Two types of morphologically expressed non-verbal predication

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The morphological expression of non-verbal predication is a geographically widespread, although not very frequent, typological feature. This paper highlights the existence of two radically contrasting types of non-verbal predicative inflection. Construction A has already been described in the literature. It consists of attaching person-sensitive inflection markers to non-verbal predicates, possibly extending this treatment to adverbs and adverbial phrases (locational and temporal), pronouns and quantifiers. This type is well attested in Uralic, Turkic, and Paleosiberian, as well as in some Amazonian language families (most notably Chicham), but it has also been pointed out for some sparse languages of Oceania and Africa. Such non-verbal person inflections diachronically stem from incorporation of conjugated copula elements. Construction B, by contrast, is much rarer and is described here for the first time. It also consists of a dedicated morphological form of the non-verbal predicate (limited, however, to nouns and adjectives), but such form stands out as morphologically lighter than any other form to be found in nouns or adjectives in argument or attribute position. While the latter forms carry some kind of case marker, the noun/adjective predicate merely consists (or historically did) of the word's root. This type of construction can be found in the small Zamucoan family and still survives in some Tupí-Guaraní languages. Diachronic inspection of Semitic indicates, however, that this predicative strategy was possibly adopted in some ancient varieties, although at later stages it intertwined with the expression of referential specificity. The paper compares the two construction types, highlighting similarities and differences.

Keywords: non-verbal predication, nominal predication, predicate *vs* argument/attribute, copular clauses, typological linguistics, Amazonian languages, Arawak, Chicham, Chaco languages, Movima, Paleosiberian, Semitic, Tupí-Guaraní, Turkic, Uralic, Zamucoan

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1. Introduction

1.1 Setting the scene

Disregarding the qualifying function of appositions, nouns may appear in either predicate or argument role (including both core and peripheral arguments). Adjectives in turn may appear in either predicative or attributive role. In (1a–b), the non-italicized noun carries two different argument roles, subject and object, as opposed to the predicative position of the same noun in (1c). Similarly, (1d) features the predicative function of an adjective, as opposed to the attributive function expressed by the same adjective within an argument NP (1e) and a predicative NP (1f). Finally, (1g) features a locative expression in predicative position, showing that this syntactic function is not restricted to nouns and adjectives:

(1) a. *The* doctor *was here.*
b. *I saw the* doctor.
c. *Sam is* a doctor.
d. *Sam is* tall.
e. *The* tall *boy hit his head.*
f. *Jim is a* tall *boy.*
g. *The bike is* in the garden.

In traditional terminology, (1c–d) contain, respectively, a nominal and an adjectival predicate. Dixon (2010: 159–164) suggests, however, to use the term 'copula complement' in both cases. Presence of the copula, however, is not a necessary requirement. In some languages the copula can or must be left unexpressed in a tense-sensitive way (more rarely, in a person-sensitive way, as in Hungarian). In Russian and in some Semitic languages, the copula is omitted in present-referring contexts, while it is required in past- or future-referring clauses, as in (2). In such cases, one can speak of Ø-marked copula, rather than 'no copula' construction:

(2) Russian
a. *Ivan doktor.* [Ø-marked copula construction]
'Ivan is a/the doctor.'
b. *Ivan byl doktor.* [fully-marked copula construction]
'Ivan was a/the doctor.'

As for the nature of copula morphemes, besides true verbal copulae one can find other types, like pronominal copulae as in Nuer (Nilo-Saharan) or in various languages of Eastern Indonesian (Stassen 1997: 80–82). Other possible sources are "bleached forms of temporal or locational adverbs, erstwhile conjunctions ('and', 'with', 'from/after'), and converbal formations based on verbs such as 'be', 'say', or 'do'." (Stassen 1997: 85; see also Overall et al. 2018b).

The juxtaposition construction – as used in (2a) – is nevertheless widely attested. From Stassen's (1997: 63) sample, one gathers that this type of construction is "used almost uniformly" in Oceania (Papuan, Australian and Eastern Austronesian languages) and is "highly prominent" in Central and South America, Afro-Asiatic and Nilo-Saharan. According to Hengeveld (1992), however, absence of the copula morpheme may indicate two quite different expression formats. In what he calls 'zero-1 construction', the non-verbal predicate shows a verb-like behavior, allowing for essentially the same kind of person/number/tense marking as an intransitive verbal predicate. By contrast, in the 'zero-2 construction' the subject and the non-verbal predicate are simply juxtaposed, with no predicative marker whatsoever. In Hengeveld's classification, these two formats respectively correspond to a verbal *vs* non-verbal strategy. If neither strategy applies, a copula must be introduced.

Hence, one can distinguish three types of non-verbal predicative construction:

I. The frequently attested COPULA CONSTRUCTION.
II. The relatively common JUXTAPOSITION CONSTRUCTION (= Hengeveld's 'zero-2' format). This type is also called 'no copula' construction, but we prefer to avoid this denomination, since it might be confused with the term 'copula-less' that we use for purely descriptive purposes. Needless to say, the structure shown in (2a) is a kind of copula-less clause (type I); we call it 'Ø-marked copula' to underline that, in the case at stake, absence of the copula is contingent on language-specific morphosyntactic principles.
III. Finally, the comparatively much rarer PREDICATIVE INFLECTION CONSTRUCTION, which is the specific object of interest here.

As the present paper will show, however, type (III) does not simply coincide with what Hengeveld calls 'zero-1' format, i.e. non-verbal predicates with verb-like inflections, but includes a hitherto non-described format. In the remainder of this paper, these two subtypes of construction (III) will be called Construction A and B. What they have in common is the fact that the non-verbal predicate is marked by dedicated morphological exponents, contrasting with those used for non-verbal elements in non-predicative position. This situation can be observed in a number of languages, admittedly not many but geographically and typologically quite distinct. The two subtypes differ, however, with respect to the actual shape of the non-verbal predicative construction, and in fact have opposite properties:

– In CONSTRUCTION A (= Hengeveld's 'zero-1' format), the non-verbal predicative inflection may attach to any kind of non-verbal element, possibly including adverbs and adverbial expressions (locational and temporal), pronouns and quantifiers. The actual array of such elements is a language-specific parameter. The predicative exponents may be similar, or even identical, to those

found on verbs; thus, the non-verbal predicative forms carry more morphological material than the same lexical elements do in their non-predicative position.

– In CONSTRUCTION B, by contrast, the non-verbal predicative inflections are exclusively restricted to nouns and adjectives and radically differ from the inflections used for verbal predicates. Besides, the predicative form of nouns and adjectives is morphologically lighter as compared with their argument/attribute form.

Erzya Mordvin (Uralic) is a prototypical example of Construction A. In (3a), the non-verbal predicate is marked by a suffix identical to the one found on the verb in (3b). This suggests that an inflected copula has been turned into a non-verbal predicative inflection. Note, however, that inflectional identity among verbal and non-verbal elements is no crucial factor, as various examples in § 2 will show. The truly defining property is the presence of person-sensitive affixes; as for their shape, it mostly depends on the diachronic origin of the copula in the given language. Copulae that developed out of pronouns have, in general, a different series of inflection markers as compared with those found on verbs. Whatever the case, Example (3c) shows that, in the relevant languages, the predicative markers can also sit on non-verbal elements other than nouns and adjectives. Finally, and most importantly, whenever an independent copula is used, the non-verbal predicative inflection disappears from the copula complement (3d):

(3) Erzya Mordvin (Finno-Volgaic) (adapted from Turunen 2010: 11–15)

a. *ton komissar-**at***
2SG commissar-**2SG**
'You are a commissar.'

b. *ton kiš-**at?***
2SG dance-2**SG**
'Do you dance?'

c. *ton t'e-s-**at***
2SG this-INES-**2SG**
'You are here.'

d. *či-ś uľ-ńe-ś pek mańej*
day-DEF be-FREQ-1RTR.3SG very bright
'The day was very bright.'

The sharply diverging properties of Construction B can be illustrated with examples from Old Zamuco (Zamucoan; see § 3). In non-verbal predication, here exclusively concerning nouns and adjectives, the copula is absent and the predicative function is expressed by a dedicated form of the word (4a). Such predicative

form (here glossed PRED) contrasts with the one used in any kind of argument position (glossed ARG), such as subject (4a) or object (4b). Moreover, the non-verbal predicative exponents are radically different from those used on verbs. This is particularly evident in Old Zamuco, where verbal inflection is based on prefixes or (as with the plural persons) on discontinuous markers consisting of a prefix and a suffix (4c), whereas the predicative *vs* non-predicative contrast of nouns and adjectives is expressed by different suffixes (or lack thereof). Just as in Construction A, however, if a copula is used – as is the case for existential clauses (4d) – then the predicative form is banned and the noun, turned into a copula complement, carries the argument form:

(4) Old Zamuco (Zamucoan)

a. *Tupa-**de*** *uom=ipus* *ɲari,* *ʧ-iatʧĕre* *ɲok*
God-**M.SG.ARG** good=ELAT.M.SG.**PRED** COMP 3.RLS-punish 1PL
'God punishes us, because he is so good.' (Chomé 1958: 129)

b. *toria* *geda-**doe***
3-steal corn-M.PL.**ARG**
'He/she/they steal(s)/stole/will steal corn.' (Chomé 1958: 128)

c. *a-ihoʧa* (1SG), *da-hoʧa* (2SG), *ʧ-ihoʧa* (3), *a-ihoʧa-go* (1PL), *da-hoʧa-o* (2PL)
'to dig, to make a hole'

d. *ge-ti=us*
rain-M.SG.ARG=EXIST
'It rains.' (lit. 'there is rain') (Chomé 1958: 126)

Thus, while both construction types exploit some kind of additive mechanism, they show sharply opposite tendencies: Construction A adds copula-like inflections to generate any kind of NON-VERBAL PREDICATE, whereas Construction B adds morphological affixes to create the NON-PREDICATIVE FORM of nouns and adjectives (as arguments or attributes, respectively). This explains the diverging nature of the added affixes: typical VERBAL CATEGORIES expressing person and, in some languages, tense (Construction A) *vs* CASE MARKERS expressing an argument/attribute function (Construction B). In summary: Construction A marks the NON-VERBAL PREDICATE, whatever its lexical nature, while Construction B marks the NON-PREDICATIVE occorrence of NOUNS and ADJECTIVES. Hence, as compared with its non-predicative counterparts, the non-verbal predicate is morphologically RICHER in Construction A *vs* morphologically LIGHTER in Construction B. However, both construction types converge in the incompatibility of the non-verbal predicative inflection with any kind of copula element: when the latter is present, the former is absent, in a strictly complementary distribution.

The following table sums up the prototypically contrasting features of the two constructions:

Table 1. Contrasting features of constructions A and B

	CONSTRUCTION A	CONSTRUCTION B
Lexical classes involved	nouns, adjectives, adverbs (pronouns, quantifiers)	nouns and adjectives
Morphological marking on	non-verbal predicates	non-predicative elements in argument/attribute position
Nature of morphological exponents	person-sensitive affixes	case-like affixes

1.2 Semantic classification of non-verbal predication

An important parameter of non-verbal predication is REFERENTIAL SPECIFICITY. Languages exploit various strategies to express the value [±specific]: articles (*a*/*the doctor*), demonstratives (e.g. *that doctor*), and dedicated morphological devices, such as the 'indeterminate' inflection of Zamucoan (§ 3.4) or the Turkish accusative-case suffix for preverbal direct objects (Heusinger 2002).[1] For languages with articles, their very absence in so-called 'bare' NPs is a further grammatical option:

(5) a. *Doctors are necessary.* [kind-level designation]
b. *The doctor was in the office.* [referential specificity]
c. *A doctor was in the office.* [preferred reading: non-specific]

As the following examples from Heusinger (2002) illustrate, however, there is a non-deterministic relationship between the nature of the article (definite *vs* indefinite) and the specificity value of the referent:

1. Karitiana (Tupian) is a peculiar case for, besides lacking articles, it does not have demonstratives. Müller & Sanchez-Mendes (2016) show that they are replaced by implicit relative clauses based on deictic elements, as in:

[*Ony sojxaty aka kyn*] *Ø-naka-pon-Ø* *João*
DEICTIC boar be at 3-DECL-shoot-NFUT João
'João shot at that/those boar(s)' [lit.: J. shot at the boar(s) be(ing) there]

(6) a. *John is looking for* a *pretty girl …*
… whoever he will meet, and will take her to the movies. [non-specific]
… namely for Mary. [specific]
b. *John is looking for* the *dean …*
… whoever it might be. [non-specific]
… namely for Smith, who happens to be the dean. [specific]

According to Heusinger (2002:245), "definiteness expresses the pragmatic property of familiarity, while specificity mirrors a more finely grained referential structure of the items used in the discourse". Of relevance to this topic is also Coppock & Beaver's (2015) discussion, contrasting "definite/definiteness" *vs* "determinate/determinacy". These are often considered to be equivalent options in grammatical descriptions, with one or the other prevailing in different traditions. We understand that there may be subtle theoretical reasons – not to speak of individual idiosyncrasies – behind any terminological choice; but since, in matters of terminology, one cannot make everybody happy, we opted for an operative solution. Whenever possible, we will make use of the more neuter, and semantically precise, terms "specific/non-specific". When referring to concrete grammatical devices, however, we will employ the terms "definite/indefinite" or "determinate/indeterminate" according to what seems to be the prevailing usage in the particular grammatical tradition, taking for granted the just noted imperfect correspondence between the semantic value [±specific] and the grammatical terms "(in)definite/(in)determinate".

Referential specificity is at stake in a major distinction concerning the semantics of non-verbal predication:

(7) a. *Sam is the organist of the cathedral.* [IDENTITY PREDICATE]
b. *Sam is (a) cathedral organist.* [PROPER-INCLUSION PREDICATE]

The terminology proposed here combines suggestions by Stassen (1997) and Payne (1997).[2] Sentence (7a) indicates a perfect coincidence between the individ-

2. See also Dixon (2010:163ff) and Overall et al. (2018b). With respect to proper-inclusion, Stassen (1997:13) distinguishes between 'property or quality' and 'class membership' predication, relating to adjectives and nouns, respectively. This is consistent with his approach, aiming at showing the different orientation of adjectival predication, verb-like *vs* noun-like depending on the language. For the purpose of this paper, a single label (proper-inclusion) suffices, although we will show that adjectives and nouns can indeed behave differently. As for identity predication, the literature offers a wide range of terminological options. Stassen (1997:101–103) distinguishes two types of identity: 'presentational' (*That's my house*) and 'equational' (*The Morning Star is the Evening Star*), but he also adds further qualifications, such as 'specificational' (*Warsaw is the capital of Poland*). For Roy (2013:7), a 'specificational' sentence would rather be like *The problem is his tie*, while she dubs as 'identity' and 'identificational' what Stassen calls,

ual mentioned and the person that fulfills the specified role (cathedral organist) in the given situation. In practice, an identity predication consists in establishing a bidirectional correspondence between two (sets of) referents. In (7b), by contrast, there is intensional inclusion of the individual referred to into the (acontextual) class of cathedral organists. Thus, the latter case converges with adjectival predication, which asserts a property. For instance, (1d) includes Sam into the acontextual, non-referential and universal class of tall entities, inferentially to be read as humans. In fact, while nouns are available for either identity or proper-inclusion predication, predicative adjectives are only available for the latter.[3] Conversely, inherently referential denotations, such as pronouns, demonstratives and proper names, can only be used for identity predication. Indeed, in (8) there is no universally shared idea of what the hypothetical class "Spiderman77" (= a web-nickname) and "Mark" may refer to, except for the idiosyncratic view that anybody can have, based on acquaintance with specific individuals.

(8) a. *Marco è lui / quello là / Spiderman77.*
'Mark is that one / Spiderman77'
b. *Lui / quello là / Spiderman77 è Marco.*
'He / that one / Spiderman77 is Mark'

According to Stassen (1997) and Roy (2013), 'identity statements' should not be considered predicational: "a change in the organization of knowledge is what distinguishes identity statements from predicational statements" (Stassen 1997: 102). Indeed, "identity statements can be shown to have a number of idiosyncratic formal properties" (*ibid.*: 13), one of them being referential symmetry, which in most cases allows inversion of subject and copula complement, as illustrated in (8).[4]

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respectively, 'equational' and 'presentational'. For our purpose, the single denomination 'identity' will suffice, although finer distinctions are perfectly justified. For instance, while all these sentences allow, possibly with marginal adjustments, free inversion of the two NPs (with the concomitant effect of inverting the roles of subject and copula complement), in Roy's 'specificational' type there is no inversion of the syntactic roles whatever the order of the two NPs. This has also been shown by Moro (1997; see also Mikkelsen 2005). It is worth noting that in the generative syntax literature the various kinds of copular sentences have been reduced to just two types (canonical and inverse) which, according to Moro (2005), can be unified into a single one.

3. Attributive predication, by contrast, is interceptive, rather than inclusive. For instance, (1f) asserts that the set of boys to which Jim belongs intersects the set of tall entities: hence, (1f) is about the set of boys that are tall.

4. On reversability, see again fn. 2. Example (8) is in Italian because English does not allow a structure such as **Mark is he/him.* Therefore, we provide a single translation for *Marco è lui / quello là.*

We do agree that identity clauses differ from proper-inclusion clauses. As Roy (2013:11) observes, the copula complement of identity predications is fully referential, as opposed to the intensional copula complement of proper-inclusion predications. Moreover, while in the latter type of predication the copula may be regarded as the semantically empty realization of person and tense-aspect features, the identity copula is a true lexical verb with possible synonyms (*correspond, coincide, be the same as* …). As Stassen (1997:104–105) points out, there are even languages, admittedly rare, that make this distinction explicit (e.g., the copulae *pen* and *khi:* of Thai).

This notwithstanding, we share the view of those who consider identity clauses (despite all the mentioned differences) a peculiar kind of predication, rather than non-predicational structures. As this paper will show, this is indeed a relevant typological parameter of non-verbal predication. The following example further highlights the relevance of the [±specific] feature in the identity *vs* proper-inclusion divide. In one possible reading of (9), the predicate referentially identifies Sam with one of the individuals belonging to the contextual set of cathedral organists:

(9) *Sam is an organist of the cathedral.*

This bears resemblance with the situation in (7a), since the referential set is in both cases contextually delimited. The difference is that in (7a) there is a perfectly symmetrical relation of identity between Sam and the definite description referring to him, whereas in (9) Sam is just one of the individuals that can satisfy the description. In the reading intended here, the indefinite article in (8) has cardinality value and might be replaced by a numeral (*one of the organists*). This confirms the lack of one-to-one relationship between the type of article and the specificity value.

Finally, we need to mention an additional type of non-verbal predication, consisting in EXISTENTIAL predicates (Creissels *forthcoming*), such as: *In the city park, there's a fountain*. Many languages have special existential constructions, different from the ones used for proper-inclusion and identity predication, and often exploit dedicated predicates. As § 4 will show, however, this is not always the case. Hence, existential clauses must be included in a survey of non-verbal predication. It is also important to consider the distinction between existential clauses, such as the just quoted example, and LOCATIONAL clauses, such as (1g): the former contain non-specific referents, as opposed to the latter. Languages may or may not formally distinguish these two types of predication, which are also frequently combined with possessive constructions, as again § 4 will show.

