NON-VERBAL PREDICATION AND COPULAS
IN THREE MANDE LANGUAGES

Valentin Vydrin
Institut nationale des langues et civilisations orientales — LLACAN —
St. Petersburg State University — Institut Universitaire de France
vydrine@gmail.com

Abstract
Non-verbal predication and copula types are analysed in three Mande languages: Bambara, Guinean Maninka, and Eastern Dan. These languages display considerable divergences. In Bambara, there are three affirmative non-verbal copulas used in different construction types, comprising one formal class. In Guinean Maninka, there is only one non-verbal affirmative copula, and it can be omitted; there is a tendency toward its substitution with a focalization particle. The affirmative non-verbal qualitative construction is copulaless. In both these languages, there is also a verbal copula used in non-default context, and an ostentative copula going back to a verb whose lexical meaning is 'to look'.

In Eastern Dan, copulas are diverse in nature: some are of verbal origin, while others go back to demonstrative adverbs. There are three series of inflectional auxiliary lexemes which are used both in verbal constructions and in constructions with non-verbal predicates, i.e. as copulas.

Key words: copula, non-verbal predication, Mande languages, Bambara, Maninka, Dan

1. Introduction

The Mande family includes 60 to 70 languages spoken in an area extending from Nigeria to Senegal and is subdivided into two branches, Western and Southeastern. In its turn, these branches consist of 11 lower taxa, of which two (Eastern Mande and Southern Mande) belong to the Southeastern branch, and the other 9 (including the Manding group), to the Western branch; for more detail see (Vydrin 2009).

All the Mande languages share, with some variation, a number of basic characteristics: they are tonal; the basic word order is S Aux O V X in a transitive verbal clause and S Aux V X in an intransitive clause; in a noun phrase, the head noun follows the dependent noun, but it precedes an adjective or a determiner.

However, languages belonging to different groups (and sometimes even to a single group) and branches of Mande can diverge considerably in many respects.

To my knowledge, there has been only one attempt so far to review copula constructions in Mande languages. This is a paper by Henning Schreiber (2008), dealing with data from thirteen languages representing different groups within the Mande family.[1] Based on this work (and adding some elements which, to my mind, do not contradict Schreiber's analysis), I would formulate the most remarkable peculiarities of non-verbal predicative constructions in the "prototypical Mande languages" as follows:

- connection between arguments and predicates is expressed, as a rule, by specialized elements, i.e. copulas. In other words, zero-connection is untypical;
- most often, copulas in Mande languages have no inflection, and they usually cannot be classified as verbs;[2]
- it is typical of Mande languages to have more than one copula for different constructions (with different semantic types of non-verbal predicates);
- copulas used in locational / oblique case constructions easily evolve into auxiliaries of imperfective verbal constructions;
- Mande languages usually have negative copulas in addition to affirmative ones. Most often, there is only one negative copula in a language. In other words, in

---

[1] A recent paper by Creissels (2017) can also be mentioned in this context, but it considers Mande copulas from a different perspective from that taken here. Certainly, descriptions of copulas and non-verbal constructions (in more or less detail) can be found in grammars of Mande languages.

[2] In (Adamou & Costaouec 2010) specialized non-verbal connectors, very common in the Mande family, are characterized as "very rare crosslinguistically". In fact, they are widely spread in African languages in general.

negative non-verbal clauses semantic differences between types of predicates are not signalled by the use of distinct copulas.[3]

The goal of this paper is to contrast this abstract model with the data of a well-studied Mande language (Bambara) and hitherto understudied Mande languages (Guinean Maninka and Eastern Dan). As will be shown, even in Bambara, some notable deviations from the abovementioned "Mande prototype" can be found, and the two other languages diverge from this "prototype" even more strikingly.

In section 2, I will present a short overview of the issues related to the non-verbal predication in the typological perspective.

In section 3, the Bambara data will be considered. Bambara, which belongs to the Manding group and is certainly the best described Mande language, is usually regarded as the most prototypical representative of this language family; in typological studies, it is often taken as the only sample language representing the entire family, as in (Pustet 2003), or the main reference, as in (Hengeveld 1992), where Bambara is mentioned 26 times, while the Southwestern Mande language, Kpelle, is mentioned only twice (and no other Mande language is referred to at all). Despite this attention, Bambara data is not unfrequently misinterpreted by typologists because of outdated or unreliable sources, and even in more specialized works, such (Schreiber 2008), questionable claims on Bambara can be found.

In section 4, the copulas and non-verbal predicates of the Guinean Maninka will be represented. Although very close to Bambara genetically, this Manding variety manifests some striking differences from Bambara and from the "prototypical Mande" model outlined above.

In section 5, the Eastern Dan data will be analysed. Dan belongs to the South Mande group, whose genetic distance from Manding lies within the range of about 4 millennia (35-40% of the basic vocabulary of the 100-word Swadesh in common) (Vydrin 2009). As regards non-verbal predication, Dan is a rather typical South Mande language, and serves as a good illustration of how distant the languages of lesser known groups may be from what is usually taken as "typically Mande" (although some basic features remain similar).

In the conclusions, the nontrivial peculiarities of the three languages (as viewed against the Mande background and in the typological perspective) are summarized.

2. A typological overview

2.1. Non-verbal predication

Copulas and non-verbal predication in world languages have been dealt with in numerous publications including (Hengeveld 1992; Stassen 1997; Pustet 2003; Dryer 2007; Adamou & Costaouec 2010). Let us briefly survey the main notions and problematics related to non-verbal predication. In what follows, I will adopt Hengeveld's approach (unless otherwise indicated).

A non-verbal predicate is defined negatively as a predicate which is not a verb; the verb is defined as a lexeme whose default use is in predicative function (Hengeveld 1992: 27).

The crucial feature of a non-verbal predicate is that it imposes selection restrictions. In numerous languages of the world, it is not accompanied by a copula. Therefore, the non-verbal predicate, and not the copula, is the true predicate of non-verbal predications (Hengeveld 1992: 29).

Clauses with non-verbal predications can be classified according to the following parameters:

- the type of copula;
- the type of predicate;
- the semantic and pragmatic function of predication;

---

[3] I am grateful to Denis Creissels for drawing my attention to the situation in Soninke where two negative copulas are available.

- the structural type of the construction (this criterion is language-specific and will not be discussed in this section).

2.2. Copula types

Following Hengeveld (1992: 32–33), a copula can be defined as a semantically empty supportive element (auxiliary) which enables a non-verbal predicate to fulfill its function.[4] It may be a carrier of TAM and probably some other distinctions (Hengeveld 1992: 32–33). Copulas may be verbal (i.e. auxiliary verbs) or non-verbal. The presence of a verbal copula (i.e. an auxiliary verb) makes a sentence verbal, but it does not prevent a non-verbal predicate from being the main predicate of the sentence.

Therefore, Hengeveld includes copulas (as a subclass) in the class of auxiliaries, Aux (1992: 30–31). According to Hengeveld, auxiliaries may be of two types: those combining with verbal predicates only, Aux^v; those combining with non-verbal predicates only, Aux^{-v} (i.e. copulas); and there are sometimes auxiliaries which can be combined with both types of predicates, $Aux^{v/-v}$. In what follows, I will use the terms "predicative markers" (in agreement with the Mandeist tradition) along with Aux^v, "copulas" along with Aux^{-v}, and "bifunctional auxiliaries" along with $Aux^{v/-v}$. The subtypes of Aux can be represented as follows:

Figure 1

Aux

Aux^v	Aux^{-v}	$Aux^{v/-v}$
(predicative markers)	(copulas)	(bifunctional auxiliaries)
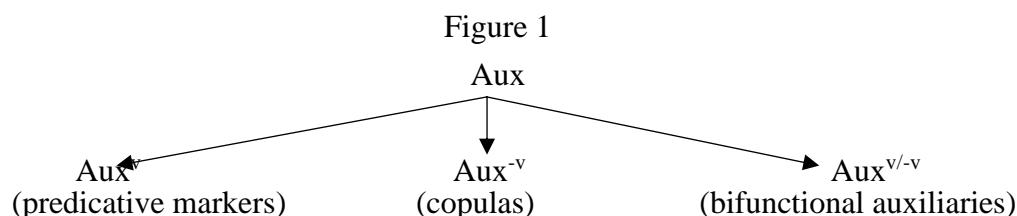
Besides true copulas, a language may also have semi-copulas and pseudo-copulas. The semi-copulas fulfill largely the same functions as copulas (they enable a non-verbal predicate to act as the main predicate of a predication), but they also affect the meaning of the construction, while a (true) copula does not.

> If compared with copula-constructions, which describe a state as such, semi-copula constructions add elements of meaning which might be called ***aspects of being.*** The ingressive construction describes a change, the coming about of a state, the continuative construction describes a lack of change, the continuation of a state. Another element of meaning which may be found in a semi-copula is a distinction of positive versus negative polarity, which is particularly frequent in the case of existential copulas… (Hengeveld 1992: 36)[5]

Pseudo-copulas may resemble semi-copulas, but syntactic tests prove that they are, in fact, lexical predicates; in any case, pseudo-copulas will not be covered in the current paper.

---

[4] So, according to Hengeveld (1992: 32–33), copulas are only those Aux which are used in sentences with non-verbal predicates. Pustet (2003: 5) proceeds from a less strict definition of copula: "A copula is a linguistic element which co-occurs with certain lexemes in certain languages when they function as predicate nucleus. A copula does not add any semantic content to the predicate phrase it is contained in". As a result, this author considers as copulas all types of auxiliaries, including those co-occuring with verbs (i.e., Aux^v). In my paper, I stick to Hengeveld's more restrictive approach, with one specification: when copulas are treated as semantically empty, it is their lexical semantics which is meant, and not their grammatical semantics, cf. the following footnote.

[5] In fact, these characteristics of semi-copula construction contradict (at least partially) the idea formulated by the same author that "the copula support rule treats the copula as a semantically empty supportive device, functioning as a carrier for tense, mood, aspect, and possibly other distinctions" (Hengeveld 1992: 33). In Mande languages, negative copulas usually appear as members of a single paradigm with affirmative copulas, which makes their interpretation as semi-copulas hard to sustain. It seems more appropriate (at least for the languages like Mande) to mention polarity among the "other distinctions" which can be carried by true copulas.

2.3. Types of constructions with non-verbal predicates

In (Adamou & Costaouec 2010), the following strategies for constructions with non-verbal predicates are singled out:

- "direct connection", where no connective item is involved;
- non-verbal connector strategy: "Non-verbal connectors play the role of syntactic bridges between the predicate and the qualified unit but do not receive any syntactic determination (e.g. TAM markers)". A non-verbal connector can be specialized or non-specialized (personal pronouns, demonstratives, focus particles, relative pronouns, locatives, etc.);
- connection via a verb, i. e. verbal copulas.[6]

According to these authors, "the connective strategies presented above are most frequently used in parallel in a given language, though it is rare to find them all in a single language".

2.4. Types of predicates and their semantic functions

As noted by Pustet (2003: 33) with respect to the non-verbal predicate types, "a standardized checklist that summarizes such predicate types, and which could serve as a working basis for studies in copularization and related topics, is currently not available. This is at least in part responsible for the largely idiosyncratic and contradictory <…> usage of terminological labels for the predicate types <…> both in the descriptive and theoretical literature". In the present paper, I shall mainly follow the semantic classification of predicates outlined by Regina Pustet who distinguishes between:

- identificational predicates implying uniqueness of the referent of the predicate expressed by a noun phrase: **He is John; He is my dad**,
- ascriptive predicates which express the idea of membership in a class (if the predicate has a nominal nucleus: **He is a teacher**) or attribution of a property (if a predicate has an adjectival nucleus: **It is red**),
- existential predicates (**Kindness exists, There is a house**),
- quantificational predicates, which are expressed by numerals or other quantifiers (**There are three, There are many**),
- adverbial (in a broad sense) predicates, or oblique case predicates, which may cover a broad range of meanings: locative, temporal, possessive, comitative, recipient, etc. They are expressed mainly by adpositional phrases.

