹.

A body is finite by its extension, i.e. its surface, and it is its limit. The extension is finite by its line and it is its limit. The line is finite by its point and it is its limit. A body must have a surface insofar it is finite, not insofar it is a body, since it is from its necessary qualities and not constituting elements.

As for surface, it can exist without a line in it, like the surface of a sphere, because the line in a sphere is assumed. Similarly, line can exist without a point in it, like the line that embraces a circle. Body precedes these limits in nature and causality. It is clear from all of this that natural form and corporeal form are substances. As for corporeal form, it constitutes body and becomes its existence not in a substrate. As for natural form, it constitutes species and is not the existence of body except being a species. Its existence, therefore, is not in a substrate. All species of substances were established in this chapter: body, prime matter, and form. There remains the discussion on the establishment of separate substances, and we will talk about them in their proper place, God willing!

⁶⁹ Cf. *al-Ṭabīʿiyyāt*, I.3.8.

PART TWO

From the six parts that pertain to Book Two, i.e. the science called metaphysics, from the three books of which consists the book of al-Taḥṣīl. It is about the rest of the nine categories, and it consists of seventeen chapters.

CHAPTER ONE

On quantity

The definition of accident and its relation to the nine categories was already given before. The relation of substance to what is below is probably that substance is necessary in the relation of accident to what is below it. If you say, ‘If substance exists, then its existence is not in a substrate’, then you take existence in its definition, while ‘not in a substrate’ is a negation. It is the same if you predicate substance of body or its description. It seems that substantiality is from the necessary qualities of body and other things that are below substance. You know that the state of accident – regarding the impossibility of its transmission from one substrate to another and its appearance to it when a body is divided, or in a position, and many other things – is like the state of corporeal form. You know that from its definition and its existence is in a substrate. The explanations that we mentioned in the section about corporeal form also encompass accident.

Then, for some accidents it is sufficient to conceive their substrates, like quantity and quality, and for some of them there is a need to conceive external things like ‘where’, ‘when’, ‘relative’ and so on. Let us talk first of all about quantity.

Quantity is divided into two kinds⁷⁰: continuous and discontinuous. On the one hand, one of it is with parts having a position, and on the other, it has no position. Continuous is a homonymous word: it includes the form of body that you already know and the specific difference of quality or quantity that state of which we already explained in the section about body; [it means] the accident that accompanies vastness insofar it is a vastness. Continuous in the first meaning is the specific difference of measures, not an accident that accompanies them. If it is said that water is divided, then each part of water would be water. However, not each part of it would be the same as the other insofar it is a measure. It [also means] an accident that accompanies them as certain nature, like the continuity of hand with human since hand is not a part of measure but of human. The case with

⁷⁰ Cf. *al-Manṭiq, Categories*, 3.4.

hand is not the same as with the part of water, because hand is not a human, while a part of water is water. Not each part is another insofar it is a measure.

Continuous, if it does not mean specific difference, is said of something else by comparison. Continuous in the first meaning is not considered in comparison to another. It is said that continuous is something that has side and one end; it is by itself is the side of something that is called continuous with it. If the two were sides in actuality, then this continuity would be contiguity similar to the line, which is continuous with another line through an angle the top of which is one actual point, and it is a limit for both of them. The same is with a body that has two parts due to two different accidents in it, like blackness and whiteness. Each of them differs from another by a substrate. What is differed by whiteness is finite and what is differed by blackness is also finite, and both of them are actual. There are no two ends here but one end. The measure of black and white in body is the same measure. They are different because of blackness and whiteness.

By continuity we also mean something by which continuous is a necessary quality for continuous in its motion, and the consideration here is motion.

The body, which is from the group of quality, is continuous in the first meaning, namely between its parts there can be assumed a common limit. This limit in the body is a surface, in the surface a line, in the line a point. You learned that in a body, in the sense of substance, there is no difference. Indeed, if you take wax and shape it in different shapes, its corporeality does not disappear with the disappearance of measures that are assumed there. Therefore, this measure is not corporeal in the sense of substance. Again, in a body, in the sense that the three dimensions can be assumed in it, there is no difference from another body. However, it can differ from another by measure, and measure is not corporeality.

As for mathematical body, it is a derived quantity with corporeal form, and both of them are abstracted from matter.

By this, i.e. measure, substantial bodies receive division since a part does not exist except where there is inequality and equality and where one thing is not another thing. This does not exist in a body in the sense of substance. Therefore, substantial body has division because of measure.

If it is said that division does not occur except because of something from it receiving division, while reception and disposition are in matter, then the disposition to division is because of matter, not quantity.

The answer is that division has two aspects: one of them is difference and fragmentation, and they accompany quantity because of the disposition of matter; the other is in the nature of the thing so it is assumed in it as a thing and it accompanies measure itself. The former is necessarily in motion while the latter does not need motion since it is an estimated thing.

In sum, the division that happens to prime matter, insofar it is a division, is not the reception

of division into parts. Division into parts means something because of which a body has inequality and equality. It is not impossible that division, which is received by matter, is received by it because of the existence of quantity in it. If we say that quantity disposes matter to the division, which is specific of matter, then it is not necessary that this disposition is of form or form remains with the division. However, motion is that which makes and disposes body closer to natural rest while it does not remain with it. Similarly, acts the disposed quantity.

As for discontinuous quantity, it is like seven, the parts of which cannot have a common limit.

As for another division of quantity⁷¹, some quantities have a position in their parts while some do not have it. The parts that have position must have stable actual existence, so some of them might have a position in relation to others, also continuity and order that help to indicate where each of them is located in relation to what it belongs. The meaning of position here is this and not a category. Position is the relation of the parts of body with each other, where one is located from another. When a body does not have an actual part, the position is determined in it either by the indication of something that is indicating, we talked about it in the section of quantity, or because of the bodies that embrace it as parallel, opposite, and so on. The same is in the body that is embraced while it is a category.

Continuous quantity has four kinds. The first is a line that is estimated through the motion of an indivisible thing in a certain direction. Then it is a surface, which is estimated from the motion of line different from that first motion. Then it is a body that is estimated from the motion of surface while rising or falling. Then it is time that is the amount of motion according to priority and posteriority. Time is not from the quantities that have a position since it has no part associated in existence to another [part]. There are no two fixed and succeeding parts in time, but in its parts there is a continuity. This continuity is one part that is an end for something disappearing and a beginning for something existing. Its parts have an order according to priority and posteriority.

As for discontinuous quantity⁷² it is but a number. The discontinuous is constituted from divisibles, the divisibles from individuals, and the individuals from units, and the units are either the very meaning of indivisible as such or something in which appears this, i.e. the unity, and this thing is another existence.

In the units in themselves there is something in itself with discontinuous quantity whose number is the amount of those units. As for the things in which there are units they have them according to an external measure, which is countable. These things are like sound or motion or

⁷¹ Cf. *al-Mantiq, Categories*, 4.1.

⁷² Cf. *Ibid.*, 3.4.

body.

Due to this, speech cannot consist of discontinuous numbers in themselves. You can refer to the book of *al-Šifā'* about the disproval of this opinion. You know from the definition of speech that discontinuous quantity is not included in its definition.

This kind of quantity, i.e. discontinuous quantity, does not have a position. The numbers from the viewpoint of their units and species do not have a name; they are expressed through some of their necessary qualities, like ten and five.

A number might belong to the things whose parts cannot be indicated with 'when' and even 'when among what'. The number of the categories are of this sort. In sum, a number does not require a position, but when it turns to have a position, it is due to its association with certain corporeality or humanity.

It was said that space is a species of quantity, but this is an error. Space is the limit of an embracing body that surrounds an embraced body, so in comparison to the embraced body it is a space, and in comparison to the embracing body it is a limit and a surface in its substance and in itself.

For its being it is impossible to become a quantity while being the embracing and the limit. If it were so, then it would have a characteristic of receiving the dimensions and division that do not pertain to a surface as such, and it does not have it. Space, therefore, is either a species of surface, and not a species of quantity in the rank of surface, or it is a surface taken in a certain state.

Some things might be called quantities and it happens by accident⁷³. Some of them become a substrate for quantities, like human and horse, when it is said a tall human or a short human. Some of them are accidents that do not exist except with the existence of quantities, like motion; it does not exist except by the association with a moving body due to the distance where there is a motion and it is measured by it, and due to the time, as well, that is measured by it. It is said, for instance, a long motion or in a long distance and during a long time. Some of these accidents are features of quantity, like long and short, that are by comparison. It is said, for example, 'this line is long' and 'the other one is not long'. Yet each line is long by itself, in the sense that it has one dimension, or 'this surface is wide' and 'the other one is not wide but narrow', since each surface is wide by itself while having a dimension that is assumed to be long and a dimension that is wide, or when it is said, for instance, 'this number is big' and 'the other one is not big but small', yet each number is big while counted by units.

These and their examples happen with quantity in comparison of one with another. Long, wide, and deep are from quantity insofar they are not relative to each other, and insofar they are

⁷³ Cf. *al-Manṭiq, Categories*, 4.1.

relative they are of the accidents of quantity. The many without relativity is a number, and the many with relativity is an accident in number.

Then, the things like these can be relative to each other in any respect, while there is no condition that what is relative supposes a relation to a third thing, like when it is said ‘many’. It can suppose a relation to a third when, for instance, we say ‘longer’ and ‘more’. Each of them has a relation to a thing that has a relation to the third. ‘Longer’ is longer in comparison to a thing that is something long, only when it is longer than it.

Know that square is the measure of the continuous and number is the measure of the discontinuous. Something from them is in the soul, and it is the counting and the measuring, and something is in the counted and the measured. If the measured is counted, the number is an accident for it and not a constituting thing for it insofar it is measured.

Time is continuous in itself and also accidental, and it is discontinuous accidentally. It is continuous in itself because it is by itself the measure of motion, as we will explain. It is continuous accidentally because it measures a distance by comparison. For it is said that ‘the time for moving through one farsakh’. Thus, time is measured by farsakh⁷⁴ and farsakh is an external measure for it. It can happen that a thing in itself is in a category, and then there occurs to it something from that category, like when a quality occurs to a quality. It is discontinuous accidentally because when a division occurs to it, such as hours, days, and so on, it occurs due to priority and posteriority.

Know that discontinuous and continuous are the specific differences of quantity and not its species, yet they are associated with the nature of genus. However, they are no specific differences that are not species. All logical distinctions are predicated of species, while they are not species in a substrate, but they can be different by consideration. Continuous quantity does not differ from the discontinuous one except by itself, and the discontinuous differs from the continuous except by itself. Thus, they do not have simple specific difference, i.e. continuity and discontinuity, like reason in human.

⁷⁴ *Farsakh* (pl. *farāsiḥ*) – was a measure of distance that has its roots in Iran (Parthia, *parasang* in Persian). During the ‘Abbāsīd period, the use of this measure became popular among Muslims throughout the mediaeval period. Different sources give a different definition of *farsakh* the equivalent of which in the metric system ranges from 5 to 19 km.

CHAPTER TWO

*On the features of quantity*⁷⁵

Quantity has two primary features: one of them is that quantity is measured by itself and the other is that it has no opposite. From the first feature it comes out that it is called equal or not equal, and from the second one that it does not receive greater or lesser [degree]. As for the first feature it is that from which we arrive at the meaning of quantity that is measured in itself and not by something else. As for it having no opposite, it is not the same because substance also shares with quantity this feature. If you studied the species of quantity, you would have known it. Continuous cannot be the opposite of discontinuous because both of them are the specific differences that accompany quantity and they are not from quantity itself. The opposites must be under one genus; discontinuity is the absence of continuity in something that is continuous by itself or by its genus, and the absence is not an opposite. Evenness, oddness, and other similar things are qualities that occur to quantity. Besides, the division of number into even and odd is the division of something into its affirmation and negation typical of it. We will explain it later.

As for equality and inequality, they are the relatives of quantity, not quantities. Small and big are also relatives. Big can be only quantity, but that it belongs to quantity is not because it is big. Big in itself is a body or a surface and due to this it is a quantity. When it occurs to it a certain relativity, then it becomes big because of it. One thing can be small or big in comparison to another thing. If those two are opposites, then the same thing must oppose itself, which is absurd. Small and big are not intelligible by their individual beings except when they are relatives. The opposites are such that each of them has specific existence, like blackness and whiteness, and then it occurs to them relativity insofar they are opposites, as we will explain it. If the big were something realised and then it was accompanied by the relativity of something opposite, then the big would not be small in comparison to the other thing.

As for the definitive limits in small and big creatures that are not said by comparison, they are natural limits, not from quantity, but natural sides. For instance, among the sizes of animals there are measures absolutely big and absolutely small. This is a comparison according to the nature of species and not its measure. The mistake is due to the replacement of accidental with essential.

As for the opposition existent between the lower and the upper places, it is not due to a surface or quantity but because of a placed thing and motion, as we will explain in its proper place and you will learn.

⁷⁵ Cf. *al-Mantiq, Categories*, 4.2.

There is neither less or increase, nor decrease or excess in its [quantity] nature, in the sense that one quantity is not more in its category than another quantity, like there is no more four than other four, a more line than another line or that it is line superior to the other. This is so in all things in their predication of what is below them on the same level. However, in a relative sense it is superior to the other, i.e. relative longness.

The difference between this and the first is that in this superiority it can be indicated to the sample of the given [longness] and the superior [longness], and in that where we do not allow it, it is impossible to do it. The inequality of greater and lesser [degree] is limited within the opposite sides. The inequality of superior and inferior is not limited within the two sides absolutely. If quantity received increase and decrease, then the sides of increase and decrease would be opposites, and quantity would have an opposite.

Among the features of quantity is that it is by itself, and not by something else, is called equal. Equality is a state when you estimate the superimposition of dimensions of the continuous or the units of the discontinuous one onto another till their limit, and you do not find that one of the superimposed is not reaching the limit that is not reached by the other one. Non-equality is when one of them exceeds or is insufficient. The correspondence in which there is no difference of the limits is called equality and the difference of the limits is not equality.

Know that everything is measured by something less, so it is possible to assume in it a unit, like one walnut. Due to this, the celestial motion is a criterion for other motions since it is faster and the fastest in the category of motion is the least in time. Motion is measured with time. We will elaborate on this explanation in the chapter that follows.

CHAPTER THREE

That discontinuous quantities are accidents

Let us clarify, first of all, that one is an accident⁷⁶. We say that one is said by analogy about the meanings that coincide in not having any division in actuality. One can be by essence and by accident. One by accident is said about something associated with something else: it is another thing, and yet they are one. This is either a substrate or an accidental predicate, like when we say ‘Zayd and the son of ‘Abdallah are one’; or they are two predicates in a substrate, like when we say

⁷⁶ Cf. *al-Ilāhiyyāt*, III.2.

‘The physician and the son of Naṣrallah are one, and they are predicated of Zayd’. About the other kinds you should read in the book of *al-Šifā’*.

One by essence includes one by genus, one by species and one by relation, as when we say that the relation of ship to sailor and the relation of city to king are one. It also includes one by substrate and one by number. One by number also has different kinds about which you can read in the book of *al-Šifā’*. One by specific difference is itself one by species. As for one by continuity, which is from the group of one by number, it is one in actuality from a certain viewpoint, and there is potentially a plurality in it. Then, one by continuity is either considered only in measure or by other nature something, like water or air. One by continuity occurs to be one in substrate, like one water.

Know that water and wine, for instance, cannot be unity by continuity in reality, but rather there can be unity by contiguity. A truly continuous substrate is a simple body homogenous by nature. Due to this it is rather the accumulation of elements in the composite things and not by continuity.

In the verification of one and many there is a circular explanation⁷⁷. Everything that is used in it is used by the mode of sign. It seems that plurality is known better in our imagination while unity in our intellects, and both of them are conceived immediately. If you ponder over the definitions of one and many, you will find an obvious circularity.

Unity does not constitute the quiddity of something. For it is not that after understanding human and one, it will necessarily occur to you that human is one. It is evident that unity is not the constitution of human, but one of its necessary qualities because unity is an accident. Plurality and unity succeed each other in matter like the succession of different measures and figures in the same wax. Also, if the nature of unity were the nature of substance, only substance could be described by it. It is not necessary that if its nature were the nature of accident, it would not describe only substance because substance is described by accidents. As for accidents, substance is not predicated of them. From the fact that unity is predicated of accidents and that it is not essential for substance and that it succeeds plurality in matter it became clear that it is an accident. Similarly, the nature of number, which is composed of unity, is an accident.

⁷⁷ Cf. *al-Ilāhiyyāt*, III.3.

CHAPTER FOUR

On the establishment of number; on the contrariety of unity and plurality; on the species of number and its some necessary qualities; on the plurality, when there is a natural order of units and parts exists together

As for numbers in the existent things, there is no doubt in it as soon as there are units more than one in the existents. Then, each unit from the numbers is a species in itself with the totality of the numbers and features it has. It is impossible for a thing, which has no reality, to have the feature of primacy, composition, completeness, superiority, inferiority, squareness, cubeness, irrationality and so on. Therefore, each unit from the numbers has a reality that specifies it and a form by which it is conceived in the soul. This reality is its unity by which it is what it is.

Number is not a plurality that is not comprised in one or a sum that does not have unity, so it is said that it is a sum of units. Insofar it is a sum, it is one and has features that others do not have. It is not surprising that a thing is one insofar it has a form, like being decimal, and it has plurality. Insofar it is decimal, it has the features of ten, while plurality has features that the unity of decimal does not have. The same is with the unity of measure from the viewpoint of continuity and its plurality from the viewpoint of potential particles in it. That is why decimal is not divided into two tens when each of them has the features of ten. If we consider ten with decimal, it is a consideration in which there is something necessary since we do not find a name for it insofar it is its unity. If we say that ten is nine and one or eight and two or seven and three, then it is from their features and necessary qualities because the composition of ten from three and seven is not better than its composition from five and five. Hence, these thoughts are not considered to be the definitions for ten and anything from the numbers. The definition of something one is one, as you learned. The same thing does not have two definitions since it does not have two forms⁷⁸. If you defined ten as a number composed of three and seven, it would be a description and its sign. The consideration of number from the viewpoint of its unity is difficult for imagination and habit, so it is illustrated with images. The state of the unity of decimal and its parts is like the state of the unity of body from the viewpoint of continuity with the possibility of assuming its parts.

Know that the contrariety between one and many is the contrariety of relative. Not each of their reality is the reality of relativity⁷⁹, but each of them has an intelligible quiddity, and then a

⁷⁸ Cf. Aristotle, *Metaphysics*, 1031a.

⁷⁹ Cf. *al-Ilāhiyyāt*, III.6.

relativity occurs to them, as we mentioned in the case of line, smallness and bigness. This relativity [takes place] when unity is the cause of plurality. The cause and the caused are relative not insofar they are unity and plurality but when they are the cause and the caused.

Then, due to unity things become criteria, and everything's criterion belongs to its genus: in long things it is length and in corporeal things it is corporeality. In some things one is by nature, like walnut, and in the others it is through assumption, like dirham or dinar⁸⁰.

Generally, one in each thing is something small in which there can be inequality less than it is. You already know the case of the criterion of motion presented before. Criterion can be separated from what it measures, like a line separated from another line, and similarly is with time and by what is measured by it.

Know that the contrary of equal is unequal. Then, unequal embraces what is bigger and what is smaller not by the commonality of genus but by the commonality of necessary qualities since it does not constitute them. For equal it is not necessary to have two contraries. As for even and odd, they are not essential features of the species of numbers. You know it from what we said while explaining that unity is not a substance. It is a number that is not included in their definition, like substance is not included in the definition of one.

As for them [odd and even] not being the species of numbers, it is clear that the species of numbers have amounts, like ten and thirty, but odd and even do not have it.

Plurality might be by assumption and by nature. Plurality by nature is when the first cannot be the second and the second be the first. The one by assumption is when it is correct to make the first to be the second and the second to be the first. Plurality by assumption in reality is not plurality, but it is possible to assume plurality in it. When there is no order by nature, there is no plurality in actuality. When there is no plurality in actuality, there is no meaning of finite and infinite except by assumption.

I say that plurality is submitted to a certain sum, and the sum is submitted to proximity, and the proximity can be by reality, i.e. by nature, assumption, i.e. by time and what is similar to it. When plurality is submitted to proximity by nature, the plurality is actual, and when it is not like this, it is by assumption. Also, when there are no parts existing together, there is no plurality, and it is like motion since prior does not exist in it with posterior. If there is no plurality, then it is neither finite nor infinite. When plurality is actual, unity remains potential, and it seems that each natural sum leads to an actual unity.

⁸⁰ Dirham – a silver monetary unit widely used in the Muslim world. The name derives from the Sasanian coin, which in its turn comes from Greek *drachma* (δραχμή). Dinar is another popular currency that dates from Roman times, when it was known as denarius. It was first introduced by 'Abd al-Malik, the fifth caliph (685–705) of the Umayyad dynasty.

CHAPTER FIVE

On the establishment of measures and their accidental being; that one surface and one line cannot be the substrates for the flat and the spheric, the curved and the straight; that a curved line differs from a straight one by the difference of species and not individually⁸¹

You already know that body is included in the category of substance. As for the body, which is a quantity, it is the measure of body in the sense of form. It was explained that this measure is in matter, and it increases or decreases while corporeal substance remains. Thus, it is an accident without any doubt. However, it is from the accidents, which are linked to matter because this measure does not separate from matter and corporeal form except in estimation. Since it is the measure of the thing, which receives three dimensions, it cannot be without this thing, i.e. body in the sense of substance, like time cannot be except by distance as we will explain.

This measure is the being of body insofar it is measured such-and-such times, which is different from the being of a thing insofar it receives the assumption of the mentioned dimensions. It is not something by which one body is different from another. As for it being measured such-and-such times, it is that by which one body can differ from another. This is the quantity of body, and it is not separated from the form of body in estimation. However, it and corporeal form can be separated from matter in estimation. As for surface and line, each of them is considered as a side and a measure. As for surface, it is clear that it receives the assumption of two dimensions. Also, it is measured and quantified and can be bigger and lesser. As for its reception of the assumption of two dimensions, it is so because it is the end of the body, which receives the assumption of the three dimensions. It is not a measure from this viewpoint but a relative. Surface in its being is an end that does not differ from another surface in this meaning.

As for it being a measure, it can differ from others but from both viewpoints it is an accident. End is an accident for a finite thing because it exists in it not like a part of it and it does not subsist without it. We already said that it is not from the condition of an accident existent in a body to coincide with something that is equal to it from that body. Also, insofar it is a measure, it is an accident. The being of surface, when it is assumed in it two dimensions, has this aspect from body, and its being a measure has this aspect from its essence and the reality of its essence. Surface due to its accidental being disappears in body because of continuity and discontinuity. The surface of a body might be a flat surface, and it can disappear while there appears a curved surface.

One surface by its reality is not a substrate in existence for a circular and flat. This is

⁸¹ Cf. *al-Ilāhiyyāt*, III.4.

because the individual being of line in existence is to be the side of surface, and the individual being of surface is to be the side of body. Unless it does not occur that body leaves its shape, it does not occur to surface and line. You already know that corporeal form is constituted by natural form and that figures and measures differ because of the difference of natural forms. When a body is dry it does not bend, and when it is wet it does, since the continuity of the edge changes by the bend or it stretches in a straight direction.

If the continuity of a line is fragmented, then one line becomes many lines, and it happens with the absence of one line. If it stretches, again, the previous line disappears. This is because the same line cannot be longer. It is different in the case of one body that is a substrate for differing dimensions in actuality that replace each other. Since if a surface leaves its figure so its dimensions disappear, it cannot be except by its division, and in this division there disappears the form of the same surface, which is in actuality. If surfaces get united with each other as an arrangement, so the common edges disappear. What is becoming is another surface by number. If it were returned to its first arrangement, it would not be the first surface by number but another one similar to it because the non-existence does not return. The same is with line. So it became clear that these are accidents.

How is surface abstracted from body in estimation? The attention is paid to surface, and not to body or that it is together with it or whether it is not with it, and nor to its condition of being separated from body. There is a difference between regarding it alone under the condition of its separation from that with what it is, and valuating it as it is observed alone while it is in your estimation subsisting alone and it is subsistent in itself alone, and between that when it is not conditioned with it. How is it possible to assume a surface in estimation individually without it being the end of a thing, except that it is estimated with a special position and it is estimated having two sides? It follows that what is estimated as a surface is not a surface since surface is the edge itself and not something that has an edge. To estimate surface as the end itself that has one side only while not discontinuous from the other side, means its end would be estimated together with it somehow. The same is with line and point.

As for the existence of corporeal measures, it is evident. As for the existence of surface, it is necessary that corporeal measure should be finite. As for the existence of line, its cause is the division of surfaces and assumption of limits. As for time, its accidental relation with motion and its existence in it was verified to you.

There is no measure except these measures because continuous quantity is not but either defined with realised existence and all its parts or it is not. If it is not, then it is existence renovating one after another, which is time. If it is defined, then it is a measure. It is either the most complete

measure and it can be assumed in the three dimensions⁸² since it is not possible to assume more than that, and this is corporeal measure, or it is assumed with the two dimensions or with one and not less than that. You learned from this that the point, which is the end of a line, is not a measure. It became clear that measures are three and continuous quantities in themselves are four.

As for heaviness and lightness, it is necessary that there are measures through their motions in time and place. Simply by themselves they do not divide into parts being numbered or receiving equality and inequality. As for division, which occurs to lightness and heaviness, so one heaviness becomes the half of the other, is because it reaches half of distance in a certain time or something similar to it, like one heat becomes the double of another heat due to its doubled action or because it is in a warm body twice bigger. Quantity, generally, is something in which there can be a thing that is a unit of counting. That thing belongs to it itself, no matter whether it exists or assumed. From the realm of continuous quantity there starts geometry, and from it ramifies astronomy, the science of spaces, the science of weights, and mechanics. From the realm of discontinuous quantity there starts arithmetics from which then branches off the science of music.

Know that curved line differs from straight line by the difference of species, not individually. The individuals of the same species differ by their substrates or accidents associating with them primarily, like the unification of whiteness with surface, or not primarily, like music and writing. The separation of the straight from the curved is not due to the plurality of substrates. This separation can exist between two straight ones and between two curved ones, not between two accidents as it coincides. They accompany line primarily, and the example of this accompaniment is either specific difference or primary accident. If they are specific differences, then they are species. If they are primary accidents, then they are either necessary or not necessary. If they were necessary accidents, then the individuals of a line as such would be equal in it, like the individuals of human are equal in rationality. However, the conclusion is absurd. If they were not necessary accidents and they succeeded each other in the same line by number, it would be necessary that the same line remains a substrate for the curved and the straight. We have already disproved this at the beginning of the chapter.

If we want to explain that something is a specific difference of a thing, we consider it by its removal. If with the removal of that thing species and even genus is removed, then it is a specific difference. Here as well, if we remove the curve or the straightness and the line disappears with them, then they are specific differences. The statement that a point becomes a line by its motion is a fantasy having no truth. Unless there is no line and surface existing, a point cannot have any

⁸² Cf. Aristotle, *Physics*, 268a; *Meteorology*, 374b.

motion. Therefore, surface and line exist prior to point and point is not a cause of the existence of line. We already explained that these limits are posterior in the existence of a body.

CHAPTER SIX

On space

This issue usually appears in the science of physics since it belongs to it. Nevertheless, we preferred to make it familiar to the reader and include it in this section. As you will know, it is [space] a surface in a certain state. We say that we understand by the word 'space'⁸³, first of all, not itself but a thing that has a relation with the body that rests in it and moves from it and to it by motion. The examination of something's existence can be after the investigation of its quiddity, and it can also be before the investigation of its quiddity if its accident is perceived. For example, it is known that there is a thing here with the mentioned relation, but it is not known what that thing is. When that quiddity is understood, there is a need to explain its existence. If the existence of that relation is not clear, there is a need to explain that it is a quiddity, which is specified with that relation, as we mentioned in the [section on] demonstration.

By space⁸⁴ it could be meant something that embraces body and something on which body rests. The inquired one here is the first one, and it is the case of the embracing one; it is separated from it while moving and [becoming] equal to it because the condition here is that two bodies do not exist in one space. Space separates from the embraced one while there is a motion⁸⁵. Prime matter and form do not separate from the embraced one with motion. Therefore, space is neither prime matter nor form. Also, motion is in space, while form and prime matter are with motion. So it is clear that space is neither prime matter nor form.

There are different theories about space.

One of them says that it is a distance appearing between bodies. Those who claim this are divided into two groups: one of them says that this distance does not exist without the embraced one and the other says that it exists without it, while they claim that it is emptiness. Others say that it is prime matter and form, and some say that it is the surface of an embracing body that is touching the

⁸³ Cf. *al-Ṭabīʿiyyāt*, I.2.5.

⁸⁴ Cf. *Ibid.*, I.2.6.

⁸⁵ Cf. *Ibid.*, I.2.7.

embraced one⁸⁶. We already disproved the theory of those who say that space is prime matter and form. About the proof of those claiming that it is a distance, you should read the book of *al-Šifāʾ*. We will bring some of them during our discussion.

First of all, I say that if the emptiness of something empty is assumed⁸⁷, it is not pure nothingness but an essence and a substance because each emptiness of something empty is assumed while there exists another emptiness of something empty, less than that or more, and it exists as something divisible. Non-being and nothingness do not exist in this way. Thus, emptiness is not nothingness. Also, whatever is like this is a quantity. Hence, emptiness is a quantity. Each quantity is either continuous or discontinuous. Emptiness is not discontinuous since each discontinuous occurs either as having discontinuity accidentally or being discontinuous in itself. To whatever discontinuity happens accidentally is continuous by nature. If it is discontinuous in itself, then it is without a common limit between its parts. Each part of everything that is like this is indivisible. However, everything like this cannot receive by itself the continuity of parts. Therefore, emptiness is not discontinuous by itself, but it is continuous by itself. Indeed, it can be assumed as equal to fullness in measure, and everything like this is equal with something continuous. Everything that is equal with something continuous is continuous. Therefore, emptiness is continuous.

Moreover, emptiness is fixed by essence, has continuous parts and has certain sides. Everything like this is a quantity with position and, thus, emptiness is a quantity with a position. Also, there exists in it a feature of distance and the reception of estimative divisibility in any side, extension, and all directions. Everything like this is receptive of the three dimensions. Therefore, emptiness has the three dimensions and a position as if it is a mathematical body separated from matter. Mathematical body is a measure, and it cannot exist except in matter. We already explained that measures cannot be infinite. If they were finite, they would be by division. Division is by the mediation of matter because if it were not matter, each distance would be one measure. Therefore, it follows that emptiness is a body.

Those who claim about the distances that are not without the embraced one must agree with what we say⁸⁸: this distance exists either with the distance of the embraced body or it does not exist. If it were not existing, there would not be the embraced one in the space. Moreover, if it were absent at times and existed at times, so it is sometimes potential and sometimes actual, there would be a potential and an actual meaning. What is potential is prime matter and what is actual is form.

⁸⁶ Aristotle analyses four possible interpretations of what is space, whether it is the form of a body, its matter, its extension or the borders of a body. See Aristotle, *Physics*, Book IV, chapters 1–6.

⁸⁷ Cf. *al-Ṭabīʿiyyāt*, I.2.8.

⁸⁸ Cf. *Ibid.*, I.2.7.

Thus, this distance is a body, while it was assumed that it is not a body. If it remains existing with the distance of the embraced body, it either unites with it or is distinct from it by the distinction of number.

However, the meaning of our statement ‘this individual distance, which is between these two things’ is that this continuous thing, which receives between them one division that indicates to it. Everything that is between the two sides is this distance, and everything that is this distance, which is between the two sides, is but an individual unit. However, there exists the distance, which belongs to body, and there does not exist other distance. If it unites with it, then there is only the distance of body, and so the estimated distance does not exist.

Also, the prevention of bodies from mutual penetration is not because of forms and qualities. If bodies are assumed to be existent, while forms and qualities are absent, mutual penetration is still prevented. If body is assumed absent and certain qualities are assumed existent, it does not prevent mutual penetration. Prime matter cannot be the cause in the prevention of mutual penetration of bodies because penetration means that anything that you take from each of the two things you find with it in a position being from another that does not differ one from another in that position. The meaning of non-penetration is that one of the two is distinct. However, prime matter has no area or position.

Then, prime matter is disposed to coincide with distance, but it does not separate as an area according to its nature. Therefore, prime matter, form, and qualities do not prevent the mutual penetration of bodies. It is known that if there were no other preventing thing here, it would be necessary that the mutual penetration of two bodies is plausible, since apart of anything that is composed of two things, there cannot be something other than them without undergoing a change and division. If the judgement is plausible to one of them, it is plausible to their totality. However, the totality of body is prevented from penetration because of something preventing from its parts. It became clear that it is not prime matter, qualities or form. There remains the nature of distance. Therefore, distance cannot be a space, otherwise, there is a penetration between bodies.

Then, it is certain that if the embraced body fills a pot, so it coincides with the distance that is a space – the matter of body and its prime matter, according to them, then when it separates from them, the body is not filling the pot or that distance is remaining in its state without coinciding with the matter of the embraced body. It is not correct that it coincides with the body and not with its matter, otherwise, the body would be existent without matter. Then there are spread two equal distances of identical natures in matter. The things identical in nature, which do not differ by species and specific differences in their substances, do not multiple in their individual beings, as we will show in the section on individuation, but they multiple by the multiplication of matters, which they occupy. If matter is one, it does not multiple, and there are no two distances since one of the

distances does not have any feature that the other would not have. We do not find in the matter of the same embraced thing but only one mode of continuity. If there were only one distance in it, then the form would be that form. If the distance were one, and it is a corporeal distance, it would follow that body does not have a space or that body is in the distance, which is its distance and its own space would be itself, which is absurd.

The adherents of distance⁸⁹ mentioned that we arrived at [a conclusion about] distance by way of analysis. This is because analysis leads to the simple things through estimation and the removal of all gathered things one by one. What remains after the removal of the rest in the estimation is a simple existent in itself, yet it has no separate subsistence. So through this, we learned about prime matter and form. Thus, if we estimated water or something else from bodies removed from a pot, for instance, it would follow that there is a fixed distance existing between its sides.

However, this is not the case. Analysis is a one-by-one separation of parts of an existing thing. Analysis indicated to prime matter while proving that there is a form that is not subsisting by itself, and it was clear that there is matter. Prime matter becomes necessary with the establishment of form and not with its removal in estimation. If the removal and absence of form were estimated, as they did it in the establishment of distance, then there would be the disproof of matter and not its establishment.

The analysis of the embraced one does not necessitate the disproof of distance or its establishment: it does not necessitate the disproof of distance because the adversary does not claim it; and as for its establishment, it is because the very disproof of the embraced one alone does not necessitate the existence of distance, unless there is no condition that the surrounding bodies still exist in their own states. So the measure of the distance, which exists in the estimation not as a distance, is established by this. If the surrounding bodies are still not in their states, the estimation imagines an infinite distance without considering the removal of body. If body is one and it is estimated as non-existent, then it is not necessary that from the estimation of its absence one can claim the distance. Nonetheless, this distance is assumed in estimation if body or bodies are absent in estimation. How do we know that this estimation is not wrong and its conclusion is not absurd? Is it shown to be true that this assumption is possible and what follows from it is not absurd? Well, except when it is claimed that all that is necessitated by estimation is necessary, but you know that this is not the case.

We say that analysis is the distinction of things whose existence is possible collectively, but they are mixed in the intellect. The intellect distinguishes some of them from the others, or it

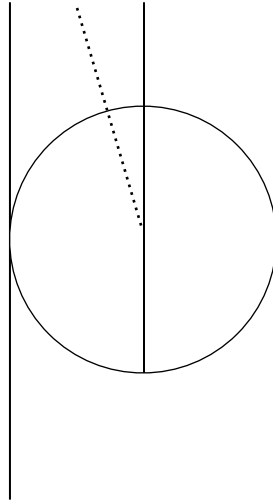
⁸⁹ Cf. *al-Ṭabrī'īyyāt*, I.2.6.

happens that some of them indicate the existence of others and, therefore, considering the state of one regarding another and transferring from one to another. Removal, in this case, has the meaning of leaving something and transferring to something else, and not non-existence.

Moreover, you know that once you conceive emptiness, the features, which specify it, are the features of quantity or something that has quantity. If emptiness receives them accidentally, then it is something that has quantity, or it is an accident having quantity or a substance having quantity. Accident cannot be something having quantity unless by its existence in a substance that has quantity. It follows that emptiness should be something associated with a substance and continuous quantity. If substance and quantity enter into its substitution, then it is a body. If they were associated with it externally, then at least it should be an accident in body. However, a body cannot enter into the accident in another body. If it were a quantity by itself while having the three dimensions, then it would be impressed in matter, as we explained while speaking about the impossibility of this kind of dimensions existing sometimes separated from matter and sometimes mingling with it. If it were so, then emptiness would be a body.

Also, in emptiness there cannot be any motion, neither straight nor circular. As for circular motion not being in it, it is because emptiness must be infinite absolutely since it is not typical for it to cease or vanish. If circular motion were possible in infinite emptiness, then there would be the crossing of two infinite lines: one of them coming from the centre of circular body and the other assumed in the emptiness as outside of circular body and parallel to the line coming from the centre. If the crossing of this kind of line with the motion of circular body were possible, they would be crossing immediately. If they were crossing immediately, as we will explain about crossing in its proper place, then they would cross at a point that is the first point where crossing can be in the assumed line in emptiness. If there were the first point existing in the assumed line in the emptiness by which there is the crossing with that line, there would exist in it the first point from which comes a line to the centre. However, the conclusions are absurd, since it is impossible that there is a point in the assumed line stretching in emptiness that is the first point from which comes a line to the centre. Since there is no point here without being preceded by another point from which can come a line to the centre and so till infinity. If it were so, there would not be any crossing. If there is no crossing, then there is no motion. Thus, the premise that it is the existence of circular motion in emptiness is false, and this is the illustration of that assumed line in emptiness⁹⁰:

⁹⁰ The illustration is not given in all manuscripts of *al-Taḥṣīl*.