1.3 Structure of this paper

We start the analysis with languages presenting Construction A (§ 2), which mark non-verbal predicates with affixes inflecting for person and, in some cases, also tense and mood. The examples are mostly drawn from Uralic, Turkic, Paleosiberian, and from some South American language families, although languages from Oceania and Africa will also be mentioned.

In the subsequent three sections, we turn to languages presenting Construction B. Since this predicative strategy has never before been brought to the attention of typological linguists, we devote some more space to it. The Zamucoan languages are dealt with in § 3; next, we show that this feature is also detectable in some Tupi-Guaraní languages (§ 4), although they differ from Zamucoan in the treatment of existential and identity predications. Construction B was possibly also used at old stages of Semitic and partially survives in some modern varieties, while in others it gave rise to a subtle interplay with the category of referential specificity (§ 5).

In § 6 we show that within one and the same language family there may be 'deviant' cases, namely languages that present a type of non-verbal predicative construction not shared by the majority of the other members of the same family. Finally, § 7 offers a summarizing discussion.

Some of the major sections include subsections describing additional details, mainly diachronic (§ 3.4, § 4.4, § 5.3). Readers who are merely interested in the main thread of the analysis may skip such addenda.

2. Construction A

The languages addressed in this section display the type of non-verbal predicative inflection called Construction A in § 1.1. This presupposes a copula-less clause and has the following properties: the predicative inflection is not limited to nouns and adjectives – although in some languages it may have a restricted application – and resembles (or even coincides with) the verb inflection, although it usually does not preserve all the TAM values available in the given language. Since the inflectional exponents at stake are added to any kind of non-verbal predicate, these lexical elements exhibit a morphologically richer form as compared with their own usage in argument position.

The examples will be taken from a somehow disparate array of languages, although most of them are distributed in geographically contiguous territories, either in the north-eastern part of the Eurasiatic continent or in the Amazonian area, so that the widespread presence of Construction A in these territories

appears to be an areal feature.[5] Nevertheless, despite the fact that most of these languages belong to a specific set of families (Uralic, Turkic, Paleosiberian, Chicham and other Amazonian languages), we will not organize the presentation according to a language classification criterion, but rather according to the decreasing degree of Construction A prototipicality. Indeed, as shown in § 6, one and the same language family may show diverging strategies of non-verbal predicative inflection.

Considering that Construction A – corresponding to Hengeveld's (1992) 'zero-1' format (§ 1.1) – has already been brought to the typologists' attention, in the subsections to follow we will merely provide an essential presentation of the data of each language. The limited purpose of this section is to show the wide geographical distribution of Construction A, as well as its degree of variability.

As a general comment, one should consider that in order to qualify as Construction A, the person-sensitive inflections simply need to attach to the non-verbal predicate, irrespective of their degree of integration. In some of the examples presented below, the person inflections look more like clitics than like true affixes; but, obviously, all such affixes must have had a previous cliticization phase.

2.1 Prototypical construction A in Mordvin (Finno-Volgaic)

The data in this section refer to Erzya Mordvin, apart from a few comments on the Moksha variety (Zaicz 1998; Turunen 2009; see also Aasmae 2014:19–20). Erzya Mordvin exploits all main types of non-verbal predication strategies itemized in § 1.1: (I) copula construction, (II) juxtaposition construction, and (III) predicative inflection construction. The third type, in keeping with Construction A, allows inflection of any kind of non-verbal predicate, as illustrated in (10):

(10) Erzya Mordvin (Finno-Volgaic) (Turunen 2010:11)

a. *ton komissar-**at*** [noun]
you commissar-**2SG**
'You are a commissar.'

b. *ton śe-d'e od-**at*** [adjective]
you it-ABL young-**2SG**
'You are young.'

5. In addition to the languages discussed below, one can find further evidence relative to North Asia in Stassen (1997:285–292), concerning the Chukotko-Kamchatkan (Chukchi) and Altaic families (Buryat, Nanaj, Even, Evenki). Since, however, Construction A has been extensively described in the literature, we feel no need to exhaustively itemize the languages that implement this non-verbal predicative strategy.

c. *mon t'e-s-**an*** [locative expression]
I this-INES-**1SG**
'I am here.'

The non-verbal predicates in (10) inflect for person, number and tense, just like verb predicates. Note that when no specification is provided in the glosses, present-time reference is the default reading. There is however a substantial difference: verb predicates always inflect, whereas non-verbal predicates need not. If no inflection appears, then either solution (I) or (II) is used. These three possibilities are illustrated in (11):

(11) Erzya Mordvin (Finno-Volgaic) (Turunen 2010: 12–13)
a. *či-ś uľ-ńe-ś pek mańej di pśi* (I: copula construction)
day-DEF be-FREQ-1RTR.3SG very bright and hot
'The day was very bright and hot.'
b. *ton eŕźa-ń ťejťeŕ-ka?* (II: juxtaposition construction)
you Erzya-GEN girl-DIM
'Are you an Erzya girl.'
c. *mon čumo-vtom-**an!*** (III: predicative inflection construction)
I guilty-CAR-**1SG**
'I am innocent.'

As Turunen (2009: 261–263) writes: "The Erzya non-verbal conjugational paradigms of the present and second past tenses are identical to verbal conjugational paradigms, the only difference being in the third person singular of the present tense", which has no overt marker. In past-referring contexts, however, the non-verbal conjugation undergoes a restriction: while the verb paradigm includes two Past tenses, called First and Second, only the latter can be used in non-verbal predications, as in (12). Despite this, the non-verbal predicative inflection of Erzya Mordvin appears to be definitely verb-like:

(12) Erzya Mordvin (Finnovolgaic) (Zaicz 1998: 198)
*kudo-so-nzo-l^{j}-**in**^{j}*
house-INES-3SG.POSS-2NDPST-**1SG**
'I was in his/her house.'

The Erzya Mordvin non-verbal conjugation cannot be used in existential clauses (Turunen 2009: 253), where the copula is normally required. In identity clauses (called 'equational' by Turunen), predicative suffixes do occur, but less often than in proper-inclusion predication (see § 1.2). Turunen (2009) points out two further modulating factors: lexical class and genre. With respect to the former, the predicative markers are more frequently used with adjectives and locational phrases than with predicative nouns. This abides by Stassen's 'time-stability' scale

(nouns > adjectives > locationals > verbs; *ibid.*, p. 294): the predicative suffix construction is obligatory with verbs, regular with locationals and adjectives, optional with nouns. As for genre, there is a stronger tendency to use the predicative suffixes in written Standard Erzya than in the spoken language (including questionnaire elicitations) or in folklore. In particular, the non-verbal past tense markers are almost exclusively confined to formal written language.

Juxtaposition, i.e. construction (II), can only be used in the present tense; in future-referring contexts, or if the mood is other than indicative, construction (I), with the copula *uĺ(ń)ems*, is mandatory (Turunen 2009: 271). Since, however, in the present tense the copula normally conveys future meaning, there is complementary distribution between the copula construction (I), and the juxtaposition construction (II). Specifically, construction (II) cannot be used with the past tense, while construction (I) cannot be used with the present tense, with the exception of folklore texts and lyrics. Hence, the predicative suffix construction (III) offers an alternative to (II) in the present tense, and to (I) in the past tense. Turunen (2009: 309–310) adds however that the juxtaposition construction in present-referring contexts is a spreading pattern, most likely under pressure from Russian. No such influence has been observed in Moksha Mordvin, where the predicative suffix construction is the regular pattern.

Besides Mordvin, Construction A can be observed in Mari – another Finno-Volgaic language – limited however to predicative adjectives. The following examples are from Kangasmaa-Minn (1998: 234): *sar* / *joskar saska* 'yellow / red flower(s)', *saska sare* / *joskar**ge*** '(the) flowers are yellow / red'. Although there is no trace of person inflection, the morphologically richer form of the predicative adjectives suggests that this is a non-prototypical version of type A.

2.2 Prototypical construction A in Turkic

Turkic languages provide another prototypical example of non-verbal predicative inflection of type A, since they extend the predicative suffixes to adverbial phrases: e.g. Tatar *sin awïl-dan-**sïŋ*** 'you are from the village', *min Kazan-nan-**mïn***, 'I am from Kazan'; Bashkir *min Qazan-nan-**mïn*** 'I am from Kazan'. Optionally, the personal pronouns can be dropped, leaving the entire referential burden upon the predicative marker. The alternative consists in dropping the predicative inflection, as in Tatar *min awïl-dan* 'I am from the village', thus implementing the juxtaposition construction (Wintschalek 1993: 88–9; Berta 1998: 298).

Johanson (1998: 41) reports that most if not all Turkic languages – such as Turkish, Bashkir, Chuvash, Kazach, Khakas, Kirghiz – present "first- and second-person markers on nominal predicates [… which] are unaccentable copula elements developed from personal pronouns" (where 'nominal' should be intended

as referring to nouns and adjectives). Wintschalek (1993: 86) confirms that, although these suffixes are cliticized to the preceding word, they do not attract the stress (as normally required in these final-stress languages), hence they retain some degree of autonomy; nevertheless, they undergo vowel harmony constraints, hence definitely show suffix-like behavior.

Tatar and Bashkir are among the most conspicuous examples of Construction A non-verbal predication. The predicative inflection is usually employed, although it is not strictly obligatory; however, number agreement with plural subjects is in most cases absent (Berta 1998: 298). Wintschalek (1993: 84–5) cites the following Tatar examples: *yazučï-**mïn*** 'I am (a) writer', *yazučï-**sï*** 'you are (a) writer', *yazučï-lar-**sïz*** 'you are writers', *šat-**bïz*** 'we are happy'. The third person affix can be dispensed with, as in *yazučï-**dïr*** ~ *yazučï* 'he is a writer', *alar student-lar-**dïr*** ~ *alar student-lar* 'they are students'. If the predicative noun is endowed with a possessive suffix, then "wird das Hilfsverb, oder besser die Predi kativendung an das Possessivsuffix suffigiert" (p. 85): *student-ïm-**sï*** 'you are my student', *bez yazučï-lar-ïgïz-**bïz*** 'we are your.PL writers'. As the reader might have noted, Wintschalek oscillates, in his denomination of such affixes, between 'predicative ending' and 'auxiliary'; this is clear indication that he assumes a copula-like nature for these inflections, which explains their repulsion for the presence of an independent copula. Bashkir examples are provided by Berta (1998: 298), who significantly points out that non-verbal predicates "can occur with copula suffixes", thus confirming the widely accepted diachronic origin of such inflections: *min uqïwsï-**mïn*** 'I am (a) pupil', *min yaďïwsï-**mïn*** 'I am (a) writer'.

Corresponding Turkish examples are, e.g., *ben zengin-**im*** 'I am rich', *biz ihtiyar-**ïz*** 'we are old', *ben yolcu-y-**um*** 'I am (a) traveller', *biz yolcu-y-**uz*** 'we are travellers', *onlar tütüncü-**dür**-ler* 'they are tabac sellers'. The last example includes the *-ler/lar-* plural affix, which can however be dispensed with, capitalizing on the plural person endings which independently express this referential value: e.g., Tatar *yazučï-lar-**sïz*** 'you.PL are writers' (with the plural marker *-lar-*) *vs* Turkish *bez zengin-**iz*** 'we are rich' (Wintschalek 1993: 86).

Past-referring contexts mostly deflect from Construction A, in that the inflected forms are built on the *i-* root of a defective copula verb: Turkish *tüccar idim / idi / idiler* 'I was / s/he was / they were salesman/salesmen'. However, this auxiliary can also be suffixed in a slightly reduced form, as in *tüccar-**dïn*** 'you were (a) salesman' (Wintschalek 1993: 89–91). In Chuvash it is indeed reduced to the invariable suffix *-ccĕ*: *epĕ syvă-**ccĕ*** 'I was healthy', *esĕ syvă-**ccĕ*** 'you were healthy'. Alternatively, as noted by Johanson (1998: 41) and Berta (1998: 298), one can express past-reference by means of the auxiliary *bulu* 'be': *bik tämle buldï* 'it was very tasty'.

2.3 Construction A in Paleosiberian

Construction A is also attested in some Paleosiberian languages. Although the internal consistency of this family is disputed, its geographical contiguity with Uralic and Turkic cannot go unnoticed.

In Ket, some case forms of the noun (locative, but also adessive and abessive) may be used predicatively with the help of person suffixes in what can be understood as adverbial phrases (Georg 2007):

(13) Ket (Paleosiberian isolate; Georg 2007: 118)

a. *íkus-ka-**du***
house-LOC-**3.M.SG**
'He is in the house.'

b. *íkus-ka-**da***
house-LOC-**3.F.SG**
'She is in the house.'

c. *ād ób-daŋta-**di***
I father-AD-**1SG**
'I am with my father.'

d. *ūk qím-an-**ku***
you wife-AB-**2SG**
'You are a bachelor.' (= without a wife)

Nouns in the nominative may instead be used predicatively without any copula in present-referring contexts, e.g. *bū keʔd* 'he (is a) human being' (Georg 2007: 136), and this applies to all kinds of predication: proper inclusion, identity, locational (pp. 312–313). The juxtaposition strategy is also used in Nivkh, also known as Gilyak (Mattissen 2003: 30; Nedjalkov & Otaina 2013). This does not differ from the situation of Russian (see Example (2) in § 1.1). However, such construction is not allowed with adjectives, which require the nominalization suffix *-s*, as in *bū áqta-s* 'he (is a/the) good one', which in turn, and crucially for the present topic, can be freely replaced by the person suffixes. As Georg writes, there is a tendency to use such suffixes for transitory qualities, whereas the nominalization strategy is preferred when a more time-stable quality is predicated (pp. 139–40):

(14) Ket (Paleosiberian isolate; Georg 2007: 118)

a. *túde tīb sél-**du***
this dog bad-**3SG.PRS**
'That dog is (being) bad.'

b. *túde tīb sēl-**s***
this dog bad-**NMLZ**
'That dog is (a) bad (one).'

The predicatively suffixed adjectives can have both present- and past-reference, depending on the context. This solution, however, is not allowed with the past copula *òbɨlda*, which dictates the nominalization strategy (pp. 139–40), thus confirming the division of labor between any kind of non-verbal predicative inflection and the copula. Significantly, Georg (2007: 172, 316–317) points out that not only adjectives, but also numerals and various sorts of pronouns can take the predicative affixes. This definitely qualifies Ket as a Construction A language.

Note that Stassen (1997) includes this language among those in which "agreement marking on predicative verbs consists of a set of affixes which is formally completely distinct from the set of agreement items for adjectives and nouns" (p. 39). He thus concludes that "the adjectival and nominal encoding in these languages are to be rated as non-verbal [to be intended here as: non-verb-like], despite the fact that they clearly involve some form of cross-reference to the person of the subject" (p. 41):

(15) Ket(Paleosiberian isolate; Stassen 1997: 40 [from Castrén 1858: 39, 80, 100, 127])
   a. *ul* *pal-**a***
      water warm-**3SG.F.PRS**
      'The water is warm.'
   b. *fèmba-**di***
      Tungus-**1S.NPST**
      'I am a Tungus.'
   c. ***dy**-fen*
      1S.PRS-stand
      'I am standing.'
   d. ***đâ**-ga*
      3.M.SG.PRS-leave
      'He is leaving.'

Actually, Stassen adds that a small group of Ket verbs share their affix set with non-verbal predicates, thus reducing the verb *vs* non-verb constrast. For the purpose of the present analysis, at any rate, the fact that verbs and non-verbal predicates host a different set of person markers is no discriminating factor: the crucially defining feature of Construction A is that the non-verbal predicate inflects for person.

2.4 Construction A in Amazonia and beyond

A recently published collection (Overall et al. 2018a) opens an interesting window on the (broadly conceived) Amazonian territory, where several language families overlap. As in the cases so far considered, more than one non-verbal predicative

strategy frequently coexist within one and the same language. Some languages, like the Cariban ones, alternate the juxtaposition and the copula construction (Guildea 2018), with the former one more likely to indicate a permanent condition, as in the Arawak language Pareci (Overall et al. 2018b: 24–25).

Prototypical cases of Construction A can however be found in some Amazonian families, first and foremost Chicham (a.k.a. Jivaroan), which seems to offer a fairly consistent behavior (see the chapter on Aguaruna by Overall 2018, and the abridged descriptions of Sikuani, Awajún and Wampis by Overall et al. 2018b). Although the fine details differ from language to language – e.g. with respect to which persons, or which sets thereof, have an explicit exponent – the similarities are sufficiently robust to allow us to illustrate the whole situation with data from the Wampis grammar by Peña (2015). In this language, the non-verbal predicates are marked by person affixes similar to those used for verbal predicates, despite restrictions on the available TAM values. This limitation seems to be the case for most of the languages cited in § 2, but this does not prevent their assignment to Construction A; conversely, in § 2.5 we will show that the mere existence of non-verbal constituents carrying TAM markers is no guarantee for the implementation of this construction type.

As Peña (2015: 730) writes: "[…] non-verbal predicates in Wampis may occur with a copula *a* or copula clitics *=aita* ~ *=ita* (for speech act participants) and *=aiti* ~ *=iti* (for third person)". Such clitic copulae inflect for person (16); besides, and most importantly for our purpose, these affixes are in complementary distribution with the copula *a* (also used for existential predication; p. 727–728), since they "never occur in subordinated clauses" (p. 730) and "occur only in present tense declarative, polar/content interrogative and exclamative" (p. 739), where the copula *a* is excluded. There is also a past tense clitic copula *=ia*, which is rarely employed nowadays but used to fill the paradigm gap for past-referring contexts. Note that the identity predications in (16d–e) exhibit the same morphosyntactic strategy as the proper-inclusion predications in (16a–c). According to Overall et al. (2018b: 25–27), the same occurs in all South American languages dealt with in Overall et al. (2018a), and many of them also have the same construction for locational, existential and possessive predication, although some languages may have dedicated existential verbs:

(16) Wampis (Chicham; Peña 2015: 741, 754)

a. *ɛ́ɛʃmaŋku=**it-mi***
man=**COP-2SG.SBJ+DECL**
'You are a man.'

b. *najóow=**ɛɛt-hi***
tall=**COP-1PL.SBJ+DECL**
'We are tall.'

c. *mijá pɨ̂ŋkɨrɛ=**ɨtʲa-Ø** !*
INTS good=**COP.EXC-3SG**
'How beautiful [it] is!'

d. *ámɨ jaʈ̂su-rú=**ɨt-mɨ***
2SG brother-1SG=**COP-2SG.SBJ+DECL**
'You are my brother.'

e. *jɛ́ɛ=**ɨʲa-m***
who=**COP-2SG.SBJ**
'Who are you?'