One should probably add to this list ostentative predicates (**Here is a house**) designating an object that is present, and the speaker can indicate it (which is not necessarily the case for the existential predicate).[7]

3. Copulas and non-verbal predicates in Bambara

3.1. Basic word order in Bambara

The word order in a verbal sentence in Bambara is standard for Mande (S Aux^v V X in an intransitive construction, and S Aux^v O V X in a transitive construction). The Aux^v is not inflected for agreement with the subject; the Aux^v slot is empty in the

---

[6] Connection via "non-connective verbs", i.e. full lexical verbs (often quasi-copulas) is also analysed in (Adamou & Costaouec 2010), but such verbs are outside of the scope of the present paper.

An anonymous reviewer mentions the problem of light verbs in Mande "which are semantically similar to copulas as they add only little information to the predication". However, in my view, the similarity of light verbs (like the dummy verb *do* in English) to verbal copulas is rather superficial; they can be characterized as pro-verbs, rather than copula-like connectors. Light verbs will, thus, not be considered in the present paper.

[7] An anonymous reviewer has suggested to also consider the pragmatics and informational structure of non-verbal predication phrases. The importance of these parameters is incontestable, however, their inclusion in this paper would be too ambitious a task and would require major discussion going well beyond the goal of the present study. I have therefore chosen to leave them for a separate study.

imperative construction (if the subject is singular), and in the perfective intransitive construction. The verb appears in V in its lexical (uninflected) form, with the exceptions of the perfective affirmative intransitive construction (where it acquires the suffix **–ra/-la/-na**), the optative construction (suffix **–ra/-la/-na**), and the non-visual progressive construction (suffix **–la/-na**).

The resultative and simultaneous constructions differ from the others: they can only be intransitive, with the word order S V Aux^v X, see 3.3.2 for more detail.

Non-verbal sentences have the structures S Aux^{-v} Adv or S Aux^{-v} (Adv can be represented by an adverb or a postpositional phrase; Aux^{-v} is a copula), see Table 1.

Table 1. Structural types of non-verbal sentences in Bambara

Non-verbal construction	Structure
Situative (Locative)	S **bɛ́** Adv or S **bɛ́** PP (Neg.: **bɛ́** → **tɛ́**)
Existential	S **bɛ́**, neg. S **tɛ́**
Equative	S **yé** NP **yé**, S **tɛ́** NP **yé**
Identificational	S **dòn,** neg. S **tɛ́**
Ostentative	S **fílɛ**, S **fílɛ nìn yé**

3.2. Bambara non-verbal copulas and their functions

Put simply (more complicated topics will be analysed below), non-verbal copulas in Bambara represent a closed class of non-verbal specialized connectors, to use the terminology of Adamou & Costaouec (2010). The non-verbal character of the copulas is established according to morphosyntactic criteria: they cannot be preceded by Aux^v and they have no regular verbal inflection (the intransitive perfective, optative and non-visual progressive suffixes).

The class of (non-verbal) copulas includes four true copulas (**bɛ́, yé, dòn, tɛ́**) and one pseudo-copula (**kó**).

3.2.1. Copula *bɛ́*

This appears in two types of non-verbal predicative constructions:

i) "situative" (or "locational"), containing adverbial / oblique case predicates. The predicate may be expressed by an adverb, S **bɛ́** Adv (1a), or a postpositional phrase, S bɛ́ PP (2).[8]

(1a) **Ń   bɛ́   yàn.**
   1SG   be   here
   'I am here' [Kanuya walew 3].

(2) **Jɔ̂n   bɛ́   ń   kɔ́?**
   who   be   1SG   behind
   'Who is behind me?' [Sagesse bambara].

A wide range of meanings is expressed in the situative non-verbal construction: location, possession, emotions, physical and mental states, etc. Situative sentences are often thetic, in which case they express an existential meaning (3), cf. (Dryer 2007: 240–244) on the cross-linguistic affinity between existential and locative non-verbal sentences.

(3) **Dàn`   bɛ́   bàro`   lá.**
   limit\ART   be   conversation\ART   at
   'A conversation has a limit' [Sagesse bambara].

ii) existential, S bɛ́ (4a).

---

[8] All Bambara phrasal examples are taken from the Bambara Reference Corpus (Vydrin, Maslinsky & Méric 2011-2019). References to the sources are indicated in square brackets after the examples.

(4a) **Fòroba-tigì`**　　　　　　**bɛ́, àní jɔ̀nforo`**　　　　**fána bɛ́.**
common.field-proprietor\ART　be　and　private.field\ART　also　be
'There is someone responsible for a common field, and there is a private field too' [Sagesse bambara].

The copula **bɛ́** can be traced back at least to the Proto-Manding-Vai level.[9]

3.2.2. Copula *yé*

This is a copula used in the equative construction: S **yé** NP **yé,** where the first **yé** is a copula, and the final **yé** is a postposition.[10] This construction may have an identificational (5) or an ascriptive predicate: membership in a class (6a) or quantificational (7).

(5) **Sɛ́bɛn-tigì`**　　　**yé nê**　　　**yé.**
paper-owner\ART　EQU　1SG.EMPH　PP
'I am the author' [Jɛkabaakra 171].

(6a) **Fántà Kúlibàli yé mùso hákilima yé.**
Fanta　Kulibali　EQU　woman　intelligent　PP
'Fanta Kulibali is an intelligent woman' [Jɛkabaara 142].

(7) **Jɛ̀kabaara`**　　**fúrabulu`**　**yé náani yé.**
Jɛkabaara\ART　leaf\ART　EQU　four　PP
'Jɛkabaara (a monthly newspaper) has four pages', lit. 'Jɛkabaara pages are four' [Jɛkabaara 10].

The copula **yé** goes back, most probably, to the verb **yé** 'to see' used in the imperative construction (Creissels 1981; Creissels 2017: 53–55).

3.2.3. Copula *dòn*

This is a copula of an identification construction, it follows the subject (8a).

(8a) **Dúnan`**　　　**dòn.**
stranger\ART　ID
'It is a stranger' [Kibaru 394].

The subject of the construction with **dòn** is the main predicate, and its argument remains unexpressed;[11] it is therefore a thetic construction.
According to (Creissels 1981), the copula **dòn** in Bambara results from a merger of the identification copular ***mú** with the focalization particle ***dὲ.**

3.2.4. Copula *tɛ́*

This is the negative counterpart of all three copulas presented above. Therefore, negation neutralizes the semantic oppositions between the various types of non-verbal constructions (the difference between them can still be expressed by other means):

(1b) **À**　**tɛ́**　　　**yàn.**
3SG　COP.NEG　here
'He is not here' [Kibaru 442] (a situative construction).

(4b) **Fùnteni tɛ́**　　　**nɛ́nɛ tɛ́**
heat　COP.NEG　cold　COP.NEG

---

[9] Pustet's (2003: 54) claim that "the Bambara copula *bɛ* is homonymous with the verb for 'to live, to exist'" is entirely misleading. What Pustet takes for a verb is, in fact, the non-verbal copula, and what she presents as a copula is a predicative marker, see section 3.3.

[10] Some authors analyse the sequence **yé ... yé** as a "copula chain"; for discussion see 3.6.

[11] In (Schreiber 2008: 71) it is claimed that this copula can appear (although rarely) with a postpositional phrase. However, this allegation is based on an incorrectly interpreted example containing a resultative construction (see 3.4.2 below) where the postpositional phrase depends on a full-fledged verb, while **dòn** appears in its verbal auxiliary function.

'It is not hot, it is not cold' [Kibaru 423] (an existential construction).

(6b) **Kɔ́nɔboli`**   **tɛ́**   **bàna**   **yé.**
diarrhoea\art   cop.neg   illness   PP
'Diarrhoea is not an illness' [Sagesse Bambara] (an equative construction).

(8b) **Dúnan**   **tɛ́.**
stranger   COP.NEG
'It is not a stranger' (an identification construction).

As mentioned in section 1, in (Hengeveld 1992: 36) a negative meaning is regarded as sufficient grounds to classify a connector as a semi-copula, rather than as a true copula; elsewhere (ibid: 32-33), the author admits that copulas can be carriers of TAM and other meanings, which makes this restriction less rigid. Indirect evidence favoring the classification of **tɛ́** with true copulas can be found in the full integration of its Aux$^{\mathrm{v}}$ counterpart **tɛ** into the grammatical system (see section 3.3); by analogy, the negative component of the meaning of the negative copula can also be regarded as grammatical and paradigmatic.

On the etymology of **tɛ́,** there is a tempting hypothesis by Creissels (1997: 11–14) tracing its origin to a Proto-Mande verb of being *TE (which seems to me too elegant to be true). On the other hand, it may be of Niger-Congo origin; cf. the Proto-Bantu negative verbal marker reconstructed by Meeussen (1967: 108) as ***-tị́-, *-tá-.**

3.2.5. Pseudo-copula *kɔ́*

According to the formal criteria, **kɔ́** 'say, tell' belongs in Bambara to the part of speech "copula": it has no verbal morphology, and it does not go together with Aux$^{\mathrm{v}}$ (predicative markers).

(9) **Nê**   **yɛ̀rɛ̂ kó à**   **mà**   **kó**   **ń**   **y'**   **à**
1SG.EMPH   self   say   3SG   ADR   QUOT   1SG   PFV.TR   3SG

fúru-sà.
marriage-die
'I told him myself that I had divorced her' [Maléfices et manigances].

However, **kɔ́** is not semantically empty, because it expresses the meaning of speech and appears as a main predicate of a sentence, while a true copula serves as a linker between the non-verbal predicate and its argument. Therefore, in the cross-linguistic perspective, it is more of a pseudo-copula.

Kɔ́ has no negative counterpart; the corresponding negative meaning is expressed by a negative construction with the verb **fɔ́** 'to say, to tell'.

Kɔ́ most likely goes back to an archaic verb of speech; verbs which may be reflexes of the same Proto-Mande root are attested in some Western Mande languages outside the Manding group: Jalonke **qúú**, Jeri **ku,** Soninke `**kó** 'speak'.[12]

3.3. Ostentative semi-copula *fílɛ*

Fílɛ is a presentative (ostentative) copula, or rather semi-copula. It is derived from the lexical verb **fílɛ** 'to look', and the copular function has evolved on the basis of an imperative construction ("look at X" > "here is X"), see (Creissels 2017).[13] There are two more or less synonymous types of ostentative sentences with the copula **fílɛ**: S **fílɛ**

---

[12] More precisely, **kó** in Manding seems to be an ancient borrowing from Soninke. An argument in favor of its borrowed character (p.c. Denis Creissels) is the fact that in Mandinka of Senegambia, it appears as **kó** (rather than *kú)*, although the regular reflex of a Proto-Manding ***o** in this language should be **u**.

[13] According to Creissels (2017: 53), "in several Manding varieties, **félé ~ fɛ́lɛ́** seems to be involved in an incipient grammaticalization process that could lead to the emergence of a new copula, but in all the Manding varieties for which I have the relevant data, copula-like uses of **félé ~ fɛ́lɛ́** are only sporadic". It is true that in Bambara the grammaticalization of **fílɛ** into a copula can hardly be regarded as complete; however, its use in copula-like functions is quite common, rather than sporadic (but it seems that Creissels proceeds here from a different definition of copula).

(10) and S **fílɛ nìn yé,** lit. "here is X like this" (11); the copula can be also followed by an adverbial phrase.

(10) **Láadi-li-kan`   dɔ́-w   fílɛ.**
advise-NMLZ-voice\ART   some-PL   look
'Here are some recommendations' [Baarakalan gafe].