This explanation is also valid for the impossibility of the existence of circular motion in infinite fullness.

As for straight motion, it is either natural or imposed, as we will explain later. Natural motion is the one that comes from body given by its nature, while imposed [motion] is when a body moves towards something different than its nature requires, like someone who is throwing a stone upwards. We will comment on all of these later.

There is no difference of parts in emptiness, so there would be a difference of places, or there would be a body moving from the beginning to the end because there is no part here more fitting in order to be the beginning rather than the end. There also would not be the existence of the world, insofar it is existence, better in order for its existence to be in another limit of emptiness since there is no difference of parts in emptiness. Otherwise, it could be said that this existence is coincidental existence, but coincidental existence does not last with this permanence. We will verify later that the existence of the world as such is not through coincidence. As for coincidence, as you will learn, it takes place with natural or voluntary things. Also, among the existents in reality there is nothing by coincidence, but all of them or most of them have finalities, as you will learn. This question does not follow if someone does not speak about emptiness since it is not from our theory that the existence of the world is in a place⁹¹. There will be some premises that we will explain later. Here we touched upon them in order not to interrupt the discussion about emptiness and because they are close to the first principles.

You know that a mover all along is moving in a thin [environment] with faster motion, like the motion of a stone in air is faster than its motion in water. This premise is evident by observation. Then, each motion is in time, as we will explain later. If something is moving in emptiness, it is necessary that its motion is within a limited time, or this motion is not in time. If it has a limited

⁹¹ Aristotle and his followers did not recognise the existence of emptiness or space as such.

time, and the time of a mover in fullness is also a limited time, then if the times of the two motions are compared, it is necessary that the time of the mover in emptiness, which has no resistance at all, has a relation to what has a resistance. However, this is impossible since what has no resistance at all has no relation to what has a resistance. Similarly, between the two times there is no mutual relation⁹². If that motion were not in time and the whole motion were in time, then the motion, which is in emptiness, is not a motion, and this is explained by the second figure, and it is a contradiction.

Therefore, no motion in emptiness is natural. If there is no natural motion, then there is no imposed motion in it.

Here is another explanation about the absence of imposed motion in emptiness based on natural premises, which we leave mentioning by being satisfied with what was said here and limiting with what is given in the book of *al-Šifā'*.

The impossibility that follows about natural motion in emptiness also follows about imposed motion in the explanation based on resistance and non-resistance. It also follows that that motion, i.e. the imposed one, does not disappear at all because you will learn that the cause of this kind of motion is an external inclination that appears from the side of the imposer in the motion. This inclination does not disappear by itself since something that deserves non-existence by itself does not exist temporally. It is not ceased by the natural power that is in the mover since if it were that power, which is the cause of the absence of the external inclination, then it would not exist from the beginning. Therefore, it is something external that ceases it either by encountering [it] or without encountering. If that thing ceased the inclination without encountering, it would cease it at the beginning. So there remains its ceasing by encountering. However, in emptiness there is no resistance by the mediation of which ceases the external inclination of the mover through imposition. Therefore, it is not correct that imposed motion disappears from something shaken if its motion were in emptiness, but the conclusion is absurd⁹³.

Similarly, there is no rest in emptiness. This is because it [a resting object] is like that, which rests without motion, and it is from its nature to move, as we will explain. The same is with that what rests in emptiness, where motion is absent, and it is from its nature to move in it. However, it is not of the nature of emptiness to have something moving in it.

There are other things that indicate by observation the non-existence of emptiness, although those who speak about emptiness make from them proofs for the existence of emptiness. They were

⁹² Cf. Aristotle, *Physics*, 215b.

⁹³ Cf. *Ibid.*, 215a; 243a, 243b.

disproved in the book of *al-Šifā'*: of such things are the 'water-stealers'⁹⁴, sprayers and water pumps, cupping glasses that absorb skin, and it is for the necessity of sticking flat bodies, also a small cup that is fixed under a heavy thing, so it is lifted with it, and other things of wondrous power that show the impossibility of the existence of emptiness.

If water were kept in the water stealer due to emptiness, then while opening the device, water would not fall down.

Thus, it should be clear to you that space is neither the prime matter of something, nor its form, nor emptiness, and nor distance. Yet, it is unavoidable that it is something like a body, either it is by mutual penetration or by embracing. It became clear to you the impossibility of mutual penetration. Therefore, it is by embracing.

It might be said⁹⁵ that space is equal to what is embraced, it is meant by it not the body of the embraced but the surface of the embraced; the equal of surface is surface, and space is the surface equal to the surface of the embraced, and it is the end of the embracing that is touching the end of the embraced one. You learned from this that space is a surface and not some measure. Line, surface, and point, while their transmission is accidental with body, are not in space itself. What has space is something that moves by itself.

Although space cannot be avoided in motion, it is not the efficient cause of motion because the efficient cause of imposed motion is known⁹⁶, and similarly, the cause of voluntary motion, and they are not space. However, not all that could not be avoided is an efficient cause. A cause also must inevitably have an effect, and nevertheless, effect is not the cause of the cause. Cause is that which is inevitable, it is in itself, and not due to something else, it precedes effect in existence. We will explain below the cause of the effect's existence.

Space does not precede motion in causality, but perhaps, it precedes it in nature, so if there is a transfer, then there is a place, and not if there is a space, then there is a motion. There is a difference between the two preceding cases. It is the condition of cause that it bestows the existence of effect, while such a condition is not in that what precedes in nature. Space, therefore, is something necessary for the substrate of motion. For the substrate of motion, insofar as it can move, is necessarily in some space. The details of the disproof of premises of the adherents of distance and emptiness, and those who claim that space is prime matter or form, can be found in the book of *al-Šifā'*.

⁹⁴ Or 'water-thief' (*sarrāqat al-mā'*) known in Greek as clepsydra (κλεψύδρα). It is a vessel with a hole on top and bottom. Once immersed in water the vessel absorbs water and contains it unless the top hole is not open.

⁹⁵ Cf. *al-Ṭabī'iyyāt*, I.2.9.

⁹⁶ Cf. *al-Manṭiq, Categories*, 5.5.

It may be asked: ‘Was not the air displaced by the walking [person] in a certain place, which is now occupied by the walking [person]?’

The answer is that the mistake here is that something that exists potentially is taken for something that exists actually. Since the displaced air was not distinguished from the air surrounding it, so it would have a specific space. It is the walking [person] that actually makes necessary those limits that embrace it, and it did not previously embrace the displaced air. These limits are the space of the walking [person], and the walking [person], when walking, does not move from something in which there is air after him, but causes air to appear behind him.

CHAPTER SEVEN

On the discourse of ‘how’ and quality

‘How?’ is asked about something that has a quality, and it is asked about quality itself, which is any stable shape for the conception of which there is no necessity to conceive something else that is external to it, or its carrier, neither the division nor relation of the parts of its carrier. So, this is quality, and through it you answer the question ‘How is this thing?’. It differs from ‘relative’, ‘where?’, ‘when?’, and ‘possession’ in not requiring any relation with something external. It differs from ‘position’ in not requiring any occurring relation of the parts of body. It differs from ‘quantity’ because it is not considered in it any division or the relation of the parts of its carrier. It differs from ‘to act’ and ‘to be acted upon’ in that it is stable. Thus, we acquire quality from the conception of different meanings. Then, if we classify those things, i.e. the categories, and we know what we have done is different from quality, the remaining will be limited to the category of quality. Hence, this is that what answers the question ‘how?’, and it is not from the others [categories].

There is also another way: to define this search as [a question of] ‘how a thing is in itself?’ by limiting to itself and its state. If the description is in need to consider something that is not in it or not from its state, so it is said ‘how is it?’, then it went astray from the necessary [direction].

It [quality] has four kinds: the first is state and faculty; the second is power and non-power; the third is acting and affection; the fourth is what is typical of quantities like figure, oddness, and evenness.

The first kind is considered together with the soul because it is either in a soul or in something that has a soul. What disappears quickly, like a weak opinion and the anger of a mild-tempered [person], is called a state. What disappears slowly, like the complete disposition of the

soul in the reception of the intelligible objects or acting in it, is called faculty. If we say knowledge is a faculty, it is indicated by it the complete disposition of someone who acquires knowledge and not knowledge itself insofar it is knowledge. The examples are the hatred of the haiting [person], deep-rooted morality, customs, and chronic diseases. The difference between state and faculty is the difference by accidents and not by specific differences that are included in the nature of a thing. The case between them is like the case between a boy and a man.

The second kind is the tendency of body for affection and the reception of certain impressions. If there is an easy tendency, then it is called natural weakness. If there is a tendency with resistance and the slowness of affection, then it is called natural power. The example of power is health and the example of weakness is disease.

The third kind is the qualities perceptible sensibly in the external features of bodies themselves, e.g. colours, tastes, smells, and other things like that.

Some of them are firm and fixed, and called 'passive', like the sweetness of honey and the redness of rose. They are called 'passive' for two reasons: the one that covers all of them, because the senses are affected from all of them, and that what is specific to some of them, because they happen to be from the affections in the very nature [of a thing], like the sweetness of honey and the yellowness of yellow. [Sometimes] it might not be the nature, like the saltness of seawater and the yellowness of someone with a bad mixture [of elements] in the liver.

Some of them disappear quickly, like the redness of a shy [person] and the yellowness of a coward [one]. They are called passive not because they are passive by themselves in reality but due to figurative expression and metaphor, the big amount of affection, which occurs to their carrier, and the fastness of their appearance and disappearance.

Know that heaviness and lightness are from this kind. A body while heating, becomes light, and while freezing, becomes heavy, and it is the same in itself. Different things, each of them having a certain weight, might unite, and if they unite, there appears a weight, less or more. This is because they are affected by each other.

The fourth kind is the qualities typical of quantities, like the curviness and straightness of a line, the figures and corners of a bodily surface, the evenness and oddness of numbers.

Know that⁹⁷ in bodies there are limits and something that has limits with a shape according to those limits. That something is a figure. As for the limits, they are not figures but sides. It is not correct to say that they are on the outward of a limited thing. It is even said, for instance, that surface is on the outward of a body, or line is on the outward of a surface. Surface is itself the outward of body and line is itself the outward of surface. The figures of bodily objects are not

⁹⁷ Cf. *al-Mantiq, Categories*, 5.2.

shapes that exist in the limits, but they exist in the totality of a limited thing within the limits and in the limits existing between them commonly. If a sphere were in a surface, it would be dome-shaped or a hollow, like if a circle were in a line itself, it would be a roundness and a curve. Just as the substrate of the figure of a circle is a surface, similarly, the substrate of the figure of a ball is a body. The figure of a circle is completed only by the bending of the line, and the figure of a ball is completed except by the curving of the surface.

These are figures, and even if their causes are limits, they are not causes in themselves but in something else that is in unity with them, and it is body.

Figures do not receive greater or lesser [degree], and also, the qualities of numbers do not receive increase or decrease. They do not have opposites because they are derived from numbers. As for other kinds, there appears in them increase and decrease.

It should not bother you that⁹⁸ certain things that you consider relative are in the category of quality, for instance, knowledge. Knowledge is knowledge of something known, same as faculty and morality, when morality is regarding something. You should not also consider, as some people of weak opinion, that the same thing is in two categories by itself. It is necessary for you to know that knowledge, morality, and other similar things are not true relatives, but qualities that must have relativity and cannot be separated from it absolutely. It is the relativity in the first sense about which we will speak, and it is not a category.

We will make clear that relative can mean a category, namely a meaning, and when it is thought, its quiddity is understood in comparison to something else, like fatherhood and sonhood. It can also mean something to what occurs this category, like the knowledge that is an image in the soul, while there appears to it a relativity externally. Knowledge has existence by itself insofar it is an image belonging to the soul, and the same is morality. Your proof for this case is the kinds of knowledge, like grammar, and the kinds of morality, as courage. They are said by themselves and not by relativity. Grammar is made knowledge, and it is called as knowledge of something while its being is relative to the nature of its genus. However, grammar is not grammar because there appears to it relativity but because it is knowledge. Courage, as well, there appears to it relativity because it is morality. If knowledge and morality as such were relatives, then their kinds would not be thought by themselves except in relativity. This is how this chapter should be understood.

⁹⁸ Cf. *al-Manṭiq, Categories*, 6.4.

CHAPTER EIGHT

On the establishment of affective quality and affections, and that they are accidents

It is known⁹⁹ that bodies are different; the black ones from them are black regardless of their figure and position; the difference in order and position is different not because of these colours; if there were no specific feature for each one of the different bodies, it would be impossible to imagine different imaginations with senses.

As for the theory stating that these qualities are figures and nothing else¹⁰⁰, it is disproved since if a sensibly perceived thing were a figure, then it would be necessary that while perceiving the figure with the pupil we would see its colour. The same thing from the same aspect is perceived as one thing. If it is perceived from one aspect and not perceived from another, the one that is not perceived is something non-perceived. Thus, colour is not a figure.

Then, it is evident that colour has an opposite, same is with taste and other things like that. However, none of the figures has opposites.

The negligence of those [people] is surprising that figures are not perceived but through colours, tastes, smells, and other qualities. A figure is absolutely not sensed in an abstract way. If an abstract figure were perceived sensibly bringing into the senses certain impressions from these impressions that are not a figure, there would be the existence of these impressions. If these impressions were not but the figure itself, it would be necessary that an abstract figure is perceived without being perceived with something else. However, it is not like this.

As for them being accidents, it is known that the existence of these qualities is in bodies and bodies exist in actuality without them¹⁰¹. If they were substances, it would be necessary that bodies disappear with their separation just like they disappear with the separation of substantial form. Also, if they were substances, they would be either corporeal substances or non-corporeal substances. If they were non-corporeal, there would be either bodies from their composition or there would not be bodies from their composition. If there were bodies from their composition, those would be bodies known to you. If there were no bodies from their composition and they would penetrate bodies, they would be either separated or not separated. If they were separated, they would either remain after the separation sensed and measured or remain not sensed and not measured. If they remained sensed

⁹⁹ Cf. *al-Ṭabīʿiyyāt*, VI.2.2.

¹⁰⁰ Here it refers to atomists.

¹⁰¹ Cf. *al-Ilāhiyyāt*, III.7.

and measured after the separation, they would have measures in themselves, or their measures would be external. If their measures were in themselves, there must be first the existence of emptiness in which there are those measures. If they were penetrating the bodies, then one distance would enter into another, and also, there would be the existence of distance or measure not in matter. However, all of this is absurd.

Also, the concept of heat, for instance, is not of the same quiddity as length, width, and depth, and it is not of the same quiddity as measure. Heat is associated with the quiddity that is a measure, and it is its attribute. This is the meaning of our statement 'the description is in the described thing'. It is with it and does not separate from it. It is not a part of something that is a measure, therefore, heat is an accident.

If its measures were external because of its carriers, there would be a body with a quality. Thus, they are accidents. If they are not corporeal and they do not have existence by themselves except in bodies, then they are accidents and not substances. If they had existence by themselves and separated from bodies, they would either subsist by themselves, namely being that quality, or would transform into something intelligible. If they subsisted by themselves, namely they are the same immeasurable and sensibly not perceived qualities, and each affective quality and affections are perceived sensibly and measured, then these qualities would not be affective qualities and affections, which is contradictory. If they were something intelligible and not sensibly perceived, then it would follow that the same thing is separated from matter at times and mixed with it at times. You already know the impossibility of this.

In sum, if heat, for example, could be separated from its substrate, then it would remain either intelligible or sensibly perceived. If it remained sensibly perceived, and sensibly perceived unavoidably has a measure and a position, while measure and position are not heat, then it would be necessary to be a heated body. The intelligible cannot be mixed and separated. If heat cannot be separated, then it is an accident.

As for accidents being unable to transfer, you already learned it when we were talking about corporeal form: if the existence of this whiteness in itself is its existence in this substrate, then its absence in it is its non-existence in itself. As for the accidentality of the kinds [of quality, like] power and non-power, their case is clear. As regards the soul, we will mention it while discussing the science of the soul.

CHAPTER NINE

*On the solution of a doubt that the being of knowledge is accidental; and on the establishment of the qualities, which are in quantities*¹⁰²

As for knowledge being accidental, it is clear that what is known is from accidents, for it exists in the soul, not as a part of it. As for substance, it might seem that an intelligible thing is also a substance since a thing cannot be a substance in one case and an accident in another.

Suffice for you to remember what we said in the section on the secondary and tertiary substances. However, we [also] say: the quiddity of substance means that it is an existent among concrete beings and not in a substrate. What is known of substance is an intelligible quiddity while it exists among concrete beings and its existence is not in a substrate. As for its existence in the intellect in this respect, it is not included in its definition since in it is not in a substrate. However, it is included in its definition when its being is not in a substrate and when it exists among concrete beings. If substance exists in the soul or among concrete beings, its judgement is the same, since in both cases, its quiddity is that it exists among concrete beings and its existence is not in a substrate.

This is like saying ‘magnet is a stone that attracts iron’. If magnet were in the hand of a man and did not attract iron, its judgement would be still the same: it is a stone that tends to attract iron. Even if it were in the palm of hand, it would still have this characteristic. Therefore, it is not the case that if there is a substrate [for substance] in the intellect, it is false that there is no quiddity in the intellect that is not in a substrate among concrete beings.

We say that these known objects, i.e. intelligible objects, will be explained in the proper place. It is already clear that what is from natural and mathematical forms cannot subsist separately in themselves, but they must be in a certain intellect or in a soul. You will learn from detailed books that the intelligible things themselves, i.e. separated things, do not exist in themselves while we know them. On the contrary, there must be an impression by them, and what is impressed by them is our knowledge of them, likewise, if they were separated forms and separated mathematical objects according to Plato’s teaching. Even then, our knowledge of them would be only what we acquire from them. For these forms cannot transfer towards us; this was already clarified in various places. However, those from them that exist for us are impressions that imitate them, and they are intelligible objects. These intelligible objects, about which we are talking, are in comprehensions and cannot be acquired in our bodies. It remains that they are acquired in our souls, and they are accidents in the soul.

¹⁰² Cf. *al-Ilāhiyyāt*, III.8 and 9.

As for the statement that the qualities in quantities are accidents, you know from the existence of the body (such as a piece of wax) that receives various figures. If there were a body that does not receive various figures (such as the sky), then the figure belongs to its necessary qualities.

As for the establishment of the figures, it is made through the circle, as you learned from Euclid's book. There are several ways for the establishment of the circle, of which the closest is when we say: bodies exist. They must be either composite or simple. It is unavoidable from the existence of bodies that they are simple primarily and then composite. It is known that if those simple bodies were left with their nature, then they would definitely have some kind of figure. If they were left without a figure, those bodies would be infinite. However, if simple bodies unavoidably have a figure, then they must be spherical. If the matter in them is one and there is one form, then there cannot be of the same nature and in the same matter various actions coming from them, so that in some of them it is an angle and in the other a line. Therefore, the figure of simple bodies must be spherical. When it is divided, a circle appears, and thus, a circle is established in this way. Once the circle is established, there established other figures. As for a straight line, it is established by the existence of parallel [lines].

CHAPTER TEN

On relative

Know that the definition of the relative, which is a category, is that its existence is relative¹⁰³. However, it should not be thought that the relative, taken in its definition, is itself something defined. Some things have a genus or something that is similar to a genus, more known to everyone, and then experts find some meaning of species that is under it or something similar to species, and when necessary, they transfer to it the name of genus, as we mentioned in the section about the possible.

The word 'relative' is said for a quiddity in comparison with something else, regardless of whether it has another existence or does not have it. If there is something, for example, a substance, and then it is accompanied by some relation, such a thing is considered from the point of its relation, insofar it is what it is, and similarly, the quiddity is named through the comparison with something else. It would belong to the relative and have a different specific quiddity, like humanity.

¹⁰³ Cf. *al-Manṭiq, Categories*, 4.5.

If there is something, like fatherhood, the quiddity is named through the comparison with something else and which has no other existence, so it would also be relative. Therefore, relative has two meanings, embracing them with its definition, yet it is not a genus for both of them. Relative, taken in this definition, is this general meaning, and the defined thing has a special meaning. The true relative, which we define, is that whose quiddity and existence is relative, and it does not have other existence. This is one of the special ones, which truly specifies the condition of abstraction by some general nature; if the nature of genus permits some meaning to accompany or not to accompany it, and none of them is necessary for it, then it becomes special provided that it is without the others that can accompany it. Here, the meanings of genus and species are not the true ones but special and common ones.

The difference between the relative, which is a category, and the relative, which is not a category but something that is accompanied by relativity, is that it is a category and it is something the objectivity of which is realised while its quiddity is expressed through comparison with something else and that it is specified in this and no other way. The latter's objectivity is subsisted by the special existence of some body, which then is accompanied by relativity, and this is not from the relativity, which is a category. If relative has no other existence besides that it is relative, then there must be one of the sides that is present and the other one that is present because of it. If you say 'double' generally, without meaning something present, then you will have a half as something opposite to double, which is not present. However, if you say 'double is four', then half as two appears as something opposite to it.

We say that by the presence of relative it is understood several things, and therefore, let us introduce the following:

We say that relative has no stable existence, like the existence of blackness and whiteness. However, its existence is something that accompanies things, and its specification is the specification of this accompaniment and not the specification of what it accompanies. This specification with the accompanied object is understood in two ways:

One of them is when the accompanied object and the relativity are together, like the relativity of this attribute with this carrier, and it is not a category.

The second one is when there exists a relativity associated with a special intellectual thing, like the association of a specific difference with a genus. They exist together as one accident of the accompanied object, and this is the presence of relativity as species.

Relative in its species is different from colours since colour in the association with the specific difference of blackness does not need any consideration of a substrate because it has stable existence. As for relative, it is inevitable to consider substrate, regardless of whether the specification is about species or the same as in the previous case. Similarity is the correspondence in

quality, but the correspondence in quality is not the corresponding quality since the correspondence in quality turns out to be like a specific difference for quality. At the same time, the corresponding quality is not like that. The corresponding quality is not a relativity but something that has a relativity. As for the correspondence in quality, it is the species of the relative; and the correspondence in quantity, which is equality, is the species of the relative. As for equal quantity, it is something that has a relativity.

Hence, it is clear from this that if something double is present, then there must also be something of which it is double because it cannot be so that everything is double of everything while it is a double of the present object. Therefore, whatever of the two relative things are known as something present, one is known through the other. If the presence does not occur to it insofar the relativity is present to it, but insofar the substrate is present, while the relativity is left as it is, the opposite relative does not become something present because the nature of relativity is not present, but its substrate is. Therefore, if relativity is not present but only through the presence of its substrate, it is not necessary that whatever is present with its substrate, the relativity is also present, as the existence of four, insofar it is a number and not a double.

When a related thing is a relativity itself, then one of the sides is not present but only by the presence of the other. For none of these sides has existence other than as a relative. Some of the substrates of relativity are forming species and the others classifying, like the fatherhood of a just man, and some are individuating, like the neighbourhood of Zayd with 'Amr.

The difference between the classifier and the species former in the example, which we gave before, is that if we imagine quantity instead of quality in equality, then there will be no equality existing and no existence of this relativity itself remains, since with the absence of the specific difference the genus is also absent. If you imagine a just man not to be just, then fatherhood would not cease with it¹⁰⁴.

Knowing this, you realise that relativity is not included in the category of individuation, for it is not individualised by itself, and because one brother may have several brothers.

Know that two neighbouring persons cannot have a single meaning that presents between them a relativity by number, but each of the neighbouring persons must have a neighbourhood that is not the neighbourhood of the other by number. Sometimes it happens that there is one species, like two neighbouring persons, and they differ in number; sometimes, the differing ones are by species, as with fatherhood and sonhood. The relation of the neighbourhood with one of the neighbouring persons is that it is in comparison with another and that [the other] has it.

¹⁰⁴ Ibn Sīnā distinguishes between a relation that is particular (the fatherhood of a specific man) and the case when it is related to the species (the fatherhood of a just and unjust man, where justice or injustice is extrinsic to the fatherhood). See *al-Mantiq, Categories*, 4.5.

The meaning of our statement¹⁰⁵ ‘the being of something is intelligible by comparison with something else’ is that if there is something and in order to be conceived its meaning needs the conception of something else external to it and not just whatever is suitable. So, when a roof is conceived, it is conceived together with a wall, which supports it, while the quiddity of a roof is not intelligible in comparison with a wall. Indeed, the intelligible meaning of a thing, which needs to be thought along with some other thing, must be by the existence of that other thing through its opposition. That meaning, which the thing has by the acquisition of the state that the other was with it, is its relativity, for example, brother. The real concept of brotherhood for one of the two brothers is determined by the existence of the other [brother], and this is the condition that he has because of that, and it is his being; he is the son of the father of the first one. Thus, brotherhood is its consideration itself when one has another with this characteristic. This is the being of quiddity that is said through comparison with something else.

Not every relation is relativity, but a relation that is considered repeatedly in something to what occurs a relativity. The meaning of our saying ‘repeatedly’ is that the focus is not only in relation, but mostly the consideration of a thing in relation insofar it has a relation to a related object. So, a roof has a relation with a wall, and if you consider the roof in terms of its relation, which it has, it would be resting on the wall being relative to the wall not as a wall, but as something that rests on it. The connection of the roof to the wall, insofar the wall is a wall, is a relation; and when you take the wall as something related to by resting on it and the roof is related to it, then it is a relativity.

So this is the meaning of what they say ‘relation belongs to one of the sides and relativity to both of them’. Indeed, if you take the roof as something resting on the wall, the relation will be seen from the side of the resting roof, and from the perspective of the wall there is no relation to anything insofar it is a wall. However, if you take this relation as a relation of the wall resting on something that it is resting upon, then it is relativity. The same case is with blackness and substrate. When blackness is regarded as an attribute and the substrate as its carrier, then it is relativity. Things that have something might be related. If you take relation insofar it is a relation, there will be relativity.

Among the related things, there are the bigger and the smaller. Here, the relativity is by assumption because the difference between the bigger and the smaller is by the excess of the bigger’s parts. When there are no actual parts, there cannot be any bigger or smaller in actuality, for example, double and half. In this example, it can be actual and assumed. Actual is in the things that have natural numbers.

Among the related things, there is potentiality and power since potentiality is in something

¹⁰⁵ Cf. *al-Mantiq, Categories*, 4.3.

to something else. Other types are listed in the book of *al-Šifā'*.

Among the number of related things, which is assumed, there is prior and posterior in time¹⁰⁶, for there is no prior in time and no posterior in existence since time exists by renewal. The prior does not rest along with the posterior. Therefore, it is because of the mind that represents two times together and compares them to each other.

Once again, we say: relative is that whose quiddity is said by comparison with something else. In concrete beings, there are many things with this characteristic. So relative exists in concrete beings. Relative, in a true sense, is a relativity, like fatherhood and sonhood, and not something that has a relation. It is relative in itself, and not due to some other relativity, where there follow infinite relativities. As for its relativity to its substrate, for example, the relativity of fatherhood to Zayd, is also a relativity not by a certain [other] relativity; for being an attribute is relative in itself, being a father is relative in itself, and being a carrier is relative in itself, [which] is not like the relativity of blackness to body established by some relation between them, namely one of them is a carrier and the other is an attribute.

We even say: relativity is not due to something related but it is the relativity of something, as we mentioned in the case of existence that it is the very existence of something. That is why instead of 'relative' it is used 'relativity'. It is the same case with being in place and time. It is clear that relativity is not something to what happens togetherness but it is a sort of togetherness.

There is one doubt here, namely, an accident exists certainly in a substrate, so it is an attribute and the substrate is a carrier. Then, it happens that it is [the accident] a being as existing attribute in the accident while the accident is a carrier for it and it is an attribute in it and so on to infinity.

We solve this doubt because the existence of accident is constituted by its being as an attribute since its being is the same as its existence in a substrate. It is not that it has existence and then it turns out to be also an attribute. This is also not the case with being in a place.

So, you learned that relative in existence means that it has this definition, and this definition must not be relative in existence except accidentally; if thought, then it is thought by comparison with something else. The relativity is an accident, and the existing relativity is the being such that if it is thought, then the quiddity is thought by comparison with something else. This being does not have a name, only insofar as it is thought by us, as we mentioned regarding ten and existence.

As for its being in the intellect, its quiddity is thought by comparison with something else, and not that if it is thought, it is thought by comparison with something else. You learned that something one self-subsistent cannot be a connection between two things when you understood that

¹⁰⁶ Cf. *al-Manṭiq*, *Categories*, 4.4. and *al-Ilāhiyyāt*, III.10.

each of the two neighbouring persons has something that relates one to the other. Thus, the existing relativity is something that if is thought, it is thought of as a quiddity in comparison with something else. You know that a real relative is not like this, but it is a reality that follows if you think about it in comparison with something else, and not such that if it is thought, then it is thought through comparison with something else.

CHAPTER ELEVEN

On 'where', 'when', position, and possession

As for 'where', it is the being of something in a place. We mentioned it in [the book on] logic, where we talked about *Categories*, that this being is different from the being in concrete beings. Relativity occurs to the being of something in a place when one of them is a carrier and embracing one and the other is an attribute and embraced one, just as it happens to the being of an accident in a substrate, when one of them is a carrier and the other is an attribute.

Under it ['where'] there are species: being above (where) and being under (where)¹⁰⁷.

To 'where' belongs the first and authentic one, as the being of something in its specific place, and the non-authentic 'where', as the being of something in the sky or a market. 'Where' can be a genus, such as the being of something in a certain place; or a species, as being in the air; and also individual, as being in this place.

We say: in 'where' there are opposites. So, being in the absolute above, i.e. at the edge, is the opposite of being at the centre, and they are two [different] meanings. They may have the same substrate, on which they succeed each other, while there is an extreme difference between them, and this is the definition of opposition.

Also, 'where' receives greater and lesser [degree]. There may be two 'where' and both of them above, but one will be more above. In such cases, a greater or lesser [degree] is possible. As for being above in the absolute sense or below in the absolute sense, being at any degree in the absolute sense, being in a place in the absolute sense does not receive a greater or lesser [degree]. The same case is with quality. Black does not receive a greater or lesser [degree]¹⁰⁸, but the thing,

¹⁰⁷ Cf. *al-Mantiq, Categories*, 6.5.

¹⁰⁸ This is because each degree of black is a separate species.

which is black, is [so] in comparison to one thing and is white in comparison to something else¹⁰⁹. Any assumed part of blackness does not receive a greater or lesser [degree] in its own reality. For any more intense blackness is a species of its own since every blackness differs. For it either does not differ in its blackness but it is due to an accident, while the discourse is not about it, or it differs in its blackness due to a specific difference. Therefore, any blackness, and any such kind of quality, differs by itself, and it differs by a specific thing, and its distinction from the other is the distinction of the species.

In sum, greater and lesser, smaller and larger, closer and more distant – all this is due to comparison and relativity. When this relativity takes place in quantity, there is small and large, in quality – greater and lesser, in ‘where’ and position – proximity and remoteness. When the relativity is not considered, there is neither small nor large in quantity, no greater or lesser in quality, no proximity or remoteness in ‘where’ and position.

As for ‘when’, it is the being of something in time or in ‘now’. Many things turn out to be in ‘now’, like contiguity and the crossing of lines, which we will explain in its turn. You will learn that temporary things, which are described as being in time, are the things that are subject to change, and that fixed things cannot be spoken of as existing in time because they have a different being, which we will explain later.

Position is the being of something that has relation to one or another in different directions. You know that if there were no external body, parts could not be assumed in a body that has a position, so it would be possible to say that this is a part and where it is in relation to the other, while some of them would be in relation to the others by deviation and equilibrium. The position, which was mentioned in the section on quantity, can also be assumed by indication. This being, which belongs to position, is not the being of something that has a relation between the parts of what it is embraced by and what it embraces. This being is not a relation, which is between them, since relation belongs to the category of relativity; and its being from this respect does not belong to the category of relativity. Heaven is of the kind that its position is by comparison with embraced things.

Know that¹¹⁰ there are also opposites in position because if you turn over a lying body or bend a straight standing tree, then the differences between the two are not in number but in meaning and nature. A body could be in one and the same ‘where’, and if something passed, it would be its opposite, and then become ‘where’ that if that thing passed [again], it would not be its opposite. This changing characteristic of body is position.

¹⁰⁹ Black is white in the sense that something dark looks light in comparison to something else.

¹¹⁰ Cf. *al-Mantiq, Categories*, 6.6.

Position can be potential, for example, when it is said that the circle, which is around the axis of quern, is smaller than its circumference because the circle around the axis does not exist in actuality in order to be near the axis or far from it; it [position] can be actual, like in the case of a sitting person in a house regarding that house. This may be natural and authentic, as the position of the sky in relation to the earth, or it may be assumed, as the position of a sitting person in a house regarding that house. Also, relativity occurs to position, for example, alignment and opposition.

As for the category of ‘possession’, he [Ibn Sīnā] refrained from including it among other categories¹¹¹. This category is like getting armed, wearing jewellery, and putting on shoes. Some of them are essential and natural, like the case of a cat and its skin; the others are accidental, as in the case of a man and his shirt. The category of ‘possession’ can be expressed differently, like ‘the category of having’ or ‘the category of property’. It can be essential and accidental.

The example of essential, natural one is also when it is said that the faculty of sight is the servant of imagination and estimation, while the estimative power is the head of faculties and other ones subordinated to it and headed by it. The same is the case with all bodily faculties in relation to the soul since they belong to it and are connected with it in this category, not as one body connects with another. The truth of this will be given to you in the science of the soul. As for what is accidental, it is like when you say: this house belongs to such and such.

CHAPTER TWELVE

The discourse on the categories ‘to act’ and ‘to be acted upon’; on the establishment of motion and its definition; the cases¹¹² of the categories ‘to act’ and ‘to be acted upon’; on the category to which pertains motion; on the clarification of rest

As for the category ‘to act’ and ‘to be acted upon’¹¹³, it is like blackening while a thing turns black and whitening while a thing turns white. The thing in which there is this happening is the one acted upon, being acted upon, and whose state is acted upon. The thing from which this happens continuously, insofar as it belongs to it, is the acting one.

¹¹¹ In *Dānešnameh*, Ibn Sīnā states that for him the question of possession of one thing by another is still unclear. See Ibn Sīnā, 2004, p. 30,8–9.

¹¹² *Aḥkām* (plural of *ḥukm*). The word is normally translated as ‘governing rule’ and sometimes as ‘value’ or ‘status’.

¹¹³ Bahmanyār considers these two categories as one. A close similarity between the two sides was noticed by Aristotle, yet their definition is not one (see *Physics*, 202a).

It is not correct to say ‘affection and action’ because they can also be said for the outcome in which the motion has ceased, as when it is said that this garment is burned if there is an outcome and it [the motion] has ended. As for the terms ‘to be acted upon’ and ‘to act’, they are specific for the state in which there is a direction towards this finality.

‘Rising’ in the meaning of ‘standing up’ or ‘to rise’ belongs to this category. As for a stable condition of rising, it belongs to [the category of] position.

This category receives opposites, as the whitening of black and the blackening of white. It can also receive a greater and lesser [degree], but in relation to blackening, not blackness, because blackening is thought of as the finality of motion. As for blackness, it does not need to be thought with motion towards it. Thus, one blackening is of greater [degree] than another if one is closer to blackening, which is a limit. This may be due to speed, so one of the two blackenings that takes place in a shorter time will be of greater [degree] than the other.

Let us now clarify¹¹⁴ the case of motion and what follows it, since it is by itself a category ‘to be acted upon’ and ‘to act’ that we explained. This consideration is within the affairs of the natural [science], but we still would like the studying person to understand it. Let us start, firstly, with motion and its descriptions.

We say: whatever comes from potentiality to actuality is either immediate or not immediate. It is conventional to call the transition from potentiality to actuality, which is not immediate, ‘motion’.

We are against using something related to time in its definition because time, as you will learn, is defined by motion. Thus, if we define it through something temporal, there will be an obvious circularity. However, we say: existent motion is a being between the beginning, from which there is motion, and the end towards which is motion, so whatever limit is assumed here, e.g. in the middle, the moving exists neither before it nor after. This intermediation is the form of motion. It is a single characteristic that the moving needs without changing. Here, the limits of the intermediation might change by assumption.

The being of the moving is intermediate not because it is in one and not another limit, but because of the mentioned characteristic, i.e. whatever the limit is supposed to be, it is neither before nor after it.

This being in the middle receives assumed division to infinity because it is continuity or something that has continuity, namely the continuity of connected limits. If it did not receive division, then it would be immediate and there would not be continuity or something that has continuity, namely motion. The distance between the beginning and the end also receives division in

¹¹⁴ Cf. *al-Ṭabrīʿiyyāt*, I.2.1.

assumption and estimation. The difference between this [the middle] and the distance is that the distance is assumed to exist and then it is possible to assume parts or a point in it. This is something that exists in it; being in one indivisible limit after another, and certainly, the existence of these connected limits in assumption and potentiality in the sense that the connectedness of a limit does not distinguish in actuality.

This form exists in the moving and it is in the 'now' because it could be said that every assumed 'now' is in an intermediate limit in which it was not before it and will not be after, and this limit is only through assumption. The being in the intermediate is something one, so each limit is defined in assumption.

Each indicated being exists in the 'now', and each being of this characteristic corresponds to a certain point in distance. Just as a point in distance is actual only in potentiality, similarly, each of these beings is only potential in the sense that one being is not distinguished from another following it in actuality. Just as extent in the estimation exists in the concrete beings and its [of extent] boundaries are not in actuality – otherwise, those that exist would be rest – and the boundaries are not actual, similarly, the being in them is not in actuality.