Secoya (Tucanoan) is an analogous case, with person suffixes (similar to those used for verbs) attaching to the copula clitic *-a* affixed to nouns. Unless a suffix for past habituality is added, these forms only have present-time reference; in order to convey other TAM values, one must use the independent verb *paʔi* 'LOCATIVE be, exist' (Schwarz 2018).

Further examples of Construction A can be found in Nivaclé (Mataguayan), spoken in the Gran Chaco area. Quoting form Fabre (2016:167, our translation): "In predicative function, i.e. deprived of its determiner, any [Nivaclé] noun can carry verbal morphology, which minimally includes a person prefix of the first conjugation. Since the third person prefix is zero, it is very frequent, though not compulsory, to add the third person suffix *-e* followed by the instrumental applicative *-sh*". The instrumental is at any rate obligatory in possessive predication:

(17) Nivacle (Mataguayan; Fabre 2016:168)
*lh-cles-**elh-yi-sh***
3POSS-child-**PL.SAP-1-INS**
'We (exclusive) are his children'

Mojeño Trinitario (Arawak) has a somehow similar behavior. Both verbal and non-verbal predicates have person affixes, except that the former carry prefixes and the latter suffixes, thus allowing possessive markers to occupy the noun-initial position. The following examples show that any word class can take up the predicative role:

(18) Mojeño Trinitario (Arawak; Rose 2018:60, 63, 77)

a. *nuti p-chicha-**nu***
1SG 2SG-child-1**SG**
'I am your child.'

b. *ene-**nu***
there-1**SG**
'There I am.'

c. *mopo-na-**wokow(i)=ri'i=(i)ni***
three-CLF.HUM-**1PL=IPFV=PST**
'We were three.'

A similar case is Movima, a Bolivian unclassified language that has no copula whatsoever. Despite its very weak verb / noun distinction, one can tell the difference in dependent clauses, where verbs, predicative nouns, and the remaining non-verbal predicates are marked by three different morphological processes. The predicative function is fulfilled by whatever syntactic component occupies the first position in the clause. The person suffixes of non-verbal predicates are similar to those found on verbs (19). Note that in (19b) the adverb predicate takes the affix *-niwa* (glossed as 'verbalizer/nominalizer') because it is in a subordinate clause:

(19) Movima (unclassified; Haude 2018: 222, 224)
a. *tolkosya-**'ne***
girl-**3.F**
'She is a girl.'
b. *n-os ney-niwa-**'ne***
OBL-ART.NPST here-VBLZ.NMLZ-**3.F**
'When she was here' (lit. at her being here).

Outside Eurasia and Amazonia, Stassen (2013) points out Kapampangan (Philippines) and Korku (Munda) as languages that use the same person encoding for both verbal and non-verbal predicates. In previous work (Stassen 1997: 40), the same author mentioned instances of what we call Construction A in Beja, where the predicate suffixes strongly resemble deictic pronouns (20a–b), as opposed to verb prefixes (20c). The same occurs in some dialects of Nubian, a Sudanic language areally related to Beja:

(20) Beja
(Afro-Asiatic, Cushitic; Reinisch 1893, vol.I: 30, 196 and Tucker & Bryan 1966: 543)
a. *batúk wún-tu-**wi***
2.F.SG big-F-**2.F.SG**
'You (F) are big.'
b. *barú:k haď á:-**bwa***
2.M.SG sheik-**2.M.SG**
'You (M) are a sheik.'
c. ***e**-n-fő́r*
3.M.SG-IPFV-flee
'He flees.'

The situation depicted in (20) is reminiscent of that of Nivaclé (17), Mojeño Trinitario (18) and Movima (19), in the sense that here too there is no synchronic

evidence of an incorporated verbal copula. However, copulae often emerge from pronominal elements; besides, person inflection – which is the really distinctive feature of Construction A – is clearly detectable in all such cases.

2.5 Non-prototypical construction A in Samoyedic and Arawak

Samoyedic languages implement a less prototypical usage of Construction A, here restricted to nouns and adjectives as in Construction B. Nevertheless, this grammatical device can be assigned to type A owing to person markers sitting on the non-verbal predicate.

Keresztes (1998: 411) considers what he calls "nominal conjugation" a Proto-Samoyedic feature. He reports examples of the predicative form of Nenets nouns (pp. 537–539): *nye* 'woman', *nye**d°m*** / *nye**n°*** / *nye-**Ø*** 'I am / you are / she is a woman', *nye**dømcy°*** / *nye**nøsy°*** / *nye**sy°*** 'I was / you were / she was a woman'; *nya* 'friend', *nya**w°*** / *nya**wøsy°***, 'he is / was my friend', *nyí**n°*** / *nyí**nøsy°*** 'they are / were my friends'. Nouns in predicative position can be followed by the appropriate form of the copula *ŋgœ-* 'to be' just in case the sentence is negative, non-indicative, future or habitive, but in such cases they do not carry the predicative inflection (p. 544). The following Tundra Nenets examples confirm that the predicative form of a noun is possible in past-referring predications, whereas future or negative contexts need the copula:

(21) Tundra Nenets (Samoyedic; Nikolaeva 2014: 29–30)

a. *xan'ena-**dəm-c'°***
hunter-1**SG**-**PST**
'I was a hunter.'

b. *xan'ena ŋǣ-ŋu-d°m*
hunter be-FUT-1SG
'I will be a hunter.'

c. *xan'ena n'ī-d°m ŋa-q*
hunter NEG-1SG be-NEG
'I am not a hunter.'

Selkup is another Samoyedic language with non-verbal predicative inflection. Here follow the forms of the noun *nom* 'God, heaven':

(22) Selkup (Samoyedic) (Helimski 1998b: 560)

1SG *nomåå**k***	1DU *nomï**ŋmɪɪ***	1PL *nomï**ŋmït***
2SG *nomåå**vvntï***	2DU *nomï**ŋlɪɪŋ***	1PL *nomï**ŋlït***
3SG *nom-**Ø***	3DU *nop**qɪ***	3PL ***nuut***

Helimski (1998b: 562) remarks that the predicative suffixes of the Selkup nouns are similar to the verb suffixes of the socalled 'subjective' (i.e., intransitive) conjugation, except for the third person, which has no overt exponent. The person suffixes are preceded by a special marker that he calls "verbal representation" (VR in the gloss), as shown in (23). If, however, one wants to express meanings of mood and tense other than indicative present, the relevant forms of the auxiliary *ɛɛ-* 'to be' need to be used, as in (23b) (see also Décsy 1970: 61):

(23) Selkup (Samoyedic) (Helimski 1998b: 562)

a. *tan kïpa iija-ŋåå-**ntï***
you.2SG little boy-VR-**2SG**
'You are a little boy.'

b. *tan kïpa iija-ŋåå-ntï ɛppï-ntï*
you.2SG little boy-VR-2SG be.NARR/INFER-2SG
'It turns out that you were a little boy.'

Décsy (1970: 61) observes that while nouns (in present-referring contexts) require actual predicative person markers (as preceded by the 'verbal representation' affix), with adjectives a slightly reduced form of the auxiliary is attached. It is worth observing that Wintschalek (1993: 88) does not agree with Déczy's (1970: 53) claim, to the effect that the Selkup adjectival predicative inflection is equivalent to using an existential verb, with the only difference of it being synthetic instead of analytic. In his view (pp. 86–7), this grammatical device is only used to express proper-inclusion predication (§ 1.2).

Nganasan resembles Selkup, inasmuch as its non-verbal conjugation is restricted to nouns and adjectives; besides, if a tense or mood other than indicative present is required, an inflected form of the copula *ij-* must be used: e.g. *mənə nʲaam* 'I am Nganasan', *mənə nʲaam isjüəm* 'I was Nganasan' (Helimski 1998a: 496). The following example shows the predicative conjugation of *kuhu* 'skin, hide':

(24) Nganasan (Samoyedic) (Helimski 1998a: 499)

1SG *ku**bum***	1DU *kuhu**mi***	1PL *kuhu**muʔ***
2SG *kuhu**ŋ***	2DU *kuhu**ri***	2PL *kuhu**ruʔ***
3SG *kuhu-**Ø***	3DU *kuhu**gəj***	3PL *ku**buʔ***

However, in § 6.1 we will show that Nganasan is, to some extent, a hybrid case, since it also has a small set of adjectives with a Construction B behavior.

We conclude this section by briefly mentioning an illusory case of Construction A to be found in some Arawak languages, such as Alto Perené (Ashéninka; see Mihas 2015) and Tariana (Aikhenvald 2003). In these languages, any major word class element may carry a selection of the TAM markers typically found on verbs, as in:

(25) Tariana (Arawak; Aikhenvald 2003: 499)
*wyume-ma-se matʃa-ma=**pidana***
last-F-CONTR good-F=**REM.PST.REP**
'The last one was beautiful.'

These affixes, however, are not person markers; furthermore, and crucially, they are 'floating clitics' which may land on any syntactic component, irrespective of whether it fulfills the predicative function (see Aikhenvald 2002: 45–47, who also quotes a similar example from Kannada, Dravidic). Interestingly, young Tariana speakers, under the influence of Tucano, now tend to place such clitics on the predicate, somehow reducing the difference with respect to a well-behaved Construction A (Aikhenvald 2010: 32).

3. Construction B in Zamucoan

The languages dealt with in this and the next two sections display what in § 1.1 is called Construction B. Since this type of non-verbal predicative inflection has not been described in the literature, we will provide comparatively more details on the few languages that implement it.

Zamucoan languages offer a clear example. This persistently small family consists nowadays of only two languages, Ayoreo and Chamacoco, respectively spoken by about 4,500 and 2,000 individuals between Bolivia and Paraguay, within the vast savanna-like area called Gran Chaco. A third Zamucoan language (Old Zamuco) was described by the Jesuit Father Ignace Chomé in the early 18th century in a grammar edited by Suzanne Lussagnet (Chomé 1958 [*ante* 1745]).[6]

To pave the way for the analysis of Construction B in Zamucoan, the next section will describe the peculiar morphology of nouns and adjectives in these languages.

3.1 A threefold morphological distinction

What makes the Zamucoan languages special is their threefold suffixation system of nouns and adjectives, which in previous works by Pier Marco Bertinetto and Luca Ciucci (see fn. 6) were called 'base', 'full', and 'indeterminate' form. In this paper, however, a different terminology will be used for reasons of internal

6. The most important modern sources concerning these languages are Kelm (1964), Morarie (1980), Higham *et al.* (2000), Ulrich & Ulrich (2000), Bertinetto (2014 [2009]), Ciucci (2016 [2013]), Ciucci & Bertinetto (2015, 2017 and 2019). Two of the present authors (Bertinetto and Ciucci) carried out fieldwork campaigns between 2007 and 2018.

consistency, namely: 'predicative form' (= PRED), 'argument case' (= ARG), and 'indeterminate form' (= IDF).

It is worth observing that proper names, personal pronouns and demonstratives have but a single form. This is self-explanatory as far as the indeterminate form is concerned – as a direct consequence of the specificity parameter mentioned in § 1.1 – but it is interesting to note that even the contrast of predicative form *vs* argument case is neutralized in such instances. Actually, not all Ayoreo nouns are fully explicit in marking the three morphological categories, as shown in (26–28), and this indeed often occurs with feminine nouns, in which predicative form and argument case may coincide in the singular (e.g. 'woman' in (27)). More sporadically, as with 'turtle' in (26) and 'girl' in (27), there is no difference between the singular and plural predicative form. This notwithstanding, the threefold distinction is still quite robust in Ayoreo nouns. As for adjectives, they inflect according to the most frequent masculine and feminine declension classes (28), thus resembling the typically fusional Romance languages, where adjectival affixes simultaneously convey both gender and number features:[7]

(26) Examples of Ayoreo masculine nouns

		PRED	ARG	IDF
'earth, world'	SG	*erãp*	*erami*	*erãtik*
	PL	*eramio*	*eramone*	*erãtigo*
'gift'	SG	*gẽrat*	*gerani*	*gẽratik*
	PL	*gẽratɕo*	*geranone*	*gẽratigo*
'bag'	SG	*gipek*	*gipej*	*gipetik*
	PL	*gipetɕo*	*gipeode*	*gipetigo*
'turtle'	SG	*joka* ↕	*jokaj*	*jokarik*
	PL		*jokade*	*jokarigo*

(27) Examples of Ayoreo feminine nouns

		PRED	ARG	IDF
'woman'	SG	← *ɕeke* →		*ɕekerak*
	PL	*ɕekej*	*ɕekedie*	*ɕekerigi*
'girl'	SG	*disi* ↕	*disia*	*disirak*
	PL		*disidie*	*disirigi*

7. For clarity, quotations from Zamucoan languages are in phonological transcription; however, in the examples we took the liberty of having capital initials for proper names. In the case of Old Zamuco, our phonological transcription is a plausible interpretation of the Spanish-based orthography used by Chomé.

(28) An example of Ayoreo adjectives

		PRED	ARG	IDF
'good'	M.SG	*werat*	*weradi*	*weratik*
	M.PL	*weratɕo*	*weradode*	*weratigo*
	F.SG	← *werade* →		*weraderak*
	F.PL	*weradej*	*weradedie*	*weraderigi*

Ayoreo can be regarded as an intermediate case among the Zamucoan languages, in terms of overt marking of the threefold morphology of nouns and adjectives. In fact, Chamacoco has completely lost the distinction between predicative form and argument case in the plural, and there are frequent cases of neutralization even in the singular (e.g. 'day' in 29). Furthermore, in contemporary usage the predicative form is often replaced by the argument case. By contrast, Old Zamuco achieves a large degree of morphological explicitness, as shown in (30), and the data reported by Chomé suggest that these inflections were regularly used:

(29) Examples of masculine and feminine Chamacoco nouns

		PRED	ARG	IDF
'man'	SG	*ɲakɨrap*	*ɲakɨrbitɕ*	*ɲakɨrbitɨk*
(M)	PL	← *ɲakɨrbo* →		*ɲakɨrbtijo*
'day'	SG	← *deːjtɕ* →		*deːjtɕtɨk*
(M)	PL	← *daːlo* →		*deːjtɕ̄ɨr*
'book'	SG	*hutɨʔ*	*hutɨta*	*hutɨrã(k)*
(F)	PL	← *hute* →		*hutɨ̄r*

(30) Examples of masculine and feminine Old Zamuco nouns

		PRED	ARG	IDF
'young man'	SG	*nakar*	*nakaritie*	*nakanik*
(M)	PL	*nakajo*	*nakaronoe*	*nakanigo*
'wife'	SG	*akote*	*akotetae*	*akoterak*
(F)	PL	*akotej*	*akotejie*	*akoterigi*

3.2 Proper-inclusion predication in Zamucoan

The most relevant syntactic function of the Zamucoan predicative form is to express the predicative function of nouns and adjectives in the spirit of Construction B, as described in § 1.1. By contrast, the argument case and the indeterminate form are only used in argument positions of any sort, as subject, direct/indirect object, or as member of adverbial phrases. To simplify the matter, in the examples to follow the indeterminate form will be neglected; the essential details on its usage will be provided in § 3.4. The reader should nevertheless keep in mind that,

as far as Zamucoan is concerned, the opposition is not just between predicative form and argument case, but rather between predicative form and argument case/indeterminate form.

In (31a–b), the adjective is in predicative form owing to its syntactic role, while the noun is in argument case. For the same reason, in (32) the argument position of the noun – as subject (a), object (b), and as part of a temporal adverbial (c) – requires the argument case. Note further that *uomio* in Example (31a) illustrates the use of the predicative form plural, showing that in Zamucoan a predicative adjective must agree in both gender and number with the subject. This is also the case of *omio* in (36) and *weratɕo* in (37). The plural value of such predicatively used adjectives, together with the predicatively used plural nouns *pitɕo, tɕekej* and *ajoreo* in (37, 40, 41), demonstrate that the Zamucoan predicative form is a fully specified morphosyntactic entity:

(31) Old Zamuco

a. *nani-onoe uom-io*
indigenous_man-M.PL.ARG good-M.PL.**PRED**
'The indigenous people are good.' (Chomé 1958: 128)

b. *Tupa-de uom=ipus ɲari, tɕ-iatɕẽre ɲok.*
God-M.SG.ARG good=ELAT.M.SG.**PRED** COMP 3.RLS-punish 1PL
'God punishes us, because he is so good.' (Chomé 1958: 129)

(32) Old Zamuco

a. *desi-odoe dak*
boy-M.PL.ARG [3]come
'The boys come/came/will come.' (Chomé 1958: 128)

b. *t-oria geda-doe*
3-steal corn-M.PL.ARG
'He/she/they steal(s)/stole/will steal corn.' (Chomé 1958: 128)

c. *a-iraus getosi-tie nes*
1SG.RLS-weed month-M.SG.ARG all
'I have weeded/will weed all month.' (Chomé 1958: 129)

Although, as noted in § 3.1, Chamacoco presents various cases of neutralization in its threefold morphology, canonical use of the predicative form can be detected in the relevant nouns and adjectives:

(33) Chamacoco (Ciucci, fieldwork)
dɨkɨ ɲakɨrap
this man[M.SG.**PRED**]
'This is a man.'