(11) **Ù   ka   báara`   fílɛ   nìn   yé.**
3PL   POSS   work\ART   look   this   PP
'Here is their work' [Jɛkabaara 131].

In fact, there is no clearcut limit between the copular and verbal (predicative) functions of **fílɛ,** as ilustrated in (12), where both interpretations are acceptable. Evidently, in this case, such contexts of use of **fílɛ** can be identified as a "*both/and situation*" of Stage II in Heine's (1993: 48–53) Overlap Model.

(12) **À   káburu`    fílɛ   só`   kɔfɛ̀.**
3SG   grave\ART   look   house\ART   behind
'Here is his grave behind the house' or 'Look at his grave behind the house' [Bamanankan kalanden ka gafe: San 3].

3.4. Copulas and verbal auxiliaries: Aux$^{v/-v}$

As mentioned in section 3.1, there are two types of auxiliaries in Bambara which are usually treated separately: Aux^v (predicative markers) in verbal predications, and Aux^{-v} (copulas) in non-verbal predications. There are however some cases where the existence of Aux$^{v/-v}$ (bifunctional auxiliaries) can be postulated. All these cases represent the evolution of non-verbal constructions into verbal ones, with some particular aspectual semantics.

3.4.1. bɛ́: evolution Aux^{-v} > Aux^v

Bambara has three verbal constructions resulting from a cyclic grammaticalization of the non-verbal situative (locative) construction to imperfective, via progressive:[14]
- imperfective: S **bɛ / tɛ** (O) V X, the verb appears in its lexical form;
- non-visual progressive: S **bɛ́ / tɛ́** (O) V-**la** X, the verb appears with a suffix **–la**;
- visual progressive: S **bɛ́** (O-) VN\ART **lá** X, the verbal predicate appears with a tonal article (and can be therefore interpreted as a noun converted from a verb) and is followed by a postposition; it can be tonally integrated by the direct object noun (which is also typical of nouns, rather than verbs).[15]

The visual progressive construction stands in an intermediate position: in terms of its grammatical semantics, it appears to be verbal, but at the same time it maintains non-verbal formal features.

The non-visual progressive is formally verbal: the postposition has transformed into a verbal suffix, and no tonal integration of the direct object with the verb is possible.

The imperfective construction has evolved even further: the verbal suffix has been lost, and the Aux tends to lose its lexical tone (its tonal realization depends on the context);[16] in dialects, qualitative vocalic reduction is observed (**bi, ti** instead of **bɛ, tɛ**).

Inasmuch as the visual progressive construction is formally non-verbal, it can be assumed that **bɛ́** and **tɛ́** maintain their status as copulas (Aux^{-v}). In the non-visual progressive construction, **bɛ́ / tɛ́** should be regarded as predicative markers (Aux^v) homonymous with the copulas. Alternatively, it could be assumed that in the non-verbal

---

[14] See in more detail (Vydrin 2019: 91–94). Cf. the analysis of these constructions in (Hengeveld 1992: 276), which is based on imprecise data (due to the lack of tonal marking) from (Brauner 1974).

[15] The usage and the semantics of the two progressive constructions vary among dialects; some Bambara speakers do not distinguish the evidential nuances of their meanings and tend to consider both constructions synonymous.

[16] More precisely, the tonal behavior of this Aux is rather unstable, varying among speakers and potentially even in the usage of a single speaker, while the tone of the copula **bɛ́** is more stable, and it can be said to have a lexical high tone.

situative construction, in the visual progressive construction and in the non-visual progressive construction we have bifunctional auxiliaries **bɛ́** and **tɛ́** (Aux[v/-v]). As for the imperfective construction, its predicative markers are formally different.

3.4.2. Emergence of the verbal structure S V Aux in Bambara

Two verbal constructions have evolved from the non-verbal identification and existential constructions. These are:

- resultative: S V-**len/-nen bɛ** ~ **dòn / tɛ́** X, the verb takes the suffix of resultative participle and is followed by an auxiliary;
- simultaneous: S V-**tɔ bɛ** ~ **dòn / tɛ́** X, the verb takes the converb suffix and is followed by an auxiliary.[17]

In both constructions, the auxiliaries **bɛ** and **dòn** are more or less synonymous, although some slight semantic differences between them can be perceived (Vydrin 2019: 219–221), and in the simultaneous construction, **dòn** is much more frequent than **bɛ**.

There is a formal difference between the original non-verbal constructions, where a participle or a converb appears as a secondary predicate and forms part of an argument NP (13), and the resultative or simultaneous constructions, where the participle or converb is not a part of the argument (subject) NP (14). In the former case, the participle/converb carries a tonal article (a floating low tone, glossed as \ART), and in the latter, it does not (Vydrin 2019: 75). A clause featuring the resultative or simultaneous construction can appear as a head in a clause chaining construction (15), which is impossible for a non-verbal clause.

(13) **Wáraba`    dɛ́sɛ-len`   bɛ   ntĕenkéɲe`   ɲími.**
     lion\ART   fail-PTCP.RES\ART   IPFV.AFF   black.ants\ART   gnaw
     'When a lion fails, it eats black ants' (litt.: a lion, failed, eats black ants)
     [Sagesse Bambara].

(14) **Júgunin`        bɔ́-len          bɛ    bàla`   fɛ̀,   ǹka,   à**
     hedgehog\ART   exit-PTCP.RES   be   porcupine\ART   with   but   3SG

     dén   tɛ́.
     child   COP.NEG
     'A hedgehog resembles a porcupine (litt.: it goes out with the porcupine), but it is not its child' [Sagesse bambara].

(15) **...   à[i]   sìgi-len   bɛ,   ∅[i]   k'   í[i]   ɲɛ́`   jɔ̀   nê**
         3SG   sit-PTCP.RES   be   INF   REFL   eye\ART   stand   1SG.EMPH

     lá   ni   nìn   kúma`   yé...
     in   and   this   speech\ART   PP
     '... he is sitting and staring at me, speaking these words...' [Chroniques amoureuses].

This formal difference, together with the semantics, proves that these are true finite verbal constructions where the participial or converbial forms appear as content verbs, and, therefore, **bɛ, dòn,** and **tɛ́** are predicative markers (Aux[v]), rather than copulas. Otherwise, it can be said that we are dealing here with Aux[v/-v] elements (bifunctional auxiliaries) which can be used both in non-verbal (identificational, existential) and verbal (resultative, simultaneous) predications.[18]

---

[17] The simultaneous construction is relatively rare; in the Bambara Reference Corpus, it occurs 40-50 times less frequently than the resultative construction. In the simultaneous construction, **dòn** is by far more frequent than **bɛ**.

[18] The failure to distinguish between these two functions of **dòn** led Schreiber (2008: 70–71) to an error: he claims that the copula **dòn** can appear in the structure NP[Arg] COP PP[Pred], and adduces as an example a resultative verbal construction, where **dòn,** in fact, functions as a predicative marker (rather than a copula), and the postpositional phrase depends syntactically on the verb, rather than on **dòn**.

3.4.3. Resultative and continuous ostentative constructions

If we admit the evolution of the lexical verb **fílɛ** 'look' to a ostentative copula, we should also admit the subsequent evolution of this copula to a predicative marker (Aux^v) in verbal constructions which can be characterized as "resultative ostentative" (16) and "simultaneous ostentative" (17), analogous to those analysed in 3.4.2.

(16) **Kúma`   mîn-nu fó-len   fílɛ   nìn yé...**
     speech\ART REL-PL2 say-PTCP.RES look   this   PP
     'All the words which have been said here...' [Kibaru 129].

(17) **... ò   dè   kɛ́-tɔ   fílɛ   ù   ka   dú`   lá nìn yé.**
      that FOC do-CONV look   3PL POSS yard\ART in this   PP
     '... here is what is being done in their yard' [Maléfices et manigances].

3.5. The verbal copula kɛ́

It is generally believed that copula in Mande languages are non-verbal (see, for example, (Schreiber 2008: 66–67) for argumentation), and this is certainly true for the Bambara copulas presented in section 3.2. There are however some uses of the verb **kɛ́** (with lexical meaning 'to do, to make' if transitive; 'to become' if intransitive) which perfectly fit the definition of copula (see 2.2).

The Bambara copulas listed in 3.2 are used in the neutral TAM context (indicative, present or habitual, non-specified). However, if it is necessary to put a non-verbal predication into a non-neutral TAM context, a non-verbal copula construction is replaced by a construction with **kɛ́** which appears as a semantically empty linker, carrier of TAM features: imperfective (habitual/future) (18), conditional (19), prohibitive (20), perfective (21), etc.

(18) **Mùso   tɛ   kɛ́ sóma   yé.**
     woman IPFV.NEG   do magician   PP
     'A woman will never be/never becomes a magician' [Sagesse bambara].

(19) **Mîn mánà kɛ́ ù   fɛ̀   kó   ù   ka   ń   jáabi.**
     REL   COND do   3PL with QUOT 3PL SBJV 1SG answer
     'Let them answer what they want', lit.: 'what is with them, may they answer me' [Geste de Ségou].

(20) **Án   kànâ kɛ́ màa-fɛ-maa   yé.**
     1PL PROH do   human-with-human PP
     'Let us not be slaves' [Jɛkabaara 332].

(21) **Ní gáran`      kɛ́-ra          sò`   lá, fàli`   bɛ**
     if   hobble\ART do-PFV.INTR horse\ART at   donkey\ART IPFV.AFF
     wà k'   à   dàn.
     go   INF 3SG overtake
     'If a horse is hobbled, a donkey overtakes it', lit. 'if a hobble is on the horse…' [Sagesse bambara].

To my knowledge, **kɛ́** has not previously been treated as a copula verb in Mandeist literature;[19] however, the examples adduced clearly demonstrate that this interpretation is correct. As far as I can judge, in other languages of the Manding group (and in many Mande languages outside Manding, see 5.4) verbs etymologically connected to the Bambara **kɛ́** are used in more or less the same way.

In the audio recordings that I have analysed, *bɛ* in the resultative construction seems to lack lexical tone (i.e., its tone varies depending on general rules of tonal modifications for tonally recessive syllables). If this tendency is confirmed by future research, it can be viewed as evidence that it is formally different from the copula and can be regarded as a separate lexeme, Aux^v, i.e. a predicative marker.

[19] In fact, the use of this verb as a substitute for copulas has been mentioned more than once in publications on Manding languages (Creissels & Sambou 2013; Vydrin 2019: 87).

3.6. Are there chain copulas in Bambara?

In section 3.2, the markers of the equative construction, **yé ... yé** (affirmative) and **tɛ́ ... yé** (negative) are analysed as combinations of a copula (**tɛ́**, the first **yé**) and a postposition (the final **yé**). However, alternative interpretations can be found in the literature. In (Dumestre 2003: 36–37), they are mentioned as "discontinuous utterance markers" ("une marque d'énoncé discontinue"), and Pustet (2003: 46) also mentions "the copula **ye** ... **ye**". Schreiber (2008: 72) explicitly argues that "two copulae are involved in this construction, and not one copula and a postposition". He assumes that "although the source may be certainly a postposition, these former postpositions have been grammaticalized and function synchronically as copulae". The argument adduced in favor of this interpretation is the following: "In languages with a predicational / specificational distinction postpositions occur predominantly with predicational and not with specificational copulae. On the other hand, specificational and not predicational copulae are used throughout in cleft sentences involving topicalisation".

This argument does not seem convincing: even if adpositions are more commonly used with predicational copulas, this in itself does not mean that they cannot also appear with specificational ones (in fact, Schreiber's assertion does not exclude this option altogether). Other counter-arguments can be adduced as well.

First, Schreiber does not explain what makes him think that the postposition has already been grammaticalized. The function of the final **yé** in (5, 6a, 7) is practically the same as in constructions with the verbal copula **kɛ́** (22) or with a full-fledged verb (23), where there is absolutely no reason to doubt that it is a postposition expressing an equative or transformative meaning, rather than a part of a copula.