The most comprehensible formulation of its [motion] meaning is when it is said: motion is the connection of limits in continuity, and rest is the interruption of this connection, and these limits are assumed in connection. This kind of motion is followed by the existence of motion in the sense of passing [a distance]¹¹⁵, which we will discuss below. The motion has existence, in the sense of interruption, only in the soul.

Having learned this, you understand the falsity of the statement of those who deny motion claiming that it is something fluid, fluid is transient and passing, and the transient and passing has no existence¹¹⁶. Also, it is not from the things that are realised in actuality as something stable and complete, but it is a being in intermediate between the beginning and the end, which was not in it before it and will not be after. There occurs to this being a possibility of assumption of infinite limits in potentiality, not in actuality. As for locomotion, there are limits in distances by potentiality where connectedness appears. As for quality, there are infinite species existing in potentiality between the two sides.

Having understood what was said, it became true to you that the being in intermediate means not something generic but something individual. For this being in a place is one, continuous, and its parts can be only in assumption. Just as the distance that has one continuity is a single actual

¹¹⁵ It refers to locomotion as a kind of motion (change) in general.

¹¹⁶ Probably this is an allusion to the members of the Eleatic school, like Parmenides, Zeno of Elea, and Melissus of Samos who hold that a true being is one and unchanged.

distance and its parts are in potentiality, so is this being, which is between the beginning and the end. Even if this being has potential limits, it still remains as one being.

Therefore, the description of motion is that 'it is the first act and completion of something potential in relation to what it is potential'. Thus, a body located in one place actually and in another potentially, while rest in the first place, is potentially moving and potentially reaching the place of destination. When it moves, the first completion or act is realised in it, and through which it reaches the second completion or act, which is the reaching to the finality. However, while it has this completion, it is still in potentiality in the sense that it is the aim of the motion, namely reaching the finality. Motion, therefore, is the first completion of the potential in relation to what it is potential. Motion is the completion of something insofar as it is potentially located in the place to which it aims, and not what it actually is, be it a person or copper. It is like a completion following the completion, in which it is in potentiality or the completion that reaches the completion, which it has in potentiality. The first completion must be due to the second completion and attached to it. If it is so, then motion is the existence between pure potentiality and pure actuality.

As for the continuous thing thought for the moving between the beginning and the end, it certainly happens to the mover not actually, but it is something realised in the intellect.

When it is said that any motion is in time, then it either means motion in the first sense, so its being in time means not that it follows the correspondence with time, but that there should be a reached [distance], that reaching corresponds to time, in which case time should appear; or it means motion in the meaning of reaching [distance], which, as we already mentioned, is present only in the mind, in which case it always corresponds to time.

Further, there must be something fixed to which motion could occur. This fixed thing must be either something potential or something actual. It cannot be potential; therefore, it should be actual. That actual should either be separated with no attachment to matter in all respects or have some kind of attachment to matter. If there is no attachment between it and matter, then there absolutely should not be any potentiality at all and it should be present in everything that must have it, as we will explain below. However, what does not have any potentiality cannot in any way be in motion; for everything that requires motion requires what it does not have. What is abstracted from matter cannot require something through motion. Also, motion occurs to something, and this thing must have certain potentiality; moreover, everything to what occurs something must certainly have some potentiality, as we will explain later.

So, it is clarified from this viewpoint: motion does not occur to something separated [from matter]. Thus, motion must exist in something composed of potential and actual, namely in a body.

Further, motion cannot be a form of certain species of bodies since motion is an accident, and an accident does not constitute a body and, as you already know, motion occurs to a body in

actuality. There cannot exist a general body, but there is a body existent as a present species. Also, the species of motion do not exist in actuality, and that which does not exist in actuality is not a species-former of something in actuality. Then, if motion constituted certain species, then it would disappear with rest and the disappearance of parts of motion. Therefore, species must be potential and it needs something fixed in actuality. Thus, motion occurs to a body after its being constituted as a species.

Some supposed that motion is nature, i.e. the formal substance of something. However, motion is a state that occurs to the state of incompleteness and it is alien to substance. With nature, as you will learn later, it is different. Hence, nature is not motion.

Further, motion is related to six things: moving, mover, something in which there is motion, something from which there is motion, something towards which there is motion, and time.

As for its relation with moving, we already explained it. As for its relation with mover, we will explain it later. As for its relation with that from what it is and with that towards which it is, it is deduced from its definition: it is the first completion realised for that which has the second completion that it has to finish with, and it is in a potential state preceding both completions, namely it is leaving the first state and directing towards the second completion. That from what it is and that towards which it is are sometimes opposites; sometimes opposed things that do not unite together, like the states of the heaven; sometimes that from what it is and that towards which it is are realised temporarily stable, so each side is resting; sometimes there is no such a state, as in [the case of] of the heaven, for in the defined beginning there is no discontinuity; the beginning here is the end itself. Since it is considered as that from which is motion, it is the beginning, and what is considered as something to which motion is directed is the end. Therefore, defining that point is in potentiality close to actuality, and the point to which motion in the heaven is directed is only the one from which it is. However, that towards which motion is directed must be defined somehow, either in actuality or in a potentiality close to actuality, and a limit in the heaven is defined only because of opposition or parallel or something like that.

Know that being in motion is the state of moving, and the being of motion is related to moving because there is the state of motion in it. Similarly, moving is the state of mover, and the being of motion related to mover is the state of motion, not of mover, just as being in a place is the state of something located, not the place. Being in motion, moving, and motion are like one essence, for motion is being in the middle, and not due to which something is in the middle, as we mentioned regarding existence and what is similar to it.

As for the relation of motion with what it takes place in, let us explain it.

Know that¹¹⁷ blackening is not [when] blackness becomes more intense, but it is the intensification of the substrate in its blackness. Indeed, if we assume that blackness becomes more intense, then that blackness either exists identical to itself, while there occurred to it excess due to the intensification, or it does not exist. If it does not exist, then it is impossible to say that what has disappeared is what has intensified since moving must be something that is fixed in itself. If blackness is fixed in itself, then it would not be fluid – as it was supposed to be a fluid quality – but permanently be fixed while excess occurs to it without being fixed with it. So each ‘now’ [would be] different amount, and this continuous excess would be the motion of blackness.

It is evident from this, as we mentioned above, that the intensification of blackness takes it out from its previous species since it is impossible to indicate the existing [amount] of it [blackness] and the excess added to it. Each limit reached [in blackening] is a simple separate quality. We already gave an explanation for this earlier.

Hence, it is clear that the soul is not a mixture [of elements]. A mixture is something fluid, where between each side there is a potentially infinite number of renewing species. The meaning of our saying ‘potentially’ is that each species does not differ from what follows it in actuality, just as points and parts of distance do not differ from each other in actuality. Each person is aware of himself as one and unchanging individual, although unity will be in the sense of continuity until the end of his life. Then, as you already know, he needs something moving in the mixture and quantity, i.e. growth, and this thing is a body. Body insofar as it is a body, as you will learn, is not the cause of motion. Therefore, body must be in motion in its mixture from the beginning to the end of life due to another cause while it is fixed and is with the stability of body. This [cause] can be more the soul than the mixture.

Know that¹¹⁸ substance does not receive increase or decrease, as you learned. Any motion takes place in something that receives decrease or increase. However, there is nothing from motion in substance. The generation of substance and its corruption is not motion but something that happens immediately. What happens immediately has no intermediate completion between its pure potentiality and pure actuality. Indeed, if substance received increase and decrease, then its species would either remain in the middle between increase and decrease, or not. If its species remained, then its substantial form would not change in itself, but it would change accidentally. Thus, it would be transformation, not generation. If substance did not remain with the increase, then the latter would create some other substance. Similarly, in each ‘now’ assumed in the increase there would appear another substance, and between one substance and the other there would be a possibility of

¹¹⁷ Cf. *al-Ṭabīʿiyyāt*, I.2.2.

¹¹⁸ Cf. *Ibid.*, I.2.3.

infinite species of substances in actuality, but this is impossible for substance. The emergence of a potentially infinite species was, for example, possible in [the case of] blackness, where there was something existing in actuality, i.e. body. As for corporeal substance, this is impossible since there is nothing actual here when we assume motion in substance.

As for quantity, since it receives increase and decrease, there must be the motion of growth and decline in it.

As for the motion in qualities, it exists in those of them that can receive increase and decrease, like blackening and whitening.

As for relative, if it occurs to a category that receives increase and decrease, and if motion is related to it, then it truly belongs to this category.

As for 'where', the existence of motion in it is obvious.

As for 'when', its existence in body is mediated by motion. So how can there be any motion in it? Any motion, as it became clear, takes place in 'when', and if there were motion in it, then one 'when' would have another 'when', which is absurd.

As for position, there is motion in it, like the motion of a spherical body around itself. If the place that embraces it [body] is estimated to be non-existent, then its being in motion would not be impossible. Obviously, a spherical body is in motion in position, and this is exactly the case with the most distant body [of the world], which is surrounded neither by emptiness nor fullness. Also, if a body in rotational motion around itself is assumed in some place, then either its wholeness will be separated from the wholeness of the place, or its wholeness will follow the wholeness of the place, but its parts will be separated from the parts of the place. However, any body whose parts are separated from the parts of its place, and its wholeness is not separated from the wholeness of its place, the relations of its parts differ from the parts of its place. For everything in which the relations of its parts to the parts of its place are different, and the wholeness is not separated from the wholeness of its place, its position changes in its place. This body changes its position with its rotational motion. Position receives decrease, excess, and increase.

As for possession, the change of state in it is primarily in 'where', and motion in it occurs accidentally, not essentially.

As for the category of 'to act' and 'to be acted upon', there is no motion in it. Motion is leaving some state, it is an abandonment of some state, and it is about a stable state. If it [left] an unstable state, it would no longer be leaving or abandoning it, but [bringing even] greater [instability] to that state. For example, if there were motion from heating to cooling and the body, being in a state of heating, cooled down, then it would not leave the heating so as to be in motion as in the category of 'to be acted upon'. For if it left the heating, that motion would not be in the category of 'to be acted upon'.

So, it became clear that motion in its reality and essence takes place only in [the categories of] quantity, quality, ‘where’, and position¹¹⁹.

Rest can be either the opposite of motion or the absence of motion¹²⁰. When we want to know whether one thing is the opposite of another, we infer the definition of one opposition from the definition of the other. I do not say that the definition of one opposite is inferred [directly] from the definition of the other, but we mean by this a comparison between the definitions of the opposites by way of examination: if the definitions of rest and motion are inferred to be opposites, then rest can be the opposite of motion, and if they are not opposites, then rest is not the opposite of motion, but its absence.

If you reflect on the definitions of both, you will find that the definition of motion is the definition of something that belongs to the category of possession and completion, while the definition of rest is the definition of something non-existent. Indeed, rest is defined as the absence of motion in what is inherent to move, and motion is defined as the first completion of this or that, as you already know. Details on this can be found in the book of *al-Šifāʾ*.

The second completion in relation to motion is the arrival to finality, and with this arrival there will be no longer any motion. This absence is rest, which is not the arrival to finality. Such non-existence can give a description of existence, for absolute [non-existence] is not something existing and its existence is not in something else. Thus, a body in which there is no motion, but which potentially can move, has a characteristic that distinguishes it from other [bodies]. If it did not have this characteristic that distinguishes this body from other [bodies] by some features it has, then it would belong to its essence. If this characteristic belonged to its essence, then it would not be separated from it, but it is separated when it moves. Therefore, this characteristic itself means that the absence of motion in what is inherent to move there is a concept that is not the concept of an essence that has this characteristic.

Non-existence, in which a thing does not need anything other than its essence in order to be described by it, has nothing to do with its existence. Its possibility is like the absence of two horns in man by affirmation and negation. As for non-walking, this is a state opposite to walking and it is found when the cause of walking is eliminated. It has existence in some way, it has a cause in some way, and it itself is the cause of existence, but in its elimination, for the cause of non-existence is

¹¹⁹ According to Aristotle, there is motion only in quantity, quality, and place since in each of them there is an opposite (*Physics*, 226a). As regards the motion in position, although it is not mentioned by Aristotle yet it is implied in his discussion of the circular motion of the heaven as a change in position in regards to the earth that is constantly at rest (*De Caelo*, 286a). At the same time, Aristotle claims that a body in a circular motion cannot change its place (*Ibid.*, 278b).

¹²⁰ Cf. *al-Ṭabṛʿiyyāt*, I.2.4.

the absence of the cause of existence. Thus, non-existence is an effect accidentally, which means that it can be accidentally a certain existent. This non-existence is not absolute nothing; it is the ‘nothingness’ of something in something concrete in a concrete state, namely its being in potentiality¹²¹.

CHAPTER THIRTEEN

That motion cannot be indivisible into parts, and that speed and slowness are not [conditioned] by the intervention of rest

If motion that is indivisible into parts could exist, then there could also exist distance indivisible into parts. The conclusion here is impossible, so the premise is impossible. If motion corresponds to distance, and distance is divisible into parts to infinity, then motion is divisible to infinity. We say: if motion consists of indivisible motions, then it would be implausible that one motion is faster or slower than the other, except if it is said that the faster one has fewer states of rest, and the slower one has more, but this statement is false, as we will explain¹²². Otherwise, some body in a certain time would have passed some distance with indivisible motion, and if this distance were divisible into parts, then the motion in it would be divisible into parts, while it was assumed to be indivisible. If it [the distance] were indivisible, then the slower [motion] would pass in the same time, either the same [distance], or more, or less. If it passed the same [distance], it would not have been slower; if it passed more [distance], it would be faster; if it passed less [distance], then the distance would be divisible into parts.

As for the speed and slowness of motion that are not because of the states of rest, this is because the larger a heavy body is, the faster it moves downwards¹²³. If we increased it as much as it would be enough to eliminate the states of rest, then these motions would not mingle with any states of rest. If we doubled this body even more, then it would become faster than when it was free

¹²¹ Aristotle names this state as privation while explaining different meanings of this word when something does not possess a certain attribute, or it can naturally possess it but does not (either in a general or particular way or in any way at all), or as the result of constraint (deprivation). See *Metaphysics*, 1046a.

¹²² This is again a critique of the views supported by Muslim theologians.

¹²³ A false statement held by Aristotle and pre-modern physics in general. The gravitational acceleration for all objects regardless of their mass is unchanged. Yet in some cases, for instance, while dropping a hammer and a feather we might speak about air friction that prevents one of the objects to fall at the same speed. However, a light and a heavy object will fall at the same speed on the moon where there is no air that creates any resistance.

from the states of rest, so the one free from the states of rest would be slower than the one faster from it, and this would be slow motion, not mingled with the states of rest.

It is interesting that if something moved in calm air or in a void, which is known and which has no resistance, and [at the same time] the beginning of its motion were an inclination or support in a certain direction, then that support and inclination in that distance would be identical, but the motion would not remain due to rest where slowness takes place, as if tiring fatigue starts and it [the body] freely inclines to rest, and then energy returns to it. How does the cause that removes inclination in calm air and void arise? How one can say that inclination and support disappear and appear again?

Further, with a flying arrow and a running trotter, the motions would be evident than the states of rest. Then, their motion has no relation to the motion of the sun since the motion of each of them would have to correspond to thousands of times more states of rest than the motion of the sun. If this is so, then in the flight of an arrow and in a trotter's running, rest would be more evident than motion, while it is not like this.

Therefore, motion that is indivisible into parts does not exist, even if it is the fastest one. Speed and slowness are not because of the intervention of the states of rest but are in motion itself due to its intensity and non-intensity.

CHAPTER FOURTEEN

On motion one as individual, species, and genus; the meaning of unity in celestial motion

Know that¹²⁴ motion can be one as an individual, one as a species, and one as a genus, either as a closest genus or a distant genus. The unity of motion as the first completion is due to the unity of substrate with the unity of moving and the unity of time. The unity of time is its continuity, and when it is said that the continuity of time is such, it is meant by its finite continuity. This is because motion shares its characteristics with other accidents. Just like whiteness becomes multiplied in number if its substrate or time is multiplied, the same is with motion. Just like whiteness does not multiply in species or in genus because of the very multiplicity of a substrate in species or genus, similarly, the very multiplicity of a substrate in species or genus does not make it necessary to multiply motion in them since the multiplicity of a thing in species follows the multiplicity of

¹²⁴ Cf. *al-Ṭabṛ'īyyāt*, I.4.3.

specific differences.

The relativity of accidents with their substrates belongs to the number of accidental characteristics of accidents, for the relativity of accidents with their substrates is connected with their existence and not with their quiddities. Existence does not enter into quiddities, and because of this, accident is one of the necessary qualities of the nine categories since accident means 'existent in a substrate'.

As for the multiplicity of individuals, it is related to accidents. That is why the individuals of motion can multiply according to their substrates. Thus, the species of motion vary according to the variety of what constitutes it, namely, what is in it, from what it is, and to what it is. For example, one of the two motions can be from the beginning to the end in a straight line, and another along a curved one. Similarly, they correspond in [terms of] what but vary in [terms of] from where and to where, for instance, an upward and a downward [motion]. Therefore, if something from these varies in conditions and states and motion that enters into connection with them, then motion will not be one in species.

We say that there is a rising doubt regarding the transition [from one state to another] since it is known that blackening differs from whitening in species because of the difference in what and to what, although the path here seems to be the same.

So it might be supposed that descent differs from ascent accidentally, like the transition from top to bottom, and similarly, straight and curved motion.

We say: you already know that straight and curved lines differ from each other in species. Therefore, curved motion must differ from straight motion in species, just as the corresponding motion in species of blackness differs from the motion in the species of whiteness due to the difference in what motion is, while the corresponding motions in species are not opposites. As for ascending and descending [motions], their case will be explained later.

As for speed and slowness, motion does not differ in them as species since they occur to any type of motion. Both of them receive greater and lesser [degrees], while specific difference does not receive them.

As for motions that differ in genus, they are like motion in quality and quantity.

As for the objection of those who say that motion is not described by unity, as well as individual being, since it is either past or future, it is refuted by what you already know: motion, as you realise it, is not divided into past and future but it is always between the past and the future.

Some responded [to this objection] by saying: the example of one motion – that something disappears in it and, nevertheless, it is preserved with the absence of that thing – is like the form of a house, which is preserved as the same one [thing] despite the removal of one brick after another and filling the gaps on their places. The same is with the form of any individual from animals or

plants.

I am not satisfied with this sort of answer. Generating and corrupting things cannot have a fixed form without the establishment of parts that exist in them from the first being preserved till the moment of corruption, without separating or disappearing and being associated with a single form or a single force, which preserve from decomposition what remains from those parts that appear through alteration. We will explain this issue while talking about growth.

The house that subsists due to the replacement of the removed bricks is no longer what it was before the replacement. After all, composite things belong to the number of accidents, and accidents are destroyed with the destruction of their carriers, and they cannot transfer [from one carrier to another]. Likewise, a reflection in flowing water is not the same one [thing] since it is a certain state of its receiver. When this receiver transforms, its characteristic does not remain. In the same way, if the receiver transforms absolutely, then the characteristic does not remain at all.

That which is sensed by one of the individual human souls is not any part of the body, for any part of it is not devoid of separation and interruption that occurs to it. It is known that both of them [the body and the soul] change, but that which is sensed by a single soul in [terms of] number is unchanged.

Celestial motion in the sense which you realised, i.e. being between the past and the future, is one and what moves in it remains forever. As for the meaning of passing [distance], it seems that its unity is by assumption, since each cycle is defined by assumption. In sum, the unity of motion is similar to the unity of distance, i.e. the unity of continuity.

CHAPTER FIFTEEN

On opposite motions and motions that are not opposite

Know that¹²⁵ the opposition of two moving objects does not make the opposition of two motions necessary. Opposite objects happen to move with the corresponding species of motion, like fire moving upwards by nature and water moving upwards by force. Motion does not become opposite by force and nature, for forced and natural motion [can] correspond to the same species. It is clear from this that motions are not opposite because of the opposition of moving objects. They are also not [opposite] because of time since opposition is not in the nature of time. They are also not

¹²⁵ Cf. *al-Ṭabṛ'īyyāt*, I.4.6.

[opposite] because of what the motion takes place in since the latter can be corresponding, while motions can be opposite. So, the path from black to white and is the same as from white to black, while the motion to black is the opposite of the motion to white.

In sum, intermediate objects are not opposite, so how can motions be opposite because of them? It remains that it is because of what motion is from and towards what it is; if they are opposite, like blackness and whiteness, then the motions are opposite. However, again not how it corresponds: the motion from blackness is not opposite to the motion to whiteness only because it is motion from blackness, but because together with that it is towards whiteness. If motion from blackness were directed not towards whiteness but to transparency, then these two motions would not be opposite.

Opposite motions are those whose sides are opposite to each other. It happens either when the sides oppose each other with real opposition by themselves, like blackness and whiteness, or when the sides oppose each other not by themselves but in relation to motion; when one of the sides happens to be the beginning of the motion, and the other the end of that motion.

The opposition between the beginning and the end is not the opposition of the relative, for the beginning of a distance is not conceived through the comparison with its end. The beginning can be thought without thinking the end together with it, while the relatives are conceived together.

If such a thing as motion is related to such a thing as a side, and this latter does not happen to be opposition in its substance but happens to be because of some accident as beginning, then it is necessary that the opposition in a thing related to it, such as motion, is an accidental opposition. This is because what occurs to the thing related to it, like beginning, can be something internal of the substance of the related thing, as motion. Thus, a warm and a cold body are opposite to each other because of their accidents, i.e. heat and coldness, but the opposition between the latter is real.

Viewed in this way, motion is not related to the side of distance insofar as it is its side only, but because motion is related to the side insofar as it is a beginning or an end. The substance¹²⁶ of motion implies priority and posteriority since its substance is separation and goal; hence, the substantiality of motion implies a beginning and an end. Motion is related to the sides of distance as the beginning and the end, and this [the sides of distance] since they are the beginning and the end oppose each other, and are a constitution of motion, although they are not a constitution of the substrate of motion. It is evident that the beginning and the end of motion are defined by being different from each other in actuality, so it is plausible that one of them can lead to the other. Therefore, they are opposite in themselves, and opposites are essential for motion, but not essential for a side.

¹²⁶ The term 'substance' here is used in the sense of meaning or essence/quiddity.

We say: straight motion is not opposite to a curved one, for if the opposition were due to straightness and curvature, then straightness and curvature would be opposites, but straightness and curvature, as you know, are not such things that can replace each other in the same substrate; the substrate of the one is not the substrate for the other, and it is not plausible for straightness to turn into curvature except through its destruction, as we said.

We explained that the opposition in motion is not because of what motion occurs in. If curved [motion] were opposite to the non-curved one because of the sides [of distance] – and a certain straight line could be a string for different arcs potentially infinite [in number] – then the same motion would be opposed by infinite motions, whereas one thing has only one opposite, namely something that is at an extreme distance from it.

However, those arcs differ in species, not as individuals, because each arc is in a different circle that cannot coincide with the other arcs. Likewise is the difference between a straight line and a curve.

We do not deny that curved motions may have straight and curved oppositions regarding certain accidents. We only deny that they can have opposites regarding their essence and quiddity. This is like mean in ethics, opposite to lack and extreme. However, lack and extreme are essentially opposite to each other, and mean is accidentally opposite to them, i.e. insofar as mean is a virtue and the [extreme] sides are a vice. For virtue is something necessary for the mean, and vice is something necessary for the [extreme] sides. Thus, the opposition between the sides and the mean is in an accident, and it is a virtue, while one side is opposite to the other in its essence and substance.

We say: there can be no opposition among curved motions because they do not differ in relation to ends, and all opposite motions are opposite to each other in relation to ends. You already know how straight motions are opposite to each other. Upward and downward [motions] are opposite as straight [lines]. However, they are also opposite due to something external to motion, namely one of the sides is up and the other is down. Motion that has an opposite is that what takes the shortest distance from one actual side to another actual side, and the opposite of which is the one that starts from its end and moves to its beginning, and not somewhere else.

CHAPTER SIXTEEN

That motion and time do not have anything preceding them, except the essence of the Creator (great is His glory!), and that they do not have a beginning in their essence; on the motion preceding in nature, and the body preceding in nature¹²⁷

We say that motion cannot begin from a certain moment in time that does not have a certain ‘before’ since every non-existent [begins to] exist when before its existence there is a plausibility of existence. The plausibility of its existence exists before its existence. For if it were not preceded by the possibility of its existence, then it would be impossible. Below we will explain that the possibility of existence must be in a certain substrate, and there it will also become clear that everything that emerges must be preceded by matter.

A thing in which there is a plausibility of motion’s existence is the one that tends to move. It is evident that if this thing exists, but does not move, then the moving cause or states and conditions due to which the act of setting in motion emanates from the mover does not exist, and if it is set in motion, it is because a moving cause has emerged.

Speaking about the emergence of a cause is like speaking about the emergence of motion. Its emergence is either by infinite causes having natural order that exist together in one ‘now’, and we will explain the impossibility of this, or by infinite causes that exist sequentially so that the existence of each cause and its absence is immediate, or each of them remains for some time. If each of them remains for some time, then there is one motion after another without interruption, and motion is perpetual. If each of them remains for one moment, then moments should follow one after the other without the mediation of time, and we will talk about the impossibility of this.

It is clear that if something emerges in a body that was not before, then it happened due to some cause or due to the existence of some relation after its non-existence, or motion that makes it be closer or farther, or the emergence of a moving power that was not before, or emerged will. The emergence of all these things has a continuous [chain of] causes, possible only through continuous motion.

As for how through motion there can be an infinite number of causes in actuality, it is because the cause, due to it [motion], does not remain in the same state and, being destroyed, does not emerge in one moment, and this [happens] in two ways.

In the first way, the cause is the motion itself, like a lamp, which little by little burns the oil

¹²⁷ Cf. *al-Ṭabṛ‘iyyāt*, I.3.11 and I.4.9.

without interruption, so the light increases little by little because of its motion.

The second [way] is [when] it is not the motion itself and motion is not the only cause, for example, [when] due to some motion, A and B move, and the state of B changes, after which the changed B rises a new state in C, and so on as far as possible. The motions that are immediate causes do not exist together in a single 'now', but they renovate and end. If motion had no beginning, then it would not be possible for things to emerge and things that should disappear to disappear. It is necessary that non-existence is because of the absence of a cause of existence; something disappears because something emerges. The cause of emergence, as you know, is motion. If among the causes there was not one that disappears by itself, then there could be no disappearance, and it is motion that by its essence and reality passes and follows. These kinds of causes, as you will learn, are causes accidentally, namely they do not bestow existence, but bestow this characteristic, i.e. the emergence for existence.

We continue this discourse and say: an agent wills either the emergence of what emerges from it, without any condition, and then it must exist with it, or it wills the relation with its existence with some condition, and the case of this condition is like the case of the previous one, so there is a regression to infinity. These conditions can be either fixed, and then infinite causes must exist together in a single 'now', which is impossible, or not fixed. This [latter] is of two kinds: either they exist not continuously, but each of them exists for one moment, not continuous with the next moment, so there must be a sequence of moments. However, the sequence of moments is impossible, for the sequence of moments means that there is absolutely nothing between the two [moments], and what is between the two moments should be less than what is between large ones, while absolute nothingness cannot be less or more. If it is said that these moments touch each other, then in response, it could be said what [was said] in the section on motion and time, or they exist continuously, and its motion or that which has motion, which was required [to be proved].

This motion that has no beginning and no interruption is the motion that can be continuous, and we will explain in its turn that it is nothing more than a circular motion.

The body that is in this circular motion must not be subject to generation and corruption, so it can exist as this [kind of] motion. Otherwise, there would be a need for another body, and there would be certainly some end.

How can one conceive this? It is like supposing that God (great is His glory!) has one will emerging before another, and so to infinity, which is absurd. Therefore, there must exist a body in which one change can occur before another. This body must be spherical, and since it is a body, it must have an agent, as you already know, and a mover, as you will learn. The necessary qualities of the first [body] will include, for example, heaven, and the necessary qualities of heaven will include motions.

So it became clear that if there were no motion, there could be neither the emergence of something nor the non-existence of anything, and motion belongs to the number of emerging things. It became clear that if there were no motion, motion could not have existed.

You learned that motion is not something that can be finite or infinite since it does not form any totality, and if it did, then [this totality] would not exist as natural plurality, which can be finite or infinite except by assumption. In addition, the existence of each of the motions does not depend on infinite motions.

Firstly, because there is no relation between the existing and preceding motions since the previous motions do not have any effect on the existence of the subsequent ones.

Secondly, because this issue is either presented incorrectly or what is required itself [to be proved] is taken in the view of its refutation.

As for it being presented incorrectly, it is because a thing, depending on the existence of infinite things, must be non-existent for some time and then be considered existing only after the existence of these infinite things, while this cannot be with any of the motions.

As for the fact that what is required [to be proved] is taken in its refutation, when this premise means that there exists no motion, before which there would not have been infinite motions, and that there was no time when all of them were non-existent – and this is what is required [to be proved] – then how can it be taken as a premise in the syllogism that refutes it, despite the fact that motions can be neither finite nor infinite?

It was also said that if each of the motions were something emerging, then all of them would be something emerging.

The answer is that motions are not a whole, for there exists one motion and, moreover, it exists after the disappearance of another, so that they [motions] cannot form such a whole that could have been emerging or not emerging.

The reason of the mistake here is because the estimation compares the completed motions with some people who passed one after the other and are now gathered in one place, while motions are not like that. The judgement of one [part] is not the judgement of the whole, for each one [part] is a part, and the whole is not a part. If in some things the judgement of each one [part] is like the judgement of the whole, then this [thought] must be dismissed. We already refuted this general affirmation with a partial negation; in some cases, the judgement of the one [part] may be the judgement of the whole, and [in others], as we already noted, it is not similar in the whole and the part.

It became clear that if motion were not necessary to be infinite, then emerging things could not exist. It also became clear from this that motion is a combination [of individual motions], in which the judgement of each one part is not the judgement of the whole.

We say: when motion is assumed to have emerged, then what precedes it cannot be absolute nothing. Indeed, it is not impossible in the power of Allah (great is His glory!) to create infinite motions in that non-existence about which they talk. If you assume the existence of twenty motions finishing with the beginning of the first motion, while assuming its [motion's] existence, and the existence of ten motions also finishing with the same beginning, then it will not be correct to say that what corresponds to two motions in this non-existence is the same. If that were plausible, then the existence of twenty motions could accompany ten motions without any difference since the impossibility of their existence in such a way is because the time in which exists twenty motions is different from the time in which exists ten motions, and what corresponds to twenty motions must be different from what corresponds to ten motions. However, in absolute nothing there is no difference, and there is no difference between the two [motions], except a difference of fluid quantity. This is nothing else than time, as we will explain below.

Also, since one 'before' is farther and the other closer, then the emerging motion should be preceded by time, and time, as you will learn, is a measure of motion. Therefore, this motion should be preceded by another motion. It is inevitable that there is something moving with the existence of motion. We already refused that something separated without any attachment to matter can move. Then that moving must be nothing other than a body or something corporeal. To refuse that the power of Allah (praised is He!) can create motions before the beginning of the motion that is assumed to emerge first is a strange judgement. To assess motions with that non-existence is like the assessment of emptiness in the explanation that it is not absolute nothing.

Surprisingly, some establish [the existence of] the Creator by claiming that bodies are inextricably linked with such emerging things as motion and rest; and everything that is inextricably linked with emerging things is something emerging. However, the big premise needs to be corrected, but meanwhile, they claim that it is a primary principle. This explanation is so foolish that it forces those [who claim it] to recognize the Creator also as something emerging, since He is not deprived, from their point of view, of emerging will and emerging hatred. True, they could suddenly say that the will and hatred of Allah (praised is He!) are from the accidents that are not in the substrate. This, as you can see, is entirely foolish. They could also claim that His will emerged, but from the emergence of His will there follows absurd conclusions.

For instance, the fact that it has a different cause than the Creator himself (great is His glory!), the necessity of change for the First himself, and that everything emerging is preceded by something emerging till infinity. Let us assume that this is sound. Yet, how do they know that everything emerging needs a creator? When it became clear to them that causes cannot be

infinite?¹²⁸ True, they can say that everything emerging is possible. However, then the explanation of the necessity of the First is not what they mean. According to what we will say below, their senselessness will be dismissed: it will be established that emerging things have quiddities, then it will be established that everything that has a quiddity is an effect, after which there will be established the Necessary Existent in itself.

We say: circular motion precedes [all] motions by nature¹²⁹ because motion in quantity is not free of motion in place and what appears in the growing [body], moving towards it and in it, whereas [motion] in place and position is free of it [motion in quantity]. Rarefaction and condensation are not free of transformation, and transformation exists only after motion in place or position since the same transformation does not always exist but emerges, and therefore, is certainly caused by an emerging cause. You already know that the emerging causes are material and the transformative causes, such as fire, transform water approaching it after it was not near it.

It became clear that motion in place precedes motion in quantity and quality. However, motions in place are straight, and straight motions are not infinitely continuous, as we will explain. Circular motion, as you know, is continuous and perpetual. Therefore, in order to exist all the mentioned motions must be preceded by some continuous motion, which is circular. Circular [motion] does not need other motions, and other motions are not free of circular motion. Therefore, it precedes motions by nature.

What features circular [motion] is that it is complete and does not receive excess, increase or decrease [in strength], as it occurs to natural motions, which at the end increase in speed, like a clod of earth when it approaches the centre, and forced motions, which decrease at the end. Complete is nobler than incomplete; hence, circular motion is nobler than other motions.

From this it follows that the spherical body, which is in circular motion by nature, should precede all bodies, and due to it the directions of straight natural motions are renewed. Another explanation of this will be given below.

What is confusing [while] imagining perpetual motion is that whatever is imagined as perpetual is imagined in some infinite fixed duration. When motion and time are removed from the estimation, this duration is fixed in it, and that duration is nothing but time.

The explanation of this is as follows: duration is not absolute nothing because it receives the less and the more [degrees], and everything that receives the less and the more [degrees] is a measure. Then, it is known that what is given in it – from this duration – this time, in which we are,

¹²⁸ A fundamental Aristotelian notion of the absurdity or impossibility of infinite regress. There necessarily must be a first cause from which everything takes its origin. Also, otherwise, any valid knowledge would not be acquired since there is no beginning according to which it is possible to construct the primary principles of science.

¹²⁹ Cf. Aristotle, *Physics*, 265a.

is different from the time that follows, and from the one in which the world did not exist, and everything that is similar is fluid. Hence, it is clear that this duration is a certain fluid measure, and it is time, which is a measure of motion. In sum, this duration appears in the estimation with the removal of time, motion, and other things, just as when dimensions appear with the removal of bodies. Whenever we imagine motions one by one, continuity is not imagined with them, but they are imagined in some other fixed duration, while the truth is what we said before. It is clear from this that imagining infinite time and perpetual motion is not difficult, but this duration, which is assumed in the estimation, does not exist at all in concrete beings. There are separate motions in concrete beings. If we conceive the matter in this way, then the conception of perpetual motion will not confuse the intellect.

Besides, those who deny the existence of perpetual motion must admit that Allah (praised is He!) is capable of creating another motion before any motion and so on to infinity. So be it.

CHAPTER SEVENTEEN

*On time*¹³⁰

Know that the existence of time is established for us by observing different [results] that appear in passing the same distance by the same moving object with the motion of determined speed and slowness¹³¹. In one case, that it passes that distance, and in the other not. We understand that a difference is in motion, but not because of speed. Indeed, if the mover passes a certain distance with quick motion, then it can also pass it with slow motion so that the difference in passing that distance is not because of speed or slowness. In sum, the passing of distance does not differ by something fixed; on the contrary, what the passing of distance differs by must disappear with the disappearance of motion. The motion that passes it half the distance cannot pass it entirely, and what passes the third of the distance cannot pass half of it. Therefore, this difference is found through the difference of the measure of the distance. Any difference that is found through measures corresponds to those measures, and everything that corresponds to those measures is a measure or something that has a measure.

¹³⁰ Cf. *al-Ṭabrī'īyyāt*, I.2.11 and I.2.13.

¹³¹ Aristotle defines quick as something that moves far away in a short period of time, while slow is something that moves little within a long period of time. Time is not determined by time, neither in quantity, nor in quality. See *Physics*, 220b.

This difference in motion, because of which the passing of distances differ, is a difference in the measures of the motions. If it were a difference in a fixed measure, then it would not differ the passing of distance. Thus, there is a fixed measure for motion. If the measure is not the quiddity of motion – the quiddity of motion is like being in the middle – then measure is something accidental to it. Existent time is always something corresponding to what we describe as existent motion, as if the motion, which means being always in the middle between the passing and the following. Similarly, what corresponds to this motion from time is between the past and the future, and this is called ‘now’. It does not have actual existence, in the sense that there is no existence for ‘now’ that is distinct from the ‘now’ that follows it in actuality, except in assumption, as we said in the section on motion.

Because of this ‘now’, priority and posteriority reveal themselves, and because of priority and posteriority, time becomes countable, as we will explain. Just as motion in that sense [being in the middle] appears to have a possibility of assuming an infinite adherence to boundaries in a distance, similarly, this ‘now’ is in assumption. The ‘now’, in this sense, is followed by the existence of time, just as the motion in the mentioned sense is followed by the motion in the sense of passing [distance]. If there were no ‘now’ in this sense, then the past and the future would not be revealed in time. Thus, ‘before’ and ‘after’ are due to this ‘now’ and in relation to it.

If this kind of priority and posteriority are because of measure, then prior and posterior in motion must be due to measure. The same situation is with bodies: if it were impossible to assume parts in them, it would be impossible to say that in them one part is prior and another part is posterior, in the sense that something in the body is not something else. Prior in motion is what happens in the prior in distance, and the posterior is what happens in the posterior in distance. The prior and the posterior in distance are revealed due to the possibility of assuming a part in it that distinguishes its prior part from the posterior part. This part is distinguished by the fact that a mover passes through it.