The following data describe the spontaneous use of predicative form *vs* argument case in Ayoreo, as found in spoken corpora, namely: (A) recordings of the former chief Samane (kindly offered to one of the present authors by the anthropologist Jürgen Riester); (B) tales narrated by the informant Ajiri during fieldwork in Colonia Peralta (Paraguay); (C) religious preachings available on the web.[8] Interestingly, in (34–35) one and the same noun occurs close together in both predicative form (*uṇakare, naiṇa*) and argument case (*uṇakari, naiṇane*). Sentence (36) features the predicative adjective *omio* in the plural, while the conversation in (37) includes an adjective (*weratɕo*) and a noun (*pitɕo*) in predicative position, both in the plural. In the latter case, the noun predicate indicates the material of which the scratching tool is made of ('it is wood' = 'it is made of wood'):

(34) Ayoreo
uhopierake Hesus te gu uhe Dupa-de uṇakare,
powerful[M.SG.**PRED**] Jesus this ASSEV COMP God-M.SG.ARG son[M.SG.**PRED**]
hekute Dupa-de uṇakar-i, Hesus, to pota heta ɕ-ataha wa
therefore God-M.SG.ARG son-M.SG.ARG Jesus also [3]want COMP 3-help 2SG
'Jesus is indeed powerful, because He is the son of God. Therefore, the son of God, Jesus, wants to help you.' (Web preaches: Prayer)

(35) Ayoreo
a-mo-ɕo naiṇa-ne ore, he naiṇa ore ŋa ore
2.IRR-see-PL shaman-M.PL.ARG 3PL MOD shaman[M.PL.**PRED**] 3PL COORD 3PL
ɕ-imo kutɕa-de ihi da-ke-ode
3-see GF.things-M.PL.ARG ADP REFL-in_front_of-M.PL.ARG
'Consider the shamans: [if/since they are] shaman, they know [see] (how to do) things for their goals [they see things before themselves].'
(Ajiri: *Naiṇaj ute bagi*)

(36) Ayoreo
ore ɕ-oṇiŋa Duguide ɕi ɕ-imata jok-eṇasõr-one Gidajgosode
3PL 3-say Dugúide EVD 3-gather 1PL-exterminator-M.PL.ARG Guidaigosode
ŋa ɕi om-io ore
COORD EVD good-M.PL.**PRED** 3PL
'They said (that) Dugúide made an alliance with our capital enemies, the Guidaigosode [a southern Ayoreo group] and (that) they were kind.' (Samane)

8. http://globalrecordings.net/en/langcode/ayo

(37) Ayoreo

[Samane] *he ajore ɲa-ne ŋa tɕ-eɳ̊a ore*
MOD person[M.SG.PRED] other-M.PL COORD 3-finish 3PL
mai-nie uhe ore tɕ-edu na-mai-nie.
3.hand-F.PL.ARG COMP 3PL 3-use_exclusively REFL-hand-F.PL.ARG
he werate porotad-ab-ode. ɲ-ani-ko
MOD good[M.SG.**PRED**] digging_stick-DIM-M.PL.ARG 1-put-PL
etɕo-j ŋa ɲ-imotɕe-ko gaj. wera-tɕo
salt[M.SG.ARG] COORD 1-wrap-PL over good-M.PL.**PRED**

[interviewer] *porotade-die ŋa pi-tɕo?* […]
digging_stick-F.PL.ARG COORD wood-M.PL.**PRED**

[Samane] *ehẽ! pi-tɕo.*
yes wood-M.PL.**PRED**
'[Samane] Other people wore out their hands as they only used their own hands. Yet, they were good our little scratching tools. We put the salt (in the bags) and wrapped it. It was good. [interviewer] Were those scratching tools (made of) wood? [Samane] Yes, of wood! (Samane)

In the last example, the 'Noun+Adjective' phrase *ajore ɲane* 'other people' needs an explanation. In this sort of sequences, plural reference is exclusively conveyed by the adjective which occupies the final position. All preceding elements, including the noun – which obligatorily takes the first position – must be in the singular and, most importantly, in the predicative form, as *ajore* in (37) and *karatake gare* in (38); since, however, such words do not fill the predicate position, we do not highlight PRED with bold characters in the glosses. The examples show that, while the noun dictates gender agreement within the whole phrase, the final adjective is the only element that carries the contextually appropriate referential value for the feature number; in addition it takes the form required by the syntactic context, which in (38) corresponds to an argument position (hence, the argument case in *keruɳ̊ane*):[9]

(38) Ayoreo
tɕ-imo karatake gare keruɳ̊a-ne
3-see jaguar[M.SG.PRED] two[SG.PRED] big-M.PL.ARG
'He saw two big jaguars.' (from Briggs 1972).

If, however, the 'Noun+Adjective' phrase fills the predicative position, then the final adjective must also be in predicative form, as *kutɕap* in (39):

9. As for *ɲane* in (37), it is functionally in argument position, but this word has no morphological manifestation of the predicate *vs* argument contrast.

(39) Ayoreo
Otadite […] *tɛ-oṇiŋame Enenadaj juj ika : karatake*
Otadite 3-tell Enenadai towards RTR jaguar[M.SG.PRED]
kutɛap
big[M.SG.**PRED**]
'Otadite […] told Enenadai in those days: "It is a big jaguar"'. (Samane)

See also the indeterminate form in (45).

The predicative form is also characteristically found in a peculiar syntactic construction, featuring a kind of implicit relative clause (i.e., without complementizer). The following examples illustrate this with the words *tɛeke* / *tɛekej* (40) and *ajoreo* (41), which may be interpreted as small clauses, with the predicative meaning directly expressed by the noun's inflection:

(40) Ayoreo
ŋa tɛi ore tɛ-irogaha da-kigade na-hõra
COORD EVD 3PL 3-request REFL-behind REFL-friend.F.SG.ARG
tɛeke ŋa tɛi ṇo to tɛi nona
woman.F.SG.**PRED** COORD EVD [3]go also EVD [3]accompany
na-hõra-nie tɛeke-j.
REFL-friend-F.PL.ARG woman-F.PL.**PRED**
'And they asked their own female friend [lit. friend who is a woman] to come with [lit. to be behind], and they went, they accompanied their own female friends [lit. friends who are women].' (Ahiri: *tɛeke uhe pioj tagu gari*)

(41) Ayoreo
mu he j-iraha uhetiga disi ute he tɛ-ise
but NEG 1SG-know COMP boy[M.SG.ARG] that NEG 3-meet
da-rasa-de to nanike, hetiga ka tɛ-ise po
REFL-fellow-M.PL.ARG also long_ago COMP NEG 3-meet also
da-rasa-de ajore-o to.
REFL-fellow-M.PL.ARG person-M.PL.**PRED** also
'But I do not know whether that boy then [in those days] returned to [= met] his own people, (or) whether he will not do so any more [lit. will not meet again his own fellows (who are) persons].' (Ahiri: *ŋakorenie oridi disi* [this story is about a boy who was abducted by a herd of animals])

Finally, it is worth observing that, in Zamucoan, Construction B is also found in temporal adverbial phrases, such as: *ŋa tɛi dire ŋa…* (COORD EVD day.PRED COORD) 'Another day came and … (lit. and apparently (it was) day and…)'. This, however, merely depends on the fact that such phrases are based on a noun; hence, they do not suggest unrestricted extension to any kind of non-verbal predicate, as in the most typical cases of Construction A.

3.3 Copula construction; identity and existential predication

Ayoreo is the only Zamucoan language that has introduced a 'pure' copula, the invariable item *(t)u* (42–44), which brought about a sharp restriction on the use of the predicative form. Such complementary distribution, crucially enforced by any kind of non-verbal predicative inflection (both A and B), confirms that predicativity is the constitutive feature of the predicative form, whose essential function is depleted by the presence of a competing overt marker of predication. This explains the argument case of *ditaj* (42), *keruṇanie* (43), and *etɕoj* (44). According to the informants consulted, Ayoreo has no detectable semantic difference between the alternative versions of a sentence, depending on presence *vs* absence of the copula:

(42) Ayoreo (Pia, pers. comm.)
dita-j *tu* *ju* *ŋa* *kutɕape* *ju* [eee] *!*
killing_weapon-M.SG.ARG COP 1SG COORD big[M.SG.**PRED**] 1SG EXC
'I am the killing weapon and I am powerful!!!'

(43) Ayoreo
mu tɕi *tɕ-ise* *nereṇa-j* *uje* *tɕi* *e* *urẽha-pise*
but EVD 3-meet day-M.SG.ARG COMP EVD already grown-ELAT.M.SG.**PRED**
disi *kasika* *ŋa* *tɕi* *juge-die* *tu* *udire*
boy[M.SG.ARG] long_ago COORD EVD [3]haul-F.PL.ARG COP those.[F.PL]
keruṇa-nie.
big-F.PL.ARG
'But the day comes when the former boy (is) definitely a grown-up, (so that) those hauls are big.' (Ajiri: *akorenie oridi disi*)

(44) Ayoreo
jok-igaid-i *tu* *etɕo-j.* *ɲ-uruŋúhi.* *j-iraha*
1PL-what_one_carries-M.SG.ARG COP salt-M.SG.ARG 1SG-enrage 1SG-know
uhe *ore* *igid-i* *tu.*
COMP 3PL [3]origin's_place-M.SG.ARG COP
'What we carried was salt. I got furious. I knew that it was their own place of origin.' (Samane)

In (44), both *jokigaidi* and *etɕoj* might alternatively fulfill the roles of copula subject or copula complement, depending on the speaker's intention, although in this narrative *jokigaidi* is the most natural candidate for the role of subject. The usage of the predicative form would eliminate any ambiguity, but this would then entail absence of the copula.

In Zamucoan, there is no structural difference between identity and proper-inclusion predication. Example (45) features the contrast between the argument case *igiṇane* as copula complement in (45a), and the predicative form *igiṇa* as

noun predicate in the copula-less clause (45b). Examples (45a–b) also feature the possessor phrase *ajore bahade* '(of) the old Ayoreo', which in Zamucoan requires argument case, here marked on the adjective *bahade* (M.PL.ARG). Recall that the predicative form *ajore* in both sentences is merely due to its being part of a 'Noun+Adjective' phrase.

(45) Ayoreo (Ciucci, fieldwork)

a. *kotɕokoi-die u ajore baha-de*
ancient_house-F.PL.ARG COP Ayoreo[M.SG.PRED] first-M.PL.ARG
igiɲa-ne
[3]house-M.PL.ARG

b. *kotɕokoi-die ajore baha-de*
ancient_house-F.PL.ARG Ayoreo[M.SG.PRED] first-M.PL.ARG
igiɲa
3.house[M.SG/PL.**PRED**]
'The *cochocoidie* (= large, beautiful dwelling spaces) were the houses of the old Ayoreo.'

By contrast, since all Zamucoan languages have dedicated existential markers, there is no room for the predicative form of the noun, since the predicative function is directly conveyed by one of these elements. In fact, the NP (possibly accompanied by a locative argument) can only have the subject role, hence it must take the argument case. The existential markers of the Zamucoan languages (46–50) have several shapes: a fully inflected verb (Ayoreo *dehi*), defective verbs restricted to the third person (Old Zamuco *si*; Ayoreo *kuse*; Chamacoco *de*), clitics (Old Zamuco *=us*; Chamacoco *=ɕ*). Note that (47) features two occurrences of the word 'alligator', first in predicative form (*arokoɲakedeɲa*) as noun predicate, then in argument case (*arokoɲakedeɲaj*) as subject of the existential copula *dehi*. It is worth observing that, as shown in (48), in existential copula clauses the order of subject and predicate can be chosen by the speakers according to their communicative intention, whereas the orders *VAO and *VS are never found in other kinds of predication. Finally, (49) shows the Chamacoco negative existential marker *nijok* (corresponding to Ayoreo *iɲok*):[10]

(46) Old Zamuco (Chomé 1958: 126)
ge-ti=us
rain-M.SG.ARG=EXIST
'It rains.' (lit. 'there is rain')

10. Negative existentials are a widespread feature in South American languages. As Overall et al. (2018b) observe, they are often attested even in languages that tend to use a juxtaposition strategy for non-verbal predication.

(47) Ayoreo (Briggs 1972)
¡kahire to! ¡arokoṇa-kedeṇa! ¡arokoṇa-kedeṇa-j
look too alligator-different[M.SG.**PRED**] alligator-different-M.SG.ARG
dehi ne!
[3]EXIST there
'Look there! It is an alligator! There is an alligator right there!'

(48) Ayoreo (Ciucci, fieldwork)
ʧeke dehi / dehi ʧeke
'A woman is there / There is a woman.'

(49) Chamacoco (Ciucci 2016: 320)
eseː=ke o-ʧ-uku itʧ nijok=oho=ʧɨ
DM=RTR PL-3.RLS-look_for COORD [3]NEG.EXIST=ADP=there
'And then they look for (him) and he is not there.'

Zamucoan existential clauses can also express possession, with the subject of the clause, in argument case, designating the possessed referent. See also (53b) for an illustration of negative possession:

(50) Ayoreo (Higham *et al.* 2000: 99)
suari-die as-i kuse to
parrot-F.PL.ARG down_plumage-M.SG.ARG EXIST also
'Parrots also have down feathers.' (lit. 'there are also (the) down feathers of the parrots')

The Zamucoan languages support Stassen's (1997) classification, according to which existential clauses belong to the category 'locational predication', which is often dealt with in a different way with respect to non-verbal predication. As § 4.2 will show, however, Tupí-Guaraní languages have a sharply different behavior.

3.4 Morphological and diachronic addenda, with a note on the indeterminate form

This section integrates the information concerning the threefold morphological shape of Zamucoan nouns and adjectives. The reader only interested in the main thread of discourse may proceed to the next section.

The threefold distinction of Zamucoan nouns and adjectives has a precise syntactic justification. It is worth noting, however, that it is also motivated by purely morphological reasons. The singular of the predicative form is the primary building block of any process concerning inflection, derivation, and composition. This is evident in cases such as those in (51), where the shape of the Ayoreo masculine plural argument case could hardly be predicted if the singular

of the predicative form were unknown. Similarly, the velar nasal of the derived noun in (52a), as well as the velar stop of the first compound member in (52b), could not be predicted from the corresponding argument case, while both find an obvious explanation in the final velar consonant of the respective predicative form:

(51) Ayoreo

		PRED	ARG	IDF
'neck' (M)	SG	*etabi**t***	*etabi*	*etabitik*
	PL	*etabitɛo*	*etabi**d**ode*	*etabitigo*
'trench' (M)	SG	*eru**k***	*eruj*	*erutik*
	PL	*erutɛo*	*eru**g**ode*	*erutigo*

(52) Ayoreo

a. *geⁿaŋõr* (M.SG.PRED) 'destroyer' < *geⁿa**k*** (M.SG.PRED) 'completed, destroyed' (cf. *geⁿaj* M.SG.ARG)

b. *utɛa**k**epie* (F.SG.PRED) 'toilet' < *utɛa**k*** (M.SG.PRED) 'excrement' (cf. *utɛaj* M.SG.ARG) + *pie* (F.SG.PRED) 'container'

Based on data such as in (51–52), one might assume that, ultimately, the predicative form is nothing else than the word's root, to which further morphological processes apply. However, this would not explain the existence of the plural of the predicative form. Hence, even though one can reasonably surmise that, at an early stage of Proto-Zamucoan, the predicative form coincided with the word's root, an independent plural morpheme (different for the two genders) must have later on been fused with the root, giving rise to what we now know as the plural of the predicative form. With this in place, the predicative form must have acquired a distinctly independent morphosyntactic status for the Zamucoan speaker.

We conclude the Zamucoan section with a brief note on the indeterminate form, which is used in argument position, in contexts characterized by referential opacity. This can be due to a number of circumstances, such as sheer non-specificity (53a), absence of the referent (53b), or futural/hypothetical/volitive contexts (54). It can also apply to 'Noun+Adjective' phrases, such as *erape ɲariŋihi* in (55):

(53) Old Zamuco

a. *agu kutɛa-tik.*
[1SG]eat thing-M.SG.IDF
'I eat something.' (unspecified) (Chomé 1958: 132)

b. *ka jo-tik=us.*
NEG water-M.SG.IDF=EXIST
'There is no water.' (Chomé 1958: 164)

(54) Ayoreo

a. *María pota nona ata-j / *ata-tik ute uhe*
María [3]want [3]accompany rich-M.SG.ARG / rich-M.SG.IDF that COMP
ʧe-ise dirika
3-meet yesterday
'María wants to marry that rich man whom she met yesterday.'

b. *María pota nona *ata-j / ata-tike mu kama*
María [3]want [3]accompany rich-M.SG.ARG / rich-M.SG.IDF but not_yet
ʧe-imo
3-see
'María wants to marry a rich man, but she has not yet met him.'
(Bertinetto, fieldwork)

(55) Ayoreo

ʧi ʧe-ahaj gate a. ʧe-ise erape
EVD 3-go_to sky[F.SG.ARG] MOD 3-meet world[M.SG.PRED]
ɲa-riŋ=ihi gu ŋa ʧi iɲoke p-ikig-od(e)
other-M.SG.IDF=LOC ASSEV COORD EVD 3.NEG.EXIST GF-direction-M.PL.ARG
ihi, ʧi hire po rĩ kuter-one ihi.
LOC EVD much also ITER honey-M.PL.ARG LOC
'He went to the sky. He found (himself) in another world, and there were no paths (whatsoever) there, but there was a lot of honey.' (Ahiri: *Naiɲaj ute bagi*)

4. Construction B in Tupí-Guaraní

Various Tupí-Guaraní languages show a morphological contrast between predicate and argument. In keeping with Construction B (§ 1.1), this contrast only concerns nouns and adjectives (to the extent that the latter exist in these languages) and consists in adding the appropriate inflection to the elements in argument position, while those in predicative position take no affix (Ø-marking).

The affix used for the argument role (stemming from Proto-Tupí-Guaraní **-a*) has received different labels in the literature. In this paper we will use the same labels proposed above for Zamucoan – predicative form *vs* argument case – thus replacing the original labels in the glosses.[11] In some cases, we also slightly modified the morphological segmentation in the examples for reasons of internal consistency.

11. The argument case is called "caso argumentativo" (Rodrigues 1996, 2001; Cabral *et al.* 2013; Dietrich 2018), "sufixo nominal" (Barbosa 1956), "marcador nominal" (Dobson 1988; Souza 2004), "caso onomático" (Adelaar 1997), "nominal case" (Jensen 1998, 1999), "caso nuclear" (Seki 2000, 2001; Borges 2006), "suffixe référentiant" (Queixalós 2001), "sufixo referenciante" (Praça 2007) and "referrer" (Queixalós 2006). Rose (2003) just calls it "suffixe *-a*". The predicative form is called "caso não marcado" (Seki 2000, 2001; Borges 2006) but also "caso vocativo" (Rodrigues

4.1 Proper-inclusion predication in Tupí-Guaraní

As observed by Rodrigues (1996: 60), in Tupinambá the argument case marks: (i) the subject; (ii) the direct object; (iii) the object of a postposition; (iv) the possessor in genitive constructions.[12] Essentially the same functions are described for the argument case in Kamaiurá (Seki 2000, 2001), Avá-Canoeiro (Cabral *et al.* 2013), Tocantins Asuriní (Cabral *et al.* 2013), Tapirapé (Praça 2007) and Emérillon (Rose 2003). In Emérillon, one observes some kind of weakening of the argument case, because "la récession du *-a* a touché sur le plan syntaxique les fonctions sujet et objet (sauf quand ils sont suivis d'une particule)" (Rose 2003: 118). The following examples from Seki (2000: 107–108) show the main uses of the argument case in Kamaiurá:

(56) Subject of a predicate (Kamaiurá)
kunu'um-a tete rak o-ho ko'yt
boy-ARG only ATT 3-go END.OF.SENTENCE [13]
'Only the boy went.'

(57) Direct object of a verb (Kamaiurá)
kunu'um-a h-uwaj-a w-ekyj
boy-ARG 3-tail-ARG 3-pull
'The boy is pulling its tail.'

(58) Object of an adposition (Kamaiurá)
je=r-uw-a nite
1SG=RP-father-ARG with
'with my father.'

(59) Possessor in genitive contructions (Kamaiurá)
jawar-a r-a'yt
jaguar-ARG RP-son
'The whelp of the jaguar.'

Although § 4.2–3 will point out some differences in the treatment of existential, possessive, and identity clauses, the analogy with Zamucoan in the usage of argument case and predicative form is striking. As Rodrigues (1996: 65) notes: "Tupinambá is […] a language whose syntactic organization directly rests on the

1996), since in Tupinambá it can also have this use. Indeed, the vocative tends to be Ø-marked in many languages. Note, however, that Ayoreo speakers use the argument case for the vocative.