(22) **Ní   jírì   bɛ́ɛ   tùn   kɛ́-ra   bànan   yé,   dàba-kala`**
     if   tree\ART   all   RETR   do-PFV.INTR   ceiba   PP   hoe-stick\ART

     tùn   bɛ   bɔ́   mín?
     RETR   IPFV.AFF   exit   where
     'If all the trees were ceibas, how would one get hoe handles?' [Sagesse bambara].

(23) **Sìlamɛ`-w       t'          ù     ka     díinɛ`   mìnɛ   fɛ́n   sure   yé.**
     Muslim\ART-PL   IPFV.NEG   3PL   POSS   religion   catch   thing   foreign   PP
     'Muslims do not consider their religion as foreign' (lit.: '… grasp their religion as a foreign thing') [Jama 14].

Second, as mentioned (although with an interpretation that I don't share) in (Dumestre 2003: 37), the equative construction may have a finite verbal construction as a predicate (24), in which case the final **yé** does not appear. Therefore, the first **yé** can fulfill the copula function alone, and the final **yé** appears only when the predicate is a NP.

(24) **...   ò   kɔ́rɔ`   yé   kó   jàntó   í   yɛ̀rɛ̂   lá.**
     that   meaning\ART   EQU   QUOT   take.care   2SG   self   at
     '... that means, take care of yourselves' [Diɲɛ yaalala].

The situation is similar in the other Manding languages for which Schreiber postulates "copula chains", and most likely in Mande languages outside the Manding group too.

3.7. Qualitative sentences: verbal or non-verbal?

In (Hengeveld 1992: 130–131), Bambara is classified with those languages that can have adjectives in predicative function (as ascriptive predicates). Hengeveld's Bambara data stem from (Brauner 1974). The same interpretation is found in (Pustet 2003: 46). In fact, the status of the adjective-like lexemes used predicatively in Bambara has been subject to debate for a long time. In (Brauner 1974; Vydrine 1990; Dumestre 2003; Bailleul 2007) they are regarded as "adjectives" or "predicative adjectives", however more recently, the predominant trend is to include them among the verbs, as a

subclass of "qualitative verbs" or "stative verbs" (Creissels 1985; Vydrine 1999; Tröbs 2008; Vydrin 2019). Qualitative verbs appear as lexical heads of verbal qualitative constructions with syntactic heads represented by Aux **ka** (affirmative) or **man** (negative), as illustrated by **jàn** 'to be long' in (25). If we assume that qualitative verbs are classed with verbs, then the markers **ka** and **man** are Aux^v, rather than copulas, contrary to (Hengeveld 1992: 215).

(25) **À   búlu-w   ka   jàn   k'   ù   pɛ̀tɛ.**
     3SG   leaf-PL   QUAL.AFF   long   INF   3PL   flatten
     'Its leaves are long, they are flattened' [Bamanakan kalangafe 5].

At the same time, there is another word class whose members' prototypical use is that of modifier of the head noun in a NP, as illustrated by **sɛ̀bɛ** in (26). These lexemes can be regarded as true adjectives; they cannot be used as the main predicate of a clause.[20] There are also several derivative suffixes (**-man, -ma, -ntan**) regularly producing true adjectives.

(26) **Fɔ́lɔ-mɔgɔ-w   tùn   yé   mɔ̀gɔ   sɛbɛ-w   yé.**
     former.time-human-PL   RETR   EQU   human   serious-PL   PP
     'People of olden times were serious people' [Kibaru 446].

Generalizations on Bambara copulas and non-verbal predication will be presented in the final section.

4. Copulas and non-verbal predicates in Guinean Maninka

Guinean Maninka (henceforth simply Maninka) is a variety closely related to Bambara: the share 97% of cognate vocabulary in the 100-word Swadesh list (Vydrin 2009), which normally corresponds to a divergence between dialects of one language, rather than between two different languages. In fact, Bambara and Maninka are sometimes regarded as dialects of one language, Manding. Their morphosyntax is underlyingly very similar, however, some striking divergences appear in the strategies they employ for non-verbal predication.

4.1. Guinean Maninka bifunctional auxiliary and non-verbal copular clauses

Unlike Bambara, Guinean Maninka has the same affirmative non-verbal copula **yé** for different types of non-verbal sentences. More precisely, it is a bifunctional auxiliary, which also functions as a predicative marker in imperfective and habitual verbal constructions. On the other hand, this bifunctional auxiliary tends to be optionally omitted. Etymologically, it goes back to the verb **yé** 'see' in the imperative (Creissels 2017). The corresponding negative bifunctional auxiliary is **tɛ́,** as in Bambara.[21]

The following types of non-verbal sentences are available in Maninka.

Table 2. Types of non-verbal sentences in Maninka

Non-verbal construction	Formula
Situative (Locative)	S **yé** Adv or S **yé** PP (Neg.: **yé** → **tɛ́**)
Existential	S **yé**, Neg.: S **yé**
Equative	S **yé** PP, Neg.: S **tɛ́** PP (PP with postposition **dí**)
Identificational	S **yé,** Neg.: S **tɛ́**
Ostentative	S **fɛ́lɛ,** S **fɛ́lɛ nìn dí**

---

[20] To be more precise, true adjectives are seldomly used in Bambara as predicates in constructions derived from the existential, ex.: **Mɔ̀gɔ sí kùnkontan tɛ́.** 'There is nobody who has no problems', lit. 'there is no person (who is) problemless'. An analogous construction is more common in Maninka of Guinea, see 4.3.1.

[21] In fact, in the idiolect of my principal informant for Guinean Maninka, there are two formally different negative copulas: **tɛ́** for the identification sentence, and **té** for all other types of sentences. However, in all other sources available, **tɛ́** is used in all contexts.

4.1.1. The identification sentence

Affirmative: S **lè yé,** where **lè** (**nè** after a nasal) is a focalization particle (which is obligatory in this construction), see (27). The Aux$^{\text{v/-v}}$ **yé** is most often omitted, so that **lè** tends to be reinterpreted as the copula (28); cf. a similar situation in Kita Maninka (Creissels 2009: 78).[22]

(27) **Ò   lè   yé.**
    that FOC COP
    'That's it' [Dalu kɛndɛ 26].

(28) **Kó   dúman-nɛn`   nè.**
    matter good-DIM\ART FOC
    'It's a good matter' [Dalilu kɛndɛ 21].

Negative: S **tɛ́.**

(29) **Ála   kán   tɛ́.**
    God   voice COP.NEG
    'It is not a voice of God' [Dalu kɛndɛ 116].

4.1.2. The equative sentence

Affirmative: S **yé** NP **lè dí** or S **lè yé** NP **dí.**
Negative: S **tɛ́** NP **dí.**

The sentence-final element **dí** is a postposition with a broad meaning: instrumental, comitative, transformative, identificational (i.e., it is a counterpart of the Bambara postposition **yé**).

As in Bambara, these constructions may have an identificational or an ascriptive (membership in a class) predicate. Interestingly, in the latter case, unlike in Bambara, the ascriptive predicate may occupy, by default, the syntactic position of the complement of the copula (more precisely, bifunctional auxiliary) (30a), or the position of subject (30b). This syntactic swap seems to have no effect on the semantics or pragmatics of the sentence, although the semantic predicate is more frequently found in post-copular position.[23]

(30a) **Músa   yé   kàranden   nè   dí.**
     Musa   COP   student   FOC   PP

or

(30b) **Kàranden   nè   yé   Músa   dí.**
     student   FOC   COP   Musa   PP
     'Musa is a student'.

By default, in an affirmative sentence with an ascriptive predicate, the contrastive focalization particle **lè** follows the semantic predicate NP, as in (30a, b). In this case, it no longer functions as a true contrastive focalizer, instead assuming a purely syntactic function. However, the focalization particle can follow the NP of the argument (30c, d) thus assuming its original role of focalizer, in which case it does not appear after the NP of a semantic predicate.

(30c) **Músa   lè   yé   kàranden   dí.**
     Musa   FOC   COP   student   PP

or

---

[22] All data for Guinean Maninka are either from the Maninka Reference Corpus (Vydrin et al. 2014), in which case the precise sources are indicated in square brackets, or from my field materials (then no reference is given).

[23] The distinction between (30a) and (30b) might be described in terms of the perspective of the sentence, as in (Sumbatova 2009), but this assumption needs further verification.

(30d) **Kàranden yé Músa lè dí.**
    student   COP Musa FOC pp
    'It is Musa (who is) a student'.

In any case, the bifunctional auxiliary **yé** can be omitted: this is especially frequent before the focalizer (**yé lè → lè**).

4.1.3. The situative (locational) clause

This clause has the structure S **yé / tɛ́** Adv and displays no distinctive characteristics with respect to its Bambara analogue (see 3.2.1), other than the possibility of omitting the affirmative bifunctional auxiliary **yé**. Most often, the omission of the auxiliary is incomplete: instead, it fuses with the preceding word and triggers a lengthening on its final vowel, e.g. **à yé** <3sg + cop> > **àa**:

(31) **Àa ò ɲá lè mà.**
    3SG\COP that manner FOC on
    'It is (going) this way' [Dalu kɛndɛ 31].

4.1.4. The existential clause

This clause has the following structure: S **yé,** as in **Nɛ́nɛ̀ yé** 'It is cold' (litt. 'cold exists') or **Tára̍ yé** 'It is hot' (litt. 'heat exists'). For its Bambara analogue see 3.2.1.

4.2. Qualitative verbal sentences

As in Bambara, there is a class of qualitative verbs in Maninka. They are less numerous than in Bambara; in other respects, they have the same characteristics and are used in similar constructions, see in detail (Vydrin 2017a).
Affirmative: S **ká** V. Negative: S **mán** V.

(32) **À jàma̍ ká síya kósɛbɛ.**
    3SG crowd QUAL.AFF numerous very
    'These people are very numerous' [Dalu kɛndɛ 17].

As in Bambara, the auxiliairies **ká** and **mán** are not regarded as copulas; they are predicative markers, i.e. Aux[V].

4.3. Zero-copulae sentences

Unlike Bambara, Maninka has two types of zero-copula sentences with non-verbal predication. In both cases, we have a simple juxtaposition of the term and the non-verbal predicate.

4.3.1. The qualitative non-verbal clause

This clause is copulaless if affirmative; its negative counterpart has a negative copula **tɛ́.**
Affirmative: S Adj (33).
Negative: S Adj **tɛ́.**

(33) **À bɛ̀sɛ, bɛ̀sɛ-ya̍ díman à ɲɛ́.**
    3SG neat neat-ABSTR\ART pleasant 3SG before
    'He is neat, he likes neatness' (litt.: '… neatness is pleasant to him').

In this sentence type, an adjective is used predicatively; it can be followed by an adverb or a postpositional phrase, as in the second clause in (33). As a rule, adjectives derived from qualitative verbs through conversion cannot appear in this construction, and there is therefore a kind of complementary distribution between the qualitative verbal and non-verbal sentences. For elaboration, see (Vydrin 2017a).

4.3.2. The copulaless equative sentence

This is a marginal type. It may have an identificational predicate (34) or an ascriptive predicate (35).

(34) **À tɔ́ɔ` Bába.**
3SG name\ART Baba
'His name is Baba'.

(35) **Músa kàranden, à fà bólokolon, à ná bólokolon.**
Musa student 3SG father poor 3SG mother poor
'Musa is a student, his father is poor, his mother is poor'.

The copulaless equative sentences seem to be more expressive than the regular equative sentences (see 4.1.2), and slightly more idiomatic. Otherwise, they are semantically equivalent.