It is clear from this that prior and posterior in motion and time are only by assumption. However, prior in motion does not exist together with posterior, as prior and posterior exist in distance together. Therefore, prior and posterior in motion have a feature that does not belong to distance. When it [motion] has specific priority and posteriority, it has a specific measure so that one part of it can be prior and the other part posterior. This measure is time.

Time is the number of motion, when it [motion] is divided into prior and posterior, not in relation to time, but in relation to distance; otherwise, there would be a circular explanation. In [time] itself, one thing happens before something or after something else, while in other things, some appear before or after due to it [time]. If there were no priority and posteriority, then it would be impossible to assume months, days, and hours.

Since time emerges and perishes, its existence is attached to matter, and it exists in matter. Its existence in matter is mediated by motion. If there were no change, then there would be no time, no 'before' and 'after'. How there can be 'before' and 'after', if something does not emerge and then another? The thing, which is 'before' insofar as it is 'before', does not disappear except when the thing, which is 'after' insofar as it is 'after', emerges, and all this follows change.

Time always exists in a constantly renewing state. Otherwise, there would be no time. Indeed, if there were something for a moment, and then there would not be absolutely anything until something else appeared for a moment, then between them there would either be the possibility of renewal of things or not. If between them there were the possibility of renewal of things, then between them there would be 'before' and 'after', and if between them there were no such possibility, then they would adhere to each other. If the adherence were constant, then there follows the succession of 'nows', and from the succession of 'nows' follows motions in an indivisible distance, while all this is impossible. If they were separated, then we would return to the beginning of the discourse. It became clear that if there is no motion, then there is no time. 'Before' is not just the non-existence of a thing, for by non-existence one can understand both posterior and prior.

Know that in existent things something necessarily appears that destroys them. This something can either appear in 'now', and it is a thing the state of which is similar to any 'now' the existence of which is taken from time and it does not need to correspond to a certain period, as in the case of touching or the separation of two lines, or it can appear only in time, like the things in motion, or with motion itself, and it is like separation and losing touch. In the first case, it exists in 'now'; in the second case, it exists in time.

The true unit [of counting] is the first that gives the meaning of unity to a thing and gives to a thing multiplicity by repetition. The 'now' that we described considers time since it makes time to have a number by bestowing it priority and posteriority, and it relates to time the relation of unity to a number. Motion gives the number of time, namely prior and posterior, while time counts motion since it is itself its number¹³².

An example of this is that the existence of people is the cause for the existence of their number, like the existence of ten of them. Ten does not make people existent, but countable things, i.e. having a number. When the soul counts people, not the nature of man is counted, but the ten through which the nature of man is detached. The soul counts the ten by man and time by motion. If it were not motion produced within the boundaries of distance with priority and posteriority for time, then time would not have a number. Therefore, time measures motion, making it something that has a measure and indicating the quantity of its measure, and motion measures time, indicating

¹³² Cf. Aristotle, *Physics*, 220b.

its measure by finding in it prior and posterior. Indication of a measure is sometimes such as when measure indicates what is measured, and sometimes such as when what is measured indicates measure. So, sometimes distance indicates the measure of motion, and sometimes motion [indicates] the measure of distance. Sometimes it is said, 'a route of two farsangs', and sometimes, 'a distance of throwing [an arrow]'. However, what gives a measure to another is that which has a measure in itself.

Time because it is continuous in its substance could be said that it is long or short, and because it is divisible into prior and posterior could be said that it is little or much. The closest cause for the continuity of time is the continuity of motion by distance, not the continuity of distance alone. The continuity of motion by distance is not the cause of time becoming continuous but the appearance of time. For there is no cause for the being of time itself continuous, i.e. measure. It is the same with all regarding body and its measure.

Some people said that time exists only by timing, and they did not know that timing is the measure of pairing the existence of one thing with the existence of another thing. What is meant here by synchronism is not what is meant by each of the two paired things. This synchronism is the opposite of a meaning where one of the two things would be prior or posterior. This thing in which there is synchronism is a moment that unites two things so that any of the paired things can be made indicative of it [a moment].

If two paired things stayed for a certain period, then the period of their stay and the beginning of it would necessarily be one and the same moment. However, we know that determined moment is the boundary between prior and posterior. Prior and posterior, insofar as they are prior and posterior, do not differ, but as motion and rest, or something else, they do differ. Indeed, for example, its being as an accident is not like its being as motion and rest. Its being is not motion and rest but prior and posterior or both. The reality of priority, posteriority, and synchronism is something else, namely the state of time.

It might be said: the existence of a thing in time is existing together with it [time], and that synchronism is not the synchronism of time. We reply: the synchronism, which is between an existent thing in time and time is the synchronism of correlation, like the synchronism between blackness as an attribute and body as a carrier. This is synchronism in nature and, therefore, it is the synchronism of the relative since it is preceded by the being in time, and related things as such exist together. This relativity occurs with 'when' as it occurs with 'where'. However, this judgement does not apply to the definition of moment since there is no natural synchronism here.

In sum, the synchronism here is something third, thanks to which one can say: the entry of Zayd [happened] together with the falling asleep of 'Amr. The synchronism can be because of a

third thing, as in the previous [example], and that third is either existence, place, or time. The measure of motion is already established for you and there is no need for you in those objections and solutions.

Just as it can be said about the species, parts, and limits of a thing that they are in the thing, so is prior, posterior, and 'now', as well as hours and years are said that they are in time. 'Now' in time is like a unit in a number: it forms boundaries in time, due to which prior objects and posterior objects make time countable, just as a unit forms in things the possibility to be counted by those things. Thus, 'now' is that which makes time countable, just as [things] other than time [become countable thanks to] the unit. For the unit by repetition gives plurality. Prior and posterior count time, not by giving time a number but by being as the number itself or the necessary qualities of number, such as even and odd. Hours and days are like two, three, four in number, and motion in time is like ten accidents in ten, for ten times leads to a certain accident, which is motion. A moving thing is like the substrate of the ten accidents in ten.

Here 'now' is in another meaning, namely, as that which occurs within the limits of time while its being is measure, as a point that is assumed in other measures. [This 'now'], obviously, does not exist in actuality; otherwise, it would disrupt the continuity of time. It is impossible to disrupt the continuity of time since if it had been disrupted at the beginning, then there would have to be a time that had no 'before'. Moreover, it would have been non-existent and then would exist. Everything that does not exist and then exists its existence is after its non-existence, so its non-existence is before its existence. Thus, it should necessarily have 'before', and this 'before' must be something other than absolute non-existence. About what we can say this is a certain acquired species of 'before', but not this time. Thus, before this time there is [another] time continuous with it. However, the 'before' does not exist in the 'now'. Hence, it is the past, and everything that is in the past by itself is time.

If we assume that this 'now' is at the end, then after it something could exist, or it could not. If after it nothing could exist, even the Necessary Existent in itself, then it would be absurd since the necessary and absolute possibilities are not removed. Thus, it has 'after', and it [has] 'before'. Hence, 'now' may exist only by assumption.

We already proved that motions are not something emerging, so it is necessary that their measures are not emerging [as well]. We also established a measure by which the motions assumed before the beginning of the first [motion] are measured. Therefore, time is not something emerging but belongs to something attached to the creation. It should be a measure for a motion without any beginning, disruption, or interruption. This is the form of circular motion through which the measures of other motions are measured. Just as the existent measure in a body is measured, what is opposite to it and equal to it, like with the measure of a ruler, similarly, other motions are measured

by the measure of circular motion. That measure of a ruler should not necessarily be related to the fact that it is lined and measured. In the same way, this measure [of circular motion] is sufficient to exist in a body and then to measure other motions.

It may be said: motion is measured by the measures of distance only, for if one moving object starts moving from the beginning to the end of a distance, then its motion can be measured only by this distance.

I answer that if the motion began again, then it would differ from the previous one only in time since the moving object and the distance are the same, and the same motion at the same distance cannot be twice if there is nothing third here.

It is known that the existence of time is not in time, so that its non-existence is in some other time, and that time belongs to the things with weak existence, such as motion and prime matter.

As for temporary things, these are those in which there is priority and posteriority, past and future, beginning and end, and this is motion and what has motion.

As for the rest, they exist together with time, and this synchronism that we mentioned in [the section on] the relative, namely, the accidental relativity of 'when'. Therefore, it must be in a natural pairing with time, so there exist between them an actual, and not accidental, relation. Thus, one of the [related] things is a carrier of time, and the other is an agent, or in such an attachment that makes possible this synchronism.

If this synchronism [is established] by comparing imperishable¹³³ with perishable¹³⁴, then it is the eternity¹³⁵ that embraces time. If it is [established] by the relation of imperishable to imperishable, then it is most rightly be called perpetuity¹³⁶. This being, i.e. the being of imperishable with perishable and imperishable with imperishable, is opposed to the being of temporary things in time. That synchronism is as it were the imperishable things, while the being of [temporary] things in time is their 'when'. Eternity and perpetuity have no duration neither in the estimation nor in concrete beings; otherwise, there would be a measure of motion.

Know that the temporal eternal¹³⁷ is separated from what between it and the 'now' by a long [period of time]. Truly, it is that the time of whose existence does not have a beginning, but not so that there is no beginning in its existence, for existence can have neither a beginning nor an end since everything that has a beginning and an end, and they differ from each other by meaning, like

¹³³ *Tābit*.

¹³⁴ *Ġayru tābit*.

¹³⁵ *Dahr*.

¹³⁶ *Sarmad*.

¹³⁷ *al-Qadīm al-zamānī*.

genus and species, or measure, number, while existence has nothing of the kind. Similarly, what emerges is that the time of whose existence has a beginning. The meaning of 'temporary emerged' is something that was not and that then it was. This means that there was a state in which it was non-existent, but this state is something that already ceased. If by this we mean not what we said, but absolute non-existence, then from this we will not understand what emerging means since eternal also does not exist in absolute non-existence.

PART THREE

From the six parts that pertain to Book Two, i.e. the science called metaphysics, from the three books of which consists the book of al-Taḥṣīl. It is on prior, posterior, power, and act, and it consists of two chapters.

CHAPTER ONE

*On prior and posterior*¹³⁸

Know that all varieties of priority have, by way of analogy, one [common] thing: prior insofar as it is prior such has something that posterior does not have, while posterior has nothing except what exists for prior.

By analogy, however, it is said here because the priority in causality is before the priority in nature, and the priority in nature is before other varieties of priority. Therefore, the word ‘priority’ is not a genus to what is below it.

Then, priority is by existence or by some third thing, such as time and space; as for a thing in itself, it neither precedes anything nor proceeds it. The varieties of priority are known, and they are known by their necessary quality, which is priority. It is known that priority is not a genus to those things.

Prior is either in order, or in nature, or in merit, or in time, or in essence, or in causality. Priority, posteriority, and synchronism are in relation to existence, as already mentioned. As for priority in order, it is everything that is closer to an actually existing or assumed beginning. Like when it is said, ‘Baghdad is before Kufa’ if the beginning is near us. The same is when ‘body’ is before ‘animal’, and ‘animal’ before ‘human’. In priority in order, prior can be made as posterior and posterior prior.

For example, if you make ‘man’ as a beginning, then everything that is closer to him will be prior, in which case ‘man’ is prior to ‘body’. The prior in place belongs to this category: whoever is

¹³⁸ Cf. *al-Ilāhiyyāt*, IV.1.

closer to the row adjacent to qiblah¹³⁹ is prior. This is in assumption, but it also can happen in nature.

As for prior in nature, it is like the priority of one over two and lines over a triangle. With the removal of the lines, the triangle is [also] removed, while the lines are not removed with the removal of the triangle. The consideration of this priority is in quiddity without existence. The difference between the prior by nature and the prior by causality is that with the prior by nature the existence of the prior is not the cause of the existence of the posterior, while in the case of the prior by causality, since it is prior in existence, its existence is the cause and reason of the posterior.

As for the prior in merit and virtue, it is like when it is said: ‘Abū Bakr precedes ‘Umar and all the companions [of the Prophet]’¹⁴⁰.

The prior in time is known.

You must realise that all of these varieties of priorities, with the exception of those specific to nature and causality, are not true priorities. The priority in time, as you know, is something in the estimation and assumption. As for the true priority, it is that which is prior essentially, and this is in nature or in essence.

Speaking about [the prior] in essence, I mean that its existence is not attached to the existence of something else or its existence is attached not to the second but something else, whereas the existence of this other is acquired from the first, so that if the existence of the second is removed, then the existence of the first should not be removed, and when the existence of the first is removed, then there follows the removal of the existence of the second. For example, you can say: ‘When Zayd moved his hand, the key began to move’, but you will not say: ‘When the key began to move, Zayd moved his hand’. Indeed, you will say: ‘First, Zayd must move with his hand, so that the key starts to move’, but you will not say: ‘First, the key must move in order for Zayd to move his hand’. This priority is not temporal; it is an existential and essential priority.

Likewise, first, there must be one, so there can be two. Here again, it is not a temporal priority. After all, you will not mean by this that [first] there must be one, and then, at some other time, two. It is quite plausible that they are together at the same time and place.

Cause must be together with effect insofar as they are correlated with each other, but from the fact that they exist together as correlated things, it does not follow that the existence of their

¹³⁹ The direction of the Kaaba (the ancient sacred temple at Mecca), to which Muslims turn at prayer, especially in the form of a niche in mosques.

¹⁴⁰ The two companions of the Prophet Muhammad and the first two caliphs: Abū Bakr (573–634), also called al-Ṣiddīq (‘the Upright’), and ‘Umar ibn al-Khaṭṭāb (c. 586–644). The underlying Abū Bakr’s virtuous character is an explicitly Sunni viewpoint. Imam ‘Alī is never mentioned in *al-Taḥṣīl*. It might be due to political reasons as well, in fear of being persecuted because of belonging to a Shia minority.

essences should be together. For relativity is a necessary quality of cause and effect insofar as they are cause and effect. Therefore, from the perspective of their necessary quality, they are together, but from the perspective of their essences, cause precedes effect, and cause precedes with this priority¹⁴¹.

As for [being] together, its varieties are like the varieties of priority and posteriority. [For example,] they say: [to be] together in time and [to be] together by nature. As for [being] together by nature, they can follow each other in the equivalence of existence, like one brother and another. They will be [also] contrary in the equivalence of existence under the same genus since they are together by nature. For in their nature, there is no priority or posteriority. Indeed, the genus is predicated of them with the same predication and being together in order, i.e. as they participate in the posteriority of the genus by nature without following one from the other in the equivalence of existence. Being together can be in actuality or in assumption.

Know that the cause of something cannot exist in such a way that along with it, there is no effect. Indeed, if the condition of its being as a cause is its essence, then as long as its essence exists, it is the cause of something else. If the condition is not only its essence, then its causality is possible, and as long as that essence is [characterized] in this way, it is not necessary that an effect flows from it. A sound mind requires that if something flows from it, that essence should be distinguished by some characteristic that was not before and because of which the existence of effect is from non-existence. It is then that essence, together with the paired attribute, becomes such an aggregate, which is a cause, and that essence is a substrate for causality.

A thing that can become a cause when some other thing is attached to it, be it a will, passion, or something expected from the outside, the addition of this thing to it, when the effect can already flow from it without any difficulty, makes the existence of the effect necessary. If the existence of the effect from it were not necessary, then the existence of the effect from it would be possible. However, the existence of any effect is necessary with the existence of its cause, and from the existence of a cause the existence of the effect becomes necessary. Both are together in time or eternity and not in the acquisition of existence¹⁴².

It follows from this that the removal of the cause necessitates the removal of the effect, but the removal of the effect does not necessitate the removal of the cause. In order for the effect to be removed, the cause must be removed. For the removal and establishment of the cause is the reason for the removal and establishment of the effect, and the removal and establishment of the effect is

¹⁴¹ In other words, the relation between cause and effect (or agent and patient, action and affection) can be equal only under the condition that that relation is accidental. If the priority of the cause is essential, then it cannot be equal to the accident.

¹⁴² This statement creates a paradox since possible existence also becomes necessary due to the necessity of its cause.

evidence of the removal and establishment of the cause. The effect exists with the cause and due to the cause, and the cause exists with the effect, but not due to it.

CHAPTER TWO

On potentiality and actuality; on the establishment of nature; that every moving object has a mover; on the finitude of movers; on capacity; that what is separated [from matter] does not perish and does not require anything through motion; on the establishment of the faculties of the soul and an indication that the soul is not a mixture [of elements]; that everything generable after its non-being is preceded by matter; that the possibility of existence is an accident; that what has no connection with matter cannot be something that emerges; how the soul in its existence needs a body; and on the priority of potentiality over actuality

It is said that potentiality is the principle of change from one thing into something else insofar as it is something else, like a physician when he heals his body. The principle of change is either in patient, in which case it is an affective power, or in agent, in which case it is an active power. It is also said: this is what allows an action or affection to come from a thing. It is that by which one thing resists another; it is that by which one thing is not affected, since change implies impotence.

The potentiality of affection may be predisposed to a certain thing, like the potentiality of water to receive a shape. It has the potentiality to receive a certain form, but not the potentiality to preserve it, while wax has potentiality for both of them. Prime matter has the potentiality of [receiving] everything, but it receives one thing, and not some other, by the mediation of something else, for example, when prime matter receives a soul through a mixture [of elements] and does not receive it if there is no mixture.

A thing may also have an affective power towards opposites, for example, in the case of wax, which is able to both heat up and cool down.

The potentiality of an agent can be limited to one thing, like the potentiality of fire, which can only burn, or it can extend to many things, like the potentiality of freedom to choose [any of the many objects].

Potentiality can be extended to an unspecified individual¹⁴³ who is specified for some reason as an individual and not some other like him and of the same species. When that individual exists in

¹⁴³ *Šaḥs muntašir* – a generalised meaning that represents this or another kind or species.

actuality, the potentiality associated with him as with that individual becomes invalid, otherwise, if the potentiality associated with it remains, then it is both in actuality and potentiality. On the part of its carrier, the potentiality associated with a similar individual does not become invalid, but the potentiality associated with an unspecified individual remains with the absence of actuality. As for this individual, he disappears with the disappearance of actuality. For example, when the intelligible is associated with an unspecified individual, it does not become invalid with the disappearance of a concrete individual. When it is associated with a single individual based on a thing that can be pointed to [as ‘this’], then it becomes invalid with the absence of that individual. Necessity is related to possibility, as perfection is related to imperfection. Thus, when necessary, possibility becomes invalid.

When a limited active power meets an affective power, an act necessarily follows from both of them. The situation is different, as will be explained below, when the opposites are equivalent, namely with the potentiality for free choice.

An active power can be called ‘capacity’¹⁴⁴, when it is supposed that it exists only for that which is capable of both acting and not acting. If it is only capable of acting, the general public does not call it ‘capacity’, and this is not correct. If this thing, which only acts, acts without will, then in this sense, it will not have capacity. If it acts according to will, and the will does not undergo either accidental changes or essential transformations in its change, then it will act according to its capacity. For if it is correct that if it wishes, then it acts, and it is also correct that if it acts, it wishes. If it is true that if it does not wish, then it does not act, then if it does not act, it does not wish. However, it does not follow that it is not willing at some time; and therefore, if at some time it does not will, it would be wrong to say: ‘When it does not will, then it does not act’, and therefore, to say: ‘When it desires, then it acts.’ The judgment that a thing is capable will not change since capacity is related to will, regardless of whether it can change or not.

The powers, which are the principles of motions and actions, are partly associated with reason and imagination and partly not. This power that is associated with reason is the power to one thing and to its opposite. Therefore, it is not a complete power in the true sense but becomes a complete power when it is associated with the determined will that requires the motion of the organs, in which case it is necessarily an actual power. From the powers associated with reason, in the presence of their affection, there does not proceed any act from themselves, since they are capable of something and its opposite. Thus, if any act proceeded from them, then there would proceed from them two opposite acts at the same time, which is impossible. In its proper place we shall discuss this subject in more detail, and explain that human actions necessarily proceed from

¹⁴⁴ Cf. *al-Ilāhiyyāt*, IV.2.

them.

As for the powers that are not associated with reason, if they meet with a complete affective power, and there is no external obstacle, there necessarily proceeds an action from them.

Know that every moving body has some extraneous mover¹⁴⁵. For if a body were to move by itself because it is a body, then all bodies would move with the same motion since bodies are similar in corporeality. Therefore, the cause of motion is something different from corporeality. Besides, if a body were to move itself, then it would be both the agent and the one the receiver of that act, and then it would be something perfect insofar as it strives to become perfect, which is absurd.

It is explained like this. If a moving object did not move insofar as it moves, then it would be impossible for the mover to be a mover; it would be something else. If it moved insofar as it moves, with the motion in which it actually moves – ‘to move’ means that a potentially moving object has an actual motion – then something would come from potentiality into actuality by something that it actually has, namely motion. However, it is impossible that this thing is actually in it since it also has it potentially and still needs to acquire it. For instance, if it were something warm, how would it heat itself with its own warmth? In other words, if it were warm actually, how could it be warm potentially? After all, it would be warmth both actually and potentially, and this is impossible.

In sum, if a body is moving potentially, then it needs something that would bring it from potentiality to actuality. However, in motion a body is necessarily potential. In other words, the concept ‘to be a moving thing’ is different from the concept ‘to be a mover for a thing’. It is necessary that a moving object as such is different from a mover as such. A moving object is a body; therefore, a mover is something else.

Motion is something whose existence has the character of renewal and passing. Therefore, its cause must also be an unstable cause, because if its cause were stable, while each cause is stable and continues to exist, its effect cannot not exist (and as you will learn, the parts of motion cannot disappear when the mover is the same body) and when it must be in rest. However, if the parts of motion did not disappear, then the motion would no longer be motion but something fixed. It would be the same if the cause of motion were an absolutely actual intellect, which does not tend to change. Thus, it is fixed that everything that moves has a mover different from that which moves.

This cause of motion either exists in a body called ‘self-moving’ or outside a body called ‘non-self-moving’. A self-moving [body] has a cause [of motion] either as one type of motion moving [the body] in motion of another type called ‘moving by free choice’, or contrary to that

¹⁴⁵ Cf. *al-Tabrī‘iyyāt*, I.2.2.

called 'moving by nature'. Moving by nature is either when it has no will, and it is called 'moving naturally', like the downward motion of a stone, or by will and a purpose, and it is called 'moving due to the soul of the heaven', like the motion of the heaven. As for [bodies] that do not move by themselves, they either move like a stone upwards in a special place, and it is called 'forced motion', or as with the motion of a passenger on a ship in an unspecified place, and it is called 'accidental motion'. Each of these varieties [of motion] has its own states, which will be discussed below.

Self-moving is either such that it moves by a certain mean¹⁴⁶, as a carpenter by means of an adze, or such that it moves directly. Some movers move so that they themselves move, others so that they themselves do not move, like an object of love when it excites the lover.

Due to the impossibility of the existence of infinite bodies, it is impossible for infinite moving [bodies] to exist simultaneously and for every mover to move itself. Therefore, the motions finish with some kind of unmoved mover. Its explanation is that, firstly, the moving must be a body or something material, while there should be infinite bodies, and secondly, the causes must be finite. This is proved thus: if there were a last mover and it was moved by a mover that was also something moving, then it could not move without being previously moved by another mover, and regardless of whether this mean is one or infinite. There can be no existence of motion unless it has a mediated character. Consequently, it must inevitably end with a mover that does not have a mediated character. The same is with the things that come from the potentiality into actuality.

The unmoved mover moves either by endowing the body with the proximate principle, with which it moves, or it moves by being followed and loved. It is clear that every power of a body that moves also moves accidentally and that the unmoved mover cannot be a corporeal power.

Further, every body from which proceeds an act¹⁴⁷, which is neither accidental nor forced, acts by means of the power in it. As for the one through will and free choice, it is clear. As for the one not by will and free choice, then that act proceeds either from the [body] itself as such, or [from the body] insofar as it has a power corresponding to the motion, or from something separate from a corporeal thing, or from some incorporeal thing separated from it.

If it [an act] proceeded from the [body] itself as such, then all bodies would participate in the proceeding of the act from it. Therefore, it must proceed from something additional to the corporeality. If it were from another body, that motion would be forced or accidental, whereas we said above that it is neither forced nor accidental. If it came from something separated [from the body] and not mixed with bodies, then this separated thing would have to achieve by motion

¹⁴⁶ Cf. *al-Ṭabīʿiyyāt*, I.4.15.

¹⁴⁷ Cf. *al-Ilāhiyyāt*, IV.2.

something that it does not have, and this was rejected by us. Therefore, if there is a certain separated thing involved in the production of motion, then it moves as something followed and loved, like the case of the celestial motions.

In any case, there must be a power in the body, which, as we said, produces motion and achieves through motion something that it does not have and becomes complete through it.

Moreover, the specification of this body by the reception of this impression from the separated [principle] can be either because it is a body, or a power in this separated [principle]. If it were a body, then any body would participate in it, while it is not like this. If it were a power in it, then it is a principle of the act's proceeding from it, and this needs to be proved. If it were a power in the separated [principle], if [the indicated effect was specified] by this power itself, then the same could be said about it as about the separated [principle]. If [it were specified] by will, then the latter would distinguish the body either due to some specific feature in it or by chance. If [it is distinguished] by chance or randomly, it would not be subject to an order that is permanent or happens in most cases; and random things, as you will learn, are not permanent or [do not happen] in most cases. However, natural things, as you will learn, are permanent or happen in most cases; there is nothing in them by coincidence and chance. Therefore, this [force distinguishes the body] not by coincidence, although coincidence does occur in natural things or will. So, there remains a specific feature. This specific feature itself must have motion, and it is a natural power, due to which a body achieves through the motion its natural character and natural figures, although, as established while we were talking about corporeal forms, [these powers] taken together are not enough for the subsistence of matter.

As regards the being of this power as the principle of motion in quantity, as we mentioned, it causes rarefaction and expansion of the size [of a body], as is the case with fire, or condensation and contraction, as is the case with earth. As for its being as the principle of motion in quality, like the state of nature of water, which turned out to be heated, and when the obstacle is removed, its nature returns to its coldness and preserves it. When a mixture [of elements]¹⁴⁸ deteriorates in bodies, their nature gains strength and returns them to the appropriate mixture.

From this, you can also understand that the soul is not a mixture because the non-existent mixture does not return itself to its original state.

Some supposed that the nature in composite beings is a mixture [of elements]. A mixture, as you will learn, is a quality resulting from the interaction of opposite qualities in neighbouring bodies. It cannot be supposed that the qualities of a mixture are the same original qualities, only that they have changed. You already know the state of this; it is an emerged quality.

¹⁴⁸ *Mizāğ*.

If this principle exists in a body, it does not endow it with motion because, otherwise, it could have an act without the body. However, its existence is like the existence of motion and body, and it follows that which endows [the body] with forms, just as its existence follows the existence of figures, colours, and tangible qualities. There is a principle, the existence of which is followed by the existence of powers from which proceed actions, and it is the soul, with which the powers are related. If a figure and colour were to act, they would also be related with this principle, since they belong to it, as when it is said: 'This power belongs to the soul.' For matter only predisposes that these things should all exist in it, but [in such a way that] by nature they precede each other. That which precedes all these attributes is called 'nature', and that which precedes forces is called 'soul'.

Others supposed that the soul produces motion through the mediation of nature. I do not believe that nature transforms into a mover of organs contrary to what its essence requires while obeying the soul. If nature were transformed, then when it were exhausted after the soul demands something contrary to what [its essence] requires, then the exhaustion would be due to a motion appearing in the body contrary to what is required, and what the soul requires, and nature requires while [having involuntary] shudder.

It is clear from this that the existence of a person's power is the principle of a motion that is different from what the mixture [of elements] requires, and causes the convergence [of what the soul requires and what nature requires], in the motion of shudder and exhaustion. This power is not a mixture [of elements]. Indeed, how can the human soul be a mixture if touch, [for example], is carried out only through the transformation of the mixture, its disappearance and the appearance of some other mixture? How can non-existence be perceived?

As for the affective power, it is either close or distant. The close one is like the potentiality of a boy to become a man, and the distant one is like the seed.

Some of the ancients, as well as those who lived after them, said that the potentiality is with the act and does not precede it. He who says this would certainly be incapable of seeing many times [different things] throughout the day; in reality, he would be blind. Everything that does not exist and that is not preceded by the potentiality of existence is the impossibility of existence¹⁴⁹.

We say: everything generable after its non-being, when this 'after' is temporary, is preceded by some matter, because before its being, it was a possible being. If it were not preceded by the possibility of being, then it would be impossible. The fact that it is possible being is not equivalent to the fact that the agent's being has power over it. The agent has no power over it if it is not possible in itself. Do not you see that the intellect allows saying: 'The impossible is not a subject to power, but the possible is a subject,' but does not allow saying: 'That which is not a subject to any

¹⁴⁹ *Mustahīl al-wuġūd*. We prefer 'the impossibility of existence' to 'impossible existence' (taken analogically with necessary and possible existence) since the latter represents the case of *contradictio in adjecto*.

power is not subject to any power, but that which is a subject to power is a subject to power’? If [the question of whether] it is subject to power or not causes difficulties for us, then we will never be able to know it, because if we knew it from the point of view that it is something impossible or possible, but ‘impossible’ would mean that it is not subject to power, while ‘possible’ would mean that it is subject to it, then we would know something unknown through another unknown thing. However, the being of a thing is a subject to power follows from its being possible in itself, for the second is [determined] by considering [the thing] itself, the first by comparison with that which produces it. Consequently, the possibility of existence has a certain reality, the existence of which precedes the existence of the possible.

The possibility of existence is an accident since it is what it is through the relation to that which is the possibility of its existence. Relation is, therefore, its constitutive feature. If it were a substance, then it would have its specific existence, not constituted by relation, in which case it would be necessary existence in itself because its possibility would have no cause. The possibility of existence in the absolute sense does not exist in such a way that relation from outside comes to it later. The existent from the possibility of existence is the possibility of the existence of something, and relation is an accident, and it is a constitutive feature of the possibility of the existence of something. Substance is not constituted by accident in such a way that it must turn out to be an existent in a substrate. Therefore, let us call the possibility of existence ‘the potentiality of existence’, and its carrier – ‘substrate’, ‘prime matter’, and ‘matter’ – depending on different viewpoints¹⁵⁰.

Know that possibility is a general idea [predicated] by analogy, like the absolute existence. It is subject to [other] ideas, namely possibilities that have no names and which can be expressed as the possibility of the existence of so and so. Thus, everything that emerges is preceded by matter, and matter is the cause of emergence. Where emergence, generation, and corruption take place, prime matter for the generable and the corrupting must be the same. Otherwise, prime matter would have to emerge, which is impossible, as you know from a series of arguments, since the emerging prime matter would have to be preceded by the possibility of existence, and for its possibility as well, some prime matter [would have to exist], and so on.

Know that the substrate of possibility must be created¹⁵¹; otherwise, it would have to be preceded by another substrate, and so on to infinity. For if this were to be necessary, another

¹⁵⁰ When the locus (*maḥall*) does not need what it contains, it is a substrate (*mawḍūʿ*), and in the opposite case, it becomes prime matter (*hayūlā*). Substrate embraces accidents and prime matter receives a form. If a form is present then its carrier is called matter (*mādda*).

¹⁵¹ Here the word *mubdaʿu* (*ʿibdāʿ*) means absolute creation that is not preceded by matter or time, unlike other similar terms *takwīn*, *ḥalq* (these two mean creation from matter), or *iḥdāt* (creation in time).

possibility would have to precede it. It is necessary, moreover, to know that the possibility of a thing is its property of the possible. Also, know that the possibility of something is its possibility, like the state of existence.

Know that the possibility, which disappears with the act, has a cause, and it necessarily emerges [in time], and it must necessarily be preceded in time by some other possibility and so on to infinity.

Further, prime matter has the potentiality only to become something in actuality, and not to exist, while the potentiality of form is to exist, and not to become something in actuality. Active intellects have the possibility and potentiality only to exist, and not to become something in actuality, for they are an act. These intellects have no connection with matter, and that which has no connection with matter cannot be preceded by the possibility of existence. Therefore, the existence of an active intellect must be permanent.

We say: the possibility of the existence of a form is an attribute that exists in prime matter. If this attribute is thought of, then it is thought of as the possibility of the existence of a form. It is like the courtyard of a house: it is [the courtyard] an attribute of the house, and if you imagine it in your mind, along with [the number of] men it can accommodate, then it will be the possibility of existence. Thus is resolved the doubt of the one who says: 'How can this existence be related to non-existence?' For relative is that in thinking of which one thinks together with it the related or can be thought of that to which it is related.

It may be said: the courtyard is something existential, while potentiality is something non-existential.

The answer is that the courtyard is something non-existent in relation to how many men it can accommodate but not in relation to existence. Potentiality in the absolute sense is something non-existent in relation to existence. It is not necessary that each of the two related things exist in the concrete things; it is necessary that they both exist in the intellect. For some things the possibility of their existence is such that it exists in matter, while for others it is such that it exists with matter, but not in it. The first includes, for example, corporeal form, the second – the human soul.

However, it does not follow from what we said that the human soul does not exist in matter; this is clear from the proofs that we will give in the section on the soul. It will be known that matter inevitably precedes [in time] the emerging soul and that it does not exist in matter. It will also be known that some varieties of the possibility of existence have the character of the first [of the possibilities discussed above] and others of the second. Matter is something desired for the existence of the soul over its non-existence since the potentiality of every possible existence to existence and non-existence is equal. So there must necessarily be a cause that inclines it either to

one or the other. It will be clear to you that matter is the cause of the existence of the soul in this and not in any other sense, in a word, the cause of its emergence. Indeed, matter is required for two things: firstly, in order that it constitutes what exists in it, and this, as we will show, does not apply to the soul; secondly, in order for it to give precedence to the existence of a thing over its non-existence, and it is this why the soul needs matter. Therefore, in reality matter in emerging things carries the possibility of existence and gives precedence to the existence of possible existence over its non-existence.

Furthermore, this possible thing is a form. It became clear with the evidence that some forms exist in it [matter]. Thus, corporeal form needs matter for two things: firstly, in order to emerge, and secondly, in order for the existence of a form to be constituted by it. As for the human soul, it needs it [matter] only for its emergence.

These considerations suggest that potentiality in the absolute sense precedes act not only in time. There are different views on this, the exposition of which is contained in *al-Šifā'*¹⁵². However, we say: the situation with particular things that generate and corrupt is like the state of seed and man. Potentiality precedes act in time, and we already said that the precedence in time does not enter into [the precedence in] existence. Further, potentiality is something posterior to act, for it is not self-subsistent in itself but needs a substance to subsist in it. This substance must be in actuality because until it has become actual, it has no predisposition to anything. For that which does not exist absolutely cannot accept anything. However, there are actually existing things that are not in potentiality, for example, the First Principle and the active intellects.

Then, potentiality needs actuality that brings it into actuality. This actuality does not belong to what emerges [by itself], and therefore, needs something that brings it [to the actual state], and it ends with actual existence that does not emerge [in time], like the consideration [of the question] about the finiteness of causes. In addition, actuality is conceived by itself, and potentiality, as we said, is conceived through actuality in one way or another by the categories of affirmation and negation. Also, actuality precedes potentiality in perfection because potentiality is imperfection and actuality is perfection. Good in everything happens only with actual being, and where there is evil, there is something potential. A thing cannot be evil in all respects; otherwise, it would be non-existent. Everything, insofar as it exists, is not evil. It is evil only to the extent that it lacks perfection, for example, ignorance, or insofar as it causes non-existence in something else, as injustice.

Thus, it is clear that in reality actuality precedes potentiality in causality, nature, dignity, and time.

¹⁵² See *al-Ilāhiyyāt*, IV.2.

Affective potentiality, in the sense of an absolute possibility, has no cause, since if it had any cause, it would have been preceded by other possibility and so on to infinity. However, the proximate potentiality of the existence of a certain thing must necessarily have concrete causes, for it is something realised. When this thing is realised in actuality, potentiality [of its being] becomes invalid. As for the proximate potentiality of some indeterminate thing, like this thing, it has no cause, this potentiality does not disappear in the carrier of the potentiality with the existence of this thing.

Possibility can be considered in a thing, taking into account its oneness, or it can be considered in it, taking into account some other condition.

PART FOUR

From the six parts that pertain to Book Two, i.e. the science called metaphysics, from the three books of which consists the book of al-Taḥṣīl. It consists of five chapters.

CHAPTER ONE

On perception and what is related to it

The non-existent in the concrete things is judged as something existential, so it must have some kind of existence. For since it does not exist in the concrete things, it must exist in the soul. The judgment is actually made precisely about it [what exists in the soul], and accidentally about what exists outside [the soul]. If the object of knowledge were known insofar as it exists in itself, then everything that exists in itself would be known to everyone, and the non-existent in the concrete things would be known. As you know, the form of a house you want to build exists in your mind, because otherwise [this form] would not cause¹⁵³ the existence of a house in the concrete things. In addition, one who was not a knower, and then became a knower, acquires an attribute that [he] did not have before, and, of course, this attribute is known. This is observed by the fact that touch is accompanied by a change in the organ [of touch] by the perceived quality.

Some [perceived] things are abstracted from others in the same way as whiteness, matter, and measure. The condition of abstraction from others is not due to the fact that they are accompanied by something extraneous to themselves. Other things are associated with something else in such a way that they have a certain impression on each other, as the association of corporeality with position and measure. If you conceive measure and position removed from a body, then the body will disappear. The third things are associated with something else, in which they have no impression [on each other], as the association of blackness with motion, since one of them does not disappear when the other is removed.

Things that are accompanied by something extraneous to themselves, this latter is accompanied due to something receiving, which is matter. For if it were to accompany them,

¹⁵³ I.e. the formal cause.

because of themselves, then it would also accompany everything that participates in them as species or individuals. However, everything associated with matter must have a certain position, and what must have a certain position can be pointed [as ‘this’], and what can be pointed [as ‘this’] does not participate in its reality and is not abstracted from the rest. If it were the case, then the varieties of known things would also be like this.

