

Word classes in Mande languages

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Abstract. The Mande language family includes about 70 languages which show a high degree of typological homogeneity in most respects. In particular, all Mande languages have extremely rigid word order patterns, which facilitates the use of distributional criteria in the recognition of word classes. By contrast, most of them (but not all) have very reduced inflectional morphology, which may favor the development of lexical polycategoriality, in particular as regards the distinction between nouns and verbs. In some Mande languages, all the lexemes that can be used as verbs can also be used in the same underived form as action nominalizations (but not vice-versa: all Mande languages have lexemes that can only be used as nouns in their underived form). Mande languages also provide interesting data about the possible criteria that can be used to delimit classes of adjectives, adverbs, postpositions, or copulas. Finally, in Mande languages, the so-called ‘predicative markers’ (a kind of auxiliaries) constitute a highly salient class of grammatical words expressing TAM, polarity, sometimes also subject indexation and distinctions related to transitivity and/or information structure.

1. The Mande language family

The Mande language family includes about 70 languages with a total of more than 50 million speakers. Mande languages are spoken in 12 West African countries, from Senegal to Nigeria. The languages of the Manding group (Bambara, Maninka, Jula, Mandinka, etc.) are by far the most widely spoken and best-documented Mande languages.

The genetic depth of the Mande family is estimated at about 5 millennia. The Mande language family was recognized very early in the history of African linguistics, essentially because of its remarkable typological homogeneity and the clear-cut typological contrasts between Mande languages and their neighbors in many respects. There is no doubt about the validity of the Mande language family as a genetic unit. What is, however, controversial is the inclusion of the Mande language family within the Niger-Congo phylum (Dimmendaal 2011).

As regards the internal structure of the Mande language family, as discussed by Vydrin (2009, 2016), there is a relative consensus about the recognition of 11 lower level groupings: Manding, Mokole, Vai-Kono, Jogo-Jeri, Soso-Jalonke, Southwestern, Soninke-Bozo, Samogho, Bobo, Southern, and Eastern. Most specialists agree on the hypothesis that the first split was between two branches, one of them constituted by the Southern and Eastern groups, the other one (designated as West Mande) constituted by the other nine groups. By contrast, there is no consensus about the intermediary stages of classification, especially within the West Mande branch. In the following chart, the only intermediary grouping that has been retained is Central Mande (consisting of Manding, Mokole, Vai-Kono, and Jogo-Jeri), on which there is a relative consensus.

South & East Mande	South Mande		Dan, Guro, Mano, Beng, Gban, Mwan, Wan, Tura, Yaure
	East Mande		Bisa, San, Busa, Boko, Bokobaru, Kyenga, Shanga
West Mande	Soninke-Bozo		Soninke, Jenaama, Soroko, Kelinga, Tigemaxo
	Bobo		Bobo
	Samogho		Dzuun, Duun, Banka, Jo, Kpan, Kpeen, Seenku
	Central	Manding	Bambara, Jula, Maninka, Mandinka
		Mokole	Kakabe, Koranko, Lele, Mogofin
		Vai-Kono	Vai, Kono
		Jogo-Jeri	Jogo, Jeri, Ligbi, Jalkunan
	Soso-Jalonke		Soso, Jalonke
Southwestern		Mende, Kpelle, Looma, Bandi, Loko	

2. The typological profile of Mande languages

2.1. Some general characteristics of Mande languages

Mande languages are tonal languages, with as many as 5 contrasting tone heights in some Dan varieties. In general, they have rather unremarkable consonant and vowel inventories, but exceptions to this generalization can be found among the languages of the Southern branch. Mande languages typically have complex systems of tonal alternations involving sandhi phenomena, tonal alternations triggered by syntactic structure, and tonal marking of inflectional categories.

Mande languages have rich systems of affixal derivation (mainly suffixal) and very productive systems of nominal compounding. By contrast, most of them have very reduced inflectional morphology, and with very few exceptions, the inflectional morphology found in individual Mande languages seems to be the result of grammaticalization processes that occurred in a relatively recent past rather than the reflex of an inflectional system that could be traced back to their common ancestor.

In most Mande languages, valency-changing morphology is limited to a causative marker (either a suffix or a preverb). Detransitivizing markers (with either an antipassive or medio-passive function) are rarely found in Mande languages, and applicative markers are not attested at all. ‘Deobliquative’ derivation making it possible to omit otherwise obligatory oblique arguments constitutes an interesting particularity of some Southern and Eastern Mande languages (Idiatov 2008).

Mande languages have neither gender / noun class systems nor classifier systems,¹ and show no compelling evidence that the situation on this point might have been different in their common ancestor.

A striking characteristic of Mande languages is the extreme degree of rigidity of word order.

¹ Note however that the adnominal possession construction of Kpelle as described for example by Konoshenko (2017: 299) can be analyzed as involving a rudimentary system of possessive classifiers.

2.2. The basics of Mande morphosyntax: clause structure

2.2.1. Transitive-intransitive alignment and grammatical relations

As regards the coding characteristics of core arguments, ergative-absolutive alignment is not totally unknown in Mande (see Vydrin (2011) on TAM-based split-ergativity in Southwestern Mande), but the neutral and nominative-accusative types of alignment are strongly predominant.