12. Also in Zamucoan, the possessor is in argument form, cf. Example (45a–b).

13. Seki (2000) glosses as FS (= fim de sentença 'end of sentence') a morpheme which seems to indicate telic completion.

distinction, by means of case marking, between argument and predicate".[14] Similarly, in Tocantins Asuriní and Avá-Canoeiro nouns and verbs without case suffixes behave as predicates, whereas they function "as arguments when they receive case inflection" (Cabral *et al.* 2013:11), and the same applies to Tapirapé (Praça 2007:11–13).

In more general terms, Seki (2000:112) observes that Kamaiurá nouns occur in predicative form when used as vocatives (cf. Tupinambá, fn. 11), dislocated constituents, predicates (60) and citation forms (61). With respect to the last situation, she observes that "when enunciated in isolation, nominals occur in unmarked case [= predicative form], corresponding to predicates which identify objects in the world" (*ibidem*). This is tantamount to saying that nouns are extracted from the lexical storage in the form of predicates, similar to verbs. Hence, rather than, e.g., 'house', we get something like 'it is a house':

(60) Kamaiurá (Seki 2000:112)
ije morerekwat
1SG boss[PRED]
'I am [a] boss.'

(61) Kamaiurá (Seki 2000:113)
jawat
jaguar[PRED]
'It is [a] jaguar.'

Here again we find complementarity between predicative form and copula, as required by both types of non-verbal predicative inflection (Constructions A and B). This can be observed in Kamaiurá (62) and Avá-Canoeiro (63), two among the rare Tupí-Guaraní languages that have developed a copula. As the following examples show, the argument case is used for the copula complement function, whereas the predicative form is required for noun predicates such as those in (60–61) (but see (74–76) for further qualifications).

(62) Kamaiurá (Seki 2000:108, ex. 255)
kara'iw-a pe-ko
non_indigenous-ARG 2PL-COP
'You are non-indigenous.'

14. The citations from Cabral (2001), Cabral *et al.* (2013), Rodrigues (1996, 2001) and Seki (2000) have been translated from Portuguese. The same applies to examples from these authors, as well as from Borges (2006) and Praça (2007).

(63) Avá-Canoeiro (Borges 2006: 121, ex. 388)
o-iko tʃi=Ø-pɨkɨr-a
3SG-be 1=RP-youngest_sister-ARG
'She is my youngest sister.'

4.2 Existential and possessive predication in Tupí-Guaraní

In many Tupí-Guaraní languages, existential predication is directly expressed by means of the predicative form, without the help of any kind of existential predicate. Lack of the copula is a typical feature of many Amazonian languages (Aikhenvald 2012: 329) and this extends to "existential markers", although these are not copulae *stricto sensu*. This is, e.g., the case in Tupinambá: "Existential predicates […] are expressed in Tupinambá by the noun without case [= predicative form]" (Rodrigues 2001: 111). The same occurs in Avá-Canoeiro (Cabral *et al.* 2013) and Tapirapé (Praça 2007). Example (64) highlights the inherently predicative nature of the noun in an implicitly existential, impersonal construction:

(64) Tapirapé (Praça 2007: 191, ex. 564)
miār
deer[PRED]
'There exists (a) deer (= It is (a) deer)' [cf. *miār-a* (deer-ARG) (Praça 2007: 50)]

According to Praça (2007: 190 ssg.), Tapirapé has two kinds of existential clauses: (i) 'absolute' as in (64), which have no subject and coincide with the citation form; (ii) 'possessive', in which the noun predicate (the possessed) is associated with a NP (the possessor) in the argument case (65), which may be regarded as the 'logical' subject, as suggested in the translations. Actually, the two types of structure turn out to be one and the same, the difference being that in the possessive construction there is a genitival relation between possessor and possessed, with the latter expressing the (implicitly existential) predicative function. This is the structure to be found in the possessive clauses of various Tupí-Guaraní languages (Dietrich 2001: 27–29), although some of them, such as Kamaiurá, also have the option of descriptive existential verbs (Seki 2000). As Rodrigues (2001: 111) remarks, in Tupinambá "possessive clauses of the type 'the guy has something' are expressed by the sequence of a noun in argument case, which is the subject, and another noun without case, which is the predicate". In practice, 'the guy has something' is conveyed by 'it is (= there is) something of the guy'.

(65) Tapirapé (Praça 2007: 191, ex. 562)
eirowi-Ø Ø-etym
Eirowi-ARG 3.II-house[**PRED**]
'Eirowi has [a] house.' (lit. 'It is Eirowi's house' = 'there is Eirowi's house')
[cf. *Ø-etym-a* (3.II-house-ARG) (Praça 2007: 57)]

(66) Avá-Canoeiro (Borges 2006: 124, ex. 397a)
tʃi=ɾ-etam
1=RP-house[**PRED**]
'I have [a] house.' (lit. 'It is my house' = 'there is my house')

As Rose (2002) notes, the use of existential structures to express possession is typologically widespread, but it is "uncommon to have an existential predication without any existential verb or copula" as in most Tupí-Guaraní languages.[15] Some authors (Seki 2000: 160, Borges 2006: 218) explicitly consider possessive clauses a subtype of non-verbal predication: the possessed, in predicative form, is the predicate, while the possessor appears in the argument case (67), unless it is a pronominal element directly sitting on the predicate (68):

(67) Kamaiurá (Seki 2000: 160, ex. 495)
jawar-a ʾaŋ i-memyt
jaguar-ARG PROX 3-son[**PRED**]
'This jaguar has a whelp.'

(68) Kamaiurá (Seki 2000: 160, ex. 496)
je=Ø-memyt
1SG=RP-son[**PRED**]
'I have [a] son.'

Existential-possessive constructions help to overcome the severe shortage of adjectives which, according to Dietrich (2001, 2018), is a characteristic feature of Tupí-Guaraní. To solve the problem, a number of languages use quality-designating nouns in predicative function, semantically corresponding to an attributive adjective. This occurs, for instance, in Tupinambá (Rodrigues 2001: 110–111). The examples in (69) show the contrast between the argument case of the possessive noun phrase in (69a) and the predicative form of the quasi-attributive, but in fact existential predication in (69b). Similar cases occur in

15. Whenever a copula is present in these languages, this is due to innovation, since "it is well known that the copula is not a characteristic of the Tupí-Guaraní family" (Queixalós 2006: 278–279). Indeed, as Meira (2006: 211) points out, within the Tupian stock only the Tupí-Guaraní languages, as well as Mawé and Awetí, have "possessive predicates expressed without an obligatory auxiliary or copula", and this is considered additional evidence that these languages stem from a common branch within Tupian.

Zamucoan, as shown by (70), despite availability of adjectives as a lexical class; but in this case the argument case is used instead, due to the presence of the existential clitic:

(69) Tupinambá (Rodrigues 1996:63, ex. (34)–(35))
a. *né r-orîβ-a o-páβ*
2SG RP-happiness-ARG 3-end
'Your happiness ended.'
b. *né r-orîβ*
2SG RP-happiness[**PRED**]
'You are happy.' (lit. 'there is your happiness' = 'you have happiness')

(70) Chamacoco (Ciucci, fieldwork)
jok poho-tɛ ejuw-o=ɕ
1SG dog-M.SG.ARG [3]thought-M.PL=EXIST
'My dog is smart.' (lit. 'there are (its) thoughts of my dog' = 'my dog has thoughts')

To sum up, the copula-less existential and possessive clauses of various Tupí-Guaraní languages provide further evidence for the existence of a dedicated morphology for non-verbal predication. Although this nicely supports the present analysis, one has to observe a contrast *vis-à-vis* Zamucoan: while the relevant Tupí-Guaraní languages make straightforward use of noun predicates, the Zamucoan ones employ true existential markers that combine with nouns in argument case (see 70, as well as 46–50 in § 3.3). Despite appearance, however, both Zamucoan and the relevant Tupí-Guaraní languages converge – in the spirit of non-verbal predicative inflection – in restricting the use of the predicative form to copula-less clauses. Since most of such Tupí-Guaraní languages lack any sort of copula element, including existential ones, it is no wonder that the function of existential/possessive predicates is expressed by nouns in predicative form. Kamaiurá and Avá-Canoeiro are exceptions which confirm the rule: they can use a copula (62–63), but exploit the predicative form whenever the copula-less construction is selected.

4.3 Identity predication in Tupí-Guaraní

Another difference between Tupí-Guaraní and Zamucoan emerges in the treatment of identity predication, which establishes a one-to-one relationship between two (sets of) referents (see examples (4–5)). In Tupinambá, for instance, identity predicates "have as nucleus a noun in argument form [= case], which normally precedes the subject (equally in argument form), but it can also follow it with a small pause interposed" (Rodrigues 2001:111). The same solution, consisting

in juxtaposing two noun phrases in argument case (subject and predicate), is adopted by Avá-Canoeiro (Borges 2006:220), Tapirapé (Praça 2007:44), Kamaiurá (Seki 2000:161; cf. Example (57)) and Guajá. See (71) and (72);[16] the latter example can be compared with (73), to illustrate the opposition of identity *vs* proper-inclusion predication (§ 1.2), respectively expressed by argument case *vs* predicative form:

(71) Tapirapé (Praça 2007:44, Example (98))
xywãeri-Ø kãpitãw-a
Xywãeri-ARG leader-ARG
'Xywãeri was the chief (leader).'

(72) Kamaiurá (Seki 2000:161, ex. 501)
je=tutyr-a morerekwar-á
1SG=uncle-ARG boss-ARG
'My uncle is the boss.' [identity]

(73) Kamaiurá[17] (Seki 2000:162, ex. 505)
je=tutyr-a morerekwat
1SG=uncle-ARG boss[PRED]
'My uncle is [a] boss.' [proper-inclusion]

Adopting Stassen's (1997) perspective (as reported in § 1.2), one might claim that the Tupí-Guaraní solution lends support to the non-predicational nature of identity clauses. However, in Zamucoan both identity and proper-inclusion predication involve the predicative form, as shown in § 3.2-3. Since it would make little sense to assume that identity clauses are predicational or non-predicational depending on the language, we opt for considering them predicational, although their peculiar nature can give rise to diverging syntactic solutions.

For the purpose of this paper, it is useful to point out that (72–73) highlight the interplay between specificity and predicativity. This issue will be shown to play an important role in Semitic (see § 5).

16. Note, however, that in Kamaiurá identity clauses "the nominal predicate is phonologically marked by the displacement of the accent of the root to the case suffix" (Seki 2000:161). Hence, the non-verbal predicate is marked, although by a different morphological device.

17. Examples (72–73) are almost indentical to (76), where the predicate is in attributive case, meaning that the relation between subject and predicate is contingent or non permanent.

4.4 Diachronic and areal addenda on the Tupí-Guaraní argument case

We append here some diachronic and areal observations on the argument case of Tupí-Guaraní languages. The reader merely interested in the main thread of discourse may neglect this section.

As Jensen (1998:505–507; 1999:148–149) writes, Proto-Tupí-Guaraní nouns were marked by the morpheme *-*a* when used as subject, object or genitive; by contrast, the noun root expressed the role of predicate. Not all Tupí-Guaraní languages have preserved the -*a* morpheme (Jensen 1998; Cabral 2001). Where this is still in use, one has to distinguish between languages which only have -*a* after a consonant, and languages in which -*a* attaches to all roots (disregarding possible morphophonological modifications, such as deletion after root-final vowels, especially /a/).[18] Cabral (2001) assigns Tupí-Guaraní languages to different groups based on loss *vs* maintainance of -*a* in the different contexts. Table 2 is a slightly revised compilation of her data: the languages are divided into subgroups according to the classification by Rodrigues & Cabral (2012).[19]

Another complication is that, according to Jensen (1998:506), Proto-Tupí-Guaraní had *-*a* after consonant and *-Ø after vowel, so that the occurrence of the former allomorph after vowel in some modern Tupí-Guaraní languages should be regarded as an innovative feature. Instead, Cabral (2001) claims that Proto-Tupí-Guaraní *-*a* occurred on all noun roots independently of the phonological contexts (with the possible exception of roots ending in /a/), and thus treats the *-Ø marker as a later development.

Considering its present geographical distribution (Figure 1), -*a* is mostly found after both vowels and consonants in languages spoken in, or relatively close to, Rondônia, i.e. where the Tupí-Guaraní family is supposed to have originated (Jensen 1999), thus providing indirect evidence for Cabral's hypothesis. One should also remark the absence of -*a* in southern Tupí-Guaraní languages.

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18. In a variety of Tocantins Asuriní, the argument case has the allomorph -Ø after /e a ɘ/, and -*a* after other vowels and consonants (Cabral 2001; Cabral *et al.* 2013). In Kamaiurá, mostly in rapid speech, *a* has no phonological realization when added to roots ending in stressed /a/ or followed by a word beginning with unstressed vowel (Seki 2000:109).

19. The languages in each subgroup are provided in alphabetical order. We moved Ava-Canoeiro and Guajá in the third column after checking the data in Borges (2006:121–122) and Magalhães (2016), respectively. We integrated missing data in the classification of Rodrigues & Cabral (2012) with Jensen (1999). Omagua and Kokama were traditionally classified as Tupí-Guaraní languages, but their genetic affiliation is now controversial (cf. Cabral 1995; Michael 2014; Vallejos 2016), so they are not mentioned in the classification by Rodrigues & Cabral (2012); Dietrich (2018) also does not consider them Tupí-Guaraní languages. In this paper, following Rodriguez & Cabral (2012), we consider Tupí-Guaraní a family belonging to the Tupian stock.

Table 2. Preservation and loss of the argument case marker *-*a* in Tupí-Guaraní languages. The alphanumeric symbols refer to points in Figure 1

Subgroup	loss of *-a* (*cf. circles in Figure 1*)	*-a* only after consonant (*cf. triangles in Figure 1*)	*-a* after both V and C (*cf. squares in Figure 1*)
I	Chiriguano (1a), Guayakí (1b), Izoceño (1c), Kaiwá (1d), Mbyá (1e), Ñandeva (1f), Paraguayan Guaraní (1g), Tapieté (1h), Xetá (1i)	Old Guaraní (1j)	
II	Guaráyo (2a), Horá (2b), Sirionó (2c)		
III	Língua Geral Amazônica (3a)	Tupinambá (3b)	
IV	Guajajára (4a)	Tapirapé (4b), Turiwára (4c)	Avá-Canoeiro (4d), Parakanã (4e), Suruí (4f), Tembé (4g), Tocantins Asuriní (4h)
V	Anambé of Cairarí (5a), Ararandewára (5b), Araweté (5c)	Xingú Asuriní (5d)	
VI	Júma (6a)	Tenharim (6b)	Amondáva (6c), Apiaká (6d), Kayabí (6e), Parintintín (6f), Uru-eu-uau-uau (6g)
VII			Kamaiurá (7)
VIII	Ka'apór (8b), Wajampí (Jarí dialect and French Guiana dialect) (8c)	Anambé of Ehrenreich (8d), Emérillon (8e), Jo'ë (8f), Wajampí (Amaparí dialect) (8g)	Guajá (8a)

However, since it was present in the earliest documented languages, such as Tupinambá and Old Guaraní, this must be a later development.[20]

Actually, not all Tupí-Guaraní languages that have preserved the affix *-a* use it according to its original argument function. Borges (2006:121–122) points out

20. Cabral (2001:153–158) identifies possible cognates of *-a* in other languages of the Tupian stock, in particular in the Arikém and Jurúna families, and thus hypothesizes that these families also had argument case marking. In Karitiana, the only language still spoken of the Arikém family, the alleged cognate of *-a*, *-o*, "is an emphatic suffix, used in nouns and pronouns which are made phonologically salient. It is not obligatory in any syntactic sense" (Luciana Storto, pers. comm.). By contrast, according to Sérgio Meira (pers. comm.), it is not possible to reconstruct the argument case for Proto-Tupian, because it is found in neither the Mawé nor the Awetí branches, which along with Tupí-Guaraní form a common superordinate family within the Tupian stock (Dietrich 2018).

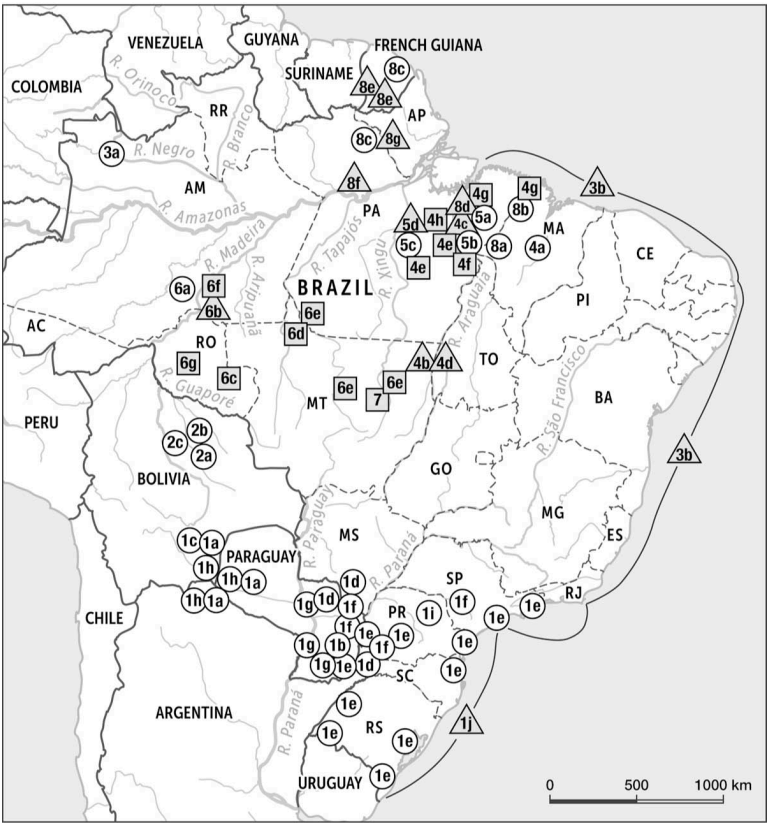

Figure 1. Distribution of ARG (*-a*) in Tupí-Guaraní languages. The alphanumeric symbols for the languages are spelled out in Table 2

that in Avá-Canoeiro this suffix has been permanently included into the phonetic shape of some nouns, which have thus lost the possibility of expressing the original morphosyntactic function; moreover, she remarks that in the mentioned language the use of the argument case is not systematic.