Abstracted knowledge from other things or associated with something so that they do not impress [each other] is called an ‘intelligible object’. It can be predicated of all individuals like ‘whiteness’, which can be predicated of everything white, while white cannot be predicated of anything else¹⁵⁴.

An object of knowledge, insofar as it is mixed with something else, is called a ‘sensible object’. Such is either an object of eyesight, or touch, or smell, or taste, or auditory perception, or an imaginary or estimated object.

If an intelligible object were perceived by a body or something corporeal¹⁵⁵, then it would certainly exist in it, and its association with it would be such that it would have an impression on it. Hence, it would be something that can be pointed to [as ‘this’] without participation in it. Then it would have position and measure, and it would no longer be an intelligible object. So, if matter, whiteness, measure or position were thought in some body, then matter would have a position different from it, whiteness would have a position and measure different from it, measure would be concretised by an edge and position different from it, position would have a measure different from it.

It may be asked: if position, when associated with a body, becomes something that can be pointed to [as ‘this’], then why does the perceived object, when combined [with it], does not become something that can be pointed to [as ‘this’]? We say: if position is associated with a body, then the latter, as we mentioned, impresses it, and if the perceived object is associated [with it], then it does not impress it. If it had an impression, then the perceived object would disappear with the removal of it. If an intelligible object had a position, then it could be pointed to [as ‘this’]. However, we perceive things and we judge that they cannot be pointed to [as ‘this’]. Thus, it means that we perceive them not by corporeal power.

In addition, if an intelligible object were associated with a body, then a specific measure would necessarily appear in it, and it would become potentially divisible. In this case, each of parts would either be [identical to] the whole, or would not be [identical to] the whole. If each of parts were not [identical to] the whole, then the intelligible object itself would have to have a difference

¹⁵⁴ Cf. *al-Tabrī‘iyyāt*, VI.2.2.

¹⁵⁵ *Ibid.*, VI.5.2.

of parts, while not each intelligible object has this characteristic, but every intelligible object has a unity, due to which it is what it is. There is nothing in it that is different from something else so that it still has some part. We think of it in this way, and therefore, it exists in our soul in this way. It cannot be said that this unity appears in some divisible thing. The impossibility of each of the parts being [identical to] the whole is obvious.

In sum, if something were thought as being in matter, then it would be thought in a sensible object and the intelligible object itself as such would be sensible, while the situation is different. This is observed by the fact that the first action of sight is the perception of colour, and then it perceives measure and figures through colour, and it does not perceive colour abstracted from everything else. It cannot be said that the perception of colours is unusual for the visual faculty, hence it is something extraneous and alien to this faculty. However, everything extraneous accompanies a thing only through the mediation of matter. Therefore, that which prevents sight from perceiving an abstract colour is not a power. This is not due to the eye, but due to something more general, and this something is the association of power with matter. The same is true of the rest of the senses.

It is clear that the perception of intelligible objects cannot appear in an indivisible limit of a body, such as a point or a surface. Firstly, because the limit also has a position, so that in this respect it is the same as the body, and secondly, because the limits themselves do not have existence separate from bodies and they cannot have attributes that the body would not have, as we found out in the previous discussion.

We know from this that things associated with something else can only be perceived by corporeal power, since these things are individuated only by extraneous, non-essential accidents, such as position, figure, and concrete measure. Thus, they are necessarily associated with things that are foreign to themselves, and these things accompany them certainly through the mediation of matter, as is the case with concrete things. Therefore, some corporeal powers perceive them. This is observed by the fact that such things are perceived by the external senses¹⁵⁶.

The impression [left by a perceived object] in the intellect is not like the impression left, for instance, in the imagination. Imagination is necessarily associated with extraneous accidents that impress it in such a way that if these accidents were removed, then there would be no imagination. An intelligible object, however, is different since the intellect can perceive something abstract from extraneous accidents, or it can associate them with it; in both cases, the thing does not cease to be intelligible.

Know that the appearance of a sensible or imaginary object in an organ is together with the

¹⁵⁶ Vision, hearing, smell, taste, and touch.

affection of the organ; otherwise, it would not appear in it but would be something nearby. That is why the sense of touch does not perceive a quality similar to the quality of an organ. Consequently, such perceptions are carried out only in such a way that the organ is affected by the perceived.

You can realise that an intelligible object is not perceived by a corporeal organ by judging that opposites do not exist together in a body. Darkness and light do not exist together. In the same way, you judge many [other] opposite things that necessarily exist in the intellect in a way that they cannot exist in the concrete things. For example, whiteness, abstracted from everything else, exists in the soul in such a way that it can be judged that it does not likewise exist in the concrete things. The same is true of other non-existent objects.

When the existence of a sensible and intelligible object in itself belongs to its perception, and its existence, which is its perception, is its very thought and feeling (as you will learn it), then something else that belongs to its existence cannot be something perceiving itself. That which perceives itself must have existence identical with its self-perception. Everything that exists in itself perceives itself, for its existence is nothing but its perceived being. Therefore, things that perceive themselves cannot be associated with matter, otherwise, their existence would belong to something else. Things abstracted from matter must perceive themselves, otherwise, their existence would belong to something else. Hence, everything that is hidden from itself is due to the association with matter, and it does not perceive itself. This is observed by the fact that corporeal perceiving faculties, such as sight, touch, and taste, do not perceive themselves.

It can be said that if a body were to perceive itself, it would perceive itself in such a way that a form would appear in it once more.

The answer is: firstly, this second form will not be identical in number with the first, so that the perceiver will not be [identical with] the perceived, unless it is said that the perceiver, perceiving the second form, knows that it is [this form] itself. However, it follows from this that it has already perceived itself before this perception, and if this perception is by another form, then there is an infinite regression. Secondly, the same form in the same matter with the same accidents does not exist twice (we already spoke about this when we talked about distances), and therefore, the thing is not affected by its own kind. Otherwise, the same thing with the same attribute would exist together twice in the same thing, which is absurd. In a word, there is a difference between the fact that you conceive something and that you conceive that the conceived exists or does not exist in the concrete things and that this conceived thing is this thing and not something else.

Know that¹⁵⁷ individual things can be perceived in a general way if the individual is not referred to as something that can be pointed to [as ‘this’], as in the case when it is said: ‘Socrates is

¹⁵⁷ Cf. *al-Ilāhiyyāt*, VIII.6.

the one who is in the such-and-such city', or 'The solar eclipse will occur in a month counting from this moment'. [In the latter case, this thing] cannot be predicated of a multitude of objects and is no longer an intelligible but a directly observed object. An individual can be perceived in a general way when he is not referred to something that can be pointed to [as 'this']. This knowledge is obtained through the mediation of causes. For whatever is known through its causes is such that the knowledge of it does not change, whether it exists or not. Thus, if you know the interval between two eclipses due to the causes, then the knowledge of this will not change regardless of whether there is an eclipse or not. However, if you know about it in relation to a certain moment, then when this moment passes and is replaced by another moment, the judgment about it will already change, because of the knowledge of time, when the eclipse is supposed to happen referring to this observed moment. As you see, this is the existence of something immediately given to you and you know that it is immediately given to you, so that when this thing is removed, the knowledge of it as something present becomes untrue. If we knew about the realisation of this thing due to its causes, and not as from its being immediately given and observed so that it can be pointed to at this moment, then the knowledge would not become untrue with its removal.

The first [general] way of knowing about an individual thing does not apply to one individual, excluding other individuals like it, because otherwise, the knowledge about it would be such that you can point to [as 'this'] and be dependent on it. You will learn that the knowledge of the Cause of causes and all existents, i.e. the Necessary Existent in itself, is through the individual things that have a [general] character, and therefore, nothing from the existents will hide from it even in the weight of dust¹⁵⁸, and no change occurs in its knowledge.

One may ask: Does it now mean that the pharaoh does not exist? We say: Yes, it knows the non-existence of the pharaoh, as well as the 'now' in the way that an individual knows the 'now' through causes, and if so, then no change takes place in its knowledge.

Knowledge about something can be acquired from outside, as is the case with one who knows about the existence of the heaven after he has perceived it by feeling. However, knowledge can also be the cause and reason for the existence of something, as in the case of one who conceives the form of a house that does not exist, and in accordance with this, he builds a house.

Further, there is active knowledge, i.e. that which proceeds from the knower, and this very origin of it [knowledge] is its 'knowingness'. Therefore, it is not the case that [this knowledge] having arisen from it [the knower] became known to it, otherwise, we would have an infinite regress. [Along with this,] there is acquired knowledge. It exists before the existence of the object of knowledge in the concrete things, as in the case of the knowledge of the celestial souls. It is

¹⁵⁸ An allusion to a Quranic verse (X:61; translation by Marmaduke Pickthall): 'And not an atom's weight in the earth or in the sky escapeth your Lord, nor what is less than that or greater than that, but it is (written) in a clear Book'.

acquired from the giver of forms¹⁵⁹ before the existence of the objects of knowledge in the concrete things, or after the existence of the objects of knowledge, as in the case of the knowledge of the existence of heaven and earth. The supplier of this knowledge is also the supplier of forms¹⁶⁰, but existents [for their part], are equipped with powers for acquiring the objects of knowledge from their supplier.

Some said that knowledge is an accident through which we perceive the object of knowledge. We asked: How do we know knowledge? By means of what do we know it? They answered: Knowledge is not known. Then we asked: How do we know it by this attribute? So they became confused. For feeling a thing is the very realisation of the impression of the felt object in the essence of who feels because he who feels a thing is characterised by an attribute that he could not be characterised before feeling. Thus, this attribute certainly exists in him, but this attribute is nothing but an impression of what is felt. In this case, what is felt is either the very realisation of that issue [feeling], or something following it. If this is the very realisation of the impression, then it is what needs to be proved. If it is something following it, then it [means] either the disappearance of that impression and other impressions from the perceiver, so the perceiver would remain in the same state as before the perception, or the realisation of the image of what is felt or some other image that is not felt. If this is the realisation of the image that is not felt, then the realisation of feeling about this thing would not be the realisation of its quiddity and meaning, which is absurd. If it is [the image of the felt one], then it is what needs to be proved.

Observation of a thing is not its existence in the soul for a second time but the same imprint in the soul only once; otherwise, what is known would be an endless regression. If this were not so, the perception of a thing by the soul would be either by its existence, or its absence, or the existence in the soul together with an attribute, or the disappearance of an attribute in the soul with its existence in it. In any case, perception is nothing but the realisation of what is perceived in the soul or in some of its powers.

When it is assumed that the feeling of a thing is not its very existence in it, there is an infinite regress, because perception, necessarily, is a certain affection or impression. If it is assumed that the feeling of a thing is a state subsequent to its existence in the mind or feeling, then the question remains open since feeling must be affected or impressed by it. However, there follows an absurdity, namely knowledge of it must be something different from its imprint [in the soul], in which case the knowledge of knowledge will be the same as of this known thing, and then there is

¹⁵⁹ It seems that here this word refers to the first intellect, that is, the first being emanating from the First Cause, rather than the active intellect above the moon.

¹⁶⁰ This term refers to the last active intellect that forms the sublunar world.

an infinite regress. So there follows what some argue that knowledge is an accident by which a thing is known. Nevertheless, knowledge and the known is the very imprint of that thing in the mind.

The perception [in the case] of human souls is by affection in the organ [of perception] and the completion of the perceiving power. Completion, however, does not change in the substance of that of which it is the completion. It is the same with the writing board; if it were not so, it would be affected by a power. Since affection would change [something] in its substance, then power would not remain upon perception.

As for the heavens, their perception is conditioned by their bodies and souls by way of completion. As you know, they are neither affected nor destroyed.

CHAPTER TWO

*On universal and particular and what is related to them*¹⁶¹

Something universal¹⁶² insofar as it is a certain nature, for example, a man, insofar as it is a man, is one thing, and insofar as it is potentially or actually something special or common, one or many, it is another thing. As such, man is only man, without any further condition. For common is a condition in addition to being a man, and the same is with particular, one and many. Humanity as such is neither common nor particular, neither potential in one case, nor actual in another, for that is what it should be. For if humanity existed only in the singular or in the plural, then humanity as such would not be something singular or plural.

Indeed, there is a difference between saying: 'It exists only in one of the two states', and: 'One of the two states has what is humanity'. From statement 'Humanity as such is not one thing' it does not follow that humanity as such is something plural. It would be the same if instead of unity and plurality, we assumed the existence, which in a certain respect is something commoner than one and plurality, and asked: 'Does humanity as such exist or does it not exist?' For even animality as such is something special, which cannot be predicated of what is subordinate to it, since if animality as such were a man, then every animal would be a man.

Our statement 'Humanity as such is one' is contradicted not by 'Humanity as such is multiple', but by 'Humanity as such is not one'. If it were so, then it cannot exist as multiple or one

¹⁶¹ Cf. *al-Ilāhiyyāt*, V.1 and 2.

¹⁶² Namely genus, species, difference, property, and general accident.

humanity. Therefore, if it is asked ‘Is humanity one?’ and a negative answer follows, then this will not mean that it is plural, for this will be an absolute negation, which means the negation of both sides.

If you understood this, then as ‘universal’, humanity can be said unconditionally. Humanity can [also] be said ‘universal’ with the condition that it is expressed in one of the known ways about multitude. From the first point of view, the universal exists actually in things, being predicated of each [of them] individually, but not because it is one or many in itself, since this does not belong to it as humanity. From the second point of view, namely, when one and the same thing, which is concretized in existence by being predicated at a certain time of each [of the things] separately, while it [the universal] does not exist.

The universal meaning can be acquired from outside, like the acquisition of [the idea of] humanity from Zayd and ‘Amr, when ‘Amr does not bring into the form of humanity anything different from [what is received from the contemplation of] Zayd. In logic, this [universal] is called ‘post-multiple’, meaning that this common meaning is acquired from [the contemplation] of various things. It [the universal] may also not be acquired from outside, like the knowledge of Allah (praised is He!) and the angels. This [universal] is called ‘pre-multiple’ because, as we will explain below, it is the cause of plurality.

It becomes clear that a person endowed with specific accidents of an individual is not endowed with the accidents of another individual, so that he is identically present in the individual of Zayd and another individual, and is endowed in himself with opposite accidents. The conception of humanity in Zayd and the acquisition of the intellectual form by the soul is not preferable to [the conception] in ‘Amr. Certainly, the humanity that is in ‘Amr can be in the intellect before and give the intellect the intelligible [form] of humanity that [he could] get from Zayd. However, whichever of them had this impression before, the other after that [cannot] have no [additional] impression. Since this intelligible form, with its state, is imprinted on the soul from any of the [individual] who happened to be before, it is connected with one of them not as more preferable than another, but it is equal to all [of them]. Therefore, there is no total universal in existence, but the existence of total universal in actuality only in the intellect, namely, as an intelligible form that has – actually or potentially – the same relation to each [single thing]. Humanity in the intellect is nothing but humanity, and it is universal only insofar as the intellect, by predication, creates in it relation to a certain multitude. In this sense, humanity is neither a genus, nor a species, nor an individual, nor something single, nor something multiple.

The being of an animal existent in an individual as an animal does not prevent it from being an animal as such, and not considered as an animal with a characteristic existent in it. For example,

whiteness, although it is not separated from matter, existing in matter due to its whiteness, nevertheless it is still something else that is considered in itself, even if it occurs to this reality to be associated with something else in existence.

As for the mode of existence of universals, they are only in the soul. Indeed, if humanity existent in Zayd were the same as the one existent in ‘Amr, then since ‘Amr is ignorant and Zayd is intelligent, Zayd and ‘Amr would be both intelligent and ignorant at the same time, which is absurd. Due to this, there cannot be the same existent soul in Zayd and ‘Amr. Besides, if one universal person were a substrate for blackness and whiteness, then he would be both black and white at the same time. Also, if one existent animality were inherent in all animals, then one and the same animal would be both flying, and crawling, and bipedal, and quadrupedal¹⁶³.

CHAPTER THREE

On the cause of the plurality of the individuals of same species; on the cause of plurality in general and on the cause of individuation; that the existent, whose quiddity is its being¹⁶⁴, and the existence, which is necessary by its essence, cannot be plural ever; on the difference between the whole and universal

Everything universal can be plural only in such a way that each of the particular objects has a specific characteristic. For example, two blacknesses can exist only because their multiplicity is determined by two bodies, or because [they have] two specific states. For if it were otherwise, there could not be a single blackness, but all that is one would be divided into many. If blackness as such required that it be plural, then each [blackness] would require the same thing that the nature of blackness requires. Moreover, if each of the two blacknesses were similar to the other, in no way

¹⁶³ This is the rejection of Plato’s theory of forms, at the heart of which is the idea that universals are not separate from individual beings. Ibn Sīnā’s position, therefore, lies in the realistic perspective. The same lines can be found in *Dānišnameh*: ‘For instance, it cannot be the case that something which comes from Zaid is not Amr (i.e. another man having the form of humanity) but a lion having a form other (than humanity). Similarly, if there are many rings bearing the same insignia, the impression one makes upon a place is the same as that any other would have made. But, an identical humanity (*mardumī*) or an identical form of blackness cannot be external to the soul, the imagination (*wahm*), or to thought (*andīsha*). The existence of the form of humanity cannot be limited to any thing (*andar har chizi*) or to any member of the class of men. Similarly, the existence of the form of blackness cannot be restricted to black men nor to instances of black entities. The identical form of man-qua-man cannot be a knower like Plato and also an ignoramus like someone other than Plato.’ See Ibn Sīnā, 1973b, p. 33.

¹⁶⁴ ³*Anniyya*.

different from it, then it would be identical to it. Further, if the fact that its being [blackness] were [some] blackness, and this blackness were one and the same, so that blackness would require this blackness, provided that it was identical to it, then there must be no blackness other than this one.

Therefore, the multiplicity of blackness, as well as everything that [subjects to] a multitude of individuals, is due to a cause. The existent that has no cause cannot be a plurality. If it were a plurality, then the existence of this plurality would be due to a cause, and also because such a plurality is a result of division. Division happens because of the receiver, since it is something outside the reality of the thing, and therefore, division occurs only where there is a receiver. This receiver is matter, so division occurs only in a body and the cause of multiplicity is prime matter.

From what was said above, you understood that the cause of everything that emerges is motion. Consequently, the divisions that bodies have are due to the multiplicity of dividing factors, and it is caused by motion. Since multiplicity necessarily goes back to something that is plural in itself, and this is motion. Thus, if there were no motion, then there would not be multiplicity of this kind. The multiplicity of motion is caused by [motion] itself, for the necessary [condition] of motion and the mode of its existence is that it is something that is generated and passes away.

Know that everything common is specified either by a specific difference or by an accident. Specific difference and accident, however, do not bestow the quiddity of genus, but they bestow the subsistence of the existence of genus as something actual. An example of this is the animality, which embraces man and horse, while both of them one in that animality. For their specific differences are not a condition in the being of the animality present in them as animality, but each of them has complete animality. Indeed, if one of them did not have complete animality, then he would not have any animality at all. If something lacks in the animality, then that animality is not animality. A specific difference, such as 'intelligent' and what is similar to it, is required only for the 'animal' to exist subsistently as an animal, which can be pointed to [as 'this'], since an animal exists only in such a way that it is either a man or a horse or some other kind.

If this is the case with specific difference, then it must be so with accident.

You already know that specific difference bestows existence. Where the quiddity of genus is [identical] to existence (and it was assumed that the specific difference is included in it), the specific difference must bestow the quiddity of genus. Moreover, if we assume that the existent that does not have a cause has a genus and a specific difference (and the specific difference bestows the existence of the genus), then something without a cause would have to be an effect.

From this it is clear that the existent that has no cause and the existent whose quiddity is its existence does not become multiple because of specific differences and accidents.

When we say that universal nature exists in concrete things, we mean that the nature that occurs to be universal exists in concrete things.

The difference between universal and whole¹⁶⁵ is that whole exists in things, while universal exists only in conception. Whole is counted by its parts, and each part is included in its subsistence, while universal is not counted by its parts. Whole is constituted by its parts, and universal constitutes its parts, since species are constituted by two universals: genus and specific difference. Moreover, whole cannot be made whole by each of its parts taken separately, while universal can be predicated of each of particular thing. Also, the parts of whole are a finite, while the particular things [subjecting] to universal are not finite. Besides, whole needs its parts to be present together, but universal does need that.

Know that the very conception of an individual prevents something else from being it, and therefore, it is necessary that [something else] should not participate in its conception. However, the essence of a thing and its constitutive features do not prevent them from participation. Consequently, it is due to an accident and a necessary accident participates in itself [something else]. This must, therefore, be due to an unchanging concomitant accident, because as you will learn, the concretizing cause is not removed while the effect remains. Thus, it must be concomitant, not necessary. However, the concomitant [accident] accompanies through matter. Hence, every species, whose individuals multiple, must be material. Moreover, the concomitant [accident] necessarily accompanies from some temporal principle. Everything that has a temporal principle is something emerging, and everything emerging is preceded by matter. Therefore, the concomitant [accident] accompanies through matter. If it accompanies it at two different times, nothing prevents it from participating [in something else]; therefore, individuation must be conditioned by the unity of time.

If you contemplate the nine categories, [it turns out] that none of them is individuated by itself in such a way that participation [in it by something else] would be impossible, except position, because 'where' is also not individuated by itself, unless it is specified by some position. Consequently, the individuating agent is position together with the unity of time. Thus, a thing that has neither position nor time, its quiddity is not divided into individual things [subordinate] to it in existence in a certain manner. From this you learn that motion is the cause of the multiplicity of individuals [subordinate to] of species. As for the unity of position, like a man from the beginning of existence to his end, it is like the unity of time and the unity of the potential continuity of many positions.

Further, some things are individuated by themselves, like the Necessary Existent in itself. Other things are individuated by necessary qualities, for example the sun, since the position here refers to its necessary qualities, or as in the case of active intellects, as we will explain below. Other

¹⁶⁵ Cf. *al-Ilāhiyyāt*, V.2.

things [are individuated] by something accidental, which accompanies from the very beginning of existence, and we explained it in the section on space and time.

As for the individuation of souls, [it is determined] by the connection that exists between them and their bodily powers, and the individuation of bodily powers [is determined] by the body in which those powers are located. Therefore, it cannot be that every soul turns out to be specified by any body whatever but by a body in which the powers really belong to it and not accidentally; otherwise, the plurality of souls would be impossible.

An individual is indeterminate in two senses¹⁶⁶. In one sense, it is one of the individuals [subordinate] of a species to which it belongs in an unspecified manner, as any individual, whatever it may be. It is like the one [of the individuals] denoted by the statement ‘a rational and mortal animal’, which cannot speak about multitude, in which case the definition of individuality becomes relative to the definition of the nature of species. In this sense, the individual, both in mind and in existence, can be any individual [subordinate] to that species and similarly in the essence of the thing.

In another sense, this is an individual appearing in the distance so that it is not clear whether it is an animal or a man. In this sense, an individual in itself cannot be something else but in the mind, causing doubts and assumptions, so it can be concretised with its animality and not as an inanimate being. As for its judgement in itself, it cannot be one or the other, since in it [only] one of them was concretised.

CHAPTER FOUR

*On the difference between genus and matter; on the difference between specific difference and what is not a specific difference; on the mode of unity of specific difference by genus*¹⁶⁷

We say: body, for example, can be said to be a genus to a man, and can be said to be matter to a man. As you know, matter is a part of his existence, and therefore, it cannot be predicated of him. The difference between body considered as genus and body considered as matter is that if body is considered to be a substance having length, breadth, and depth provided that it does not include nothing similar, for example, sense and nutrition, then it is matter. If it is taken without further

¹⁶⁶ Cf. *al-Ṭabrī‘iyyāt*, I.1.1.

¹⁶⁷ Cf. *al-Ilāhiyyāt*, V.3.

conditions, so that it may have with this meaning sense and nutrition or may not have it, then it is a genus. Therefore, in the second meaning body can be a predicate, but not in the first meaning. The same is with a sensible thing: if it is taken as something having sense, provided that nothing else is added, then there is no specific difference, but a part of a man; if a sensible thing is taken as something having sense without further conditions, so that some ideas can be added to it, then there is a specific difference.

Any meaning that creates difficulty in its matter or genus should be considered that if it is such that it allows the addition of specific differences to it (i.e. whether they are present in it or [abstracted] from it), then it is a genus; if it is such that if some other thing enters into it, not belonging to it and added to it by something extraneous, then this is not a genus but matter. If, however, the fullness of the meaning is given in such a way that everything that can enter into it turns out to be included, then it becomes a species.

Thus, provided that it [the meaning] is not added, then it is matter; provided that it is added, then it is a species; but when this does not occur to it and each of the additions is possible so that it will be included in the content of this idea, then it will be a genus. This is about compound things.

As for that the essence of which is simple, the intellect assumes the same considerations. As for existence, there is nothing in it that could be distinguished as a genus or as a species.

If some nature¹⁶⁸ is added to a general meaning, then its addition to it must take the form of division so that it can be reduced to species, and the division must not allow change; so it can be pointed out [as 'this'] while the substance remains, when, for example, 'moving' would be 'immobile', while being one as an individual. This thing [division] is called specific difference. If specific difference is removed, then genus will also be removed, not to mention species, since genus does not pass from one species to another. Moreover, the subjects of the division must not occur to it due to something that precedes them. For example, when someone divides a substance into 'capable of moving' and 'not capable of moving', while at first he would have to divide it into 'body' and 'non-body'.

When the nature of a genus has some accidents through which its division can be carried out, then its predisposition to the division is either by its generic nature or by some more general nature, as, for example, when an animal is black and white, a human is male and female, and this is not due to specific differences. However, genus can be divided on the basis of peculiar things, like male and female in animal, but this is not a specific difference in any way. For they could only be specific differences if they occurred to animal from the aspect of its form, whereas male and female occur to animal due to the difference in the matter. This difference, however, does not prevent

¹⁶⁸ Cf. *al-Ilāhiyyāt*, V.4.

animal from receiving as such a specific difference that occurs to it from the side of its form, so that if we imagine ‘not male’ and ‘not female’, then the species would remain [as it was]. Masculinity and femininity would not prevent the division into species if they were not taken into account and were not given a division into them [species], but would be [taken into account] because of necessary qualities. Indeed, the animal, which is a body capable of eating and voluntary movement, does not contain masculinity and femininity, and nevertheless, is thought as an animal and nothing else. It would be different if we imagined ‘not rational’ and ‘not speechless’, or imagined colour as ‘not white’ and ‘not black’. An extended interpretation of specific difference is given in *al-Šifā*¹⁶⁹. While defining specific difference, it is necessary to proceed with what we mentioned above. One species might follow, which is not a specific difference and does not go beyond it, namely when it belongs to the necessary qualities of a specific difference. We spoke in [the book of] logic about the unity of genus and specific difference, and it is through implication.

The unity of one thing with something else¹⁷⁰, when one is potentially the other thing, is not by adding to it. For something can be thought in the mind in such a way that in itself that thing is a multitude of things, each of which in existence is that thing, and something else is added to it due to its concrete existence, while the other in terms of concretisation. For example, measure: it is something that can be both line, and surface, and depth, but not through the association of something with its volume, and the volume of measure with line, for instance. It is in such a way that the line itself is this measure. In fact, measure means something that is predicated of equality, but is not conditioned in such a way that it is only this thing. If some condition were put forward here, then measure would not be a genus because everything general, being specified in its generality, already ceases to be common. However, there is no condition here, so it can be predicated of both line, and surface, and depth, so measure is only one of them. Nevertheless, the mind limits it when thinking about it as separate existence. Then, if something is added to it [measure], this latter is added not as something outside of measure, but it is through realisation. There is no generic nature in existence, but, as you know, it is in the mind. Specific difference is from the necessary qualities of logical genus.

Know that multitude follows in the mind from the necessary qualities of unity in various ways: as many parts potentially follow from a single line; multitude follows from ten and other numbers; [multitude] follows in a non-concretized and concretized form from the intelligible animal and other genera; many concrete beings [follow] from the intelligible animal with a non-concrete

¹⁶⁹ Cf. *al-Ilāhiyyāt*, V.4.

¹⁷⁰ Cf. *Ibid.*, V.7.

genus; genus and specific difference follow from a species; premises follow from the conclusions and the parts of definition and the defined.

CHAPTER FIVE

On the relation of specific difference and genus to definition and the relation of definition to defined; on the difference between quiddity and essence; on specific difference; on the relation between specific difference, genus, and species

Genus and specific difference in a definition, insofar as each of them is a part of that definition, cannot be predicated of the definition, and the definition cannot be predicated of it¹⁷¹. However, we say: definition in reality bestows the meaning of single nature. For example, if you say a rational animal, its meaning is the animal, which itself is rational. If you look at that one individual, such as a man, there is no plurality in the mind. Yet if you look at the definition as something composed of genus and specific difference, then there is plurality. If you understand the definition in its first meaning, then it is identical with what is defined in the intellect, but if you understand it in the second meaning, then it will no longer be something identical with the meaning of the defined, but something leading to the latter.

Know that¹⁷² definition covers substance in a real and primary way, while accident has no definition that coincides with it, because it is inevitable that in the definition of accident the substrate in which it is located is taken, so that something additional is in the definition regarding its meaning. It is the same with the definition of natural form. As for a composite thing, the definition of substance is repeated twice in it: substance is necessarily taken in the definition and again in the definition of it [itself], so that in the definition there is also something additional to the defined. In such cases, there is either no definition or there is a definition in some other sense.

The quiddity of everything simple is its essence since there is nothing here that receives its quiddity. Also, the form of everything simple is its essence. As for the composite things, neither their forms nor their quiddities are their essences. As for the form, it is clearly a part of them, and as for the quiddity, this is what makes a thing what it is. It is what it is because the being of the form is associated with matter. A composite thing is the sum of form and matter; and the essence belongs to the necessary qualities of a composite thing, like a thing and genus.

¹⁷¹ Cf. *al-Ilāhiyyāt*, V.7.

¹⁷² Cf. *Ibid.*, V.5.

Know that an individual, such as Zayd, cannot have any definition by no means. It is denoted by pointing [to it as 'this'], and what is pointed to is indeterminate insofar as it is pointed to. Indeed, a definition consists of described things predicated of a certain set and do not contain an indication of something concrete. If such an indication were possible, then it would be a name and there would be no knowledge of the unknown through description.

When you want to know whether something essential is a genus or a species, you should think [of the following]: if an intelligible idea is complete in the mind, so that nothing more than an accidental idea is required in its conception, then this thing is a species, such as five or six; if you cannot conceive it existent except after searching its whatness, then that thing is a genus, like a number, because a number can be conceived as existing only after searching for what kind of number it is.

Know that not every thing needs a specific difference in order to be different from another thing. However, it needs the specific difference that participates with something else in the genus. If something participates in something necessary, such as existence, then it does not need a specific difference. It is like the separation of colour from number. For in such cases, [one thing] is separated [from another] by itself. Genus is predicated of species as a part of its quiddity, and specific difference is predicated of it as its necessary quality.

When a specific difference is not participating with a genus in some other genus, it is separated from the latter not by a specific difference but by itself. Its separation from species is due to the nature of the genus in the quiddity of which there is species but there is no specific difference in its quiddity.

As for the separation of one specific difference from another, it is due to a specific difference when both of them are subject to some genus. Otherwise, they are separated from each other by themselves if they are subject to some common necessary quality, such as existence. It is not necessary for every specific difference to participate in a genus together with some other specific difference, but, in the end, it participates in some common necessary quality. It is not necessary for every specific difference to have a specific difference.

The specific differences of a substance must be a substance without the substantiality being taken in their definition, and the specific differences of quality must be a quality without quality being taken in their definition.

Further, if a logical specific difference exists, then it is not necessary that there is also a specific difference existent through derivation [of a word], because in the species of accidents there are no derived specific differences, just as not all substantial species, with the exception of composite ones. For by logical specific difference is meant something with such and such an attribute in general. Moreover, only upon examination does it become clear that it must be a quality

or a substance. The fact that its being is not something that has reason does not mean that it is a substance, however, its substantiality is known from outside.

The parts of a definition must precede the defined. If you define a man's finger by a man, the segment of a circle by a circle, or a sharp angle by a straight [angle], then none of those will be a part of the species in terms of its form. Also, a circle is not subject to the condition that it actually has a segment, so that the latter constitutes the form of a circle; a man is not conditioned in order to be a man to have a finger; straight [angle] is not conditioned to have sharpness that is a part of it. Indeed, it occurs to a straight [angle] to have sharpness, and to a circle to have a segment due to the affection that appears in its matter. For what is a part through matter is not a part of definition but is a part of matter. The error with respect to 'finger' and 'man' is because something accidental is taken for something essential, and with regard to 'angle' and 'circle' – because something potential is taken for something actual.

PART FIVE

From the six parts that pertain to Book Two, i.e. the science called metaphysics, from the three books of which consists the book of al-Taḥṣīl on cause and effect. It consists of four chapters.

CHAPTER ONE

On the proof of the number of causes; that body is not the cause of existence; on the cases of the four causes; on cause and effect

The existence of anything is known from the existence of another thing, and the existence of the latter is known from the existence of the first. We call the first one cause, the second – effect. Whenever something is a part of something, and the existence of this part is not due to that thing, and the existence of the thing is not a condition for the existence of that part, and the existence of that thing is after the existence of the part, then the latter is the cause of the existence of that thing.

You already heard that the causes are form, element¹⁷³, agent, and finality¹⁷⁴. By form is meant the cause that is a constitutive part of a thing, thanks to which it is actually what it is. By element [is meant] the cause through which a thing is potentially what it is. By agent [is meant] the cause that bestows [something] with existence, separated from itself, i.e. which in itself, according to the first intention, is not a carrier for what comes into existence from it, as in the case of a physician when he treats himself. Metaphysicians understand the agent as the principle and source of existence, like the Creator (great is His glory!) in relation to the world, and physicists – that which bestows [something] not with existence, but with motion, and this cause predisposes [something to the reception of certain forms]. As for the final cause, it is that for which the existence of a thing is realised.

There are no other causes besides these four causes. A cause is either inside of the constitution of a thing and a part of its existence, or it is not. If it is a part of its existence, then either it is the part due to which it [the thing] is [what it is], only potentially, like wood in relation to

¹⁷³ I.e. matter.

¹⁷⁴ Cf. *al-Ilāhiyyāt*, VI.1.

bed, or it is something due to which [the thing] becomes in actuality, i.e. form, like the form of bed in relation to bed. If it is not a part of its existence, then it is either that for the sake of which [the thing exists], i.e. finality, or not for the sake of which [the thing exists]. In this case, its existence either [flows] from it [a cause], or so it [the cause] is not in it [the thing], and it is an agent, or so that its existence from it and it is in it, and then again it will be its element or substrate. If the element that is a receiver, not being a part of the thing, and which is specified by the term 'substrate', is not the element that is a part of [thing], then there will be five [causes]. If both of them are considered as one cause, since they participate in the idea of reception, then there are four [causes].

Element in the meaning of prime matter should be considered a principle not for form, but for composite. Substrate is a principle for accident because element is primarily and actually constituted by form, while its essence, taken only in itself, is potential, and a potential thing as such never acts as a principle of existence; otherwise, non-existence would be a cause of existence. That is why body cannot be the cause of any existence. For body consists of prime matter and form, and form does not act without prime matter because, as you know, without it it does not exist. Form acts through matter, because any act can proceed from an agent only after individuation, while the individuation of bodies is [determined] by position, and position is mediated by matter. Therefore, matter is a proximate cause. If body were the cause of existence, then non-existence would bestow existence, matter would precede the form, which would follow it, while [in reality] form precedes [matter].

In a word, body consists of existing prime matter and form, so its existence is after both of them. Therefore, if one body were a cause of [another] body, then it would first of all be the cause of matter and form, which is impossible.

It is clear that the causes of body must go back to something that is not a body, since neither prime matter nor form is something necessary. The prime matter, which is predicated of the prime matter of the ninth sphere is, of course, univocally predicated of the other prime matters, just as the body, which is predicated of the body of the ninth sphere, is also predicated of all bodies. The prime matter of the ninth sphere precedes its corporeality, and the prime matter that predicates its prime matter precedes its corporeality. Therefore, the prime matter of the eighth sphere also precedes the corporeality of the ninth sphere; the ninth sphere, for example, cannot be the cause of the prime matter of the eighth sphere, etc. Compare the case of substance, accident, separated thing [from matter], and body. Its existence [of a body] must be connected with its essence since corporeality, of course, is a condition for the existence of a separated thing [from matter].

If you ask about [absolutely] real being, then [you can answer like this]: the cause of existence can only be that which is in all respects free from anything potential, and this is an attribute of the First (great is His glory!) and nothing else. After all, if existence were bestowed [by

a principle] in which there would be something potential, whether be it intellect or body, then non-existence would participate in the bestowal of existence, and something potential would participate in the derivation of a thing from potentiality into actuality.

Let us return to our interrupted discourse. We say: substrate is that which can be realised in actuality as an existent through the combination of form with matter, and then cause accidents to subsist in it, whether they be necessary accidents, in which case the substrate will be essentially prior to them, or transitory, in which case the substrate will be preceding them in time. Thus, the substrate is a cause in relation to an accident, being the cause of its subsistence, and a cause in relation to a composite from [the cause] itself and an accident being its part.

Form would act as an efficient cause in relation to matter, if form existed in actuality without matter. However, it is a part of an efficient cause, as one of the two engines of a ship. In the section on form, we showed that it needs in some way matter and another participating [principle] to bestow it. Form is a formal cause in relation to a composite of [the form] itself and matter, being the form of matter, and not its formal cause.