4.4. Verbal copulas

In Maninka, the verb **kɛ́** 'do; become' is used as a verbal copula in non-neutral TAM contexts in the same way as in Bambara. The same can be said for the verb **fɛ́lɛ** 'look' which is used as an ostentative copula.

5. Copulas and non-verbal predication in Eastern Dan

5.1. Basic information about Eastern Dan

Dan is spoken by about 1,6 million people, mainly in Côte d'Ivoire and Liberia. Of these, some 650,000 people speak dialects of the Eastern zone; the Gwɛɛtaa dialect (sous-préfecture of the Biancouma préfecture of the Tonkpin province) has been taken as the base of the Eastern Dan written norm. The data presented in this paper stems from the Gwɛɛtaa dialect (Dan-Gwɛɛtaa).

The basic word order in a verbal sentence is (S) Aux O V X (transitive) or (S) Aux V X (intransitive). The person and number of the subject are necessarily indexed on the Aux^v, together with TAM and polarity meanings (in the recent South Mande studies, these Aux^v are often referred to as pronominal predicative markers, or PPM). Presence of the subject is optional. There are therefore several series of Aux^v (or PPM) expressing different TAM and polarity meanings, together with verbal suffixes or tonal modifications on the verb (the suffixes and the tonal modifications are in complementary distribution; in certain constructions, a verb appears in its bare form and with its lexical tone).

In the strategies used by Eastern Dan for non-verbal predication the same background can be perceived as in Manding languages, however, there are numerous conspicuous differences. The copula functions can be fulfilled by heterogeneous elements: non-verbal non-inflected copulas (similar to the Manding ones, although with certain important differences), or by some PPM. Also, as in Manding, there are verbs used as copulas. Inasmuch as the Dan data has not yet been the subject of scholarly discussion, it will be represented here in detail, in order to give the reader a clear idea of the rather intricate set of the means used in this language to express non-verbal predication.

5.2. Non-verbal non-inflected copulas

There are two true non-verbal non-inflected copulas, **ɓɰ̀** and **dɤ́.**[24]

5.2.1. Copula ɓɰ̀

ɓɰ̀ is used in constructions with one or two arguments. In the construction with one argument, the subject (S) represents the predicate, and the sentence structure is:
Affirmative S **ɓɰ̀** (36).
Negative S Aux$^{v/-v}$ **ɓɰ̀** (37).
The Aux$^{v/-v}$ is represented by the imperfective negative series (see 5.3).
In the construction with two arguments, the structure is:

---

[24] Dan-Gwɛɛtaa has 5 level tones marked in this article according to the IPA recommendations and in agreement with the new Eastern Dan orthography, ex.: **a̋** extrahigh, **á** high, **ā** mid, **à** low, **ȁ** extralow. There are also three falling tones, of which only one, high-extralow (**â**) is relatively frequent, the other two are extremely rare. All examples are from my field data.

Affirmative S ɓɯ̰̋ NP ká (38).
Negative S Aux^{v/-v} ɓɯ̰̏ NP ká (39).

Normally, the subject (S) is a term, and the NP introduced by the instumental/comitative/transformative/equational postposition **ká** expresses the predicate; the PPM is represented by the imperfective negative series.

In both types of sentences, the syntax is rather peculiar. In an affirmative sentence the copula does not combine with a PPM, and, contrary to general practice in Dan, the position of subject cannot be vacant. In the negative context, the subject combines with a negative imperfective Aux^{v/-v} (37),[25] and the subject NP is also quasi-obligatory (cf. 5.1).[26]

In both types of sentences, the following semantic types of predicates can be present:

i) ascriptive equative (identificational) (36, 37, 38).

(36) Ñ̄   dā   ɓɯ̰̏.
      1SG.NSBJ   father   COP
      'It is my father (who did it)'.

(37) Àbɪ̋,   n̄   dā   ɓà   gbḛ̂   yáá   ɓɯ̰̏.
      no   1SG.NSBJ   father   POSS   dog   3SG.IPFV.NEG   COP
      'No, it is not my father's dog'.

(38) Ñ̄   dā   yáá   ɓɯ̰̏   Gbàtɔ̀   ká.
      1SG.NSBJ   father   3SG.IPFV.NEG   be   Gbato   with
      'Gbato is not my father'.

ii) ascriptive classificational (membership in a class) (39).

(39) Ɯ̄   yày̰ɔ́ɔ́   ɓɯ̰̏   kwà̰ɓḛ̂   ká.
      2SG.NSBJ   neighbour   COP   thief   with
      'Your neighbour is a thief'.

iii) ascriptive specificational (non-exclusive, situational identity) (40, 41, 42).

(40) Tǣ̰æ̰̀   ɓɯ̰̏.
      truth   COP
      'It is a truth'.

(41) Kwɪ́pl̰ɤ̀ɤ̀dɛ̀   sɪ̀   dèdè   ɓɯ̰̏.
      city   good   very   COP
      'It is a very beautiful city'.

(42) Tǣ̰æ̰̀   ɓɯ̰̏   dūū-wɔ̰̀   ká.
      truth   be   magic-matter\IZF   with
      'Sorcery is a true thing' (i.e., sorcery exists).

Concerning the etymology of this copula, two suggestions can be made:

i) it derives from the spatial deictic adverb ɓɯ̰̄ ~ ɓɯ̰́ 'there' (out of sight of both interlocutors). Grammaticalization of deictic adverbs into copulas is very common in the languages of the world, and the tonal modification observed is entirely possible in the process of grammaticalization. If we assume the evolution of the adverb ɓɯ̰̄ into a semi-copula (see 5.6.3), it becomes necessary to postulate two successive cycles of its grammaticalization to copulas. This hypothesis is supported by the anomalous co-occurrence of the PPM and the copula ɓɯ̰̏ in the negative construction;

ii) it may be inherited as a copula from the Proto-Mande level, cf. the identification copulas in the closely related language Goo, ɓɤ̋ ~ ɓɤ̀ ~ ɓɛ̋; the

---

[25] This fact cannot be regarded as an argument for the verbal nature of ɓɯ̰̏, because the negative imperfective PPM series serves both verbal and non-verbal sentences, see 5.2.3.

[26] The subject can be omitted in rare contexts, as in the following: Ɯ̄ dā ɓɯ̰̏ Gbàtɔ̀ ká ɛ̀ɛ̀? – Yáá ɓɯ̰̏. 'Is Gbato your father? – He is not'. Even here, omission of the subject in the answer, although grammatically acceptable, is regarded as somewhat impolite.

identification/presentative copula in Vai (Western Mande), mù; and the identification copula reconstructible for Proto-Manding (Western Mande) as ***mú** or ***mù**.

5.2.2. Copula ɗɤ́

This copula has a constant high tone and appears in two different contexts.

Firstly, it can be used as a copula in a non-verbal locative predicative construction (43a). In this context, it can be replaced by an existential or conjoint PPM (Aux^{v/-v}) (43b), without any notable modification of meaning. Like a PPM, it can also introduce predicates stemming from locational predicates (see section 5.3.4), e.g. a possessive predicate (44).

(43a) Ȁ   ɗú-dɤ̃̀   ɗɤ́   yī   gṹ,
       3SG.NSBJ   daughter-DIM   be   sleeping   in

       yɤ́-'   gɔ̀-lɤ̀.
       CONS.3SG.JNT-3SG.NSBJ   head-tie\JNT

       'When her little daughter is sleeping, she braids her hair'.

(43b) Ȁ   ɗú-dɤ̃̀   ɤ́   yī   gṹ …
       3SG.NSBJ   daughter-DIM   3SG.JNT   sleeping   in

       (The same meaning.)

(44)   Wʌ̃̀   ɗɤ́   n̄   gɔ̀,   ɓíˊˊ   ɗɤ́
       money   be   1SG.NSBJ   PP   1SG.PFV.NEG   go

       tó-'   ɗī̄   ká.
       remain-INF   hunger   with

       'If I had money, I wouldn't remain hungry'.

ɗɤ́ can replace the conjunctive 3SG Aux^{v/-v} in verbal sentences too (45). It can therefore be regarded as an Aux^{v/-v}, in the same way as the Aux^{v/-v} series analysed in 5.2.3.

(45)   Yɤ̀   kʌ̄   yʌ̄   kʌ̀   ɗɤ́ɗɤ́   ɤ́   ɓíˊ
       3SG.EXI   RETR   work   do\NEUT   until   CONS   darkness

       ɗɤ́   ~   ɤ́   ɓʌ̄̃.
       be   ~   3SG.JNT   put\JNT

       'He worked till it got dark'.

Secondly, this copula appears in the construction ɤ́ ɗɤ́ 'every' (lit. 'which exists') (46), where the nature of the element ɤ́ is subject to debate: it may be a relative marker ɤ́, or (more probably) an amalgam (as quite commonly in Dan-Gwɛɛtaa) of this marker with the subsequent 3SG Aux^{v/-v} of the conjunctive series which has the same form, ɤ́ (ɤ́ ɤ́ → ɤ́). Even if the latter interpretation is correct, ɗɤ́ cannot be regarded here as a verb (in which case one would expect the tone lowering which is obligatory in a verb preceded by a conjunctive Aux^{v/-v}, thus giving ɗɤ̀, instead of ɗɤ́). The Aux^{v/-v}-interpretation of the element ɤ́ in the construction ɤ́ ɗɤ́ is confirmed by the example (47), where ɗɤ́ appears with the 3PL Aux^{v/-v}.

(46)   Ɓʌ̃́   ɤ́   ɗɤ́,   yà   ɗó   ɤ̀   gɔ̀   kɔ́ɔ́dɤ̀.
       human   REL.3SG.JNT   be   3SG.PRF   go   REFL.SG   POSS.LOC   house.LOC

       'Everyone has gone home' (lit.: 'Human who exists, he has gone at his home').

(47)   Ɓʌ̃́   gbʌ̃̀   wó   ɗɤ́   wà   ɗṹ   ɗɛ̃́ɛ́-dɤ̀.
       human   all   3PL.JNT   be   3SG.PRF   come   square-LOC

       'All the people (who were there) have come to the village square'.

The non-verbal copula ɗɤ́ goes back to the verb ɗó ~ɗɤ́ 'go'; it results from the most ancient grammaticalization cycle of this verb (see 5.4 on the other two cycles).

5.3. Pronominal predicative markers as copulas

In Eastern Dan, there are 12 series of PPM used as auxiliaries in verbal sentences, or Auxv, as in (48); for the full list of PPM in Dan-Gwɛɛtaa see (Vydrin 2017b: 211; Vydrin 2017c: 535).

(48) Sā̰ā̰   yí   yə̀   ɓɔ̄-sīʌ̄   ɓā̰   ɓīʌ̄ʌ̄   gɯ́ɯ,
     soap   water 3SG.EXI appear-DUR 1SG.POSS wound   in
     yə̀   ɓɛ̄ɛ̄   kà̰à̰.
     3SG.EXI human scratch\NEUT
     'Soap suds smart my wound, and the wound is itching'.

These auxiliary lexemes result from the fusion of personal subject pronouns with the subsequent auxiliaries and/or copulas.

Among these, three series can also appear in the copula function, see Table 3. These three series are therefore bifunctional auxiliaries, or Auxv/-v.

TABLE 3. BIFUNCTIONAL AUXILIARIES IN EASTERN DAN

	SINGULAR				DUAL	PLURAL				
Person	1	2	3	Log.	Inclus.	Excl	Incl.	2	3	Log.
Existential	ā	ī/ū̄	yə̀/yə̀/Ø	ʌ̄̀	kō	yī	kwā	kā	wò	wō
Conjoint	á	í/ú̄	ʌ́/yʌ́/Ø	ʌ́	kó	yí	kwá	ká	wó	wó
Negative Imperfective	ɓá̰á̰	ɓáá	yáá	–	kóó	yáá	kwáá	káá	wáá	–

As shown in Table 1, 3SG forms of the existential and the conjoint series can be omitted.