The comparative analysis by Cabral (2001) suggests that weakening or loss of the argument case went hand-in-hand with weakening of the contrast argument *vs* predicate role in both nouns and verbs. Queixalós (2006:268) goes one step further: "the documented languages […] are testimony to the different stages that the disaggregation of the initial system has reached. Each amputation observed – each lacuna in the supposed initial distribution of the referrer [= argument case] – should be seen as symptomatic of one and the same process: loss of omnipredicativity". According to this author, omnipredicativity characterized the whole Tupí-Guaraní family at an early stage (see also Queixalós 2001). To make sense of this, one might recall the observation in § 3.4, to the effect

that the Zamucoan singular predicative form diachronically coincided with the word's root, before it was turned into an independent morphosyntactic entity with its own inflection markers for singular and plural. Identification of the predicative form with the word's root fits particularly well with the unsuffixed Tupí-Guaraní predicative form. To meet Queixalós' suggestion, one can thus rationalize the situation in terms of the inherently predicative inclination of the Tupí-Guaraní nouns in their most neutral manifestation, in which they do not carry any morphological index (i.e. in the predicative form). In the Tupí-Guaraní languages that have preserved the original strategy, nouns and adjectives (to the extent that the latter word class exists) emerge from the lexical storage as inactive (non-eventive) predicates. By contrast, when nouns occur in argument positions, they need to be equipped with a dedicated marker: hence the reason for the *-a* suffix. In this connection, one has to note that, although here we only concentrate on nouns, in Tupí-Guaraní languages the argument case can also appear on inactive verbs used in argument position. As Rodrigues (1996:65) remarks about Tupinambá: "with case marker, both nouns and verbs function as arguments; without case marker, both function as predicates".

It is also worth noting that, according to Jensen (1998:507–508; 1999:149), Proto-Tupí-Guaraní also had three 'locative' cases and an 'attributive' one (also known as 'translative'). An example of predicate in the locative case is shown in (74). Note that in Zamucoan the locational function is fulfilled by adpositions. As for the attributive case, still to be found in some modern languages, it is used to indicate: (i) "the role or function of a noun"; (ii) "the end product of a process", (iii) "a change of state" (Jensen 1998:507), but it can have specific uses. In Emerillon (Rose 2003:335–341) it can express the identity of the referent (75); in Kamaiurá (Seki 2000:110–112, 151) it indicates that the subject is assigned a non-permanent property (76). Note that in the examples below the locative and attributive case occur in predicative position, hence they compete with the predicative form in specific contexts:

(74) Kamaiurá (Seki 2000:164, ex. 520)
toryw-a rak ta-ip
party-ARG ATTR village-LOC
'The party was in the village.'

(75) Emerillon[21] (Rose 2003:339, ex. 756)
R e-paʔi-am.
R 1SG.II-uncle-ATTR
'R is one of my uncles.'

21. Here and in the following examples from Tupí-Guaraní languages, Roman numerals after the person refer to different sets of person prefixes, as indicated by the respective authors.

(76) Kamaiurá (Seki 2000: 163, ex. 511)
je=tutyr-a morerekwar-am
1SG=uncle-ARG boss-ATTR
'My uncle is boss.' (temporarily)

We conclude this section by noting that in some Tupí-Guaraní languages – once again unlike Zamucoan – the argument suffix *-a* can also attach to deictics as part of an identity predication (Cabral 2001: 137). This occurs for instance in Kamaiurá (Seki 2000: 64). In Tembé, this suffix can sit not only on demonstratives, but on free pronouns (Carvalho 2001: 49–54). By contrast, in Avá-Canoeiro free pronouns and demonstratives do not have the argument case inflection, but proper names do (Borges 2006: 187–19), again unlike Zamucoan. An extreme case appears to be that of Tapirapé, where the argument case extends to demonstratives (77a), pronouns (77b), and proper names (77c):

(77) Tapirapé (Praça 2007: 42, Example (94)–(96))
a. *ã'ẽ=gã-e'ym-a mĩ a-enow ne=Ø-mãrãkã-Ø*
DEM=SG-NEG-ARG HAB 3.I-listen 2SG.II=RP-sing-ARG
'That is not the one who always listens to your singing.'
b. *ie-e'ym-a kwee ã-tym 'ãwãxi-Ø ka-pe*
1SG-NEG-ARG MIDDLE.PST 1SG.I-plant mais-ARG field-LOC
'It was not me the one who planted mais in the field.'
c. *kãtowyg-a rãka a-mor xe=Ø-we mayg-a*
Kãtowyga-ARG REC.PST 3.I-give 1SG.II=RP-ADP medicine-ARG
'It was Kãtowyga the one who gave me the medicine.'

Evidently, these languages have expanded the original function of the argument case – which, as suggested above, consisted in assigning referential value to otherwise intrinsically predicative, hence non-referential items – thus turning the suffix *-a* into a mere morphosyntactic marker of argument status.

4.5 Interim summary

To sum up, both Zamucoan and various Tupí-Guaraní languages have an explicit morphosyntactic marking of arguments and predicates, as expressed by the opposition argument case *vs* predicative form. In both language families, the predicative form coincides (or historically did) with the root of the word, whereas the argument case adds a specifically devised inflectional ending to the word. Supposedly, in both families the morphologically unmarked nouns and adjectives came out of the lexical storage as inherently predicative items, and thus needed to be adequately modified in order to assume an argument role. This appears to be the ultimate reason of existence for Construction B within type (III) – predicative inflection – of non-verbal predicative strategies (§ 1.1).

There are however some differences in the administration of non-verbal predicates in these two families. One consists in the fact that most Tupí-Guaraní languages lack not only copula elements, but also existential elements of any kind. Thus, while Zamucoan makes use of dedicated markers in existential and possessive clauses, the relevant subset of Tupí-Guaraní languages organize such clauses in the form of impersonal structures built upon morphologically marked predicative nouns.

Another remarkable divergence is the treatment of identity clauses. While Zamucoan languages treat them as normal instances of noun predication, the relevant Tupí-Guaraní languages assign both NPs the argument case. This has paved the way, in some languages, for the expression of the contrast [± specific] (72–73), by morphologically opposing identity (with both NPs in argument case) *vs* proper-inclusion predication (with the non-verbal predicate in predicative form). Zamucoan languages, by contrast, have no dedicated device to indicate referential specificity, although they have the option of marking the feature [-specific] in argument position by means of the indeterminate form (53–55).

Despite these differences, a unifying factor is nevertheless detectable – between Zamucoan and the relevant subset of Tupí-Guaraní languages – in the neat division of labor of copula-elements of any kind and the non-verbal predicative form. Ayoreo shows this feature in the clearest way, since it is the only language in which one can find free alternation between two semantically equivalent constructions: (I) the copula-less non-verbal predication here called Construction B, and (II) the copula construction, with the copula complement in argument case. This alternation conclusively highlights the inherent nature of the predicative form, whose function is depleted by the very presence of a competing marker of predicativity, such as the copula.

5. Construction B in Semitic

The Semitic family offers a uniquely wide diachronic window. This, however, is not the reason for the historically oriented approach of this section. The actual reason is that all modern Semitic languages have lost the original morphological contrast, or at best preserve it only in part. Our purpose here is to provide another term of typological comparison, by tracing back the development of non-verbal predicative inflection in a subgroup of Semitic languages, showing that it shared the properties of Construction B, namely: (i) restriction to nouns and adjectives; (ii) heavier morphological marking of the argument (as compared to the predicative) position; (iii) rejection of any kind of copula-elements (as typical of all types of non-verbal predicative inflection).

Readers conversant in Semitic matters should be warned that, for obvious reasons of space and focus, a number of complex issues concerning the individual languages, as well as the broader comparative context, will only be sketchily hinted at. A paper addressing a wider array of issues is in preparation by Margherita Farina. As for readers only interested in the main thread of the analysis, they may want to skip § 5.3, which analyzes the admittedly pale remains of Construction B in some modern Semitic languages.

5.1 Evidence of construction B in Akkadian and Aramaic

Akkadian exhibited the so-called 'predicative construction', in which a 'light' form of the word (often a verbal noun), i.e. without case endings, is employed in a copula-less sentence. This form contrasts with the so-called 'status rectus', as in ***maruṣ*** / *marṣum* 'sick', ***dan*** / *dannum* 'strong', ***šar*** / *šarrum* 'king' (Huehnergard 2005: 219–220). It is important to underline the morphologically lighter structure of the predicative form, which (consistent with Construction B) makes it a third millennium BC equivalent of the Zamucoan and Tupí-Guaraní predicative form. In the following examples, the adjective ***palḫat*** and the noun ***šarrāq***, both without case-ending, are used as predicates:

(78) Akkadian (cited in Huehnergard 2005: 220)
il-at-ni ina mātī-šunu palḫ-at
god-F-1PL in land-3.M.PL fearsome-F.**PRED**
'Our goddess is fearsome in their land.'

(79) Akkadian (Buccellati 1968: 6)
šu šarrāq
3.M.SG thief[**PRED**]
'He is a thief.'

The contrast between the predicative form (78–79) and the nominative of the 'status rectus' (80) allowed Akkadian to convey the opposition proper-inclusion *vs* identity predication (§ 1.2), with the latter expressing the [+specific] value even in the absence of the article. This is somehow reminiscent of the analogous situation of some Tupí-Guaraní languages (§ 4.3):

(80) Akkadian
Old Babylonian (1894–1595 BC; cited in Buccellati 1968: 9)
a. *ul mart-u attī*
NEG lady-NOM.SG 2.F.SG
'You are not the mistress.'

Middle Babylonian (1595–1155 BC; cited in Buccellati 1968: 173)

b. *šarr-u atta*
king-NOM.SG 2.M.SG
'You are the king.'

The subsequent, phonologically driven dissolution of the Old Semitic case system, at some point between the second and the first millennium BC, as documented in several West Semitic dialects of the first millennium (among them Aramaic and Hebrew) had severe consequences, obscuring the distinction between the morphologically lighter *vs* heavier forms, with eventual obliteration of the predicative function. According to Buccellati (1968), this leveling was later on partly amended by the introduction of the definite article, which gave expression to the [±specific] feature. This contributed to a kind of realignment of the system. In the following quotation, Buccellati implicitly refers to the syntactic contrast of predicative *vs* argument role:

> […] the appearance of the article is connected with the fall of the case endings. A morphological reason may now be suggested (and not only for Aramaic): as the case endings dropped, it became impossible to differentiate between normal and predicative state, and thus a new category (determination and indetermination, viz. the article) was introduced to take care of the phenomena which were previously expressed by the use of different states of the noun. (Buccellati 1968: 12)

The creation of the article, to which Buccellati refers, is a typical feature of some North-West and Central Semitic languages during the first millennium BC (Voigt 1998; Tropper 2001; Jastrow 2005; Rubin 2005: 65–90; Pennacchietti 2005; Hasselbach 2013). Its shape varies across the languages: in Hebrew (81a) and Arabic it is a prefix, whereas in Aramaic (81b) and Old South Arabian it is a suffix (Beeston 1984; Rubin 2005: 68).[22] The contribution of the article to noun predication in the modern Semitic languages is a syntactic byproduct of the [±specific] feature. But interestingly for our purpose, Pat-El (2009) proposed that its original function was not to mark specificity, but rather the adjective attributive function ("the article distinguishes the attributive adjective from the predicative adjective", p. 38):

(81) a. Biblical Hebrew (Gen 24,58) [from Pat-El (2009: 22)]
hā-'īš ha-ze
DEF-man DEF-this
'This man.'

22. All these forms are usually traced back to a common ancestor **hā*(*-n*), mostly interpreted as a demonstrative.

b. Aramaic of Targum Onqelos, Gen.12, 7
arʿ-ā *hādā* (2nd cent. AD) [from Pat-El (2009:22)]
land-DEF DEM.this
'This land.'

Aramaic is a most interesting case. The dialects of this Semitic subgroup developed three series of noun forms, or 'states' in traditional grammatical terminology. Leaving aside the 'construct' state – i.e. the form of a noun used as first element of a genitival construction, in which a noun attributively determines another noun – we will focus on the contrast between:

i. the 'absolute state' (here glossed ABST), unmarked for specificity and, crucially, expressing predicativity;
ii. the 'emphatic (or determinate) state' (glossed EMPH), characterized by the definite marker *-ā*.

The functional distinction between these two states, which by and large implement the divide predicate *vs* argument, is documented in a number of Aramaic varieties throughout the first millennium, as shown in (82). In 3,23 the emphatic state *gubrayyā*, modified by the demonstrative *illek*, indicates three previously mentioned men, thus implying referential specificity; but in 3,24 Nebuchadnezzar, who can now see four people, predicatively refers to them by means of the absolute state *gubrīn*. Likewise, the passive participle *mkaptīn*, expressing a small clause predicative complement, features the absolute state:

(82) Biblical Aramaic (Dan. 3,23–24; Jastrow 2005)
3,23 *w-gubrayy-ā* *illek* *tlate-hōn* […] *npal-ū*
and-man-M.PL.EMPH those three[PL.CST]-3.M.PL fall[PRF]-3.M.PL
l-goʾ *attūn* *nūr-ā* *yaqīd-t-ā*
to-middle[CST] furnace[CST] fire-F.SG.EMPH burn[PTCP]-F.SG.-EMPH
mkapt-īn *edayn* *nbūkadneṣar* *malk-ā* […]
bind[PASS.PTCP]-M.PL.**ABST** then Nebukadnezzar king-EMPH
'But these three men… fell into the midst of the furnace of blazing fire still tied up. Then Nebuchadnezzar the king …'
3,24 *ʿāneh* *w-āmar* *l-hadābro-hi* *ha-lā*
answer[PRF.3.M.SG] and-say.PRF.3.M.SG to-retinue[CST]-3.M.SG INT-not
gubr-īn *tlātā* *rmē-nā* *l-gōʾ* *nūr-ā*
man-PL.**ABST** three[SG] throw[PRF]-1PL to-middle[CST] fire-F.SG.EMPH
mkapt-īn […]*?*
bind[PASS.PTCP]-M.PL.**ABST**
'… said to his high officials, "Was it not three men we cast bound in the midst of the fire?…'
[the reason for the king's surprise is that he expected to see three men rather than four]

One can thus draw a parallel between absolute state and predicative form on the one hand, and emphatic state and argument case on the other hand, although the specificity factor intersects (in the relevant contexts) this basic distinction. Indeed, in (83a), the emphatic state expresses referential specificity, whereas the absolute state expresses proper-inclusion predication in (83b):[23]

(83) Qumran Aramaic

a. *kāhen-ā* *rabb-ā*
priest-EMPH great-EMPH
'the Great Priest.' (11Q18 14.ii.5; García Martínez & Tigchelaar 1997: 46–47)

b. *w-hū* *hwā* *kāhen*
and-he be[PRF.3.M.SG] priest[ABST]
'and he was a priest.'
(Genesis Apocryphal – 1QapGen 22,15; García Martínez & Tigchelaar 1998: 1222–1223)

5.2 The decline of construction B in Semitic

Around the beginning of the Christian Era, the systemic value of the Old Aramaic states opposition progressively weakened, and the emphatic (or determinate) state became the normal form of the noun, irrespective of specificity. The decline of the original opposition clearly emerges in (84), which compares the different rendering of a similar structure in Old Aramaic and Syriac, a later variety of Eastern Aramaic. In (85) two functionally attributive adjectives receive a contrasting treatment: *alīṣā* is in the emphatic state like the noun it modifies, whereas *qaṭīnā* is used predicatively in the absolute state, as a kind of implicit relative clause qualifying the noun *ūrḥā* (morphologically masculine but semantically feminine):

(84) a. Old Aramaic of Zakur (800–775 BC; Butts 2013: 344–345)
š *ʿnh* *ʾnh*
man[ABST] humble[ABST] 1SG
'I am a humble man.'

b. Syriac (Acts of Thomas, ed. Wright 1871: 172.13; 3rd cent.)
gabr-ā *ʾnā* *ʿebrāy-ā*
man-EMPH 1SG Hebrew-EMPH
'I am a Hebrew man.'

23. For the use of the emphatic and absolute states in Qumran Aramaic, see Fullilove (2014).

(85) Syriac (Afrahat, beginning of the 4th cent. AD, *Demonstrationes*, 447,2)
b-tar'-ā alīṣ-ā wa-b-ūrḥ-ā d-qaṭīn-ā
by-door-EMPH straight-EMPH and-by-way-EMPH REL-small-F.**ABST**
'through the right gate and the narrow way (lit. the way that is narrow).'

The domain in which the absolute state more often preserves its original syntactic value is indeed the adjectival predicative function (Nöldeke 1898[1966]: § 204; Joosten 1989; Goldenberg 1991). This anticipates later developments of the Neo-Aramaic dialects. By contrast, nouns often occur in the emphatic state even when used as predicates, such as *šmā* and *esārā* in (86):

(86) Syriac (Barhebraeus, m. 1286 AD, *Metrical Grammar*,
qadīmūt syām-ā Ch.1 § 1, ed. Bertheau 1843: 5)
precedence[CST] position-EMPH
la-yt-eh šm-ā ellā esār-ā
not-essence[CST]-3.M.SG noun-EMPH but conjunction-EMPH
'The preposition is not a noun, but rather a conjunction.'

The following versions of three biblical passages offer insight into the progressive loss, within Aramaic and its later variety Syriac, of the opposition absolute state (predicate) *vs* emphatic state (argument) with nouns, as opposed to adjectives. In (87–89), the Targums text retains, as in Biblical Hebrew, the absolute form of 'priest/minister', 'barren woman', and 'old'; the Syriac Pešiṭṭā, on the contrary, has the emphatic form for the nouns *kūmrā* 'priest' and '*qartā* 'barren woman'[24] in (87–88), but uses the absolute form for the adjective *sēb* 'old' in (89):

(87) *Genesis* 14, 18 (NRSV) '[And King Melchizedek of Salem brought out bread and wine;] he was priest of God Most High.'

a. Biblical Hebrew (1st half of the 1st millennium BC ?)
wə-hû kohen l-el ʿelyôn
and-3.M.SG priest[**ABST**] to-God high[**ABST**]
'and he was priest of God Most High.'

b. Targumic Aramaic (Targum Onqelos 2nd-3rd cent. AD)
wa-hū məšammēš qdām el ʿīl-ʾāh
and-3.M.SG minister[PTCP.M.SG.**ABST**] before God high-EMPH
'and he is/was minister before the high God.'

c. Syriac (Pešiṭṭā version, second half of the 2nd cent. AD)
wa-hū kūmr-ā hwā da-ʾlāhā
and-3.M.SG priest-EMPH be[PRF.3.M.SG] REL-God
'and he was the priest of God.'

24. The adjective '*qartā* is reported as a substantivized form in the dictionary sources.

(88) *Genesis* 11, 30 (NRSV) 'Now *Sarai was barren*. She had no child'
  a. Biblical Hebrew (masoretic text)
    wa-təhî *sāray ʿaqār-āh*
    and-be[PRF.3.F.SG] Sara barren-F.**ABST**
  b. Targumic Aramaic (Targum Onqelos)[25]
    wa-hwāt *sāray ʿaqr-ā*
    and-be[PRF.3.F.SG] Sara barren-F.**ABST**
  c. Syriac (Pešiṭṭā)
    wa-hwāt *sāray ʿqar-tā*
    and-be[PRF.3.F.SG] Sara barren-F.EMPH
    'And Sarai was barren.'