Know that an agent and a receiver can precede the effect in time. As for the form, it does not precede in time absolutely. Cause can be a cause of a thing essentially, for example, a doctor in relation to treatment, and it can be a cause accidentally. It is [accidental] either because it is a cause in relation to something other than what [the cause of which] it should be, as when they say: 'The scribe heals'. For he heals insofar as he is a doctor, or because he performs an action essentially; but it is followed by some other action, as in the case of scammony, which cools accidentally, while essentially it removes bile, followed by a decrease in heat; or when a pillar is removed from the wall, which becomes an accidental cause of the fall of the wall. This is because the agent here does nothing but remove the obstacle, followed by a natural action, i.e. the heavy thing falls naturally. It is the same with how fire heats or burns nearby objects, how seeds are sown in the ground, how questions are pondered comparing them with a conclusion, and with other things of this kind. So you already know what is a cause, and below we will give additional explanations.

Cause is sometimes proximate, like smell in relation to fever, and sometimes distant, as in the case of congestion and fullness, and sometimes particular, for example, when we say: 'This builder is the cause of the house', and sometimes universal, as when we say: 'The builder is the cause for building', sometimes special, as when we say: 'The builder is the cause for the house', and sometimes general, as when we say: 'The creator is the cause for the house'.

Know that the proximate causes of a body are the prime matter and the form, but the prime matter is through the mediation of the form. As regards accidents, the substrate [is the proximate cause]. The situation here is different from that [where] prime matter and form [were discussed]. There the prime matter was a distant cause of a body compared with the form, but here the accident

is a distant cause of what consists from itself and the substrate, while the substrate is the proximate cause.

As for the agent, it is a cause either in relation to form alone or in relation to both form and matter, but in relation to matter through the mediation of the form, and in relation to the composite through the mediation of both of them.

CHAPTER TWO

On the state of efficient cause, for instance, the clarification on the quality of fire's being as a cause of fire's existence; that effect does not remain after the absence of cause; that cause is the first in existence rather effect and truer; that everything with quiddity is effect; that from the common opinion does not come any act; that simple thing is not the cause of the existence of both things together; on element and form

Know that when a certain thing is non-existent, and then it is existent after being non-existent for some reason, we say that it was 'made'. If we add something else to this – that it exists after non-existence in time, or that the agent acts through motion or without motion, instrument or will – then this will be something additional to what we have said. If any of this is a necessary quality of one of them, or both together, then it will be outside the [given] concept, like causation as a necessary quality of a body. So, there is existence and non-existence, and there is the being of this existence after that non-existence that is an attribute of this existence and is predicated of it.

As for the precedence of non-existence, it does not depend on the agent in the same way that the action depends on it, which is why this existence cannot be described by the fact that it is after non-existence due to the action of the agent. It is proved this way: it is inevitable that this existence is either preceded by non-existence, or it is not preceded by non-existence. Thus, it will always be, however, its existence is not in itself but due to another, and its existence due to another is not conditioned by the fact that it is after non-existence, so that its dependence on another will consist in the fact that it is possible existence, and not necessary. Therefore, its dependence on it [another being] will be constant as long as it exists through this existence. If this is true, then it should be proved. Either its existence will be impossible if non-existence does not precede it, but the action of the agent does not extend to the impossible [or] this action of the agent will be creation, and the agent will have nothing to do with the fact that it is preceded by non-existence.

True, the non-existence of a thing can have a cause, namely the absence of the cause of

existence, but this existence that is preceded by non-existence insofar as it is preceding non-existence is not influenced by the agent.

Thus, existence depends on a cause insofar as it is non-necessary existence and not insofar as it is preceded by non-existence, i.e. insofar as it is emerging. If this is the case, and if existence needs a cause, then this kind of existence as such deserves to have a cause and to continue and remain. For every caused existence in itself needs a cause and cannot remain after the non-existence of the cause. Therefore, its need for a cause is a constitutive feature of this kind of existence.

Further, if the establishment of this caused existence is free of a cause, then it would be necessary in itself, which is absurd. If things that emerge always had the full power to receive existence in themselves and in their substance, then they would always exist. However, their disposition to exist is made complete by changes taking place in them one after another, so their power to exist becomes complete. When their power to exist is complete, they exist.

It is clear from this that, contrary to what others supposed, the agent is not the cause of emergence, it is the cause of existence, and this attribute is essential for it, i.e. it is preceded by non-existence. The essential has no cause and is inseparable from that in relation to which it is essential. On the other hand, from the standpoint of those who say that the agent is the cause of emergence, it follows that emergence [in itself] is neither emerged, nor eternal, nor existent, nor non-existent, since this turns out to be [only] its state. This would require a lengthy explanation, from which the fragrance of incense would spread.

One might suppose that the son remains after the father, the building remains after the builder, and the heat remains after the fire. However, the reason here is that these are not causes in reality. The mistake in this case is made because the accidental is taken for the essential, and below we will show that the cause of every body is something necessarily intellectual.

Moreover, as for the builder, his motion is the cause of the motion of the clay, just as his rest is the cause of the rest of that clay. The completion of this motion is the cause of some connection [of the building], and this connection is the cause of some figure [of the building]. The preservation of this figure is explained by the stability of this connection method due to the nature of the clay. In the same way, fire is the cause of heat in an element not because it bestows the heat, but it eliminates the cold that prevents the appearance of heat [for example] in water from the giver of forms. The emergence of heat and the transformation of water into fire are due to the causes that endow the elements with their forms. As you already know, [these causes] cannot be bodies.

As for the preceding causes, they are that which predispose and concretise, in a word, accidental causes. Indeed, as you know, the cause must precede the effect in nature and causality and not in time. How can fire be the cause of the existence of another fire, if fire must rather be preceded by the causality of another fire?

Further, as you will learn, fire and what is similar to it from emerging beings, bodies and corporeal accidents, are not necessary existence in themselves. They must have a cause. If this cause exists (I mean the Cause of causes, the Necessary Existent in itself), then in its existence it does not need anything else, and what is free from that is not a cause. In sum, if this kind [of being] is not necessary in itself, then there must necessarily exist some kind of cause external to it. We know from this that the possible must have a cause. Also, the emerging fire can remain when the previous fire disappears. If the previous [fire] were the cause of the existence of the emerging [fire], then it [this latter] would disappear with the disappearance of the previous [fire].

If someone stubbornly insists that the act is possible only after the disappearance of the effect, having heard that it is not the precedence of the non-existence of the effect that depends on the agent, but the existence coming from it in a given 'now', then let that 'now' [last] continuously to infinity.

If he deviates from the truth, saying that the existent is not given existence by an existent, then let him know that the misunderstanding here arises because of the word 'exist'. Indeed, if we mean that the existence of the existent is not resumed after it was not, then this is true; but if we mean that the existent does not exist in itself at all and its quiddity does not require existence for it as such, but its existence comes from something else, then the error contained here will be explained below.

The effect which we [mean] when we say that it is existence given by some principle can be described as that which has a principle and endows it with existence, either in a state of non-existence, or in a state of existence, or both of them. It is clear that it does not have a principle in a state of non-existence. Therefore, it is not true that it has a principle in both states together. It remains that it has a principle when it exists. However, the principle is the principle that endows the existent with existence and the existent, which is described as that which receives existence from something; so it would be better to describe it as that which receives existence, since 'to exist' suggests the future existence that is not [limited to] the present moment.

If this obscurity is removed, it will be correct to say: the existent exists, i.e. it can be described as an existent. For just as at the moment when it is existent, it is described as existing and the expression 'describe' does not mean that it will be described in the future, so it is with the word 'exist'. After all, we do not say that the existent needs a principle, but we say that the existent needs a supporter and preserver.

Know that if the act proceeding from a body proceeded from its true quiddity, and its individuation had nothing to do with this, then it becomes absurd. Indeed, a body can have existence only after it has become an individual, and [act] proceeds from something existent only when it exists. It must therefore proceed from a body through the mediation of its individual, and it

[the latter] is conditioned by position. Therefore, a body or a bodily form or accident cannot be the cause of the existence of a soul, intellect, corporeal form or corporeal matter, since there can be no positional relation to the listed things.

In addition, know that a thing, existing only as an individual, is either self-sufficient in its individuation, and this is when something necessarily exists in itself, or such that its existence is completed by its necessary features, in which case, this species happens to exist in one individual. That is why it is impossible that in these two [modes of existence] there is participation, or is such that it is individuated only due to some accident extraneous to the species, as in the case of the man, the individuals of whose species multiply by extraneous accidents.

Know that the existence of the effect and the existence of the cause cannot be equivalent, since the existence of the cause is by itself, and the existence of the effect by the cause.

Further¹⁷⁵, existence as such is not different in intensity and weakness and does not receive 'more perfect' and 'more imperfect'. It is different in three respects: priority and posteriority, self-sufficiency and need, necessity and possibility. As for priority and posteriority, it is because the cause has existence in a primary way and the effect in a secondary way. As for self-sufficiency and need, the cause for the existence does not need the effect, but exists by itself or due to some other cause, and the effect needs a cause. In fact, this [category of differences] goes back to the previous one. As regards necessity and possibility, because the effect does not necessarily exist in itself, otherwise, it would be necessary in itself without any cause. However, in itself, irrespective of whether it has a cause or not, it is possible existence, and it is necessary only due to the cause. Also, the cause, as it turned out, cannot be necessary due to it [the effect], but is necessary either in itself or due to something else. When it is necessary in itself, its existence is more real than the existence of the possible, even if it is possible, and is not necessary because of the effect, while the effect is necessary because of it [the cause] even after its necessity. When the necessity of a cause as such is thought, attention is not drawn to the effect as such, and when the existence of the effect as such is thought, it is thought only through comparison with the cause. Therefore, the necessity of a cause is specified by taking it into account as such, without relating it to the effect, while the existence of the effect is only necessary when it is related to the cause. So, from these three viewpoints, the cause is more worthy of existence than the effect. Thus, the cause is more real than the effect. It was established that among the existents there is one whose reality is existence, then it is true that it is absolute reality, that it is the reality in itself (great is His glory!), and that knowledge of it is the knowledge of reality in the absolute sense.

It is clear from what was said that accidents cannot be the cause of the existence of

¹⁷⁵ Cf. *al-Ilāhiyyāt*, VI.3.

substance since they are posterior to substance in existence, while substance precedes them. In the same way, the composites cannot be the cause of the simple because if the simple and the composite exist, the simple is prior in every respect. In the same way, a body is not the cause of the intellect or the soul, and the sensually perceived is the cause of the intelligible, just as bodies are not the cause of what does not need matter for its existence, i.e. separated [from matter] beings, for the cause must be more affirmed in existence than the effect.

Know that everything that has a quiddity is an effect. After all, existence, as you know, is outside the quiddities, and a quiddity, within in itself, without regard to external existence, is non-existence. If existence were a necessary feature of its essence, then it, being in the realm of non-existence, would be the cause of existence. Therefore, existence appears to the quiddities [from outside], and everything that has a quiddity is an effect.

Know that a simple thing, in which there is no composition at all, does not appear as a cause in relation to two things together jointed in nature. Indeed, a thing can proceed from it only after its procession from it became necessary. So, if C comes from A insofar as B must come from it, then such a procession of C from it will not be necessary, for if C proceeds from it insofar as B must proceed from it, then, since B must proceed from it, it will not be B that will proceed from it. Hence, the procession of B from it will not be necessary. Therefore, everything simple is such that something that proceeds from it in the primary way is one in itself¹⁷⁶.

No concrete act can proceed from the general will and from the general opinion. For the general opinion cannot be directed to one thing and not to something else like it, just as the nature of man cannot be realised primarily in Zayd rather than in ‘Amr. If one thing is not primarily related to any principle rather than another similar to it, then its relation will be the same whether it is related to its principle or not. Such a thing comes after its principle through possibility, and [the possibility of] its existence from it does not prevail over [the possibility of] its non-existence. Everything that does not acquire necessity from its cause does not exist. However, the effect, which has nothing like it in its species, such as the sun or the active intellect, can exist from a general opinion.

You understand from all that was said that if the cause becomes an actual cause, then the effect must necessarily exist with it¹⁷⁷.

Let us mention the state of elements¹⁷⁸. We say: an element is something that has the

¹⁷⁶ This is a well-known Neoplatonic thesis that from one only one can directly proceed or *ab uno simplici non est nisi unum*.

¹⁷⁷ This is a statement that lies behind the concept of the eternal co-existence of the world with the Creator.

¹⁷⁸ I.e. matter.

potentiality of the existence of a thing¹⁷⁹. This element is a carrier of potentiality, either alone or through the participation of something else. This means that an element can be simple or composite.

If it [the potentiality] existed in it alone, then either it would not need something in which or from which [something arises], but only the transition to the actuality in it. Hence, this [thing] denoted by the term ‘substrate’, similarly must be actually subsistent in itself, like a body in relation to accidents. Otherwise, it would need something additional, and that additional is either motion in relation to ‘where’, or in relation to quality, quantity, position, and substance, which will give way.

If it [the element as a carrier of potentiality] is through the participation of something else, then there must certainly be some combination and some composition in it. It [the transition from potentiality to actuality] is either only by the composition and combination or, in addition to this combination, also change in quality, as is the case with the medicine that make up theriac. It is necessary that this kind of elements must form a certain type of unity in order to become later an element for something, just as four elements form one or another type of actual unity in order to become later an element for an animal or plant. Everything in which there is a change reaches its finality through one change or through a series of changes.

The substrate may be common to everything, like prime matter, or to a number of things, as in the case of juice in relation to vinegar, wine, and syrup. A feature of the element is that it only receives. Its form is acquired from something else.

As for form, it is meant everything that is in an actual state. Therefore, active intellects are forms. Form is sometimes called every quiddity and act, even motions and accidents. Sometimes form is called that thanks to which matter actually subsists. Sometimes that thanks to which matter is completed, although it is not actually subsisted by it, as in the case of health. Sometimes figures and similar things that emerge in matter [used] in this or that art. Sometimes the species, genus or specific difference of a thing.

Form may be simple, like the form of the elements, or composite, like the soul and its powers. It is necessary that, in the composites, through their combination there formed some type of unity, after which they subsist as matter. An imperfect agent needs motion and tools in order to proceed from itself as something present in matter. A perfect agent is such that the form that exists in itself follows the existence of the form in its matter, and this is precisely the case with the procession of things from the Necessary Existent in itself.

¹⁷⁹ Cf. *al-Ilāhiyyāt*, VI.4.

CHAPTER THREE

On finality, accident, involuntary, unintentional

Finality is that for which a thing is¹⁸⁰. In some things, finality can be only in the agent itself, for example, joy and triumph. Finality can be in some things other than the agent, like when at times, for instance, in a substrate a motion comes from deliberation or nature, and at times, it is in a third thing when someone does something for someone else's pleasure, when it is an external finality for the agent and the receiver, and the joy of the pleasure is finality. Finalities also include the imitation of something else, so what is imitated insofar as it is desired is finality, and the effort to imitate it is also a finality.

As you already know¹⁸¹, some things are constant and others are frequent, for example, fire, since in most cases it ignites wood while getting close to it, or a person who is leaving his house to the orchard in most cases gets there. The difference between the constant and the frequent is that the constant is never hindered, while the frequent can be hindered. That is why, the frequent is carried out on the condition that the obstacles are removed. In natural things this is obvious. As for things based on the will, if the will is sound and complete, if the organs are set in motion by it, if there are no reasons preventing [its implementation] or weakening determination, and if the goal is achievable, then it is clear that it cannot be achieved. Moreover, some things are equal, like Zayd's sitting and standing, while others are in the minority, as is the case with a person having six fingers.

As you understand, the constant or the frequent cannot be said that their existence is by chance. Therefore, chance exists in what is equal and [belongs to] minority. However, what is equal and [belongs to] minority may in a certain sense be necessary. For if it happened that in the hand of the embryo there were matter more than is expended on five fingers and a different force found in natural matter a complete predisposition [to accept its action], then an extra finger must necessarily be formed there.

In sum: if a man could embrace everything so that nothing would escape his knowledge, then none of the existing things would be accidental, but they would all be necessary. Therefore, things that exist accidentally are accidental only in relation to one who does not know their causes. If you consider them in relation to the Cause of causes (great is His glory!) and all-embracing causes, then none of the existing things will be accidental. Its example is the extra finger: if in

¹⁸⁰ Cf. *al-Ilāhiyyāt*, VI.4.

¹⁸¹ Cf. *al-Ṭabrīyyāt*, I.1.13.

relation to the one who does not know its reason and in relation to the individual it is something accidental, then in relation to everything, to the knowledge of Allah (praised He is!), and to all-embracing causes, it will not be accidental. In the same way, if a person comes across a treasure on the way, then in relation to the one who comes across, and to the one who does not know the reasons that led this person to the treasure, this will be accidental, but in relation to the knowledge of Allah (great is His glory!) and all-encompassing reasons, it will not be accidental but necessary¹⁸².

In a word, if something happened by itself unexpectedly, since it is not constant and frequent, then the reason that led to it can rightly be called ‘accident’ or ‘luck’. This is if it tends to lead [to such an event], but not constant or frequent. If it does not at all tend to lead [to such an event], then the latter cannot be said to have happened accidentally. For example, the sitting of Zayd during a lunar eclipse. It cannot be said that Zayd’s sitting is accidentally became the cause of the lunar eclipse. In fact, an accident occurs only in relation to what tends to lead [to some event], so that if the agent realised the motions occurring everywhere, and was able to wish and choose [at the same time], then he could define a finality. For example, if a person who went to the market knew that he would meet a creditor on the way, while meeting a creditor with a person who is unaware as such of [the upcoming meeting] is an accident.

From this it is clear that accidental causes occur to a thing only as efficient causes and final causes accidentally. In natural and volitional things, the reason of an accident is accidental, not necessarily constant or frequent, and where it happens to a thing, it does not have a cause that makes it essentially necessary.

An accidental cause may or may not lead to its essential finality, for example, a falling stone that breaks [something]. After all, it could stop or maybe fall into its place. If it reaches its natural finality, then in relation to the latter it will be an essential cause, while in relation to an accidental finality it will be an accidental cause. If, on the other hand, it does not reach [its natural finality], then it will be false in relation to its essential finality. Accident is more general than luck. The same accidental cause can have an unlimited number of accidental finalities.

Accident can be described¹⁸³ as an accidental finality in relation to something natural or [something] based on will or [caused] by force. The latter goes back to nature or will, and nature and will in themselves precede accident. So if there are no natural or volitional things, then there is

¹⁸² This example is discussed in *Dānišnameh*. In the chapter about the condition in which the contingent being can be known by a knower, Ibn Sīnā claims that it is possible to know a contingent being from necessity. We speak about contingency as soon as someone may find a treasure, however, it becomes a necessity when the cause of this finding is known. Everything has a cause (even if it is not known to us always), and hence, everything is necessary and is known by that necessity, i.e. the First Cause. See Ibn Sīnā, 1973b, pp. 63–64.

¹⁸³ Cf. *al-Ṭabṛīyyāt*, I.1.14.

no accident.

So you learned that volitional and natural causes precede accident, that natural and volitional things are directed towards finalities essentially and not accidentally, that accident happens to both of them, and that accidental finalities are finalities by accident. It is clear that the existence of the world is not accidental. If there is an accident in it, then it belongs to generating and corrupting things, since in relation to its individuals and when the all-encompassing necessary causes [of things] are not considered, [these things] are not related to everything. You will be even more convinced of this when you learn about the Necessary Existent in itself, finalities, the finality of finalities, and what says Empedocles¹⁸⁴ is completely false. The book of *al-Šifā'* contains a refutation of his teaching based on observation and clear evidence¹⁸⁵.

Here is one such evidence: if on the same spot falls a grain of wheat and a grain of barley, then wheat will certainly grow from wheat and barley from barley.

Here is another evidence: the finalities that proceed from nature, when nothing hinders that nature, are all complete. If it [nature] leads to a harmful finality, then this happens in a minority of cases. That is why it is asked: 'What happened to the ear of a grain that it withered?', 'Why barley does not grow on the land?', 'Why does not a tree consisting of a fig tree and an olive grow?', 'Why the species were not preserved at most?'

Moreover, while noticing some shortcomings in the [action] of nature, we help it through art, for example, a doctor acts, convinced that with the removal of an obstacle and the strengthening of power, nature will direct [its action] to [maintain] health.

From the lack of deliberation in nature, it does not follow that its actions have no finality. For deliberation does not make action have finality, but it concretises the action, which can be chosen from selective actions, each of which has its own specific finality. For finality belongs to every action by necessity and not because of the action of an agent. If the soul were freed from concrete obstacles, then actions that are uniformly similar to each other would proceed from it without any deliberation. This is the case with the heaven: it is free from various obstacles and motives, and therefore the action that proceeds from it is uniform. Think about a skilled scribe: after all, how stupid he would look if he thought about each letter to be written. The same is about a lute player, a slipper who grabs something in order not to fall, or a hand scratching some part of the body without any thought or deliberation. The rest of what was said in this section can be consulted

¹⁸⁴ Empedocles of Acragas (V c. BC) formulated a philosophical teaching (in hexameter verse) that laid the foundation of the influential theory of four elements or roots (air, water, earth, and fire) along with two active principles: Love and Strife. Everything in the world consists of these four roots that are brought together and blended by Love and at the same time they are separated by Strife.

¹⁸⁵ Cf. *al-Ṭabṛ'īyyāt*, I.1.14.

in the book of *al-Šifā'*, in order to make sure that the being of action with a finality does not proceed necessarily from deliberation. On the contrary, it can proceed without deliberation and have a finality.

Know that the order of withering is also directed towards finality. Indeed, it is because the order of withering is the essential cause, which is warmth, and the accidental cause, which is nature. Each of them has a finality: the finality of heat is the removal of moisture and thereby the destruction of matter in a certain order, and this is essential to warmth. As for the nature, which is in the body, its finality is the preservation of the body by gradually supplying it. However, each next supply will help less at the end and at the beginning, as we will mention in its place. Thus, the reduction of the supply [of the body with the necessary matter] will be an accidental cause of the ordered [process of] withering, and the removal [of moisture] by warmth will be the essential one, but the action of both will be directed to a certain finality. Death, if not a beneficent finality in relation to the body of Zayd, is a necessary finality in the order of everything. In the science of the soul, you will notice that the finality in death is something necessary in the preparation [of the soul] for perpetual life and finalities in correlation to weakness as something necessary for the weakening of the bodily forces because of which the soul prepares for the other world¹⁸⁶.

As for unintentional and involuntary, it is necessary to know that every volitional motion has a proximate and a distant principle. The proximate principle is the moving power in the muscles of this organ, as we will explain in the section on the soul. Then comes collection, after collection desire, and later thought and imagination. When a form corresponding to them appears in the imagination or in the intellect, desire moves without being preceded by another will, and this form itself moves desire. This is exactly the case with the procession of the existents from the First. It is the same conception of the existents the cause of whose existence is without any need for desiring or using an instrument. When desire is moved, action is completed by it only after collection, and also, motion is not complete when collection cannot [set in motion] the organs. Therefore, volitional motion is due to the causes which we mentioned.

The form that appears in the imagination can be the finality itself, like a person who is supposed in one place and position and desires to get to another place and position. The finality in this case is the place itself. However, it may not be that, for example, a person who desires [to go to] a certain place in order to meet a friend. In this case, what the motion leads to is not identical to what the desire, while in the previous case, what the motion led to was identical to the finality. Sometimes the motion itself is the finality of the mover. Each of the [psychic] powers has a finality

¹⁸⁶ In the last chapter of *al-Taḥṣīl*, Bahmanyār discusses the afterlife condition of human souls from a philosophical perspective, where the happiness of souls depends on direct and pure (without bodily mediation) self-knowledge.

not belonging to others.

If each finality is achieved by motion, like going to the market, or if it is reached at the end of the motion, like meeting the creditor, when the desire of imagination and thought coincides with it [the finality], then it is clear that the finality is not unintentional. If, however, what the motion leads to coincides with the desire of imagination, but does not coincides with the desire of thought, then it is unintentional.

Further, if the finality is not what motion leads to, and its principle is the desire of imagination, but not of thought, then either imagination alone, or imagination together with nature and a mixture [of elements], is the principle of desire, as in the case of the patient's breathing and motion, or imagination, together with a character and mental property that causes a habit without any deliberation, such as playing with a beard, and playing with a beard is a habit with many causes.

If [the principle of the desire is] imagination alone, then this action is called 'involuntary'. It is 'unintentional' when the desire of imagination coincides with what the motion leads to. If imagination is along with nature, like breathing, then this action is called a 'necessary goal' or 'natural goal'. If imagination is together with character and mental property, then this action is called 'habit'. You will learn that character stabilises through the use of actions so that which proceeds from this character is called 'habit'. If there is a finality that belongs to the moving power and it is the end of the motion, such as visiting the market, and there is no other finality after that, such as meeting the creditor, then this action is said to be 'in vain' in relation to the thinking power, but not the moving power that is in the muscles.

You learned that the unintentional is finality of the imaginative power based on manifestations and conditions due to [various] causes. Playing with beard is also from unintentional [actions], i.e. those determined by the imaginative principle. Do not suppose that it does not proceed from the imagination at all. After all, every mental action arises after it was not; therefore, there must certainly be a desire. It is together with the imagination, although that imagination is fleeting or stable and one does not realise it. For not everyone who imagines something is aware that it is imagination; otherwise, awareness would lead to an actual infinity.

The desire arises for a certain reason, either a habit, irritation caused by a situation, or willingness to change the situation. The reasons of this are countless.

The difference between what comes out of habit and what comes out of art is that what comes out of art depends on the choice of the creator, and what comes out of habit does not depend on the intention of the person.

As for prayers, dreams, and daydreams, they also belong to the things directed to will, but these things are thought of by the First after being thought of by their owner so that the owner turns

out to be one of the causes of this object of thought¹⁸⁷. You already know that intelligible objects are [conceived] by the First from the side of their causes, and you know that the cause of existents is the very representations of them in it. If these objects turn out to be intelligible to the First and do not contradict the pure good, i.e. the order of the world, then they arise as the one who prays desires them and imagines them in his mind or sees them in a dream. However, being thought in the mind of the owner is somehow the cause of their existence. If they are contrary to the order [of the world], then they do not exist. So, if a person dreams in the mind of travelling or achieving holiness¹⁸⁸ or something else, then the owner of this dream is somehow the cause of the First thinking about it. If these dreams are consistent with the order of the world, then what he requires is completed, and if they do not agree, then they are not completed.

CHAPTER FOUR

On necessity, good, and existence; on the existence of individual beings that have finalities; that finality is the cause of the existence of other causes in actuality

Here there is one more thing – a necessary thing that is one of the accidental finalities. It is threefold¹⁸⁹: either it is something that must exist as a cause, as in the case of the firmness of iron that can cut; or it is something that must exist as a finality so it is a necessary feature of the cause, as in the case when the cutting body must necessarily be dark since darkness is a necessary feature of iron that is necessary [for cutting]; or it is something that must exist as a necessary feature of the finality itself, as in the case when the finality of marriage is procreation, and then the love of a child follows. These are finalities accidental by necessity. It is exactly the same with the celestial motion: here, the finality is the desire to become like the absolute perfection, and then, as we will explain below, the existents follow.

The existence of evil in the world is because of this category, i.e. necessity. Indeed, if, for example, the divine finalities, which is generosity, include the existence of everything possible and the existence of the composites from elements, if these elements can only be earth, fire, water, and

¹⁸⁷ Even dreams and daydreams are the subject of causality since everything operates within the universal cause-effect scheme and eventually can be traced back to the Cause of causes.

¹⁸⁸ *Wilāya* – a Sufi concept of sainthood, sometimes also named ‘friendship’ (with God). It is a divine gift and the realisation of human perfection distinguished by wisdom and moral purity.

¹⁸⁹ Cf. *al-Ilāhiyyāt*, VI.5.

air, and if by means of fire the [world] order achieves the finality to which it is directed, only insofar as it is able to burn, then it necessarily follows that it burns the clothes of the poor. As for how the fire reaches the clothes of the poor, it becomes necessary due to the motions of the heaven, which proceeds from the divine design and the necessary order [of the world].

Also, the existence of man necessarily depends on innate warmth, a necessary feature of which is the ability to remove [moisture] mentioned above. Therefore, the necessity in relation to individual things is necessarily evil, but in relation to everything it is a finality, as we said in the section on accident.

In a word, the cause of evil is the possibility of existence, which we will explain in its proper place.

Know that the infinite number of individual generating things are not essential finalities in the universal nature. The essential finality is, for example, the existence of man. It is, however, cannot be one individual that can be pointed to [as 'this'] like in the case of the sun¹⁹⁰. Every material generating thing, as you know, is corrupting, while the species remains due to the indefinite and non-concrete individual, and this remaining is the final cause, i.e. the finality that has the action of the universal nature and it is one. However, this one in order to remain necessarily must have the existence of an infinite number of individuals, and the infinity of individuals in number will be a finality in the first sense of the necessity. At the same time, if the finality here is the infinity of individuals, this infinity of individuals will mean something other than what is meant by each individual. There is infinity when one individual is after another individual and not when one infinity follows another infinity. Therefore, the real cause here is existence, and it is the existence of an indefinite individual or the infinity of individuals.

Further, the fact that one individual leads to another, [and that] to a third, [the third] to a fourth, is in itself not the finality of the universal nature, but of the particular nature, while each particular nature has the finality of the existence of a particular individual. You will learn the meaning of the universal and particular nature below.

As for the celestial motion, its finality is the constancy of motion. There are no infinite motions here because it is one in continuity, as you know from the above, although it is hypothetically connected with an infinite [series] of motions.

Know that the First Cause is the real finality of the existence of other causes. This is because the finality is not conceived in the soul of the agent, it cannot be an agent, but it is the existence of other causes in concrete things and the cause of the existence of the finality in concrete things, as in the case of the existence of dwelling after the existence of a house. This is when the finality is in

¹⁹⁰ Since the sun is the only individual being of its species.

origin. When the final cause is higher than the origin, then, as will be explained in its place, none of the other causes will cause it. Therefore, the final cause as such precedes other causes, but it is posterior in existence because it is the being itself so that the posterior comes to it insofar as it can imply coming into being. Moreover, other causes become actual causes for the sake of the finality, while the finality is not for the sake of something else.

The finality exists either in the receiver, like the existence of the form of a building in clay and bricks, or it exists in the soul of the agent, like a dwelling. Therefore, the finality of the nearest agent directly related to the moving of matter is a form in matter. That the finality of which is not a form in matter is not the proximate principle of motion. If it acts differently, then [it can] be the principle [of motion] accidentally, for example, when a person builds a house in order to settle there: from the perspective of the one who wants to receive a dwelling, he is the first cause of construction, but as a builder, he is an effect to himself as a dweller, so that as a dweller he will have a different finality than as a builder.

In the first case, [when the finality exists in the receiver] in relation to the agent it is a finality, and in relation to the motion it is an end and not a finality. For something strives towards the finality, and therefore, it cannot cease to exist, but thanks to this, it will receive completion while the motion stops with its achievement. In relation to the agent, which receives completion due to it – before that it was in potentiality – it is good because evil is non-existence, and good is emergence and actual existence, while in relation to the receiver, which actually exists, it is a form.

In the second case, since it [the finality] is a form or an accident in the agent, the latter necessarily passes through it from a potential state to an actual one. But the potential state is evil, while the actual one is good. Therefore, in this case, the finality is certainly good in relation to the agent himself. So that in relation to the agent as to the principle of the motion, it is a finality, and in relation to it as to that which receives completion through it, it is good. Dwelling is a finality for a constructor insofar as he is a mover, and when it receives completion through him it is good since this transition from potentiality to actuality is in a certain sense beneficial for existence or for preserving existence. This is if motion is natural or based on an intellectual choice. If it is imaginary, then good will be imaginary and not absolute. Therefore, every finality from one point of view is a finality, and from another point of view, it is good, either real or imaginary.

Further, one and the same thing can [be considered] in relation to the receiver, which receives completion through it, and in relation to the agent from which it proceeds. In relation to the agent, when the latter is not affected by itself or by what follows it, it appears as generosity, but in relation to the affected one, as good. In general, good is what every thing requires, namely existence and the perfection of existence. As for generosity, it is endowing something else by the endowing principle for which it does not require any reward, be that reward gratitude, praise, reputation or joy.

Generosity is endowing something else with perfection in its substance or state without any recompense in any form. Therefore, every agent that acts to achieve something that leads to a semblance of recompense is not generosity, just as everything that endows the receiver with form or accident – and it has another finality to achieve something that it can receive from something else – is not generosity. Yet we say: goal or wish to achieve something belongs only to a thing the essence of which is imperfect. For either [it achieves something] for itself and for its well-being, then its essence is imperfect in its existence; or for the sake of another thing: either the proceeding and non-proceeding of this thing from it to another thing will be equivalent. Thus, it will have neither incentive nor probability for proceeding from it to another thing of this good. This action cannot proceed from it to another thing since if the goal does not require it, then the procession of the action from it will remain within possibility, or its procession from it is worthier rather than not procession. As you know, in the end it returns to the goal and reaches with its essence, since its essence will obtain perfection and destiny from this [anyway]. After all, the question ‘why?’ will be repeated until it touches the agent itself. So, if they ask: ‘Why did you do this?’, they will answer: ‘To please such and such’. When they ask: ‘Why do you need the joy of such and such?’, they will answer: ‘After all, a good deed is beautiful’. However, the questions will not stop there. They will ask: ‘Why do you need beauty?’ If they answer that in order to gain good or avoid evil, then the questions will be settled. For the acquisition of good and deliverance from evil for every thing is an absolute requirement in itself, since will belongs to the one who loves himself, and therefore, every thing wills its object of love, i.e. itself. So, it is clear that everything that requires a goal is imperfect. In sum: the requirement of a certain goal is the requirement of something that it does not have. As for compassion and mercy, these are passions peculiar to the soul, which suffers from affection due to them. If someone does a good deed towards another out of them [compassion and mercy], then the goal in it is to cease the suffering of the soul.

The investigation of final causes is the true wisdom, even the best part of wisdom, namely when final causes are used as middle terms in the proofs.

PART SIX

From the six parts that pertain to Book Two, i.e. the science called metaphysics, from the three books of which consists the book of al-Taḥṣīl. It consists of four chapters.

CHAPTER ONE

On the concomitants of plurality and the concomitants of unity

The identical concomitants of unity¹⁹¹ are those about which we spoke in the section on unity. They are either essential or accidental. From the accidental ones, there is one that is inherent in quality, and it is called ‘similar’, the one that is inherent in quantity is called ‘equal’, the one that is inherent in the relation is called ‘corresponding’, and the one that is inherent in the sides is called ‘matching’. The substantial ones are certainly inherent in constitutive features. Of these, the one that is identical in genus is called ‘homogeneous’, in species is called ‘alike’, and in its specific features – ‘matching’.

The opposite of being identical is otherness. Otherness is in a genus or species, and otherness in species is the same as specific difference. When the things that are other in a higher genus are in matter, their otherness itself in relation to a higher genus does not require to be incompatible in matter, like warmth and sweetness.

Those that differ from each other in species subordinate to the nearest genera are impossible to be completely compatible in the same substrate, like in the case of blackness and whiteness. Every thing that cannot be together in the same substrate in the same respect and at the same time are called ‘opposites’. Moreover, ‘opposite’ is predicated of these [things] as something necessary and not as a constitutive feature. It has four [kinds]: correlation, opposition, non-existence and possession, affirmation and negation.

Each of the opposite things has an existential essence, although each of them must be followed by the absence of the other. The situation is different with non-existence and possession because non-existence has no existential essence. We already explained that the cause of their

¹⁹¹ Cf. *al-Ilāhiyyāt*, VII.1.

opposition is that they are incompatible, neither in themselves nor in regard to their specific differences. Since no higher genus is incompatible [with another higher genus], opposites must be subject to some genus, and their genus must be one. Consequently, opposites differ from each other by specific differences and, therefore, they belong to the category of otherness in form, for example, whiteness and blackness are subject to colour.

The condition for opposites is that their substrate is one. Opposites that have one substrate and one genus in their essence cannot be together in the substrate, but replace each other in it. There is an ultimate difference between them, and they occur to a substrate in a primary way and like the occurrence of humanity and horseness to matter, but like a warm mixture and a cold mixture. Some opposites have intermediate [links] between them, while others do not.

The opposite of the one must be one. For if we suppose a difference between one thing and two, then [one of the two] will be in the same sense and in the same respect, and then two different things in the same respect will be identical in the form of difference, so there will be one species, not two; or [they will differ from each other] in different respects, and that will be an opposite in different respects, and not in one. Hence, it is not because of the specific difference, which if accompanies the genus, immediately separates the species. The specific difference of species, as you know, is one and belongs to the necessary qualities of species, for example, the opposition of one body to another in relation to heat and cold, and to another in relation to whiteness and blackness, while we are talking about opposition in essence and in the same respect. So, it is clear: the opposite of the one is one.

An intermediate [link] can be a valid intermediate, like in the case of lukewarm (intermediate between hot and cold), and invalid, for example, when we say ‘not light and not heavy’, because this is nothing but a verbal intermediate, and it belongs to indefinite statements.

Correlation leads to opposites. Opposite things are substrata of opposition, and opposition itself is a substrate for correlation because correlation is a necessary quality of opposition.

Non-existence is said in relation to several things: it is said about that which is peculiar to something existent, but not to something else since it is unusual for [that other] to be, as it is unusual for a wall to have sight; it is said about that which is peculiar to the genus [of something], but which is absent in it, as when they say that a donkey is not rational; it is said about that which is peculiar to the species [of something], but which is absent in its individual, as in the case of the female sex; it is said about that to which it is peculiar to belong to something, but which is absent in it, either because the time has not yet come, as in the case of a beardless one, or because time has already passed, as in the case of a toothless one. The first example corresponds to negation, and the second to possibility and potentiality.