These series of bifunctional auxiliaries appear in various types of non-verbal sentence.

5.3.1. Sentences with a qualificational predicate expressed by an adjective

These sentences may be of two types: (S) Aux Adj (49-51) or (S) Aux Adj ká (52), where ká is the comitative/instrumental (etc.) postposition already mentioned in 5.2; further information on these constructions is available in (Vydrine 2007).

(49) Zā̰   yə̀   vlá̰ā̰vlā̰ā̰.
     Jean 3SG.EXI slovenly
     'Jean is slovenly'.

(50) Yí   ʌ́   sæ̀æ̀   dèdèwō...
     water 3SG.JNT fresh   very
     'When the water is very cold...'

(51) Yáá   klʌ̀ʌ́klʌ̀ʌ̀.
     3SG.IPFV.NEG   healthy
     '(S)he is not healthy'.

(52) À   kɔ̀kpʌ̄-dṵ̀,   à   gɛ̀n   kpʌ̄-dṵ̀   wò   sɛ́ɛnɗʌ́   ká   dì.
     3SG fist-PL   3SG leg   ball-PL   3PL.EXI small.PL   with so
     'His fists and his soles are small like this'.

5.3.2. Sentences with a quantificational predicate expressed by a numeral

As in the previous case, these sentences may be of two types: (S) Aux Num (53) or (S) Aux Num ká (54).

(53) Ɓáɗǎkʌ̄ɓɛ̌-dṵ̀   wó   yá̰-tó-sīʌ̄
     work-do-human\IZF-PL   3PL.JNT   eye-remain-DUR
     ū̄   gɔ̀,   wò   yà̰àgā.
     1SG.NSBJ PP   3PL.EXI three
     'The workers who are waiting for me, they are three in number'.

(54) Ằ   6à   dʌ́-dṵ̀   wò   yằàgā ká.
      3SG.NSBJ POSS child-PL 3PL.EXI three with
      'He has three children' (lit. "His children are three").

5.3.3. Sentences of the type (S) Aux NP ká

Such sentences may have an ascriptive classificational predicate (55) or an ascriptive specificational predicate (56) expressed by a NP. This type is in competition with the **6ṵ̄**-sentence (cf. 5.2).

(55) Ū̄   yàyɔ́ɔ́   yɤ̀   kwằ6ɛ̃ ká.
      2SG.NSBJ neighbour 3SG.EXI thief with
      'Your neighbour is a thief'.

(56) Dū̄-wɔ̰̀   yɤ̀   tɛ̰̄ɛ̰̀ ká.
      magic-matter\IZF 3SG.EXI truth with
      'Sorcery is a true thing' (i.e., sorcery exists).

5.3.4. Sentences of the type (S) Aux Adv

In this formula, Adv stands for adjuncts of various types: postpositional phrases, peripheral cases of locative nouns, adverbs. The sentence have different oblique case predicates:

i) spatial predicates (57). Predicates with different semantics based on the spatial metaphor can also be classified along with this type, e.g. those referring to physical or psychological states, as in (58).

(57) wò   dū̄   plɤ̀ɤ̀ 6ṵ̄.
      3PL.EXI magic at   there
      '<...> they are there, in the sorcerers' village'.

(58) Ā̄   n̄   flʌ́ʌ̀   gṵ́.
      1SG.EXI 1SG.NSBJ health in
      'I am in good health' (lit.: "I am in my health").

ii) possessive predicates (in fact these can also be regarded as an extension of the spatial metaphor):

(59) Wʌ́ʌ̀gā yằ   gɔ̀.
      money   3SG.EXI>3SG.NSBJ on
      '(S)he has money'.

iii) comitative predicates:

(60) 6lṵ̄ dɔ̀ɔ̀ yɤ̀   6ɔ̀   kɤ̄ ā   Kwɨ́tī̄
      rice ART 3SG.EXI appear\NEUT that 1SG.EXI Kwitii
      gṵ̀   ká.
      belly\IZF with
      'This rice sprouted when I was pregnant with Kuiti'.

iv) existential predicates can be introduced by an idiomatic combination of the Aux with the deictic adverb **6ṵ̄** 'there' (61) Such a combination can be regarded, in fact, as a complex copula (and the predicate is expressed by the subject). In this context, the Aux tends to be omitted, and the adverb assumes the copula function, see 5.6.3.

(61) Kwɨ́ dằầ   bèdɛ̃̌ 6á   yɤ̀   6ṵ̄,
      white 3PL.NSBJ.POSS medicine certain 3SG.EXI there
      yɤ̀   6ɪ̄ʌ̄ gṵ́-6ɔ̀   wɛ̄̃ɛ̄̃dɤ̀.
      3SG.EXI wound inside-appear\NEUT burning
      'There is a medicine of the Whites, it makes a wound sting'.

5.4. Verbal copulas

5.4.1. ɗɤ́

This copula is homonymous with the non-verbal copula presented in 5.2.2, but, unlike the latter, it modifies its tone following a regular verbal pattern, cf. (62) where its lexical high tone is replaced by an extralow grammatical tone (obligatory for verbs in the neutral aspect construction), while in (63) its lexical high tone is maintained (typically for the negative imperfective construction).

Sentences with the verbal copula ɗɤ́ may express the following meanings:

i) existential, the predicate being represented by the subject, and the term remains unexpressed:

(62) Péŋ́   gblṹ   yāà-ɗṹ wɔ̀   ɗɤ̏.
    twin stomach evil-PL 3PL.EXI be\NEUT
    'There are wicked twins'.

(63) À   ɗó ɗɛ̀ wɛ́ɛ́ ɓá   yáá   ɗɤ́.
    3SG.NSBJ go place other certain 3SG.IPFV.NEG be
    'He had no other place to go'.

ii) possessive, in an adnominal possessive constructions, using Stassen's (2009) terminology, or "Loc-possessive constructions with genitive coding of the possessor" in Creissels' (2015: 4) terminology. This function is derived from the existential one.

(64) À   ɓà   kɔ́   yɤ̀   ɗɤ̏.
    3SG.NSBJ POSS house 3SG.EXI be\NEUT
    '(S)he has a house' (lit.: "His/her house exists").

(65) Bɛ́ŋ   yā   à   kɔ̀kúndhɛ̀   yáa dhɤ́.
    machete this 3SG.NSBJ hand-catch-place 3SG. IPFV.NEG be
    'This machete has no handle'.

There are, therefore, two competing constructions in Eastern Dan expressing the meaning of predicative possession: the locational possessive, see 5.3.4, and the adnominal possessive. The coexistence of such constructions is typical of South Mande languages, for a detailed comparative analysis of their semantics in Gban see (Fedotov 2016). In Eastern Dan, the situation is close to Gban, with some nuances.

The verbal copula, ɗɤ́, results from the second grammaticalization cycle of the verb ɗó ~ɗɤ́ 'go', the first cycle having produced a non-verbal copula ɗɤ́, see 5.2.2. The third (and most recent) cycle of grammaticalization of this verb has produced an auxiliary verb ɗó ~ ɗɤ́ used in the future (66) and prohibitive (67) constructions: it maintains both the phonological form and morphosyntactic features of the original lexical verb (combinability with a PPM and grammatically conditioned modifications of the tone), and differs from the latter only in terms of its grammatical function.

(66) Ā   ɗɔ̏ ~ ɗɤ̏ à   kɑ̄-'.
    1SG.EXI go\NEUT 3SG.NSBJ chase-INF
    'I'll chase him away'.

(67) Kɤ̄ ɗēbɑ̀ɗɑ́ ɓā yá   ɗó ~ ɗɤ́ ɤ̄   dè   zɑ̄-'…
    that woman ART 3SG.PROH go   REFL.SG self kill-INF
    'Lest the woman should kill herself…'

5.4.2. Kɑ̄

This is a polysemous verb, etymologically identical to the verb kɛ́ in Bambara and Maninka (see sections 3.5 and 4.4); its basic meaning is 'do' (when transitive) or 'happen' (when intransitive). In the non-neutral TAM contexts where bifunctional auxiliaries cannot appear in their copular functions, they are replaced by kɑ̄, for example in the perfect construction (68). In these cases, kɑ̄ can be regarded as a true verbal copula, insofar as no lexical semantics can be imputed to it.

(68) Ū̄   gɔ̀   ɗɛ̋ yà   kā̄ zîìsừù.
   2SG.NSBJ   head.CMM   leaf 3SG.PRF   do   horrible
   'Your hair has grown ugly'.

Besides, kā̄ appears as a verbal copula in a negative ascriptive equative sentence in an idiomatic combination with an adverb ɗɤ̌ 'so, like that' (69).

(69) Ā̀   gɔ̃̀   yáá   kā̄   ɗɤ̋.
   3SG.NSBJ   husband   3SG.IPFV.NEG   do   so
   'It is not her husband'.

5.5. Verbal semi-copulas

5.5.1. kā̄

The verb **kā̄** in the neutral aspect and conjoint constructions expresses past meaning (70, 71a) and therefore appears as a semi-copula, cf. a corresponding non-verbal sentence with a PPM in the copula function (71b).

(70) ... ɤ́   ɗō   ɗɔ̋ɔ̋   gúú   kwî́pɤ̀   ɤ́   kằ
   3SG.JNT   go\JNT   market   in   town   REL.3SG.JNT   do\JNT

   Gbĩ̄ã̄ã̄gwĩ̀ŋɗɛ̀   ká
   Biancouma   with
   '… she went to the market in the town that was Biancouma' [Zuase.004].

(71a) Ɓā̄   pàŋ̀   yɤ̀   kằ   pű́ű́.
   1SG.POSS   trousers   3SG.EXI   do\NEUT   white
   'My trousers were white'.

(71b) Ɓā̄   pàŋ̀   yɤ̀   pű́ű́.
   1SG.POSS   trousers   3SG.EXI   white
   'My trousers are white'.

5.5.2. Gū̄ 'be in the past' and tū̀ 'continue to be'

These are regular verbs from a morphosyntactic viewpoint. They can function as auxiliary verbs introducing content verbs in the infinitive (72, 73), in optative or prospective constructions (74).

(72) Yɤ̀   tū̀   yáàdū̄-'.
   3SG.EXI   still.be\NEUT   sit-INF
   'He keeps on sitting'.

(73) Yű́ắ   yɤ̀   kā̄-'   sāā̄   ɓò
   illness   3SG.EXI   RETR-3SG.NSBJ   tiredness   remove\NEUT

   sű́   plɛ̀ ká   yɤ́   ɤ́   gū̄   gā-'.
   moon two   with   CONS   3SG.JNT   be.pst\JNT   die-INF
   'The illness tormented him for two months, before he died'.

(74) Yɤ̀   kā̄   n̄   ɓlòò   ɗű́,
   3SG.EXI   RETR   1SG.NSBJ   press\NEUT   already

   ā   gū̄   ɓā̄ā̄   à   gɔ̀-ɓằ.
   1SG.EXI   be.pst\NEUT   1SG.PROS   3SG.NSBJ   head-beat
   'If he had squeezed me, I would have slapped him across his face'.

At the same time, **tū̀** and **gū̄** can introduce non-verbal predicates, still expressing past and continual meanings; in this case they function as semi-copula verbs. As a rule, they appear in the neutral aspect (75, 76, 77) and conjoint constructions (78), the latter being a kind of equivalent of the former in certain syntactic contexts. They introduce the same types of non-verbal predicates as the Aux$^{v/-v}$ in their copular function (see 5.3).

(75) Zĩ̄ã̄ã̄ yɤ̀   gū̄   sằ.
   road   3SG.EXI   be.PST\NEUT   good

‘The road was good’.

(76) Wɔ́   ɓlʌ̀ʌsʉ̀ʉ̀   dʌ̃̀   ɤ́   gʉ̄   yí   ɓā
     matter   important   FOC   3SG.JNT   be.PST\JNT   day\EMPH   ART

     à̰   ká.
     3SG.NSBJ   with
     ‘There was an important event on those days’.