(89) *Genesis* 24, 1 (NRSV) 'Now Abraham was old'
  a. Biblical Hebrew (masoretic text)
    wə-abrāhām *zāqen*
    and-Abraham old[**ABST**]
  b. Targumic Aramaic (Targum Onqelos)
    wə-abrāhām *sīb*
    and-Abraham old[**ABST**]
  c. Syriac (Pešiṭṭā)
    wa-ʾbrāhām *sēb*
    and-Abraham old[**ABST**]
    'And Abraham was old.'

The modern Neo-Aramaic dialects have mostly lost the morpho-semantic opposition absolute *vs* emphatic (or determinate) state. However, some of them, such as the Maʿlūla variety, have preserved the absolute form with predicative adjectives. In this dialect, nouns appear in only one form, etymologically derived from the emphatic state; adjectives, by contrast, present a lighter and a heavier form, respectively stemming from the absolute and the emphatic state (Arnold 1989: 10–12 and *passim*):

(90) North-West Neo-Aramaic of Maʿlūla
  a. *hanna psōna rabb*
    this boy big[**ABST**]
    'This boy is big.'
  b. *ṯōle* *psōna rapp-a*
    come[3.M.SG] boy big-EMPH
    'The/a big boy came.'

25. Text according to the "Comprehensive Aramaic Lexicon": http://cal.huc.edu/ (viewed on 30/01/2019).

5.3 Relics of construction B in modern Arabic and Maltese

Problematic for the reconstruction sketched in § 5.1 is the situation of Arabic, which, at least in the Classical literary tradition, had a system of cases alongside the [±definite] (i.e. [±specific]) opposition, as shown in Table 3:

Table 3. Masculine singular of definite *vs* indefinite forms in Classical Arabic

	[−DEF]	[+DEF]
Nominative	*kitāb-un*	*(al-)kitāb-u*
Accusative	*kitāb-an*	*(al-)kitāb-a*
Oblique	*kitāb-in*	*(al-)kitāb-i*

However, evidence suggests that caseless spoken varieties may have existed throughout the history of Arabic (Blau 2006:80; Huehnergard 2017:3, fn. 9 therein). Modern Arabic dialects do not have cases and mark the proper-inclusion predicative function by absence of the definite article. By contrast, as shown in the following Arabic and Maltese examples, the [+DEF] form (= article+noun) fulfills, in the appropriate contexts, the role of identity predication. This may possibly be regarded as a relic of the diachronically vanished Construction B, although an independent development is of course possible:

(91) Classical Arabic

a. *Yūḥannā (huwa) kāhan-un*
Yūḥannā 3.M.SG priest-NOM.SG
'Yūḥannā is a priest.' [proper-inclusion]

b. *Yūḥannā (huwa) al-kāhan-u haḏihi al-kanīs-ati*
Yūḥannā 3.M.SG DEF-priest-NOM.SG DEM.F DEF-church-F.SG
'Yūḥannā is the priest of this church.' [identity]

(92) Maltese

a. *Pawlu (huwa) saċerdot*
Pawlu 3.M.SG priest
'Pawlu is a priest.' [proper-inclusion]

b. *Pawlu (huwa) s-saċerdot ta' din il-knisja*
Pawlu 3.M.SG DEF-priest REL DEM DEF-church
'Pawlu is the priest of this church.' [identity]

An attributive adjective usually follows the name it modifies (93a–93d), and may be marked for definiteness (93b–e). In the predicative role, however, the adjective cannot be accompanied by the article (93c–f):

(93) Classical Arabic

a. *bayt-un* *kabir-un*
house-NOM.M.SG big-NOM.M.SG
'a big house'

b. *al-bayt-u* *al-kabir-u*
DEF-house-NOM.M.SG DEF-big-NOM.M.SG
'the big house'

c. *al-bayt-u* *kabir-un*
DEF-house-NOM.SG big-NOM.M.SG
'the house is big'

Maltese

d. *tifel* *marid*
boy [M.SG] ill [M.SG]
'an ill boy'

e. *it-tifel* *il-marid*
DEF-boy [M.SG] DEF-ill [M.SG]
'the ill boy'

f. *it-tifel* *marid*
DEF-boy [M.SG] ill [M.SG]
'the boy is ill'

A major feature of Arabic and Maltese, as well as other Semitic languages, is the extensive use of verbless clauses in present-referring contexts (91–92). Actually, a third person pronoun with copula-like function can be introduced (the so-called 'pronoun of separation'), agreeing in number and gender with the subject. However, this is not obligatory (although recommended by normative grammars in Maltese), as shown by the parentheses in (91–92). In past- and future-referring contexts, by contrast, the copula is mandatory (94–95), and in Classical Arabic this caused the predicate to be in the accusative (94). This alternative morphological marking of the element in the predicative function, depending on presence *vs* absence of the copula, is consistent with the nature of Construction B, where the predicative form is only allowed in copula-less clauses:

(94) Classical Arabic

a. *wa-l-kalimat-u* *ṣārā* *ǧasid-an*
and-DEF-word-NOM.F.SG become[PRF.3.M.SG] flesh-ACC.M.SG
'And the Word became flesh.' (John 1,14, Smith and Van Dyke version)

b. *kāna* *al-walad-u* *ṭayyb-an*
be[PRF.3.M.SG] DEF-boy-NOM.M.SG good-ACC.M.SG
'The boy was good.'

(95) Maltese
Pawlu kien is-saċerdot ta' din il-knisja
Pawlu.PN be[PRF.3.M.SG] DEF-priest[M.SG] REL DEM DEF-church[NOM.F.SG]
'Pawlu was the priest of this church.'

5.4 Synopsis

To sum up, the expression of non-verbal predication appears to have been, from as early as the 3rd millennium BC, the primary reason for the opposition between two different forms of Semitic nouns and adjectives, however denominated in the different grammatical traditions. This opposition was preserved in Biblical Hebrew and in ancient and medieval Aramaic varieties, although by means of different morphological exponents, but it was lost in most Neo-Aramaic dialects, and is only partly preserved, limited to adjectives, in varieties such as the dialect of Maʿlūla. A kind of weak memory of this syntactic contrast may be considered to survive in some Semitic languages (§ 5.3), both past and present, through the independently motivated opposition [±specific], as conveyed by presence *vs* absence of the definite article, expressing the contrast proper-inclusion [-DEF] *vs* identity predication [+DEF].

On a broader scale, the analysis developed in sections § 3 to § 5 has shown that some typologically unrelated languages, spoken in geographically remote areas such as South America and Northern Africa, have (or had) a clear morphosyntactic strategy to express non-verbal predication by means of what we call Construction B. The following examples offer a synopsis of a passage from the book of *Genesis* in Biblical Hebrew, Syriac, Classical Arabic, Maltese and Ayoreo, where the [-DEF] form (Semitic) and the predicative form (Ayoreo) express predication, as opposed to the argument role conveyed by [+DEF] form (Semitic) and argument case (Ayoreo):

(96) Gen. 3, 1 (NRSV) 'Now the serpent was more crafty than any other wild animal'
a. Biblical Hebrew
wə-ha-nnāḥāš hāyāh ʿārûm mikkol ḥayyat
and-DEF-snake be[3.M.SG] clever.[-**DEF**] from_all animal
lit. 'and the snake was clever among all animals.'
b. Syriac (Peshiṭta)
w-ḥewy-ā ʿrîm hwā men kull-āh
and-snake-DEF clever[M.SG.-**DEF**] be[PRF.3.M.SG] from all-3.F.SG
ḥayû-tā
animal-F.SG
'and the snake was the cleverest of all animals.'

c. Classical Arabic (modern edition by Smith and Van Dyke)
wa-kānati al-ḥayyatu a-ḥyal-a ǧamīʿ-i
and-be[PRF.3.F.SG] DEF-snake.F.NOM.SG ELAT-clever-ACC[-**DEF**] all-GEN
ḥayawān-āt-i
animal-F.PL-GEN
'and was the snake the most clever of all of the animals.'

d. Maltese
u s-serp kien l-a-ktar wieħed li
and DEF-snake be[PRF.3.M.SG] DEF-DET.ELAT-much one REL
jilħaq fost l-annimali selvaġġi kollha
clever[-**DEF**] among DEF-animal[PL] wild[PL] all
lit. 'and the snake was the most one that was clever among all wild animals.'

e. Ayoreo (Morarie & Briggs 1985: 7)
uga-j u uhe ariŋakatɕoki-pise
snake-M.SG.ARG COP COMP lier/dishonest_man-ELAT.M.SG.**PRED**
nanike ome d-oh-ode kutɕiso ore n̥ese
time_back ADP REFL-fellow-M.PL.ARG animal[M.PL.**PRED**] 3PL all
'There was a snake, who in those times (was) the most dishonest amongst all animals.'
[lit. amongst all its fellows (who are) animals]

6. 'Deviant' cases

In all cases so far presented, we described a homogeneous situation within any given language family. There are, however, 'deviant' cases, suggesting that both Construction A and B of non-verbal predicative inflection can coexist within the same family. In § 6.1 we show that the Saami dialects, unlike other Uralic languages discussed in § 2.1, use a non-verbal predicative inflection of type B, instead of the expected type A. This also partially occurs with Nganasan, in contrast with the canonical Samoyedic behavior (§ 2.5). Symmetrically, in § 6.2 we show that some Semitic languages exhibit clear instances of Construction A, instead of the expected Construction B (cf. § 5). Actually, Nganasan (Samoyedic) and Akkadian (Semitic) go one step further, showing that Constructions A and B can coexist within the same language.

6.1 Construction B in Saami (Finno-Saamic) and Nganasan (Samoyedic)

In all Saami dialects, predicative nouns and adjectives appear in the copula construction (Miestamo 2011: 24). Both subject and non-verbal predicates are in the

nominative, except for locational clauses, where the predicative noun is in the inessive case. This clearly implements the copula construction (I), as described in § 1.1. However, many adjectives contrast an attributive and a predicative form. Needless to say, there are dialect differences, as one can gather from Feist (2010) for Skolt Saami, Behnke (2010) for Ter Saami, and Wilbur (2014) for Pite Saami. Sammallahti (1998) provides a general survey, showing that the actual form of the adjective depends on the inflectional class.

Following Sammallahti (p. 71–73), one can distinguish three major adjectival classes: (i) with no morphologically distinct attributive form; (ii) with morphologically distinct attributive form; (iii) with no attributive form. Among the examples of class (ii), he reports (with predicative form first): ***láiki*** / *láikkẹs* 'lazy', ***johtil*** / *johtilis* 'fast', ***čáhppat*** / *čáhppes* 'black', ***čieŋal*** / *čiekŋalis* 'deep', ***álki*** / *álkẹs* 'easy', ***vuddjii*** / *vuddjes* 'fat, greasy', ***aṣẹhaš*** / *aṣẹhis* 'thin', ***un'ni*** / *unna* 'small', ***garas*** / *garra* 'hard', ***lossat*** / *lossa* 'heavy', ***fiinnis*** / *fiinna* 'fine', ***čáppat*** / *čáppa* 'beautiful'.

As Wilbur (2014) notes, it is likely that the attributive form derived from the predicative one, although synchronically this is no longer evident in all cases (see the above examples). The diachronic evolution has indeed created a mixed situation, whereby in some declensional classes the predicative form looks morphologically heavier than the attributive one. Whatever the case, if Wilbur is right, we have a situation reminiscent – at least diachronically – of Construction B, such that the predicative form, historically coinciding with the word's root, is (or was) morphologically lighter than the non-predicative (i.e. attributive) form. One has to add, however, that the behavior of present-day Saami dialects is definitely non-prototypical, inasmuch as the predicative form of the relevant adjectives coexists with the copula. To the extent, however, that these dialects can be assigned to Construction B, they deflect from the other Uralic languages mentioned in § 2.1.

A similar case can be found in Nganasan (Samoyedic), already mentioned in § 2.5 for its non-prototypical implementation of Construction A, as restricted to nouns and adjectives. However, this very same language also has a small group of qualitative adjectives which exhibit an inflectable attributive form contrasting with the morphologically lighter predicative form: e.g. *tanəgəə* 'wide', ***tandᵘa*** '(it) is wide'; *kəəlʲükü* 'short', ***kəim*** '(it) is short' (Helimski 1998a: 497). In this case, deflection from the prevalent type occurs within the same language. We will describe another such case in the next section.

6.2 Construction A in Semitic

In addition to what is reported in § 5.1, one has to note that the predicative form of the Akkadian noun (most often a verbal noun), as described above in (78–79), can be combined with endings ostensibly deriving from the independent pronouns

in order to form the so-called 'stative' (Huehnergard 2005: 219–223).[26] This gives rise to person-sensitive affixes in the spirit of Construction A. From the adjective *marṣum* 'sick', one gets the conjugation in Table 4:

Table 4. The Akkadian stative paradigm as compared with the independent personal pronouns

	'Stative'	Independent pronouns		'Stative'	Independent pronouns
1SG	*marṣ-**āku***	*anāku*	1PL	*marṣ-**ānu***	*nīnu*
2.M.SG	*marṣ-**āta***	*atta*	2.M.PL	*marṣ-**ātunu***	*attunu*
2.F.SG	*marṣ-**āti***	*atti*	2.F.PL	*marṣ-**ātina***	*attina*
3.M.SG	*maruṣ-**Ø***	*šū*	3.M.PL	*marṣ-**ū***	*šunu*
3.F.SG	*marṣ-**at***	*šī*	3.F.PL	*marṣ-**ā***	*šina*

A form such as *marṣāku* can thus be a self-contained sentence, meaning 'I was/am/will be sick'). Similarly, from the verb *aḫāzu* 'to seize, capture', one gets *aḫiz*:

(97) Akkadian [from Carver (2016: 2)]
māt-um *aḫiz*
land-NOM.SG seize[3.M.SG.**PRED**]
'the land is seized.'

The interpretation of the 'stative' construction has been a matter of debate (Buccellati 1968; Kraus 1984; Huehnergard 1987; Kouwenberg 2000; Carver 2016 among others). A similar pattern can be found in later stages of Semitic and is especially common in Syriac. It consists in the juxtaposition of a noun and an enclitic coreferential pronoun – such as *aḥayn ennūn* in (98) – whereby the noun normally features in the emphatic (or determinate) state, rather than in the absolute state (Joosten 1989; Goldenberg 1991). Recall that in § 5.1 these two 'states' were considered to be essentially equivalent to, respectively, the argument case and the predicative form of Zamucoan and Tupí-Guaraní:

(98) Syriac (Barhebraeus, *Chronicon*)
hālēn ṭayāy-ē *aḥay-n* ***ennūn***
these arab-PL.EMPH brother[CST]-1PL 3.M.PL
'These Arabs are our brothers.'

26. Needless to say, the term 'stative' does not have, here, its usual meaning. Although the pronominal origin of the 'stative' endings is generally admitted, a verbal origin has been proposed for at least some of them (Kuryłowicz 1972; Kouwenberg 2000; Hasselbach 2007; for a brief account, see Carver 2016: 9–10).

This construction – also known as 'conjugated pronoun' (Goldenberg 1983: 112) – is somehow reminiscent of the non-verbal conjugation (Construction A) described in § 2, and involves nouns, adjectives and, largely, participles and other verbal nouns, such as participial adjectives, as in (99–100). It displays a high degree of grammaticalization, whereby some of the enclitic pronouns (the first person singular and plural) are phonologically integrated into the root, as in (100):

(99) Syriac (*Vita* of Ephrem, CSCO, ch. 11)
*anttā lā bāht-ā **anty**?*
woman[DEF] not ashamed[PTCP.F.SG]-ABST 2.F.SG
'Woman, are you not ashamed?'

(100) Syriac (Barhebraeus, *Chronicon*)
*mašlmīn-**an** la-mdīn-tā*
deliver[PTCP.ABST]-1PL OBJ-city-EMPH
'We are delivering the city.'

In Eastern varieties of Neo-Aramaic, this construction has developed into the so-called 'predicative conjugation/inflection', replacing the original Aramaic system of prefix and suffix conjugation. The combination of active and passive participles with suffixes of pronominal origin has given rise to a new inflectional pattern expressing the contrast present *vs* past-referring. In Ṭuroyo, e.g., from the theme of the active participle *goriš* 'pulling', one finds the pattern of active predicative inflection shown in Table 5 (Jastrow 1997: 363).[27]

Table 5. Ṭuroyo predicative inflection

1.M.SG	gorăšno (I.M am pulling/pull)	1.F.SG	gŭršóno (I.F am pulling/pull)
2.M.SG	gŭršĭt (you.MS are pulling/pull)	2.F.SG	gŭršát (you.FS are pulling/pull)
3.M.SG	górĭš (he is pulling/pulls)	3.F.SG	gŭršó (she is pulling/pulls)
1.M/F.PL	gŭršína (we are pulling/pull)		
2.M/F.PL	gŭršútu (you are pulling/pull)		
3.M/F.PL	gŭrši (they are pulling pull)		

A brief mention should be added here of the *'īt-* construction of Biblical Aramaic and Syriac. Originally, it was a possessive construction based on the root

27. A recent paper by Khan (2018) points out that a number of Near Eastern Neo-Aramaic dialects (especially the Barwar dialect, pp. 252–255) display different sorts of (mostly enclitic) copulae of pronominal origin, employed in structures that can be interpreted as instances of Construction A. Significantly, such dialects have lost the light/heavy form opposition in the nominal morphology (Khan 2008, vol. 1, ch. 14.1), which makes them definitely incompatible with Construction B.

meaning 'essence', where possession was expressed by a pronoun coreferential with the subject. This gave rise to non-verbal predications such as:

(101) a. Syriac (Odes of Solomon; 2nd cent.)
kahn-ā d-māry-ā īta-y
priest-EMPH REL-Lord-EMPH essence-1SG
'I am the Lord's priest.' (lit. 'Lord's priest my essence')

b. Syriac (Barhebraeus, *Ecclesiastical Chronicle*, I, 21)
hānā ʾītaw-hy abū-hy d-īšūʿ
this essence-3.M.SG father-3.M.SG REL-Isho
'This one was Isho's father.' (lit. 'Isho's father his essence')

In the course of time, however, *ʾīt-* was used more and more as a kind of copula, also giving rise to compound tenses as a true auxiliary, thus clearly diverging from any recognizable type of non-verbal predicative inflection. Although anticipated in earlier varieties such as Biblical Aramaic (book of Daniel, about 3rd cent. AD), this structure became wide-spread in Syriac under the influence of philosophical and theological Greek, subsuming all functions of *eînai* 'to be' (Butts 2013: p. 342–369).[28] Despite its diverging nature, the *ʾīt-* construction is nevertheless relevant to the topic of this paper inasmuch as it shows a possible line of development from pronoun to copula.

7. General discussion

In this paper, we described the different strategies of non-verbal predication adopted by two sets of typologically unrelated languages. What makes them special is the fact that, instead of using the much more frequently used strategies mentioned in § 1.1, namely the copula construction (I) or the juxtaposition construction (II), these languages developed a specifically dedicated morphological marking for non-verbal elements in predicative position.