Further, non-existence and possession have no intermediate [link] in the substrate since they

themselves affirm or deny [something], being specified by genus or substrate, as well as by time and state. Non-existence and possession are related to a given specified individual in the same way as two opposites are related to existence in general. Since there is no intermediate [link] between the two opposites, there is also no intermediate between non-existence and possession. In [the section of] categories of *al-Šifā'*, the similarities and differences between these four [opposite things] are mentioned, which are not appropriate in this book.

The differences between the opposite and non-existence include the fact that each of the two opposites has some kind of existential cause, while non-existence has only the absence of a cause for existence.

CHAPTER TWO

On the finitude of bodies, numbers, causes, and effects

Every body and every number has a natural order and parts existent together, and therefore, they are finite¹⁹². This is proved as follows: any number and measure with this property actually go to infinity either in all directions or in one direction. In any case, we can suppose some limit here, such as a point in a line, a line in a surface, a surface in a body, or a unit in a series of numbers. Let us take it as a limit and talk about it insofar as it is taken as a limit. We take some part of AC from AB, where from the side of B [it continues to] infinity. If AB is applied equally to CB or considered to be suitable to it, then it will either go to infinity in the same way as AB, or it will be less than AB by being equal to AC. However, AB cannot coincide with CB to infinity since CB is less than AB. Since CB is less than AB on the side of B and CB is finite, and AB is superior, then AC is finite, while AB is finite, yet it was supposed to be infinite, which is absurd. We already proved above the finiteness of bodies in a different way. In our discussion about natural bodies, we will prove [their finiteness] in another way according to physical reasoning. Besides, as you also know, if a number does not have a natural order, then it is not a number; for a number is a multitude, and where there is no multitude, there can be neither finiteness nor infinity. The same is the case with motions; we proved that its parts do not exist together.

You will also learn¹⁹³ that efficient causes must be finite, because if there is a side, a

¹⁹² Cf. *al-Tabrī'īyyāt*, I.3.8.

¹⁹³ Cf. *al-Ilāhiyyāt*, III.1.

mediating [link], and a final effect, and [at the same time] the causes, whether they are finite or infinite, occupy the position of mediating [link], needing a side, whose position is different from the position of the mediating [link], then these mediating [causes] cannot exist. Therefore, not a single effect can exist. Thus, the causes must go back to a cause that is not an effect.

So, it is clear that if the side is not an effect, and everything is an effect or something possible, whether it be one or infinite, then these effects cannot exist. However, there is one condition here, namely the causes are taken together with effects, as explained in the section on causes. For if this condition is not considered, the proof is not correct since the latter proceeds from the fact that they all exist together, just as in the case of a number under the condition that its parts exist together. After all, if they did not exist like that, i.e. existing together, then they would not be finite or infinite. You know that every action that is through motion is a request [for something] and that every request presupposes an object of request. However, every object of request is a finality, so if we suppose an infinity of finalities, then the goals and finalities will be eliminated, which is absurd.

CHAPTER THREE

On the clarification of pleasure and pain; that separate substances do not die or corrupt

We say: there is neither pleasure nor pain where there is no perception¹⁹⁴. Therefore, both must be preceded by perception. Perception is carried out either through the body, as we mentioned, and it is called sensory or estimative, or not through the body, as we demonstrated, in which case it is called intellectual. The object of perception is threefold: either pleasant or unpleasant perception, or neither pleasant nor unpleasant. Pleasure follows the perception of the pleasant or it is the perception itself, and it is certainly a perfection for the perception. Pain follows the perception of the unpleasant, and it is certainly an imperfection for the perception.

Some believed that pleasure is a way out of the natural state. The reason for this error is that they took the essential for the accidental. This is because sensory perception is carried out by means of an organ, and as long as the organ is not affected, there is no perception. Consequently, the organ comes out of the natural state, and as for the receptive power, it does not reach its perfection through affection. For while being affected by a power – and affection means the disappearance of one state and the existence of another – there would have to be another, stable perception that is not

¹⁹⁴ Cf. *al-Ilāhiyyāt*, IX.7.

affected; otherwise, there would be an infinite regress without any perception. Thus, the perception of human souls is carried out through the affection of an organ [of perception] and the perfection of the [receiving] power.

The perfection of the [perceiving] power means that the relation of the perceived to it is like the relation of writing to a writing board. As for the perception of the celestial souls, as you will learn, there is no affection either in the organ or in the [receiving] power. As for neither pleasant nor unpleasant, it does not follow pleasure or pain.

Each [perceiving] power has its own pleasure and its own pain. For the power of anger, which we will talk about in the section on the soul, this is a triumph. For the power of lust it is what suits it. For the imagination it is a dream. For the sense of touch it is what pleases it, and the same is the case with smell and sight, but with the intellect it is what suits and pleases it.

The perception of pleasure is different in three respects: firstly, in relation to sublimity and lowness of the power; secondly, with regard to the measure of perception, since the fuller the perception of each power, the fuller the pleasure it receives and the greater the pain it experiences; thirdly, in relation to what is perceived, for the more perfect it is and closer to the absolute perfection, the stronger the pleasure it receives. If this is so, then how can one compare sensual pleasure, for example, to the pleasure derived from a sweet thing with pleasure so low and far from the absolute perfection, with the pleasure to which intellect is inclined when perceiving the Necessary Existent in itself, which is the absolute perfection with no mixture of deficiency. This is about the lowness and the sublimity of what is perceived.

As for the perceiving powers, you will learn that the bodily power, if it completes its perception of a thing, it weakens and becomes incapacitated. To be convinced of this, it is enough to realise that the eye gets tired and may even deteriorate, if it looks intently at the sun. Consider other sensible things, and you will find that it is the same with them.

As for the intellectual power, it grows even stronger from the perception of intelligible objects. Moreover, the intellectual power does not exist in the body, and therefore, it is far from changing. Among the existents, it is closely connected with the Necessary Existent in itself. Further, the intellectual power comprehends ideas free from anything extraneous, as we have shown, while the sensible power perceives everything mixed with something alien to it; that is why it is not able to comprehend the realities of things. In addition, it perceives [only] the external side [of things], while undergoing a change. The intellect perceives the substances of things and their realities while not changing. It is peculiar to the intellect to perceive the absolute perfection and sacred substances, while the sense is unable to [comprehend] any of these.

However, it often happens that some powers are not even aware of the pleasure intended for them, just as a person, hearing noble harmonious melodies, does not pay any attention to them, or

abhors them, like a person who receives pleasure by eating rubbish, or a sick person, who eats honey in disgust, due to a custom, as in the case of the one who is accustomed to unpleasant food, or due to the weakness of the [perceiving] power, like weak sight that cannot bear the contemplation of light. These causes prevent our souls, as long as there exists a connection between them and the body, from those perfections prepared for them in the other world.

Here, there is another cause that also hinders what we mentioned, and it is a state similar to the state of tingle. The human soul is followed by sensible lust even more, just like it is followed by the motivations of senses more than by the motivations of the intellect, and we will explain it in the section on the soul.

CHAPTER FOUR

On the complete and above the complete

‘Complete’¹⁹⁵ is something that tends to have an attribute, thanks to which it reaches perfection, and it is realised for it with an additional condition: its existence in itself is the highest perfection possible for it, so that it proceeds only from what belongs to it, and that it should not have any excess either because of itself or because of anything else. This is the attribute of the active intellects. ‘Above complete’ is that which has proper existence and which has an excess – the existence of other things [flowing] from itself. This is from itself and it is the attribute of the Necessary Existent in itself. ‘Sufficient’ is that which is endowed with something by which it in itself achieves its proper perfection. This is the attribute of the celestial souls. ‘Insufficient’ is that which needs something else that gives it perfection one by one. These are the things that are in [the world] of generation and corruption, because these things need causes external to them, thanks to which they are predisposed to perfection flowing on them. The celestial souls are free of any predisposition. If you think, you will find that the absolute perfection belongs only to the Necessary Existent in itself (great is His glory!).

Know that¹⁹⁶ what is abstracted from matter, regardless of whether it has some kind of connection with matter, as in the case of human souls, or no connection at all, as in the case of the active intellects, is not corrupted. Indeed, every thing that tends to be corrupted for some reason has

¹⁹⁵ Cf. *al-Ilāhiyyāt*, IV.3.

¹⁹⁶ Cf. *al-Ṭabṛ‘iyyāt*, VI.5.4.

the potential to be corrupted. However, corruption is preceded by the act of remaining, and potentiality, as you know, is not an act. Therefore, there are two different things here: firstly, the bearer of potentiality, and secondly, that which conditions the act. So it follows that it is composite, while it was supposed that it is non-composite. This is common to all separated beings.

I say: a thing that is potentially can be corrupted certainly has the potentiality of remaining, for its remaining is not necessary and obligatory, and if it is not necessary, then it is possible. However, possibility is potential. Therefore, there is the potentiality of remaining in its substance. This potentiality is certainly not an act. Thus, this act leads to what is actualised due to it and can exist like matter. It is definitely a carrier of potentiality and something composite. Therefore, everything simple does not have the potential to corrupt, and everything that has the potential to corrupt must necessarily be composite.

Here is one more proof that the separated Necessary Existent is not corrupted by itself: if it were non-existent, then it follows that the cause for its remaining would have to be the absence of the cause of non-existence, but in this case it would not be necessary in itself.

It may be said: the active intellects in themselves are certainly something possible; but what may exist, may not exist; hence, they have the potentiality of non-existence.

The answer: here possible is said in two specific senses: first, in the sense that a thing in itself requires neither its existence nor its non-existence; secondly, in the sense that if a thing is supposed to exist or not to exist, then there is nothing impossible. So in the first sense the possible does not require to be composite, but in the second sense it does, because in the second sense it requires that there is something potential and something actual. Such a thing is something generated, and everything generated, as you will know, corrupts. The proof here leads to the denial of the possibility of the soul and other simple possible [beings] in the second sense.

One can [also] say: since souls did not exist, then when they exist, it can be supposed that they will not exist. The answer is that this conclusion does not follow from the premise. For what can be supposed to be non-existent must, as was said in the proof above, be something composite. Since souls are not something compound, then it cannot be supposed to be non-existent. It is clear that the supposition of the possibility of the non-existence of a temporal emerging thing is related to its composition, and not that this follows from the possibility in the first sense.

From this it is known that the prime matter is not corrupted in the generating and corrupting bodies, for they are simple. Moreover, since the continuity of emerging things is necessary, the supposition of the non-existence of prime matter implies the emergence of prime matter to have other prime matter that precedes it, and as you know, everything generated is preceded by matter.

Further, prime matter and the active intellects are not preceded by non-existence; even if they are supposed to be non-existent would not lead to absurdity.

It may be said: just as the possibility of the existence of souls lies in matter, so also the possibility of their corruption lies in it.

The answer: everything for which the possibility of corruption lies in matter must have such a connection with the latter that it would require corruption with its corruption. Such a thing must exist in matter, or matter must be the efficient cause of its existence, but with the soul it is different¹⁹⁷.

The Book is finished with the help of the Lord the Bestower. There is no success except with Allah!

¹⁹⁷ Because the existence of the soul is not dependent on matter; it is eternal and incorruptible.

GLOSSARY

A

accident = ‘araḍ, a‘rāḍ

acting = an yaf‘ala

analogically = bi-l-taškīk

affirmation = taṣḍīq

B

being = kawn

being acted upon = an yanfa‘ila

being caused = ma‘lūliyya

body = ġism

C

causality = ‘illiyya

cause = sabab, asbāb

category = maqūla, maqūlāt

composed = murakkab

concrete beings = al-a'yān

conception = taṣawwur

corporeal = ġismī/iyya

D

definition = ḥadd

E

efficient cause = 'illa fā'iliyya

essential = dātiyya

existence = wuġūd

existent = mawġūd

equivocally = bi-l-ištirāk

F

form = šūra

first principle = awwaliyya

G

genus = ġins, aġnās

giver of forms = wāhib al-ṣūwar

I

individual being = huwiyya

intellect = ‘aql

intelligible = ma‘qūla, ma‘qūlāt

L

locus = maḥall

M

mathematics = al-riyāḍiyyāt

mathematical = ta‘līmiyya

matter = mādda

material = māddī/iyya

metaphysics = ‘ilm mā ba‘d al-ṭabī‘a

mind = dihn

N

nature = ṭabīʿa

natural = ṭabīʿī

Necessary Existent = wāǧib al-wuǧūd

non-existence = ʿadam

non-existent = maʿdūm

O

oneness = waḥda

P

particular = ǧuzʾī

physics = al-ṭabīʿīyyāt, ʿilm al-ṭabīʿa

plurality = kaṭra

position = waqʿ

possession = ǧidda

priority = taqaddum

prime matter = hayūlī

posteriority = ta'ahhur

Q

quality = kayf, kayfiyya

quantity = kam, kamiyya

quiddity = māhiyya

R

reality = haqīqa

relative = muḍāf

S

sense = ḥiss

self-subsistent = qā'im bi-nafsih, qā'im bi-dātih

science = 'ilm

simple = basīt

subject matter = mawḍū'

substance = ḡawhar

substantiality = ḡawhariyya

subsistence = qawwām

substrate = mawḍūʿ

space = makān

species = nawʿ, anwāʿ

specific difference = faṣl

specific feature = ḥāssa

synonym = murādifa

T

time = zamān

U

universal = kullī

univocally = bi-l-tawāṭuʿ

W

where = ayna

when = matā

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APPENDICES

APPENDIX A. Inventory of the manuscripts of *al-Taḥṣīl* and other works attributed to Bahmanyār

This is a provisional inventory of manuscripts that embraces all extant works attributed to Bahmanyār. Below there is a list of five treatises and 111 manuscripts. At the moment, it is the most comprehensive attempt, still the actual number of manuscripts, particularly that of *Kitāb al-taḥṣīl*, without doubt, should be higher. Among these treatises, the authenticity of only the latter work remains beyond doubt. The other treatises need to be studied thoroughly from the doctrinal perspective and on the level of manuscripts as well in order to be authenticated. Treatise 2, along with Bahmanyār, is attributed to Ibn Sīnā [on this issue, see Malikov, 2022]. There are at least 23 manuscripts that indicate al-Fārābī as the author of Treatise 3, while two times it is ascribed to al-Maʿṣūmī and Bahmanyār. Treatises 4 and 5, also attributed to Bahmanyār, survive only in one copy which makes the process of their authentication probably even more equivocal.

1. Kitāb al-taḥṣīl

Legenda:

m = MS containing *Mantiq* (section on logic)

i = MS containing *ʿIlm mā baʿd al-ṭabīʿa* (section on metaphysics)

t = MS containing *al-ʿIlm bi-aḥwāl aʿyān al-mawǧūdāt* (section on science of the states of the concrete beings)

India

1. Hyderabad, Oriental Manuscripts Library and Research Institute (form.: Āṣafiyya Library): 372
2. Hyderabad, Oriental Manuscripts Library and Research Institute: 373
3. Hyderabad, Oriental Manuscripts Library and Research Institute: 488
4. Patna, Khuda Bakhsh Oriental Public Library: 2230 [11th c. H?; i, t]
5. Rampur, Rampur Raza Library: 3517/2414 M [9th c. H]
6. Rampur, Rampur Raza Library: 3517/13894 D [977H; incomplete]
7. Rampur, Rampur Raza Library: 3519/8469 M [12th c. H; incomplete]

Iran

8. Hamadan, Madrasah-i Ġarb: 4786
9. Isfahan, Madrasah-i Ṣadrā Bāzār: 103

10. Mashhad, Āstān-i Quds-i Raḍavī (form.: Ḥaydar Collection): 348
11. Qum, 'Allāma Sayyid Muḥammad Ḥusayn Ṭabāṭabā'ī Private Collection: 877
12. Qum, Kitābhānah-i Golpāyegānī: 4/142-672
13. Qum, Kitābhānah-i Mar'asī: 1392
14. Qum, Kitābhānah-i Mar'asī: 1996
15. Qum, Kitābhānah-i Mar'asī: 7205
16. Qum, Kitābhānah-i Mar'asī: 9281
17. Qum, Kitābhānah-i Mar'asī: 10169
18. Qum, Kitābhānah-i Mar'asī: 10290
19. Qum, Kitābhānah-i Mar'asī: 15059/1
20. Qum, Markaz Aḥyā'-i Mirāṭī Islāmī: 1225
21. Qum, Markaz Aḥyā'-i Mirāṭī Islāmī: 2424
22. Tabriz, Tiqat al-Islām Private Collection: no number
23. Tehran, Kitābhānah-i Dāniškādah-i Ilāhiyyāt-i Dānišgāh-i Tihrān: 211 ج
24. Tehran, Kitābhānah-i Dāniškādah-i Ilāhiyyāt-i Dānišgāh-i Tihrān: 304 ج
25. Tehran, Kitābhānah-i Dāniškādah-i Ilāhiyyāt-i Dānišgāh-i Tihrān: 71 د
26. Tehran, Kitābhānah-i Dāniškādah-i Ilāhiyyāt-i Dānišgāh-i Tihrān: 404 د
27. Tehran, Kitābhānah-i Dāniškādah-i Ilāhiyyāt-i Dānišgāh-i Tihrān: 644 د
28. Tehran, Kitābhānah-i Madrasah-i 'Ālī-i Sipahsālār: 1272
29. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī (form.: Kitābhānah-i Maḡlis-i Šūrā-yi Millī): 811
30. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 812 ط [m, i, t]
31. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 1528
32. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 1715 [m, i, t]
33. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 5328
34. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 10018
35. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 87717
36. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihrān (form.: Kitābhānah-i Dāniškādah-i Adabiyāt-i Dānišgāh-i Tihrān): 64
37. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihrān: 2672 ف
38. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihrān: 8189
39. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihrān: 8239/1
40. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihrān: 9918

41. Tehran, Kitābhānah-i Millī Ğumhūri-yi Islami-yi Iran: 326
42. Tehran, Kitābhānah-i Millī Ğumhūri-yi Islami-yi Iran: 457
43. Tehran, Kitābhānah-i Millī Ğumhūri-yi Islami-yi Iran: 458
44. Tehran, Kitābhānah-i Millī Ğumhūri-yi Islami-yi Iran: 4076
45. Tehran, Kitābhānah-i Millī Malik: 111
46. Tehran, Kitābhānah-i Millī Malik: 645/1
47. Tehran, Kitābhānah-i Millī Malik: 863
48. Tehran, Kitābhānah-i Millī Malik: 2260
49. Tehran, Kitābhānah-i Millī Malik: 15982/33
50. Tehran, Madrasah-i ‘Ālī-i Šahīd Moṭahharī: 1272

Iraq

51. Baghdad, Maktabat al-Awqāf: 95467 [1074H]

Ireland

52. Dublin, Chester Beatty Library: 3096 [20 Rabīʿ I – 23 Rabīʿ II 901H/8 December 1495 – 10 January 1496; m; folios: 229]

Lebanon

53. Beirut, Université St. Joseph, Bibliothèque Orientale: 380 [Rabīʿ I 905H/1499; owners: the Saviour monastery (Dayr al-Muḥalliš) of the Basilian Salvatorian Order of Mašmūša; Louis Cheikho]

Syria

54. Aleppo, al-Maktaba al-Aḥmadiyya: 1122
55. Aleppo, Paul Sbath Collection: 278 771

Turkey

56. Diyarbakır, Diyarbakır İl Halk Kütüphanesi: 21 Hk 263 [1071H; copyist: Muḥammad Salīm; m; folios: 188]
57. Istanbul, Koca Ragıp Paşa Kütüphanesi: 880 [1117/8H]
58. Istanbul, Köprülü Yazma Eser Kütüphanesi: Fazıl Ahmet Paşa 34, Fa 863 [888H; copyist: ‘Ali ibn Muḥammad; place of copy: Shiraz]
59. Istanbul, Topkapı Sarayı Müzesi Kütüphanesi: Ahmed III, 3190 [1491; copyist: Nūr al-Allah ibn

Ḥalīl al-Allah ibn Faḍlūl]

60. Istanbul, Topkapı Sarayı Müzesi Kütüphanesi: Ahmed III, 3287 [9th c. H; m; folios: 177]

61. Konya, Konya Library: 1103 [1084H; i; folios: 190]

Vatican

62. Vatican City, Vatican Apostolic Library: Vat. ar. 1411 [m, i; folios: 197]

1a. A chapter (III.2.2) from *al-Taḥṣīl* that circulated separately

63. Turkey, Istanbul, Köprülü Yazma Eser Kütüphanesi: Fazıl Ahmet Paşa, Fa 1604 [title: *Faşl min Kitāb Bahmanyār fī itbāt al-ʿuqūl al-faʿāla wa l-dalāla alà adadihā wa itbāt al-nufūs al-samāwiyya wa fī al-ğāya llatī tūʾahā al-aflāk fī ḥarakātihā wa fī itbāt al-ağsām al-ʿunsuriyya wa fī anna al-ʿālam al-ğismānī wāḥid*]

1b. Persian translation of *al-Taḥṣīl*

1. Iran, Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 1997 [i, t; folios: 330]

2. Uzbekistan, Tashkent, Abu Raihon Berunii nomidagi Sharqshunoslik Instituti: 2688 [ca. 17th c.; m, i, t; folios: 350]

2. *Risāla fī mawḍūʿ ʿilm mā baʿd al-ṭabīʿa* or *Risāla fī itbāt al-mabdaʿ al-ʿawwal*

Independent version

1. Netherlands, Leiden, Universiteitsbibliotheek, Golius Collection: Or. 184 [514–5H; author and title: Bahmanyār, *Risāla fī mawḍūʿ ʿilm mā baʿd al-ṭabīʿa*]

2. Turkey, Istanbul, Nuruosmaniye Kütüphanesi: 4894 [1143–68H; author and title: *Risāla li-l-šayḥ al-raʿīs Abī ʿAlī ibn Sīnā fī itbāt al-mabdaʿ al-ʿawwal*]

3. Turkey, Istanbul, Süleymaniye Kütüphanesi: Ayasofya 4829 [1143–68H; no title, incipit: *qāla l-šayḥ*]

4. Turkey, Istanbul, Süleymaniye Kütüphanesi: Ayasofya 4849 [781H; author and title: *Risālat al-Raʿīs fī itbāt al-mabdaʿ al-ʿawwal*]

***al-Mubāḥaṭāt* version**

5. Iran, Tehran, Kitābhānah-i Dāniškādah-i Ilāhiyyāt-i Dānišgāh-i Tihrān: 1149 [962H]
6. Iran, Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 634 [1043H]
7. Netherlands, Leiden, Universiteitsbibliotheek: Or. 864 [717H]
8. United Kingdom, Oxford, Bodleian Library: Pococke 534 [634H]

3. *Risāla fī marātib al-mawḡūdāt* or *Risāla fī 'itbāt al-mufāraqāt wa ahwālihā*

Egypt

1. Cairo, Dār al-Kutub wa l-Waṭā'iq al-Qawmiyya (form.: Dār al-Kutub al-Miṣriyya): 540
2. Cairo, Maktabat al-Azhar al-Šarīf: 31748 (102) [author and title: al-Fārābī, *Risāla fī 'itbāt al-mufāraqāt*]

Germany

3. Berlin: 3058 [author and title: 'Abū 'Abd 'Allah al-Ma'sūmī, *Risāla fī 'itbāt al-mufāraqāt*]

India

4. Ahmedabad, Hazrat Pir Muhammad Shah Library: 1017 [author and title: al-Fārābī, *'Itbāt al-mufāraqāt*]
5. Aligarh, Aligarh Muslim University, Maulana Azad Library: 81/46
6. Lucknow, Kitābhānah-i Nāširiyya: 740 [author and title: al-Fārābī, *'Itbāt al-mufāraqāt*]
7. Patna, Khuda Bakhsh Oriental Public Library: 2/474 2461/3

Iran

8. Mashhad, Kitābhānah-i Āstān-i Quds-i Raḡavī: 532 [author and title: al-Fārābī, *Risāla fī al-mufāraqāt*]
9. Qum, Kitābhānah-i Golpāyegānī: 33/45 [1102H; copyist: Mullā Muḡammad Raḡīm al-Qazwīnī; author and title: al-Fārābī, *'Itbāt al-mufāraqāt*]
10. Qum, Kitābhānah-i Mar'ašī: 286 [1072H; copyist: Šāh Murād Farāhānī; author and title: al-Fārābī, *'Itbāt al-mufāraqāt*]
11. Qum, Kitābhānah-i Mar'ašī: 3445 [1251 Ša'bān; copyist: Mehr 'Alī Tabrīzī; author and title: al-Fārābī, *'Itbāt al-mufāraqāt*]
12. Qum, Kitābhānah-i Mar'ašī: 4353 [1107–84H; place of copying: Isfahan and Qum; copyist:

- Muḥammad Mahdī ibn ‘Alīnaqī Ḥusaynī Qumī; author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
13. Qum, Kitābhānah-i Mar‘ašī: 9309 [10 Šawwal 1092/22 October 1681; author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
14. Qum, Markaz-i Iḥyā’-i Mīrāt-i Islāmī: 1861 [11H; author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
15. Tehran, Kitābhānah-i Madrasah-i ‘Alī-i Sipahsālār: 2/634 1
16. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī (form.: Kitābhānah-i Maḡlis-i Šūrā-yi Millī): 634 [1043H; author and title: al-Fārābī, *Maqāla fī ’itbāt al-mufāraqāt*]
17. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 3923 [8H; author and title: al-Fārābī, *Risāla fī ’itbāt al-mufāraqāt*]
18. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 4001 [1014H; copyist: Taqī al-Dīn al-Gīlānī; author and title: ‘Abū ‘Abd ‘Allah al-Ma‘šūmī, *’Itbāt al-mufāraqāt*]
19. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 5283 [11H; author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
20. Tehran, Kitābhānah-i Maḡlis-i Šūrā-yi Islāmī: 14280 [author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
21. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihrān: 2401 [11H; copyist: Ridā Mūsā Kašmīrī; place of copying: Tus]
22. Tehran, Kitābhānah-i Millī Ğumhūrī-yi Islami-yi Iran: 2971 ع [1023H; place of copying: Herat; author and title: al-Fārābī, *Maqāla fī ’itbāt al-mufāraqāt*]
23. Tehran, Kitābhānah-i Millī Malik: 1253 [1077H; author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
24. Tehran, Kitābhānah-i Millī Malik: 4655 [13H; copyist: Karīm ‘Alī Ḥorāsānī; author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
25. Tehran, Kitābhānah-i Millī Malik: 4693 [12H; author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
26. Tehran, Kitābhānah-i Millī Malik: 4694 [1021–2H; copyist: ‘Abd al-Qādīr al-’Urdūbādī; place of copying: Shiraz; author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
27. Tehran, Madrasah-i ‘Alī Šahīd Moṭahharī: 1216 [1091H; author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]
28. Tehran, Madrasah-i ‘Alī Šahīd Moṭahharī: 2912 [author and title: al-Fārābī, *’Itbāt al-mufāraqāt*]

Netherlands

29. Leiden, Universiteitsbibliotheek, Golius Collection: Or. 184 [514–5H; copyist: Fayrūz ibn

Rūzbihān; author and title: Bahmanyār, *Risāla fī marātib al-mawğūdāt*)

30. Leiden, Universiteitsbibliotheek, Golius Collection: Or. 958 [925H; owner: Muḥammad ibn ʿIbrāhīm al-Ṭabīb; author and title: Bahmanyār, *Risāla fī ʿitbāt al-mufāraqāt wa ʿaḥwālihā*)

Saudi Arabia

31. Riyadh, Maktabat al-Malik ʿAbd al-ʿAzīz al-ʿĀmma: 3921 [author and title: al-Fārābī, *ʿItbāt al-mufāraqāt*]

Turkey

32. Istanbul, İstanbul Millet Kütüphanesi, Feyzullah Efendi Collection: 34 Fe 1265/4 [1094H; author and title: al-Fārābī, *Maqāla fī ʿitbāt al-mufāraqāt*]

33. Istanbul, Süleymaniye Kütüphanesi: Ayasofya 4839/2

34. Istanbul, Süleymaniye Kütüphanesi: Ayasofya 4854/4

35. Istanbul, Süleymaniye Kütüphanesi: Ayasofya 4859

Uzbekistan

36. Tashkent, Abu Raihon Berunii nomidagi Sharqshunoslik Instituti: 2385

4. *Maqāla fī āraʾ al-maššāʾin fī umūr al-nafs wa quwwāhā*

Turkey, Istanbul, Süleymaniye Kütüphanesi, Nafiz Paşa Collection: 1350 [Rabīʿ I 1164H/1751]

5. *Faṣl li-Abī l-Ḥasan Bahmanyār*

Netherlands, Leiden, Universiteitsbibliotheek, Golius Collection: Or. 184 [514–5H; copyist: Fayrūz ibn Rūzbihān]

APPENDIX B. *Risāla fī marātib al-mawǧūdāt* or *Risāla fī ʾitbāt al-mufāraqāt wa aḥwālihā*

NOTE TO THE TEXT

Risāla fī marātib al-mawǧūdāt (Treatise on the levels of existents) or *Risāla fī itbāt al-mufāraqāt wa aḥwālihā* (Treatise on proving the separate beings and their states) is a short metaphysical work that discusses separate or non-corporeal beings. Each chapter of the treatise brings different proofs concerning the non-corporeality of four different kinds of beings. Therefore, the title containing *itbāt al-mufāraqāt* seems to be more relevant to the style and exposition of the treatise, while *marātib al-mawǧūdāt* accents the general metaphysical relation of the non-corporeal beings.

The text of the work appears in four editions [Poper, 1851, pp. 17–28; Saʿd, 1911, pp. 12–19; Ğawādī, 1977, pp. 56–73; Hyderabad, 1921–30, pp. 2–8]. Poper used Leiden Golius 184 codex (ascribed to Bahmanyār), Saʿd’s edition is a republication of Poper’s text with some corrections, Ğawādī was using Saʿd’s text while including an apparatus that shows alternative reading according to the Hyderabad edition of the treatise ascribed to al-Fārābī under the title *Risāla fī itbāt al-mufāraqāt*. The Hyderabad edition, just like that of Saʿd’s, does not provide any information; there are no notes on the manuscript, no introduction and not even the name of the editor. The comparison between the editions shows minor differences. Yet the Hyderabad edition reveals more alternative readings in comparison with the other two.

The following Arabic text is a new transcription of the treatise from Leiden Golius 184 codex – one of the oldest manuscripts of this treatise known at present – since Poper’s edition suffers from a number of imprecisions in rendering the text. The original text is accompanied by its first English translation.

رسالة في مراتب الموجودات

لبهمنيار بن المرزبان

رحمة الله عليه

بسم الله الرحمن الرحيم

توكلي على الله

المفارقات أربع مراتب مختلفة الحقائق: (أ) الموجود الذي لا سبب له وهو واحد؛ (ب) العقول الفعالة وهي كثيرة بالنوع؛ (ج) النفوس السمائية وهي كثيرة بالنوع؛ (د) النفوس الإنسانية وهي كثيرة بالأشخاص.

الصفات العامة لها وهي أربع: (أ) إنها ليست بأجسام وهو معنى سلبي. ولا يوجب أن لا تختلف حقائقها لاشتراكها في هذا السلب؛ (ب) إنها لا تموت ولا تفسد. وإلا كان وجب أن يكون فيها قوة الموت والفساد. ولو جاز هذا لوجب أن يجتمع فيها قوة الوجود والبقاء وفعلهما فكانت يكون [تكون] موجودة ومعدومة معاً. فبين أن البسائط إذا صارت بالفعل لم يبق فيها القوة والإمكان. بل إنما يصح ذلك في المركبات التي لها إمكانان. فيبطل أحدهما عند كونه [كونها] بالفعل ويبقى الآخر في المادة. ثم لا تمتنع الفساد في واجب الوجود بذاته بيان خاص وكذلك في المادة الأولى بيان خاص آخر؛ (ج) إنها تدرك ذواتها بعد أن تعلم أن إدراكها لذواتها مختلفة [مختلف] بالأنواع. فإن إدراكها لذواتها هو نفس وجوداتها ووجوداتها مختلفة. والأول يدرك ذاته ولو لم يدر. لا محالة لأنه إن [لو] لم يدرك لوازم ذاته. لكان إدراكه لذاته ناقصاً. وإدراكه للوالم ذاته هو إرادته؛ (د) إن لكل منها سعادة فوق سعادة الملابس للمادة. على أنها أيضاً في المفارقات مختلفة متفاوتة. ثم لكل منها صفات خالصة مشروحة في الكتب؛ (هـ) إنها حية بذواتها أي وجودها حيوتها.

البراهين على إثبات هذه المفارقات

فمن هذه البراهين ما يتضمن إثبات مفارق ومنها ما يثبت أولاً به أمر ثم ببرهان ثانٍ نعلم أن ذلك الأمر مفارق. البرهان على إثبات الموجود الذي لا سبب له وهذا يحتاج إلى برهان آخر في أنه مفارق. لما كانت الممكنات واجباً فيها أن ينتهي [تنتهي] إلى موجود لا سبب له. وإلا كان يلزم إذا وضع طرفان وواسطة وكان يوضع الطرف الأخير معلولاً والأول علة أن يكون الأول أيضاً حكمه حكم الواسطة المحتاجة إلى طرف ليس حكمه حكم الواسطة. فما كان يصح وجود ما حكمه حكم الواسطة سواء كانت عدة الواسطة متناهية أو غير متناهية.

وجب أن يكون في الموجودات موجود لا سبب له . وذلك بعد أن توضع العلة موجودة معاً إذ المعلول لا يصح أن يوجد من دون العلة وإن اتصل وجوده [بوجوده] . فإنه إن استغنى بعد وجوده عن العلة صار واجب الوجود بذاته بعد أن كان ممكناً ومحتاجاً إلى العلة . والحدوث لا يفيد الوجود المعلول الواجبية بذاته . فإن الحدوث أيضاً هذه صفته . وبالجملة لا تأثير للفاعل في الحدوث أي في سبق العدم أي في كون مثل هذا الوجود مسبق العدم بل هذا له من ذاته . وما له من ذاته فلا سبب له .

البرهان على أنه مفارق برهانان

لو كان جسماً لكان له مادة وصورة فكانا سببين لوجوده . وما لا سبب له لا يجب بسبب . (ا) إنه لو كان جسماً لكانت له ماهية ولو كانت له ماهية للزم ثلث محالات . الأولى أن المعدوم كان يلزمه الوجود أي كان سبباً لوجود ذاته . الثانية أن الموجود الذي لا سبب له يكون من لوازم تلك الماهية فيكون معلولاً صادراً عنه [عنها] . الثالثة أن وجوب الوجود يكون متعلقاً بتلك الماهية فإنما [قائماً] فيها فكان وجوبه بها .

إثبات العقول الفعالة : عليه خمسة براهين ويتضمن [تتضمن] إثباتها

الأول : اللازم عن الأول يجب أن يكون إحدى الذات لأن الأول إحدى الذات من كل جهة ومقتضى الواحد من كل جهة واحد . ويجب أن يكون هذا الإحدى الذات أمراً مفارقاً . وإنما أقوله من [عن] البراهين : (ا) من المعلوم أن الأجسام والمفارقات كثيرة . فلا يصح أن يكون الصادر عن الأول أو لا صورة جسم أو مادة . وذلك لأن الصورة الجسمية تفعل بواسطة المادة الموجودة فيها لأن وجود الصور الجسمانية في المادة ولا يستغني عنها . ومصدر فعل كل شيء وجوده . فيكون مادة الجسم الأول علة لما بعدها من الصور والمواد والمفارقات . ولكن ليس للمادة إلا القبول ؛ (ب) الصورة الجسمية لا محالة يفعل [تفعل] بعد وجودها وجود شخصي وتشخصها بالوضع . ففعلها إذا وضعي . ولو كان [كانت] سبباً لوجود جسم آخر لكان وجب أن يكون [تكون] أولاً سبباً لوجود مادته وصورته . لكن ليس بين الصورة الجسمية وبينهما وضع . فلا يصح أن يكون [تكون] سبباً لوجودهما فلا يصح أن يكون [تكون] سبباً لما بعدهما أعني الجسم . والاستحالة في كونها سبباً للمفارق أظهر ؛ (ج) الجسم مؤلف من مادة وصورة . ولا الصورة مستغنية في وجودها عن المادة ولا المادة عن الصورة . فلا بد من ثالث ليس بجسم . ويؤدي [تؤدي] هذه البراهين إلى أنه لو كان المعلول الأول غير مفارق لكانت الصورة الجسمية والمادة سبباً لوجود الجسم والمفارق . لكن هذا محال .

الثاني : لو كان جسم فلكي سبباً لوجود جسم محوي لكان يلزم أن يكون لعدم الخلاء سبب . والخلاء محال وجوده والمحال لا سبب له . فمعلوم من هذا أن لكل فلك مفارقاً .

الثالث : إن النفوس الإنسانية مفارقة . فعلتها يجب أن يكون [تكون] مفارقة لأن الجسم متأخر في درجة الوجود عن المفارقات . فلو كانت صورة جسمية سبباً لوجود مفارق لكانت تفيد وجوداً فوق وجودها وأتم من وجودها . فكان وجود مثل النفس الإنسانية بغير سبب . والصرورة الجسمية لا يفيد [تفيد] وجوداً أكمل من وجود ذاتها . ووجود المفارق أكمل من وجود ذاتها .

الرابع : النفوس الإنسانية مخرجها من القوة إلى الفعل في المعقولات عقل براهين : (أ) الصور المتخيلة والمحسوسة والمتوهمة وبالجملة الأجسام بالقوة معقولة . فلا بد من أمر يجردها ويصيرها معقولة . فإن كان ذلك الأمر أيضاً بالقوة معقولة [معقولاً] لتسلسل فينتهي لا محالة إلى معقول بذاته ؛ (ب) الصور الجسمانية يفعل [تفعل] بوضعها . ولا وضع لها إلى يقوسنا [نفوسنا] . فلا يصح أن تخرج عقولنا من القوة إلى الفعل . مكمل عقولنا لا محالة يكون أتم وجوداً منها . والمعقولات هي التي تكملها . فمفيدها عقل بالفعل .