(77) À̰   ɓà̰   dʌ̃́   ɓā   yɤ̀   ɓɔ̃̀
     3SG.NSBJ   POSS   child   ART   3SG.EXI   appear\NEUT

     kɤ̄   yɤ̀   tʉ̃̀   Klà̰à̰plɤ̀ɤ̀.
     that   3SG.EXI   still.be\NEUT   Klaapleu
     ‘His child was born while he was still in Klaapleu’.

(78) Wʌ̃̀ʌ̃   yɤ̀   tʉ̃̀   n̄   gɔ̀.
     money   3SG.EXI   still.be\NEUT   1SG.NSBJ   PP
     ‘I still have money’.

5.6. Non-verbal semi-copulas dɛ̃̀, ɓā, ɓʉ̃̄

These three elements, deictic in origin, are at various stages of grammaticalization; they can be regarded as ostentative copulas. As is typical of ostentative copulas, they do not appear in negative sentences; they seem to be unable to take a second argument.

5.6.1. Dɛ̃̀

This copula appears in presentative sentences ("here is X", when X is visible to the speaker, i.e. the ostentative function) of the structure S dɛ̃̀ (79), but it can also be used to present abstract situations or mental concepts, as in (80). dɛ̃̀ is the most grammaticalized among the non-verbal semi-copulas; in synchrony, it has no direct correlate of a non-copular nature, and its etymology is not quite clear. It can be probably traced back to the focalization determinative dʌ̃́ which has a free (and less frequent) variant dɛ̃̀. The latter variant is quite likely more archaic (in Dan-Gwɛɛtaa, grammaticalization is often accompanied by a shift of front vowels to back unrounded ones, but not the reverse).

(79) Yiĩ̀   dʌ̃́   tòtàáɓã̀   dɛ̃̀.
     1PL.EXCL.POSS   child   last   here.is
     ‘Here is our youngest child’.

(80) À-dʉ̃̀   dʉ̃̄   gɛ̃̀   dɛ̃̀.
     3SG.NSBJ-PL   come   foot/leg   here.is
     ‘Here is the reason for their coming’.

5.6.2. ɓā

This copula appears in sentences of the same structure, S ɓā ‘this is S’. The sentence introduces either an object visible from a distance (81), in which case its function can be regarded as ostentative, or not visible to the speaker at the moment of speech (82), in which case its function is close to identificational, cf. (83).

This element is, in Adamou & Costaouec's (2010) terms, a non-specialized non-verbal connector.

(81) Zǎ́ǎ́gwɛ̄   ɓā.
     Zaagwe   there.is
     ‘That is Zaagwe’ (a village observed by the speaker from a distance).

(82) N̄   dʌ̄   ɓā.
     1SG.NSBJ   father   there.is
     ‘This is my father’ (whom you are speaking about; who has done this job…).

(83) **Ɗàà̰** **ɓā.**
   knife   there
   'It is a knife'.

Ɓā undoubtedly goes back to the demonstrative adverb **ɓā** 'there, near the listener' (which has also grammaticalized into a definite article **ɓā**).

5.6.3. Ɓɯ̄̃

Ɓɯ̄̃ changes its tone to high, **ɓɯ́̃**, if the preceding word ends with a mid tone. It is originally an adverb, indicating an object that is either invisibile or at the limit of visibility. Its evolution toward the copula status is at an early stage, and manifests itself in the regular omission of the 3sg bifunctional auxiliary of the existential series in the construction of the structure S EXI **ɓɯ̄̃** 'S exists' (although this auxiliary can still be restored in slow speech, which is impossible in the constuctions with **ɗɛ̃** and **ɓā** described above; if the Aux$^{v/-v}$ is present, it can be said that the copula function is assumed by Aux$^{v/-v}$, or that the combination of Aux$^{v/-v}$ with **ɓɯ̄̃/ɓɯ́̃** is a complex copula, see 5.3.4).

If the subject NP (expressing the non-verbal predicate) is non-referential, a sentence with **ɓɯ̄̃/ɓɯ́̃** expresses an ostentative meaning (84).

When introducing NPs with concrete referential meaning, the deictic semantics of **ɓɯ̄̃** in this construction are completely eroded, and the construction expresses existential meaning (85, 86, 61).

(84) **Dū**   **(yɤ̀)**   **ɓɯ́̃.**
   sorcery   3SG.EXI   there
   'Sorcery is there' (i.e., "in that particular place, there are people engaged in sorcery"), rather than *'sorcery exists'.
(85) **Ṉ**   **dɑ̄**   **(yɤ̀)**   **ɓɯ́̃.**
   1SG.NSBJ   father   3SG.EXI   there
   'My father is alive' (i. e. "my father exists").
(86) **Zlɑ̰̄ɑ̰̄**   **(yɤ̀)**   **ɓɯ̄̃.**
   God   3sg.exi   there
   'God exists'.

5.7. Non-verbal predication in Eastern Dan: from function to form

As we can see, the means for non-verbal predication in Eastern Dan are very heterogeneous, and there are numerous cases where one function is carried out by two (or more) competing constructions. To simplify the overview, all the data represented in Table 2 are arranged from function to form.

Table 2. Eastern Dan copulas and non-verbal predicates, from function to form

Function	Copula	Structure	Examples in the text
1.1. Ascriptive Classificational (class membership)	**ɓɯ̀̃**	1 argument, S **ɓɯ̀̃** Neg.: (S) **yáá ɓɯ̀̃** 2 arguments, S **ɓɯ̄̃** X **ká** Neg.: (S) **yáá ɓɯ̀̃** X **ká**	39
	ɓā	1 argument, S **ɓā**	83
	Aux$^{v/-v}$	2 arguments, (S) Aux$^{v/-v}$ X **ká**	55
	gɯ̄, tɯ̀	(S) PPM **gɯ̄, tɯ̀** X **ká**	
1.2. Ascriptive Attributive (quality)	Aux$^{v/-v}$	(S) Aux$^{v/-v}$ Adj (S) Auxv/-v Adj **ká**	49, 50, 51, 71b 52

Function	Copula	Structure	Examples in the text
	gū�	(S) PPM **gū̄** Adj	75
	tȕ̀	(S) PPM **tȕ̀** Adj	
	kā̄	(S) PPM **kā̄** Adj (S) PPM **kā̄** Adj **ká**	68, 71a
2.1. Ascriptive Equative (an exclusive identity between the subject and the nominal predicate)	**ɓȕ̀**	1 argument: S **ɓȕ̀** Neg. (S) **yáá ɓȕ̀** 2 arguments: S **ɓȕ̀** X **ká** Neg. (S) **yáá ɓȕ̀** X **ká**	36 37 38
	gū̄	(S) PPM **gū̄** X **ká**	
	kā̄	1 argument, (S) PPM **kā̄ ɗɤ́** 2 arguments, (S) PPM **kā̄** X **ká**	69 70
	ɓā̄	S **ɓā̄**	82
2.2. Ascriptive Specificational (non-exclusive, situational identity)	**ɓȕ̀**	1 argument: S **ɓȕ̀** Neg. (S) **yáá ɓȕ̀** 2 arguments: S **ɓȕ̀** X **ká** Neg. (S) **yáá ɓȕ̀** X **ká**	40, 41 42
	Aux^v/-v	(S) Aux^v/-v X **ká**	56
	gū̄, tȕ̀	(S) PPM **gū̄/tȕ̀** X **ká**	
3. Localizational spatial	Aux^v/-v	(S) Aux^v/-v X	43b, 57, 58
	ɗɤ́	(non-verbal copula) (S) **ɗɤ́** X	43a
	gū̄	(S) PPM **gū̄** X	
	tȕ̀	(S) PPM **tȕ̀** X	77
	kā̄	(S) PPM **kā̄** X	
Localizational temporal	**gū̄**	(S) PPM **gū̄** X	76
	kā̄	(S) PPM **kā̄** X	
4. Existential	Aux^v/-v	1 argument: S Aux^v/-v **ɓȕ̀**	61, 85, 86
	ɗɤ́ (verb)	1 argument: S PPM **ɗɤ́**	62, 63
	ɗɤ́ (non-verbal copula)	1 argument: S **ɗɤ́**	46, 47
	gū̄	S PPM **gū̄**	
	ɓȕ̄	S (PPM) **ɓȕ̄**	
5. Quantificational (based either on numerals, or on quantifiers: all, few, many, much, some)	Aux^v/-v	(S) Aux^v/-v Num (S) Aux^v/-v Num **ká**	53 54
	gū̄, tȕ̀	(S) PPM **gū̄/tȕ̀** Num (**ká**)	
	kā̄	(S) PPM **kā̄** Num (S) PPM **kā̄** Num **ká**	
6.1. Oblique case predicate: comitative	Aux^v/-v	(S) Aux^v/-v X **ká**	60
	gū̄, tȕ̀	(S) PPM **gū̄/tȕ̀** X **ká**	
6.2. Oblique case predicate: possessive	Aux^v/-v	(S) Aux^v/-v X **gɔ̀**	59
	ɗɤ́ (verb)	1 argument: S PPM **ɗɤ́** (S = possessive construction)	64, 65
	ɗɤ́ (non-verbal copula)	S **ɗɤ́** X **gɔ̀**	44
	gū̄, tȕ̀	(S) PPM **gū̄/tȕ̀** X **gɔ̀**	78
	ɗɤ́ (non-verbal copula)	**dɛ̀** X **ɗɤ́**	

Function	Copula	Structure	Examples in the text
6.3. Oblique case predicate: comparative	**kā** + **dɤ́** (non-verbal copula)	(S) PPM **kā dɛ̀** X **dɤ́**	
	gū̄ + **dɤ́** (non-verbal copula)	(S) PPM **gū̄ dɛ̀** X **dɤ́**	
7. Ostentative	**dɛ̀**	1 argument, S **dɛ̀**	79, 80
	ɓā	1 argument, S **ɓā**	81
	ɓũ̄̄	1 argument, S (**yɤ̀**) **ɓũ̄̄**	84

6. Conclusions

Let us first overview the most interesting phenomena detected in each of the languages treated in this paper, and then attempt to make some generalizations.

6.1. Bambara

Even in such a language as Bambara, which is well studied (by African standards) and not unknown to typologists, the following phenomena have been discovered that had escaped the attention of previous researchers:

- alongside the much-described four non-verbal copulas (locational **bɛ́,** identificational **dòn**, equative **yé**, negative **tɛ́**), there are two verbal ones: **kɛ́** (from the verb **kɛ́** 'to do; to become'), used in marked TAM contexts, and an ostentative semi-copula **filɛ** (from the verb **filɛ** 'to look');
- it is not only copulas of locational / oblique case constructions that evolve into verbal auxiliaries; this evolution also concerns the copulas of identificational and existential constructions (respectively **dòn** and **bɛ́**, and their negative counterpart **tɛ́**). As a result of their grammaticalization into Aux^v (predicative markers), a word order has emerged in Bambara that is rather untypical of Mande, available for intransitive constructions only: S V Aux.

Also notable in Bambara is the recurrent character of the grammaticalization of the locational copulas **bɛ́ / tɛ́** described in 3.4.1. which can serve an exemplary illustration of Heine's (1993: 48ff) Overlapping Model.