The two strategies in question – here called Construction A and B – differ however in their essential properties, as itemized in the next section. In terms of distribution, § 2 has shown that Construction A can typically be found in Mordin-

28. A good example of the identification between *ʾīt-* and *eînai* can be found in the following paraphrase of Aristotle's *Peri Hermeneias*, ch. 2, in the Syriac Grammar by Bar Zoʿbi (beginning of the 13th cent.): "When a noun is found together with *hwā* ('he was'), *ʾītawhy* (lit. 'his essence', hence 'he is') or *nehwē* ('he will be') it indicates truth or falsity", i.e. it expresses predication (translation by Margherita Farina). The Greek text has the following forms of *eînai*: *ēn* ('he/she/it was'), *estín* ('he/she/it is'), *èstai* ('he/she/it will be').

ian, Turkic, Paleosiberian, and in some Amazonian languages, but is also attested in some sparse languages from Oceania and Africa, and can be detected in Akkadian and Syriac (§ 6.2). Construction B, by contrast, can be found in Zamucoan (§ 3), Tupí-Guaraní (§ 4), some old varieties of Semitic languages (§ 5.1), plus – limited to adjectives – in the Neo-Aramaic dialect of Maʿlūla (§ 5.2) and (much less prototypically) in the Saami dialects (§ 6.1).

In § 7.1 we analyse the constitutive features of Construction A and B. In § 7.2 we discuss the hypothesis of omnipredicativity, suggesting that it can be conjured for type B. Finally, in § 7.3 we add some observations on identity predication, as well as on predicative adjectives in general, i.e. with no reference to Constructions A and B.

7.1 Two types of non-verbal predicative inflection

Construction A and B differ along two major, and partly interrelated, parameters of analysis:

- the range of lexical classes involved, and
- the kind of morphological marking.

With respect to the first parameter, Construction B restricts the predicative inflection to nouns and adjectives, whereas Construction A extends it to adverbial phrases (locational and temporal) and possibly also to pronouns and quantifiers. Some Construction B languages further restrict the predicative inflection to adjectives, as the Neo-Aramaic dialect of Maʿlūla (§ 5.2) or the Saami dialects (§ 6.1). Lexical class constraints can also be observed among Construction A languages: Samoyedic languages typically restrict the predicative inflection to nouns and adjectives (§ 2.5) and Mari (Uralic) even to just adjectives (§ 2.1). A special case is Ket (Paleosiberian), where the predicative inflection involves all major lexical classes to the partial exclusion of nouns (§ 2.3).

To understand the second parameter (the kind of morphological marking), one should first consider the role of the copula. In both types of construction, the copula is in complementary distribution with respect to the predicative inflection, but there is a fundamental difference. In Construction B languages, the copula originally was (and still largely is) absent (Tupí-Guaraní) or limited to the existential function (Old Zamuco and Chamacoco). If a true non-existential copula is observed, it must be a relatively recent development (Ayoreo), and the same holds for the marginal usage of the copula in Kamaiurá and Avá-Canoeiro (§ 4.1, Examples (62)–(63)). Note that absence of the copula implies that nouns and adjectives have an intrinsic predicative value in and by themselves; we will elaborate on this in § 7.2. By contrast, most Construction A languages have copula ele-

ments (possibly more than one) and thus may use them as an alternative strategy, possibly depending on discourse parameters. However, these languages have also turned the original copulae (whatever their origin) into person-sensitive inflections to be added to non-verbal predicates, thus creating a specific type of conjugational pattern orthogonal to the copula, whose presence would be redundant. As a consequence, the inflections of Construction A are definitely verb-like, and may resemble, or even coincide with, the given language's verb inflections, with which they may share, to some extent, the TAM features.

This suggests that any deflection from the complementary distribution of non-verbal predicative inflection and copula must be a later development. This has possibly occurred in the Saami dialects within Construction B (§ 6.1).

The copula incorporation process of Construction A has brought about an important consequence which enhances the structural divide, namely the morphologically heavier shape of the non-verbal predicative form. By contrast, in Construction B the predicative form is morphologically lighter and can historically be interpreted as the word's root, although in the course of time the situation may have changed, sometimes quite remarkably. A striking example of this evolution is the Zamucoan predicative form, which has developed its own plural. In order to build a convenient functional opposition, Construction B languages have added dedicated inflectional exponents to the non-predicative form of nouns and adjectives (as argument or attribute, respectively), unless phonetic erosion has occurred in some declensional classes.

This brings about a fundamental difference: although both types of contruction make use of an additive mechanism, this goes in opposite directions. Construction A adds PERSON-SENSITIVE INFLECTIONS to generate the NON-VERBAL PREDICATIVE FORMS, whereas Construction B adds CASE-LIKE AFFIXES to generate the NON-PREDICATIVE FORMS of nouns and adjectives.

Interestingly, some languages seem to belong to both types, to the extent that both constructions are used in the same diachronic phase. This is the case of Akkadian and Syriac, which, besides Construction B (§ 5.1), also made use of the so-called 'stative' (Akkadian) and 'conjugated pronoun' constructions (Syriac), giving rise to Construction A inflections (§ 6.2). Conversely, Nganasan has a small set of adjectives with type B behavior, contrasting with the prevalent adoption of (a non-prototypical version of) Construction A.

It is worth noting that our analysis did not consider situations such as those to be found in some Finno-Ugric and Slavic languages, in which the noun predicate can be marked with special case endings in order to trigger specific semantic nuances. For instance, in Finnish the essive case, instead of the nominative, indicates a temporary property (102). Similarly, in Russian the opposition (nowadays excluded from present-referring contexts) of instrumental *vs* nominative conveys

the contrast transitory *vs* relatively permanent in the past (103). In Polish, by contrast, the instrumental case is normally used to indicate proper-inclusion predication (104), as opposed to identity predication, which is expressed by the nominative. The reason for not including these case-assignment strategies into Construction B is that they coexist with the copula; hence, the noun inflection is not the main carrier of the predicative function:

(102) Finnish (Uralic)
a. *hän oli siellä opettaja-na*
s/he was there teacher-ESS.SG
'S/he was there (temporarily) as a teacher.'
b. *hän on opettaja*
s/he is teacher[NOM.SG]
'S/he is a teacher.'

(103) Russian (Slavic)
a. *Ivan byl doktor*
Ivan was doctor[NOM.SG]
'Ivan was a/the doctor.'
b. *Ivan byl doktor-om*
Ivan was doctor-INSTR.SG
'Ivan was (temporarily) a/the doctor.'

(104) Polish (Slavic; Stassen 1997: 104; from Stone 1980: 22, 35)
a. *jestem student-em*
be.1SG.PRES student-INSTR.SG
'I am a student.'
b. *Warszawa to stolic-a Polsk-i*
W. DEM capital-NOM.SG Poland-GEN
'W. is the capital of Poland.'

7.2 The role of omnipredicativity

As far as Zamucoan and Tupí-Guaraní languages are concerned, the origin of the divide 'predicative form *vs* argument' case is possibly related – following a suggestion by Queixalós (2001, 2006) – to the omnipredicative tendency that has been claimed to be a widespread feature of American Indian languages at large. This tendency may manifest itself in three different ways.

The most extreme one consists in the nouns having access to explicitly 'verbal' morphology, as in languages where nouns have been claimed to have the morphological shape of verbal predicates, such as Nahuatl (Launey 1994, 2004), Cayuga (Sasse 1998), or the Salishan languages. In (105), the predicative function is alter-

natively expressed by two roots ('friend' and 'call') which in many languages would be respectively considered a noun and a verb, whereas in Nahuatl they are morphologically shaped as predicates in both sentences, with the subject argument syntactically marked by a determiner. In (106a), the Cayuga word for shaman is morphologically shaped like a predicate, just like the stative predicate in (106b):

(105) Nahuatl (Launey 2004)

a. *ka Ø$_i$-ī-ikniw in Ø$_i$-ki-nōca*
ASSER 3-3POSS-friend DET 3-3OBJ-call
'It is his friend that calls him.' (literally: 'The calls-him is his friend')

b. *ka Ø$_i$-ki-nōca in Ø$_i$-ī-ikniw*
ASSER 3-3OBJ-call DET 3-3POSS-friend
'His friend calls him.'

(106) Cayuga (Sasse 1998)

a. *h-até:tse'-s*
3SG-cure-PRS
'He cures.' (= 'he is a shaman')

b. *k-ha't-á:thę-hs*
1SG-throat-dry-PRS
'I am thirsty.'

Although the idea of a complete merge of nouns and verbs has been rightly disputed (e.g. Mithun 1999), it is undeniable that the distance between these two lexical classes in languages like the two above is definitely much narrower than, e.g., in Indo-European languages.

The second manifestation of omnipredicativity – which may be regarded as an attenuated version of the first – can be observed in the Tupí-Guaraní family, where verbs are split (according to one major terminological option; see Jensen 1998) between 'active' and 'inactive' verbs. The latter require a specific set of person prefixes, which coincide with, or are at least very similar to, the morphemes used to indicate possession in nouns. There are conflicting views as for the verb-like *vs* noun-like status of 'inactive' verbs and this may reflect the idiosyncrasies of the individual languages (Meira 2006). For instance, the 'inactive' verbs of Bolivian Guaraní (a.k.a. Chiriguano), despite their noun appearance, take the same tense-aspect suffixes as the 'active' verbs, as shown in (107):

(107) Bolivian Guaraní (Bertinetto 2006)

a. *ajapo* 'I do' ('active' predicate)
Non-Future: *a-japo*; Future: *a-japo-ta*; Perfect: *a-japo-ma*

b. *che miari* 'I speak' (lit. 'my speech'; 'inactive' predicate)
Non-Future: *che miari*; Future: *che miari-ta*; Perfect: *che miari-ma*

But in addition to selecting a different set of person markers (e.g. *che* instead of *a-* for first person singular),[29] 'inactive' verbs can inflect, like any noun root, for retrospective and prospective stage (the so-called 'nominal tense'), as shown in (108) with a 'pure' noun and an 'inactive' verb, respectively. This underlines, on the one hand, the ambiguous nature of the latter, but also shows that in this language even 'pure' nouns retain some 'verby' features:

(108) Bolivian Guaraní (Bertinetto 2006)
  a. *me* 'husband'; *me-gwe* 'past husband (either dead or divorced)'; *me-rã* 'future husband (either fiancé or dreamed of)'
  b. *che miari* '1SG speech'; *miari-gwe* '1 past speech'; *miari-rã* '1 future speech' (i.e., 'I speak / spoke / will speak')

The third and so far less often noted manifestation of omnipredicativity is directly relevant for the topic of the present paper, inasmuch as it involves the possibility of inflecting nouns and adjectives in two contrastive ways, depending on their predicative *vs* argument/attributive role. This is the case of Construction B languages.[30] Since the predicative form coincides (or originally did) with the root, one might claim that in such languages nouns and adjectives emerge out of the lexical storage with inherent predicative capacity. Thus, the word for 'house' would literally have the meaning of 'it is a house'. This is what Seki (2000:112) proposed with respect to Kamaiurá nouns used as citation forms (Example (61)), which might be construed as exhibiting a kind of ostensive meaning, such as: 'it is a house (what one sees out there)'.[31] By contrast, when one and the same noun/adjective is used in argument/attribute position, a specific exponent must be added.

We also observed that in some Tupí-Guaraní languages, owing to absence of existential copula elements, the citation form of the noun can have an existential reading (Examples (64–68)). This may be understood as an implicitly ostensive nature of the citation form, whereby 'it is a house' may also be construed as 'there

29. It is worth noting that in Guaraní (at least in the Bolivian variety) the predicative function of a noun may be expressed by copula-less syntactic structures in which the personal pronoun is repeated, with an effect of emphatic underlining; e.g., *che che mburuvicha* 'I am the boss' (Dietrich 1986).

30. We do not list, among these manifestations, a further type consisting in nouns directly used as predicates, such as Ayoreo *j-uruode* 'my words' for 'I speak', or Chamacoco *p-ekwerta* 'my memory' for 'I remember'. In such cases, we do not find a dedicated morphology to mark predicativity, but rather a pragmatically conventionalized copula-less usage.

31. This reasoning does not apply to present-day Zamucoan, though. When asked for the translation of a Spanish word, Ayoreo and Chamacoco informants mostly provide the argument case, rather than the predicative form.

is a house'. In Zamucoan, by contrast, the presence of existential elements bars the predicative form of the noun (§ 3.3).

Omnipredicativity might possibly also be conjured for some old varieties of Semitic, if the interpretation provided in § 5.1 for Akkadian and Aramaic is correct. In those cases, a morphologically lighter form was exploited to mark the predicative function of the word, as opposed to its argument/attributive functions. However, it would be unreasonable to extend the omnipredicative nature to Construction A languages, in which the predicative forms consist in the incorporation of person-sensitive copula-like inflections. In such languages, the predicative function originally performed by the copula – or by copula-like elements of pronominal origin – was at some point directly transferred to the copula complement in the form of a dedicated inflection, with the effect of turning it into a fully-fledged non-verbal predicate.

7.3 Identity predication and predicative adjectives

The discussion in § 5 highlighted the interplay of the predicative function with the parameter of specificity. This is directly related to identity predication, which presupposes referential specificity of both (sets of) referents among which the correspondence is established (§ 1.1, Example (4)). By contrast, proper-inclusion predication, being intensional in nature, presupposes non-specificity of the copula complement or, in languages such as those at stake here, of the non-verbal predicate. Clear evidence of the contrast between these two kinds of predication can be detected in those Tupí-Guaraní languages that use the argument case on both arguments of an identity clause, while using the predicative form to express proper-inclusion (§ 4.4, Examples (72)–(73)).

In the Semitic languages the expression of this contrast has been entrusted to presence *vs* absence of the definite article (Examples (91)–(93)), while other languages oppose definite *vs* indefinite articles, as in Eng. *John is the* / *a teacher*. The Zamucoan languages, as seen in § 3.4, can mark non-specificity via the indeterminate form of the noun, but apart from that they treat identity and proper-inclusion predication in the same way. The same result is achieved in Tennet (Surmic, Eastern Sudanic) via the peculiar morphosyntactic strategy described by Dixon (2010:172). This language employs the copula construction for [-specific] predication and juxtaposition for identity, hence referentially specific predication, and this goes together with alternative morphological specifications of the two NPs: nominative for copula subject and accusative for copula complement in [-specific] contexts, as opposed to accusative for both NPs in [+specific] copula-less contexts.

Our analysis has pinpointed the fact that in some languages – Mari (§ 2.), the Neo-Aramaic Maʿlūla dialect (§ 5.2), the Saami varieties and to some extent

Nganasan (§ 6.) – the non-verbal predicative inflection is restricted to adjectives. Wintschalek (1993: 87) surmised that the relevant Uralic and Turkic languages might have developed this feature via contact with Indo-European languages, since contrastive marking of adjectives depending on attributive *vs* predicative role (somehow reminiscent of Construction B) is a relevant feature of German and Russian:

(109) a. German
das schöne Mädchen ist da vs *dieses Mädchen ist schön*
'The beautiful girl is here.' 'This girl is beautiful.'
b. Russian[32]
umnaja devuška zdes' vs *devuška umna*
'(The) clever girl is here.' '(The) girl is clever.'

However, a language-internal development cannot be excluded.

7.4 Conclusion

The non-verbal predication strategies A and B documented in this paper, although admittedly attested in a minority of languages, appear to be the geographically non-restricted manifestation of a typologically relevant tendency to mark, by means of dedicated inflections, the contrast between the predicate *vs* argument/attribute functions of non-verbal elements. Future research might disclose further evidence, possibly diachronic, of this phenomenon in other languages.

It is worth noting that Queixalós (2006), quoting Lemaréchal (1989), established a parallel between Tupí-Guaraní and the radically omnipredicative Austronesian languages which make use of dedicated morphemes to mark the argument function of a root (e.g. the determiner *ang* in Tagalog), as opposed to its predicative function. However, in such isolating languages the contrast predicate *vs* argument is entirely dealt with by the syntax, whereas in the languages discussed here morphology is directly involved. Besides, the same type of syntactic marking can be found in fully-fledged Construction A languages such as Nivaclé and Mojeño Trinitario (§ 2.4), where argument nouns are regularly accompanied by an article/determiner (Fabre 2016; Rose 2018). Hence, this cannot be regarded as a defining feature in the present context.

32. The stress falls on the first syllable of *umnaja* and on the last of *umna*. It should be noted that not all Russian adjectives exhibit the so-called 'short' form. However, to the extent that they have it, it can only be used predicatively; the alternative 'long' form, by contrast, can be used both predicatively and attributively.

Mattissen (2003: 271) discussed the hypothesis that the existence of complex nouns that can "function as predicates without a copula and thus constitute a minimal sentence on their own" might be considered a polysynthetic feature. She observed that "if polypersonalism [i.e., the usage of person affixes to build non-verbal predicates] is considered a necessary condition for polysynthesis, then the nature of person marking on the complex noun becomes a crucial point". However, she adds a cautious note: "there are polysynthetic languages without complex nouns". The languages described in this paper provide independent evidence to this conclusion, showing that not all languages exhibiting polypersonalism in their noun inflection (see Construction A) are polysynthetic.

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Abbreviations

The following abbreviations will be used in the paper:

AB	abessive
ACC	accusative case
AD	adessive
ADP	adposition
ARG	argument form
ART	article
ASSER	assertive marker
ASSEV	asseverative
ABST	absolute state
ATT	attested evidential
ATTR	attributive
CAR	caritive
CLF	classifier
COMP	complementizer
COORD	coordinator
COP	copula
CST	construct state
DECL	declarative
+/-DEF	(in)definite
DM	discourse marker
DEM	demonstrative
DET	determiner
DIM	diminutive
DU	dual
ELAT	elative
EMPH	emphatic state
ESS	essive
EVD	evidential
EXC	exclamative
EXIST	existential copula
F	feminine
FREQ	frequentative
GEN	genitive case
GF	generic form
HAB	habitual
HUM	human
IDF	indeterminate form
IND.PART	indeclinable particle

INES	inessive
INFER	inferential
INS	instrumental case
INT	interrogative
IPFV	imperfective
IRR	irrealis
ITER	iterative
LOC	locative
M	masculine
MOD	modal
N	neuter
NARR	narrative
NFUT	non-future
NEG	negation, negative
NMLZ	nominalizer
NOM	nominative case
NPST	nonpast
OBJ	object
OBL	oblique case
PASS	passive
PFV	perfective
PL	plural
POSS	possessive
PRED	predicative (form)
PRF	perfect
PRS	present
PRET	preterite
PROX	proximal
PST	past
PTCP	participle
REC	recent
REFL	reflexive
REL	relative
REM	remote
REP	reportive
RLS	realis
RP	relational prefix
RTR	retrospective
SAP	speech act participant
SG	singular
VBLZ	verbalizer
VR	verbal representation

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