الخامس : الحركة الدائمة لا بد لها من محرك مفارق .

إثبات النفوس السمائية بثلاثة براهين

(أ) الحركة الطبيعية يصدر [تصدر] عنها عند حالة غير طبيعية فهي مؤدية إلى حالة طبيعية أي سكون . وذلك عند ارتفاع الحالة غير الطبيعية . ولا يصح في الحركة المستديرة السكون .

(ب) الحركة الطبيعية يطلب [تطلب] أمراً يسكن [تسكن] عنده وذلك على أقرب الطرق فهي إذن مستقيمة .

(ج) الطبيعة لا يقتضي [تقتضي] مهروباً عنه مطلوباً ولا يهرب [تهرب] عن مطلوبها . والمستديرة بخلافها فهي إذن غير طبيعية . فهي نفسانية إختيارية ولأنها تختار جرياً . فلا يصح أن يكون [تكون] عقلاً صرفاً . وإلا ما كان يعدم أجزاء الحركات وما كان يتعين حركة من دون أخرى فما كان يجب وجود ما لا يتعين فكان لا يوجد حركة .

(أ) مطلوبها لا يصح أن يكون معيناً وإلا كان يسكن [كانت تسكن] عند موافاته . فهو إذن كلي فهو إذن عقلي .

(ب) مطلوبها لا يصح أن يكون حسيّاً ولا من باب الشهوة والغضب . وإلا كانت يسكون [تسكن] عند إصابته .

البرهان على إثبات النفوس الإنسانية

الأجسام الحيّة يصدر [تصدر] عنها أفعال لا يصدر [تصدر] عن سائر الأجسام . فهو لأمر غير الجسمية ولأن الجسم المطلق لا وجود له . فهذا الأمر مقوم له فهو جوهر . وليس سبيل هذه الأجسام سبيل المعاجين لأن لها خصوصية وجود . إذ لها نموّ واغتذاء وإدراك وحركة من تلقائها .

البراهين على أنها مفارقة

(أ) إنها يدرك [تدرك] المعقولات . والمعقولات معاني مجردة عما سواها كالبياض لا كالأبيض . وكل ما يحصل في جسم فإنه يؤثر فيه ما لا بد للجسم في وجوده منه مثل الشكل والوضع والمقدار . فلو حصل معقول في جسم لكان يحصل له مقدار وشكل . ووضع فكان يخرج عن إن يكون معقولاً .

(ب) إنها يشعر [تشعر] بذاتها . ولو كانت موجودة في آلة لكانت لا يدرك [تدرك] ذاتها من دون أن يدرك [تدرك] معها آلتها . فكانت بينها وبين ذاتها وآلتها آلة وكان يتسلسل . بل كل ما يدرك ذاته فذاته له . وكل موجود في آلة فذاته لغير ذاته .

(ج) إنها تدرك الأضداد معاً . بحيث يمنع أن يوجد [توجد] على ذلك الوجه في المادة .

(د) وهو إقناعي أن المعقولات القوية لا يضعفها [تضعفها] .

(هـ) وهو إقناعي أن العقل قد يقوي بعد الشيخوخة . وإذا كانت مفارقة لم يجب أن يفسد [تفسد] بفساد المادة الموجبة لحدوثها المكثرة لعدتها المعينة لوجود نفس من دون أخرى مثلها .

البرهان على أن لها سعادة بعد المفارقة من جنس سعادة المفارقات وإن أمّتها ما يكون للنفوس الفاضلة

فقد عرفت أنها بسيطة . وأنه يجب إذا وجد لها ما كان في قوتها أن يقبله [تقبله] من الكمالات أن لا يزول عنها بما . بأن في البرهان المتقدم حين بين أن البسيط إذا خرج إلى الفعل لم يبق فيه الإمكان . وهذا الكمال هو العقل بالفعل أعني الاستعداد التام للاتصال بالمفارق الباقي الثابت . فهي يتصل [تتصل] بها بعد المفارقة . والعقل الهولاني وإن كان قدسياً فإنه مستعدّ لأن يصير عقلاً بالفعل . والعقل بالفعل أمّ منه . وإذا كان العقل الهولاني قد يتصل بالمفارق من دون تعلم منه أعني من دون استعمال فكر أو خيال فلأن يتصل به العقل بالفعل بعد المفارقة أوجب وأولى . وبالجملة لا بد للنفس في أن يحصل لها العقل بالفعل من البدن . فإن العقل بالملكة يستفاد بالبدن لا محالة . وكثير من الأوساط في البوأي [النظر] يقتنص من الرصد وبالْحس . والذي يختص بهذا المكان أنه لو كان العقل الهولاني باقياً مع العقل بالفعل لكانت النفس بشيء واحد عالمة وجاهلة معاً .

تمت الرسالة بحمد الله وحسن توفيقه

وصلّى الله على النبي محمد وآله

Treatise on the Levels of Existents

by Bahmanyār ibn al-Marzubān

May Allah have mercy upon him!

In the name of God, the Merciful, the Compassionate

My trust is in God!

The separate [existents] are four levels of different realities: a) the existent that has no cause and it is one; b) active intellects, and they are many according to species; c) celestial souls, and they are many according to species; d) human souls, and they are many according to individuals.

The common attributes that they have are four: a) they are not bodies, and it is a negative meaning. However, it is not necessary for their realities not to differ in order to participate in this negation; b) they do not die and do not corrupt. Otherwise, the potentiality for death and corruption would be necessary for them. If it were possible to make it necessary [for them] to unite the potentiality of existence and permanence and their actuality, then they would be existent and non-existent at the same time. It became clear that if the simple [existents] become actual, there remains no potentiality and possibility in them. On the contrary, it is true for the composed [existents], which have two possibilities. One of them ceases while its being is actual, and the other remains in matter. Besides, the impossibility of corruption in the Necessary Existent by itself has a special explanation, and similarly, it has a special explanation regarding prime matter; c) They perceive themselves after having understood that their perception of themselves differs according to species. Their perception of themselves is their very existence, and their existence is different. The first one perceives itself and the necessary qualities of itself. It is impossible, therefore, if it does not perceive the necessary qualities of itself. Its perception of itself then would be deficient. Its perception of its necessary qualities is its will; d) Each of them has happiness above the happiness [of the things] concomitant with matter. However, it is also different and distinct in the separate [existents]. Besides, each of them has specific attributes explained in books; e) They are alive by themselves, or their existence is their life.

Proofs establishing these separate [existents]

Some of these proofs include establishing a separate [existent], while some establish first a thing, and then, through a second proof, we know that that thing is a separate [existent]. The proof on the establishment of the existent that has no cause needs another proof that it is a separate [existent]. Meanwhile, the possible [existents] necessarily terminate in an existent that has no cause. Otherwise, if two sides and one mean were taken, then it would be necessary that the last side is taken as an effect and the first as a cause, so the first also would be a truth which is the truth of the mean needing a side whose truth is not the truth of the mean. Something that can be an existent its truth is the truth of the mean equal to several means, either finite or infinite.

It is necessary that among the existents there is an existent that has no cause. This is [apparent] after the causes are taken as existing together since an effect cannot exist without a cause and reach its existence. If, after its existence, it were free from the cause, then it would be a necessary existent by itself after being possible and in need of a cause. Coming-into-being for the caused existence does not participate in the necessity by itself. Indeed, coming-into-being is also an attribute of it [the effect]. In sum, there is no influence of the agent in coming-into-being or in the preceding of non-existence or in the being of a similar one of this existence preceding non-existence, on the contrary, it has this from itself. What it has is from itself has no cause.

Proving that it is separate by two proofs

If it were a body, then it would have matter and form, and the two would be the causes of its existence. However, what does not have a cause must not have a cause. (a) If it were a body, then it would have a quiddity, and if it had a quiddity, then three impossibilities would be necessary. First, non-existence would be necessary for existence or it would be the cause of existence itself. Second, the existent, which has no cause, would be one of the necessary qualities of that quiddity, so it would be an effect flowing from it. Third, the necessity of existence would be related to that quiddity [while] subsisting in it, hence its necessity would be through it.

Establishing active intellects: there are five proofs, and they include their establishment

First, it is necessary that from the First [existent] comes [an existent] with one essence because the First is one essence from all aspects, and it requires the one to be one from all aspects.

It is necessary for this one essence to be something separate. Now, I say some of the proofs: a) it is known that bodies and separate [existents] are many. It is impossible that what comes from the First is a form of a body or matter. That is because corporeal form acts by the mean of existing matter in it since the existence of corporeal forms is in matter, and they do not free from it. The source of acting of each thing is its existence. Hence, the matter of the first body is the cause of those things that are after it, like forms, matter, separate [existences]. However, for matter there is only reception; b) corporeal form inevitably acts after its existence and individuation according to the position. Its actuality is therefore positional. If it were a cause of the existence of another body, then it would be necessary to be primarily the cause of the existence of its matter and form. However, between corporeal form and the two [matter and form] there is no position. Hence, it cannot be the cause of the existence of the two, and it cannot be the cause of what is after the two, i.e. body. The impossibility in its being to be a cause for a separate [existent] is more obvious; c) a body is composed of matter and form. There is no form free in its existence from matter, and there is no matter [free] from form. So it is inevitable that there is a third that is not a body. These proofs show that if the first effect were not separate, then corporeal form and matter would be the cause of the existence of body and separate [existent]. However, this is impossible.

Second, if a celestial body were a cause of the existence of an embracing body, it would be necessary for the non-existence of nothingness to have a cause. However, the existence of nothingness is impossible and the impossibility has no cause. It is known from this that each sphere has a separate [existent].

Third, human souls are separate [existents]. Hence, their cause must be a separate [existent] because a body is posterior to the separate [existents] in the degree of existence. If a corporeal form were a cause of the existence of a separate [existent], it would be participated by existence above its existence and more complete than its existence. Then existence such as the human soul would be without a cause. Corporeal form does not make participate existence more perfect than its own existence. The existence of a separate [existence] is more perfect than its own existence [of corporeal form].

Fourth, the transition of the human souls from potentiality to actuality in the intelligible things is intellect, [it has] some proofs: a) imaginary, sensible, and estimative forms, in sum, the bodies in potentiality are intelligible. It is inevitable that there is something that abstracts them and makes them intelligible. If that thing also were intelligible in potentiality, there would be an infinite regress, and it would finish, without doubt, with an intelligible by itself; b) corporeal forms act according to their position. They have no position in our souls. Therefore, it is impossible that they move our intellects from potentiality to actuality; c) what makes perfect our intellects is, without

doubt, something more complete in existence than them [the intellects]. The intelligible things are those that make them perfect. Hence, it is the actual intellect that makes them participate.

Fifth, a permanent motion inevitably has a separate mover.

Establishing celestial souls by three proofs

a) Natural motion comes from a non-natural state, and it moves towards a natural state, i.e. the rest. That [happens] when the non-natural state is removed. In a circular motion, the rest is impossible.

b) Natural motion requires something when it is in rest with it, it is by the shortest way, hence it is straight.

c) Natural [motion] does not demand what escapes from it as an aim and does not escape from its aim. Circular [motion] is its opposite, and hence, it is not natural. It is the willing soul because it chooses the direction. It cannot be a pure intellect. Otherwise, the parts of motions would not disappear, one motion would not be determined without another, therefore, what would be necessary existence would not be determined, and motion would not exist.

The proof that they are separate

a) Their requirement cannot be determined, otherwise, they would rest upon its appearance. Therefore, it is universal and it is intellectual.

b) Their requirement cannot be sensible and not from the category of desire and anger, otherwise, they would rest upon its achievement.

Proof establishing the human souls

Acts that come from the alive bodies do not come from other bodies. It belongs to something non-corporeal because the absolute body has no existence. Then this thing has a subsistence and it is a substance. The characteristic of these bodies is not the characteristic of mixed

things because they have special existence. It is due to them that growth, nourishment, perception, and motion take place.

Proofs that they are separate

a) They perceive intelligible things. Intelligible things are abstracted meanings like whiteness and not white. Everything that is acquired in a body influences in it what is inevitable for a body in its existence, like figure, position, and volume. If there an intelligible thing were acquired in a body, then it would acquire volume, figure, and position. Therefore, it would be put aside if it were intelligible.

b) They sense themselves. If they existed in a tool, they would not perceive themselves without perceiving themselves with their tool. Then there would be between them and themselves and their tool another tool and there would be an infinite regress. However, everything that perceives itself belongs to itself. Everything that exists in a tool does not belong to itself.

c) They perceive the contraries together. Thus, it is impossible [for them] to exist in this way in matter.

d) It is convincing that the powerful intelligibles do not weaken them.

e) It is convincing that intellect can be powerful after ageing. If they are separate, then it is not necessary that they corrupt with the corruption of the matter necessary for their coming into being, their multiplication in a definite number for the existence of a soul without the other like itself.

Proof that they have happiness after the separation from the genus of happiness of the separate existents and the most complete of it belongs to virtuous souls

You already know that they are simple. It is necessary then that when something is found in their potentiality to receive perfection, it does not cease from them. It became clear in the preceding proof that if a simple thing becomes actual, the possibility does not remain in it. This perfection is the intellect in actuality, i.e. it is a full disposition for joining the remaining fixed separate existent. It joins it after the separation. Material intellect, if holy, is disposed to turn into an intellect in

actuality. The intellect in actuality is more complete than it. Material intellect can join a separate existent without any teaching, i.e. without using thought or imagination, because joining active intellect after the separation is more important and more superior. In sum, it is inevitable for a soul to acquire for it intellect in actuality through a body. Habitual intellect, without doubt, uses a body. Most of the means of a theory benefit from observation and senses. It should be specifically said in this place that if material intellect remained with intellect in actuality, then the soul would know and not know the same thing at the same time.

The treatise has finished with the praise of Allah and his good success.

Blessings of Allah upon the prophet Muḥammad and his family

APPENDIX C. *Maqāla fī ārā' al-maššā'in fī umūr al-nafs wa quwwāhā*

NOTE TO THE TEXT

The following is a short treatise entitled *Article on the opinions of Peripatetics on the issues of the soul and its powers*. Its main topic is the perception of the human soul. The Arabic text is transcribed from the only manuscript of this work known for now – Nafiz Paşa 1350. I decided to divide the text into ten sections according to its contents. The treatise has not been published, translated or studied before.

بسم الله الرحمن الرحيم
عونك لطيف

قال الحكيم بهمنيار قد جمعت في هذه المقالة مجروراً من العلماء المشائين في أمور النفس وقواها . وعولت في إقامة البراهين عليها على الكتب المصنفة .

[١] فأقول إن الحي هو الإدراك الفعال والحي لا يكون حياً بحيوة تسبق بل ربما سبق كونه بحيث يصدر عنه الفعل . والإدراك أمر غير الحيوة وربما لا يسبقه أمر . ولو كان الحي حياً بحيوة سبق لما صحَّ وجود الحي وقد شرطت إن اقتصر على الدعوى دون البرهان .

[٢] والمدرك لا محالة على صفة أو لا تملك الصفة موجودة له لما كان مدركاً . وتلك الصفة هي أثر في المدرك أو نفس المدرك . والمدرك بالحقيقة هو الأثر الموجود في المدرك وبالعرض الموجود من خارج الأثر . إنا نقول إن هذا الذي أعرفه أي هو موجود في زمان له وجود في الأعيان أو لا وجود له في الأعيان . وها هنا صفة تستمر لازمة وصفة تستمر عارضة . وللأزمة مثل كونه الزوج بحيث لون له لصفته لون الفرد بخلاف ذلك . فإنه لا سبب لكون الزوج بهذه الصفة العارضة مثل لون الإنسان عالماً أو كاتباً . وهذا لا محالة يعرض له سبب من خارج ثم المدرك قد يكون منبعاً عن المدرك لازماً عنه أي لا يحتاج إلى سبب أو موجود من خارج حتى تدركه هذه الصفة . وقد لا يكون منبعاً عنه بل عارض فيه من سبب خارج وهذا العارض من خارج إما يعرض من دون أن يكون المدرك موجوداً أو يعرض بعد وجود المدرك .

[٣] فالإدراك يكون على ثلاثة أقسام . قسم يكون المدرك لازماً للمدرك ولا محالة يكون هذا الإدراك قبل وجود المدرك في الأعيان . وقسم يكون عارضاً للمدرك حاصلًا فيه عن سبب وهذا على قسمين . قسم يكون الإدراك قبل وجود المدرك في الأعيان وقسم يكون بعد وجوده في الأعيان . ولا محالة ينتهي الإدراك إلى مدرك يكون إدراكه على سبيل اللزوم ومن غير سبب وقبل وجود المدرك في الأعيان . فالقسم الأول صفة الإدراك الباري علمه غير مستفاد من شيء . والقسم الثاني صفة الإدراك نفوس الكواكب التي إدراكها من الباري وعارض فيها . والقسم الثالث صفة لإدراك الحيوانات التي هي تحت الفلك .

[٤] الشيء هو ما لا يقع فيه الشركة كزيد وهذه الشمس والكلبي هو ما يمكن أن يقع فيه الشركة كالإنسان . فإن زيد أو عمراً أو خالدًا يشتركون فيه وليس أحدهم بالأولى بأن يوصف بالإنسانية من الآخر المعنى الملازمة علمًا في هو كزيد والشمس . فإنه لا يصح أن يوجد إلا مادياً .

[٥] والمعنى البري عن المادة كالإله وهذا يسمى مفارقاً . والكليات أيضا لا تصح أن تكون في مادة . وعلى هذا يجب أن

يكون الإدراك على أقسامها . ومدرك المحسوسات يسمى حواس ونحو إدراكه يسمى إدراكاً حسيّاً . ومدرك الكلّيات البرئة عن المادة ويسمى عقلاً ونحو هذا الإدراك يسمى إدراكاً عقليّاً . والمشاهدة والاعتبار يدلنا على أن لنا ولأكثر الحيوانات الحواس الخمس . ولنا أيضاً الخيال ولنا أيضاً الوهم والحفظ ولنا أيضاً الرؤية والفكر . ولكن الرؤية والقوة المفكرة أشياء من باب الإدراك ويسميان بالفارسية هس . وقد يعدم الإنسان الرؤية والفكر ولا يعدم مع هذا شيئاً من الحواس أي أنه يبطل مع بطلانه عنها طلب المعقولات واستنباط المجهولات . فيظن أن بطلانه بطلان العقل وليس الأمر كذلك . فإن العقل شيء وطلبه الاستنباط المجهول شيء والآلة التي تستعملها فيه أي القوة المذكورة شيء . وأنت تعلم أن الجسم معنى واحد . وهذه الأفعال مختلفة فهي تصدر لا عن الجسم المطلق بل بسبب معنى زائد على الجسمية ويسمى ذلك طبيعة ونفساً وقوى . وقد عرفنا الحس والاعتبار أن لنا الإدراك والحسي والحبي والوهمي والعقلي . ولا يبعد أن يدرك أمراً محسوساً منفكاً من التخيل والتعقل وكذلك بالعكس .

[٦] وعرفنا بالبرهان أن النفوس الفلكية لها إدراك وهمي وعقلي ويشترك الإنسان والحيوانات ونفوس الكواكب في أن إدراكاتها مستفادة من الغير على القسمين المذكورين . وعرفنا بالبرهان أن علم الله تعالى هو عقلي على سبيل اللزوم لا على سبيل الاشتقاق في الغير . لكن الإدراك يختلف . فإن بعضها أصفي وبعضها أقل صفأً أي مشوب . وكذلك أنا نتخيل في حال اليقظة صورة غائبة وإن الحس الظاهر يمنع من أن يتخيلها في حال النوم واسطة الحواس الظاهر . وتختلف أيضاً من جهة أن بعضها هو إدراك الحقائق الأمور كنهها وبعضها هو إدراك الظواهر الأمور . وبحيث نعرف الأمور لا لحقائقها بل صفة من صفاتها . وكذلك كما نعرف الإنسان مثل شجرة التفاح بأنها هذه الشجرة لا من جهة أنه راها وهي ثمر التفاح على سبيل التكرار . ومثل من يعرف حجر المغناطيس أو يعرف النار بأنه يحرق جسماً راه يحرق . ثم لا يدري لم يثمر هذه الشجرة التفاح وشجرة أخرى لا يثمر مع الاشتراك في الشجرة . ولا يدري السبب أيضاً في أن المغناطيس سيجذب الحديد والسبب في أن النار تحرق مع اشتراكهما في الجسمية . وأكثر علومنا على هذا الوجه .

[٧] ودل البرهان على أن الله تعالى له العلم العقلي التام غير المشوب أعني أنه يعلم ما نعلم علماً عقلياً تاماً أي أنه يعلم كل أسباب من أسباب حتى ينتهي علمه إلى سبب الأسباب . وهو ذاته وحقيقته وكون علمه بكل شيء منبعثاً عن ذاته ومن ذاته غير مشوب لحس ولا خيال .

[٨] فإن الحس والخيال إنما يدركان على سبيل الاشتقاق من العبر والمشوب بالناقص أعني الحس والخيال بالقياس الى العقل لا يكون خالصاً ولا تاماً . والبرهان أيضاً دل على أن للفلك إدراكاً خيالياً وعقلياً ولكن العقلي منه غير تام أي لا يعرف كنه الأمور كما هي تعرف الأمور بصفاتها كما حكينا ومع هذا لا ينفك عن التخيل . فهو من هذه الجهة أنه مستفاد من الغير أيضاً ناقص خياله صاف لأنه معصوم من منازعة الحس وكونه مشوباً بالعقل زائداً في كماله والحس . والاعتبار دلنا على أن للحيوانات إدراكات حسية وخيالية وعلى أن لنا إدراكاً حسيّاً وخيالياً وعقلياً وعلى أن بعض الحيوانات أقوى منا حساً وأن معقولاتنا ناقصة لأننا ندركها بعد الاشتقاق بواسطة الحواس . ومع هذا لا ندرك كنه الأمور كما حكينا من أمر شجرة التفاح والنار والمغناطيس . وإنه لم يكن مفيداً الحواس كما يبرهن عليه فن العلوم . بل الإله هو المفيد المحسوس والمعقول وفي نسبة

الأمر الموجود إلى تلتقطه حواسنا منها نسبة الأشجار إلى ما يزرعه ونسبة النار إلى ما تحرقه . وكذلك نسبة المحسوسات والعلم إلى ما يلتقطه العقل . منها تلك النسبة بعينها تفيد الجمع أعني الزرع والنار والحادثة عند الأحراق والمحسوس أعني الأثر الحاصل في الحس . والعقل هو الإله قد أحكم جميع ذلك بالبرهان .

[٩] ثم تنبع كل إدراك راحة وألم . ويشبه أن يكون الإدراك هو الراحة أو الألم . فإدراك الملائم هو لذة وإدراك غير الملائم هو ألم . ولكن اللذات بتقارب الحسب شرف المدرك وحسنه . فإن الأشرف يكون الالتذاذ به أتم وعلى هذا يكون اللذة العقلية آلة الحس . وكذلك بتقارب لحسب ما يدرك منه . فإن ما يدرك كنه الشيء يكون التذاذ به أتم من التذاذ بما يدركه بصفة من صفاته . وهذا وإن كان عقلياً فإنه يكون أنقص من القسم الأول . وأيضا فإنما يكون الإدراك للملائم أصفى وأخلص من الشوب والحس والخيال كان التذاذ به أتم وأشرف هو أن يكون الأخرس تخليط الأشرف . فإن الحس شرف الخيال بشرف الحس . فقد ثبت أن اللذة العقلية أشرف من الحسية ولا يبعد أن يكون التذاذ النفس بالحسيات أثراً لأن الحسي في ذاته أقوى بل لأن نصيبها من العقلات أقل كما ذكرنا . وكان في اليقظة ملتذاً التذاذ حسياً مشوباً بالتذاذ خيالي وعقلي وفي حال النوم نلتذ التذاذ خيالياً مشوباً بالتذاذ خيالي وعقلي وفي حال الموت بقي علينا الإدراك العقلي فيلتذ التذاذ عقلياً برياً من باب الخيالي والحسي . فقد تبين ذلك وبقت القوة العقلية بالبراهين المنطقية . وهذه اللذة وإن كانت في ذاتها تكسب الخلوص من الشوب شرف فهو من جهة فله نصيبنا في الإدراك العقلي أنقص . وذلك أن الحياة العقلية التامة هي الأول فقط . ولما كانت نفوس الكوكب أضعف في الإدراك العقلي واللذة العقلية حين نقصت بها تحت آلاتها وأوامها ولما كانت المعقولات عنها أنقص من معقولات النفوس الفلكية وكانت خيالنا وأوامنا أنقص بأنها حيرت بالحواس .

[١٠] وما أرى أن يكون لنا فعل بعد عدم البدن وما ظنوه الآخرة أعني العقلية . فقد عرفت أن الحياة هي الإدراك والعقل للأنفس الإنسانية . وإن كان أشرف من الخلوص عن الشوب فهي أنقص من جهة قلة نصيبها في الإدراك العقلي وعدم الفعل . ونفوس الإنسان تدرك ذواتها إدراكاً قريباً من الإدراك العقلي . لا نحتاج في إدراكها لذواتها . وشعورها بها إلى البدن والشعور ألم الأشياء عند النفس . ألا نرى أنها تطلبه فتطلب من الإدراك لنفسها ويفعل ما يفعل لنفسها؟ أعني أن لنا نقيصاً كجرها بالإدراك والفعل . ويستكمل بهما و كل نفس يشعر بعد المفارقة بذاتها فهي يلتذ بهذا الإدراك لا محالة . فإذا كانت النفس مشتقة بالمعقولات الفاضلة كالإله والملائكة وسائر العلوم كان التذاذها وراحتها ونعيمها أفضل وأتم ولا محالة . يكون حيوتها أفضل من حياة النفس الساذجة . فيطلب كل ما يقدر عليه من النعم الآخرة وإن كان ذلك لمن وفق له .

والسلام على من اتبع الهدى ورحمة الله وبركاته والصلوة على سيدنا المرسلين محمد خاتم النبيين وعترته الأكرمين
الطاهرين وسلم تسليماً دائماً كبيراً

*In the name of God, the Merciful, the Compassionate,
Your help is marvellous!*

Al-Ḥakīm Bahmanyār said: “I gathered in this article what is taken from Peripatetic scholars on the issues of the soul and its powers. I [also] relied on the classified [according to their topics] books in constructing the proofs”.

[1] So I say that the living is an active percipient, and the living is not alive due to the life that precedes [it], but perhaps due to a precedent of its [the living’s] being so that action comes from it. Perception is something other than life, and it may not be preceded by something. If the living were alive due to the life preceding [it], the existence of the living would not have been possible, and it would have been stipulated to be limited to the claim without any proof.

[2] A perceiver inevitably has an attribute or does not possess an attribute that exists for him while being a perceiver. That attribute is a trace in the perceiver or in the soul and the perceiver. The perceptible in reality is a trace existent in the perceiver and by the accident existent from outside the trace. We say that this one that I know, i.e. an existent in time, has existence in concrete objects or does not exist in concrete objects. Here is an attribute that continues as something necessary and an attribute that continues as something accidental. An example of the necessary is being the husband so that he has a colour for his attribute of the colour of the individual other than him. There is no reason for the husband to be due to this accidental attribute, such as the colour of a person while being a scholar or a scribe. This inevitably occurs to him with a cause from outside, and then the perceived may be necessarily originated from the perceiver, that is, it does not need a cause or to exist from outside so you perceive this attribute. However, it may not be originating from it, but rather occurs to it from an external cause, and this accident from outside either occurs without the perceptible being existent, or it occurs after the existence of the perceptible.

[3] Perception is divided into three kinds. One kind where the perceptible is necessary for the perceiver, and inevitably this perception is before the existence of the perceptible in concrete objects. [Another] kind when it is accidental to the perceiver and realised in it through a cause, and this has two kinds. One kind is when perception is before the existence of the perceptible in concrete objects, and [another] kind is when it is after its existence in concrete objects. The perception inevitably ends in a perceiver, whose perception is by necessity and without a cause, and

before the existence of perceptible in concrete objects. The first kind is the attribute of the divine perception, whose knowledge is not acquired from anything. The second kind is the attribute of perception of the souls of the stars [planets] whose perception is from the Creator and accidental to them. The third kind is an attribute of the perception of the living beings that are under the sphere [of the moon].

[4] A thing is something in which there does not take place participation such as Zayd, and this sun, while universal is something in which can happen participation such as a human. For Zayd, ‘Umar, or Ḥālīd, they participate in it [humanity], and none of them is more superior to be described by [the concept of] humanity than the other necessary meaning while knowing that he is like Zayd and the sun. It can only exist materially.

[5] The meaning distant from matter is like a deity, and this is called a separate being. Universals also cannot be in matter. Therefore, perception must be divided [into different kinds]. The perception of the sensibles is called the senses, and this kind of perception is called sensible perception. The perception of universals distant from matter is called intellect, and this kind of perception is called intellectual perception. Observation and consideration indicate that we and most animals have five senses. We also have imagination, and also estimation, memory, deliberation, and thinking. However, deliberation and the faculty of thinking are things that belong to the category of perception, and they are called ‘huš’ [consciousness] in Persian. A person may lack deliberation and thinking, and yet none of the senses fails, i.e. it disappears with its disappearance while requiring intelligibles and deducing the unknown. It is supposed that its disappearance is the disappearance of the intellect, but this is not the case. The intellect is something, and its request for unknown deduction is something, and the tool that you use in it, i.e. the mentioned power, is [also] something. You know that the body has one meaning. These actions are different, as they do not originate from the absolute body, but because of a meaning that is additional to the corporeality, and it is called nature, soul, and faculties. We learned about senses and observed that we have a perception, such as sensory, affectionate, estimative, and intellectual. It is not impossible to perceive a sensible thing that is separate from imagination and intellection, as well as vice versa.

[6] We learned with the proof that heavenly souls have an estimative and intellectual perception, and humans, animals, and planetary souls participate in their perceptions by acquiring from the other based on the two mentioned categories. We [also] learned with the proof that the knowledge of Allah Almighty is intellectual by necessity, not by way of derivation in others. However, the

perception differs. Some of them are pure, and some are less pure, i.e. mixed. Likewise, we imagine in the state of wakefulness an absent image, and the external sense prevents us from imagining it in the state of sleep through the external senses. They also differ in that some of them are the perception of the realities of things as they are, and some of them are the perception of the external appearances of things. Therefore, we know things not because of their realities, but rather one of their attributes. Likewise, as we know a man, like an apple tree that is this tree, not because it is seen while it bears apples by way of repetition. The example of someone who knows the magnet stone or knows fire is that it burns a body while he sees it being burned. Then he does not know why this apple tree does not bear fruit, and another tree does not [as well] while participating in the [essence of] tree. He also does not know the cause of why the magnet will attract iron, and the cause of the fire that burns with their participation in the corporeality. Most of our knowledge is in this way.

[7] The evidence indicates that Allah Almighty has complete intellectual knowledge that is not mixed [with something else], i.e. He knows what we know with complete intellectual knowledge, that is, He knows all the causes of the causes until his knowledge ends with the Cause of the causes. He is His essence and reality, and the being of His knowledge is through everything emanating from Himself and out of Himself, He is not mixed with sense or imagination.

[8] For sense and imagination only perceive by way of derivation from transition and mixture with imperfection, i.e. sense and imagination in comparison with the intellect is neither pure nor complete. Moreover, the proof also indicates that astronomy has an imaginative and intellectual perception, but the intellectual one is incomplete, namely it does not know the essences of things as it knows things by their attributes, as we said [before], and yet it never ceases to imagine. In this respect, it also benefits from the other, weak in its pure imagination, because it is infallible from conflicting with the senses and its being is mixed with the intellect a lot in its perfection and sense. Consideration shows us that animals have sensory and imaginary perceptions, and that we have sensory, imaginary, and intellectual perceptions, and that some animals are more powerful than us in sense, and that our intelligibles are deficient because we perceive them after derivation through the senses. However, we do not perceive the essences of things, as we said in the case of the apple tree, the fire, and the magnet. It is not beneficial for the senses, as the art of science proves. However, God is beneficial for sensible and intelligible, and in relation to existing things to what our senses collect from them, such as the relation of trees to what they bear and the relation of fire to what it burns. The same is the relation between sensory objects and science to what the intellect collects. Among them is that relation itself that is beneficial for all, i.e. planting, fire, the incident at

burning, and the sensible, namely the impression that occurs in the senses. The intellect is God, who judged all of this with proof.

[9] Then comes all the perception of comfort and pain. It seems that the perception is comfort or pain. The perception of the favourable is pleasure and the perception of not favourable is pain. However, the pleasures are close to the honour of the perceiver and his goodness. The most honourable is the most complete pleasure of it, and according to this, intellectual pleasure is the instrument of the senses. The same is with closeness according to what is perceived from it. For that which perceives the essence of a thing, the pleasure of it is more complete than the pleasure of what it perceives from one of its attributes. And this, even if it were intellectual, would be less than the first kind [the divine perception]. Also, the perception of the favourable would be purer and truer than [a certain] mixture, senses, and imagination, the pleasure from it would be more complete and honourable than the lower with mixed honour. Sense is the honour of imagination with the honour of sense. It was proven that intellectual pleasure is more honourable than sensual, and it is not unlikely that the soul's pleasure of the sensual things is of no consequence, not because the sensual in itself is stronger, but rather because its share of the intelligible things is less, as we mentioned. In wakefulness, there is a sensual pleasure mixed with imaginary and intellectual pleasure, and in the state of sleep, we have an imaginary pleasure mixed with imaginary and intellectual pleasure, and in the state of death, we are left with intellectual perception, so the pleasure is intellectually distant from the category of imaginary and sensory. It was shown with logical proof that intellectual faculty remains. This pleasure, if in itself, acquires purity from mixture and honour, then, on the other hand, it has our share in intellectual perception decreased. This is because complete intellectual life is only the first. When the souls of the planets are weaker in intellectual perception and intellectual pleasure, then they decrease in their means and estimations, and when the intelligibles are less than them and the heavenly souls, then our imaginations and estimations decrease because they were affected by the senses.

[10] I do not think that we should have an action after the disappearance of a body, and what they think is the afterlife, i.e. the intellectual one. You know that life is perception and the intellect belongs to human souls. If it is more honourable than purifying from mixture, then it is less in terms of its lack of share in intellectual perception and absence of action. Human souls perceive themselves in a way that is close to intellectual perception. We do not need to perceive them with themselves. Its sense of itself is towards the body, and the feeling is the pain of things in the soul. Do we not see that it is seeking it, so it is seeking perception for itself and doing what it does for itself? I mean, we have a deficiency, such as its consequences, by perception and action. It becomes

complete with them, and every soul feels itself after the separation, so it inevitably enjoys this perception. If the soul is derived from virtuous intelligibles, such as God, angels, and all other sciences, then its pleasure, comfort, and bliss are better and more complete without any doubt. Its life is more virtuous than the life of a naive soul. It requires everything it can have from the afterlife bliss, even if that is for those who are in agreement with it.

Peace be upon those who follow the guidance, and may Allah's mercy, blessings, and benediction be upon our lord of messengers, Muḥammad, the seal of the prophets, and his honourable and pure progeny, and peace be upon him always and forever!

APPENDIX D. *Faṣl li-Abī l-Ḥasan Bahmanyār*

NOTE TO THE TEXT

The following is a concise writing that circulated independently and as a part of *al-Mubāḥaṭāt*. It exposes the doctrine of Pythagoreans regarding numbers being the principle of the world. The text entitled *A chapter by Abū l-Ḥasan Bahmanyār* aims to explain the doctrine of numbers and specify the nature of knowledge and assumption impartially without manifesting any sympathy or polemics. The Arabic text is transcribed from the Leiden 184 codex. It has not been translated before.

عند كثير من الأوائل أن الأعداد مبادئ للعالم . وأمثلة ما حمل عليه هذا القول أن يكون معناه كون الشيء واحداً غير كونه موجوداً أو إنساناً وهو في ذاته أقدم منها [منهما] . فالحيوان الواحد لم يحصل واحداً إلا وقد تقدمه معنى الوحدة الذي به صار واحداً . ولو لا [لاه] لم يصح وجوده . فيذن هو الأبسط الأشرف الأول وهذه صورة العقل . فالعقل يجب أن يكون الواحد من هذه الجهة والعلم دون ذلك في الرتبة لأنه بالعقل ومنه . فهو الاثنان ألفي [الذي] ينفرد إلى الواحد والعلم يؤول إلى العقل . ومعنى الظن عدد السطح والحس عدد المصمت أن السطح لكونه ذا ثلاث جهات . هو طبيعة الظن الذي هو أعم من العلم رتبة لأن العلم يتعلق بمعلوم معين . والظن ينجذب إلى الشيء ويقبضه والحس أعم من الظن فهو المصمت أن الجسم له أربع جهات .

الحمد لله حق حمده وصلواته على نبيه محمد وآله أجمعين

A chapter by Abū l-Ḥasan Bahmanyār

Many of the predecessors held that numbers are principles of the world. Its most typical example is a doctrine that states: a thing's being is one that is not its being as existent or a human while it precedes them in itself. One animal does not become one unless it has been preceded by the meaning of the oneness through which it becomes one. If [this is] not considered, then its existence is not possible. So it is the simplest, the most honourable, the primary, and this is the form of the intellect. For the intellect must be one from this perspective, and knowledge is less than that in position because it is with the intellect and from it. It is the two, which are separated into one, and knowledge is subjected to the intellect. The meaning of assumption is the number of the surface, and sense is the number of the solid. The surface's being has three sides. It is the nature of assumption to be more general in position than knowledge because knowledge is related to something specifically known. Assumption is attracted to a thing and embraces it, and sense is more general than assumption, it is solid, and the body has four sides.

Praise to Allah and blessings to His prophet Muḥammad and his entire family!

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