6.2. Guinean Maninka

Although genetically very close to Bambara (in fact, both varieties are sometimes regarded as dialects of a single language, Manding), this language displays, with respect to copulas, some important divergences from the Bambara model (and from the Mande "prototype" represented in the Introduction):

- there is only one affirmative copula **yé** (more precisely, a bifunctional auxiliary, Aux$^{v/-v}$) for different constructions involving non-verbal predication. At the same time, there is a tendency to reinterpret the focalization particle **lè** into a copula (incidentally, the grammaticalization path "focalization particle > copula" is inverse to those mentioned in (Heine & Kuteva 2002);
- there are zero-copula constructions for ascriptive attributive predication and, marginally, for a variety of the equative sentence. Besides this fact, the affirmative bifunctional auxiliary **yé** tends to be omitted in other constructions too. All this is in disagreement with the general Mande trend formulated by Schreiber: "… zero copulae are only rarely found in the sample languages" (Schreiber 2008: 73).

Guinean Maninka, like Bambara, has a verbal copula **kɛ́** for marked TAM contexts and a verbal ostenative copula **fɛ́lɛ**.

6.3. Eastern Dan

The Eastern Dan copulas are numerous and heterogeneous, they do not constitute a single formal class and differ greatly among themselves both by origin and by their morphosyntactic behavior.

This language has two copulas close to the "prototypical Mande" type, ɓṳ̈ and ɗɤ́. However, they differ from their Bambara counterparts in that they can be combined with Aux^v in some contexts.

The central position in the non-verbal predication in Eastern Dan is occupied by bifunctional auxiliaries (Aux$^{v/-v}$), which are inflectional and therefore untypical of Mande.

Another peculiarity of Eastern Dan is the existence of a verbal copula ɗɤ́, which assumes central copula functions — in contrast with Manding languages where verbal copulas, although available, appear in their copula functions only in TAM-marked contexts (kɛ́) or with an ostentative meaning (fílɛ / fɛ́lɛ).

Finally, Eastern Dan has zero-copula constructions expressing non-verbal predication, inasmuch as omission of the 3SG Aux$^{v/-v}$ is possible (see 5.3).

Eastern Dan is remarkable for the abundance of recurrent copula-related grammaticalization processes:

- motion verb ɗó > verbal copula ɗɤ́ and > non-verbal copula ɗɤ́ (one can also mention the grammaticalization of this verb to an auxiliary used in the future construction, ɗɤ́ ~ ɗó). The grammaticalization path 'to go > copula' seems to be rare; at least, it is not attested in (Heine & Kuteva 2002);
- verb kā 'do; happen' > verbal (true) copula kā in non-neutral TAM contexts (in the same way as kɛ́ in Manding), and also > semi-copula verb kā used in the neutral aspect construction to express past meaning. At the same time, a non-verbal auxiliary word ("retrospective operator") kā is attested in Eastern Dan, which may result from a further grammaticalization of the abovementioned semi-copula verb kā;
- demonstrative adverb ɓṳ̈ 'there' (out of sight) > non-verbal existential semi-copula ɓṳ̈ (see 5.6) and > ɓṳ̈, a true non-verbal non-inflected copula (see 5.2.1).

6.4. General observations

A thorough analysis of non-verbal predications in the three Mande languages shows that the situation in each of them, and also across these languages, is strikingly more diverse than one might imagine on the basis of general descriptive works — not to mention the representation of Mande data in typological studies. This is just another case showing how risky typological studies where each genetic unit is represented by a single language may be.

As mentioned in 2.2, (Adamou & Costaouec 2010) single out three strategies for non-verbal predicate clauses ("direct connection", i.e. zero-copula construction; "non-verbal connector strategy"; "connection via verb, i.e. verbal copulas") and claim that "it is rare to find them all in a single language". However, in my sample, two out of three Mande languages (Guinean Maninka and Eastern Dan) use all three strategies.

Another point worthy mentioning is the direction of grammaticalization typical of Mande languages: Aux^{-v} > Aux^v or Aux$^{v/-v}$ (a copula transforms into a verbal auxiliary). This grammaticalization path is not limited to copulas in locational constructions evolving toward progressive/imperfective markers.

Acknowledgements

Glosses

1, 2, 3	1st, 2nd, 3rd person
ABSTR	suffix deriving abstract nouns
AFF	affirmative
ART	article
CMM	common case
COND	conditional marker
CONJ	conjunction
CONS	consecutive conjunction
CONV	converb
COP	copula
DIM	diminutive suffix
DUR	durative
EMPH	emphatic pronoun (Manding); emphatic form of noun (Dan)
EQU	equative copula
EXCL	exclusive 1 pl. pronoun
EXI	existential marker
FOC	focalisation particle
ID	identification copula
INF	infinitive
INTR	intransitive
IPFV	imperfective marker
IZF	status-constructus marker (extra-low tone)
JNT	conjoint predicative marker; conjoint form of verb
LOC	locative case
NEG	negative
NEUT	neutral aspect form of a verb
NMLZ	suffix of nominalization
NSBJ	non-subject pronoun
PFV	perfective
PL	plural
POSS	possessive marker/pronoun
PP	multifunctional postposition (comitative, instrumental, equative, etc. meanings
PRF	perfect marker
PROH	negative subjunctive marker
PROS	prospective marker
PST	restrospective operator
PTCP	participle
QUAL	qualitative verbal construction marker
QUOT	quotative particle/conjunction
REFL	reflexive pronoun
REL	relative determiner/pronoun
RES	resultative
RETR	retrospective marker
SBJV	subjunctive marker
SG	singular

Abbreviations

Adj — adjective
Adv — adverbial phrase
Aux — auxiliary
Aux^v — predicative marker
Aux^{-v} — copula

Aux$^{v/-v}$ — bifunctional auxiliary
Neg — negative
NP — noun phrase
Num — numeral
O — direct object
PP — postpositional phrase
PPM — pronominal predicative marker
S — subject
TAM — tense, aspect, mode
V — verb, verbal predicate
X — oblique

References

Adamou, Evangelia & Denis Costaouec. 2010. Connective constructions in the world's languages: a functionalist approach. *La linguistique* 46(1). https://doi.org10.3917/LING.461.0043.

Bailleul, Charles. 2007. *Dictionnaire Bambara-Français*. 3rd edn. Bamako: Donniya.

Brauner, Siegmund. 1974. *Lehrbuch des Bambara*. Leipzig: Enzyklopädie.

Creissels, Denis. 1981. L'étymologie des prédicatifs d'identification des parlers bambara et jula : yé et dòn-dò-lò. *Mandenkan* 1. 3–10.

Creissels, Denis. 1985. Les verbes statifs dans les parlers manding. *Mandenkan* 10. 1–32.

Creissels, Denis. 1997. Postpositions as a possible origin of certain predicative markers in Mande. *Afrikanistische Arbeitspapiere* 50. 5–17.

Creissels, Denis. 2009. *Le malinké de Kita* (Mande languages and linguistics 9). Rüdiger Köppe Verlag. Köln.

Creissels, Denis. 2015. Existential predication and trans-possessive constructions. Presented at the Colloque international « La prédication existentielle dans les langues naturelles : valeurs et repérages, structures et modalités » INALCO, Paris.

Creissels, Denis. 2017. Copulas originating from the imperative of see / look verbs in Mande languages. In Walter Bisant & Andrej Malchukov (eds.), *Unity and diversity in grammaticalization scenarios*, 45–66. Berlin: Language Science Press.

Creissels, Denis & Pierre Sambou. 2013. *Le mandinka. Phonologie, grammaire, textes*. Paris: Karthala.

Dryer, Matthew S. 2007. Clause types. In Timothy Shopen (ed.), *Language Typology and Syntactic Description*, vol. 1, 224–275. Cambridge University Press. Cambridge.

Dumestre, Gérard. 2003. *Grammaire fondamentale du bambara*. Paris: Karthala.

Fedotov, Maksim. 2016. Adnominal predicative possessive construction and pragmatically "flexible" noun phrases in Gban. In *Issledovanija po jazykam Afriki 6 (Исследования по языкам Африки. Выпуск 6) [Studies in African languages 6]*, 320–345. Moscow: Kliutch-S.

Heine, Bernd. 1993. *Auxiliaries: Cognitive forces and grammaticalization*. New York, Oxford: Oxford University Press.

Heine, Bernd & Tania Kuteva. 2002. *World lexicon of grammaticalization*. Cambridge University Press.

Hengeveld, Kees. 1992. *Non-verbal predication: theory, typology, diachrony* (Functional Grammar Series 15). Berlin, New York: Mouton de Gruyter.

Meeussen, Achille Emiel. 1967. Bantu grammatical reconstructions. *Africana Linguistica* III. 79–121.

Pustet, Regina. 2003. *Copulas – universals in the categorization of the lexicon* (Oxford Studies in Typology and Linguistic Theory). Oxford: Oxford University Press.

Schreiber, Henning. 2008. Copula constructions in Mande – an overview. *Mandenkan* 44. 63–77.

Stassen, Leon. 1997. *Intransitive predication* (Oxford Studies in Typology and Linguistic Theory). Oxford: Clarendon Press.

Stassen, Leon. 2009. *Predicative possession*. Oxford: Oxford University Press.

Sumbatova, Nina. 2009. Kommunikativnaja struktura adygejskogo predlozhenija: perspectiva i fokus (Коммуникативная структура адыгейского предложения: перспектива и фокус) [Communicative structure of the Adyghe sentence: perspective and focus]. In Jakov Testelets, Petr Arkadkev, Alexander Letuchij & Nina Sumbatova (eds.), *Aspekty polisentetizma: ocherki po grammatike adygejskogo jazyka (Аспекты полисинтетизма: очерки по грамматике адыгейского языка) [Aspects of polysynthetism: studies in Adyghe grammar]*, 559–611. Moscow: RGGU.

Tröbs, Holger. 2008. Bambara. In Holger Tröbs, Eva Rothmaler & Kerstin Winkelmann (eds.), *La qualification dans les langues africaines. Qualification in African Languages*, 13–28. Rüdiger Köppe.

Vydrin, Valentin. 2009. On the problem of the Proto-Mande homeland. *Journal of language relationship* 1. 107–142.

Vydrin, Valentin. 2017a. Vyrazhenie predikacii kachestva v gvinejskom maninka (Выражение предикации качества в гвинейском манинка) [Expression of the quality predication in the Maninka of Guinea]. In Valentin Vydrin & Anastasia Lyakhovich (eds.), *V zheltoj zharkoj Afrike... K 50-letiju Aleksandra Zheltova (В жёлтой жаркой Африке... К 50-летию Александра Желтова) [In the hot yellow Africa... In honor of Alexander Zheltov on the occasion of his 50th birthday]*, 25–47. St. Petersburg: Nestor-Historia.

Vydrin, Valentin. 2017b. Quantifiers in Dan-Gwɛɛtaa (South Mande). In Denis Paperno & Edward L. Keenan (eds.), *Handbook of quantifiers in natural language* (Studies in Linguistics and Philosophy 97), vol. 2, 203–280. Springer.

Vydrin, Valentin. 2017c. Dan jazyk (Дан язык) [Dan]. In Valentin Vydrin, Yulia Mazurova, Andrej Kibrik & Elena Markus (eds.), *Jazyki mira: Jazyki mande (Языки мира: Языки манде) [Languages of the world: Mande languages]*, 469–583. St. Petersburg: Nestor-Historia.

Vydrin, Valentin. 2019. *Cours de grammaire bambara*. Paris: Presses de l'INALCO.

Vydrin, Valentin, Kirill Maslinsky & Jean-Jacques Méric. 2011. *Corpus Bambara de Référence*. http://cormand.huma-num.fr/index.html.

Vydrin, Valentin, Kirill Maslinsky, Andrij Rovenchak & Ibrahima Sory 2 Condé. 2014. Corpus maninka de référence. http://cormand.huma-num.fr/cormani/.

Vydrine, Valentin. 1990. Les adjectifs prédicatifs en bamana. *Mandenkan* 20. 47–90.

Vydrine, Valentin. 1999. Les parties du discours en bambara : un essai de bilan. *Mandenkan* 35. 73–93.

Vydrine, Valentin. 2007. Les adjectifs en dan-gwèètaa. *Mandenkan* 43. 77–103.