The Mande languages for which the relevant information is available have systems of grammatical relations in which the sole argument of intransitive clauses and the A term of transitive clauses share a number of behavioral properties that distinguish them from the P term of transitive clauses. This justifies using the traditional labels ‘subject’ for NPs showing the coding properties shared by the sole core argument of intransitive clauses and the A term of transitive predication, and ‘object’ for the P term of transitive predication. For the detailed analysis of the grammatical relation system of a Mande language, see Creissels (2019) on Mandinka).

2.2.2. Transitive and intransitive predicative constructions

The verbal clauses of Mande languages are characterized by a particularly rigid (and typologically unusual) constituent order, with the object invariably in immediate preverbal position and the obliques in postverbal position. Transitive verbal clauses can be schematized as S O V X*, and intransitive verbal clauses as S V X*.² A so-called ‘predicative marker’ (a kind of auxiliary) is often found immediately after the subject NP. Example (1) illustrates the S O V X order in some Mande languages. In all the sentences given in this example, any change in the linear order of constituents would automatically result in ungrammaticality.

- (1a) *Sékù bέ Mādù kálán túbàbùkân ná.*
 Sékou ICPL Madou teach French.language POSTP³
 S pm O V X
 ‘Sékou is teaching French to Madou.’ (Bambara, pers.doc.)⁴

- (1b) *Yúgò-n dà dòròkè-n qóbó yàxàré-n dà.*
 man-D CPL.TR dress-D buy woman-D for
 S pm O V X
 ‘The man bought a dress for the woman.’ (Soninke, pers.doc.)

² In this schematization, S, O and X must be understood as ‘subject’, ‘object’ and ‘oblique’, respectively. The asterisk must be understood as the Kleene star: X* represents a string consisting of an arbitrary number of obliques, including the empty string.

³ The generic gloss POSTP is used throughout the paper for postpositions whose range of possible meanings is difficult if not impossible to analyze in terms of extensions of some core meaning. Such postpositions are widely used in Mande languages to flag oblique arguments (i.e., semantic arguments of the verb that are not encoded as subject or object NPs).

⁴ The abbreviation ‘pers.doc.’ (personal documentation) refers either to data I directly collected myself in field work with native speakers, or to data taken from a variety of sources other than language descriptions and subsequently checked with native speakers.

(1c) *Ń ñìngée fii-mà í má.*
 1SG cow five-FUT 2SG POSTP
 S O V X
 ‘I will give you a cow.’ (Soso, pers.doc.)

(1d) *Kpaná gbóó lé-ni bí má?*
 Kpana what say-CPL 2SG to
 S O V X
 ‘What did Kpana say to you?’ (Mende, Innes 1971: 137)

Example (2) illustrates intransitive predication. Note that, in Mande languages, a significant proportion of semantically bivalent verbs do not select the transitive construction as their coding frame, and occur in an extended intransitive construction with one of their two arguments encoded as an oblique.

(2a) *Sékú búká làfí í là kódò lá*
 Sékou ICPL.NEG want 2SG GEN money.D POSTP
 S pm V X
 ‘Sékou doesn’t want your money.’ (Mandinka, pers.doc.)

(2b) *Ń m̀̀ngú dò léminè-n tòxó-n ñà.*
 1SG forget with child-D name-D POSTP
 S V X
 ‘I forgot the child’s name.’ (Soninke, pers.doc.)

(2c) *Sukúlu lopoí jisia tí li-má sukúlií hu há.*
 school child DEM.PL 3PL.ICPL.NEG go-PROG school.D in today
 S pm V X X
 ‘These school children are not going to school today.’ (Mende, Innes 1971: 91)

(2d) *È ññn̄ kālē gó.*
 3SG get.lost.PST forest in
 S V X
 ‘He got lost in the forest.’ (Wan, Nikitina 2018:110)

2.2.3. Ditransitive constructions

In contrast to most language families of sub-Saharan Africa, Mande languages do not have double-object constructions.⁵ One of the arguments of semantically trivalent verbs must obligatorily be encoded as an oblique in post-verbal position. In ditransitive constructions, both indirective and secundative alignments are common.

⁵ The only exception I am aware of is Gban (Fedotov 2017: 981), and it has a simple historical explanation. The point is that the S O₁ O₂ V X construction of Gban is only possible with the causative form of transitive verbs, and consequently can be traced back to a source construction in which what has become a causative suffix still was a causation verb taking a nominalized transitive clause as its object, something like ‘X caused [Y’s V-ing Z]’ for ‘X made Y V Z’.

2.2.4. TAM and polarity

In Mande languages, grammaticalized TAM distinctions can be expressed by verbal suffixes (such as *-mà* in (1c) above), predicative markers immediately following the subject NP (and consequently separated from the verb by the object NP, such as *bé* in (1a)), or a combination of both. The division of labor between predicative markers and TAM suffixes of verbs varies from one language to another.

In Mande languages, polarity distinctions are commonly expressed by pairs of predicative markers, often with no formal resemblance at all between the negative member of the pair and its positive counterpart, as in (3). Pure negative markers, either in post-subjectal or clause-final position, are less common.

(3) Mandinka (pers.doc.)

(3a) *Fàatú yè Fántà máakóyì kódòo tó.*
 Fatou CPL.TR Fanta help money.D LOC
 ‘Fatou helped Fanta financially.’

(3b) *Fàatú mâŋ Fántà máakóyì kódòo tó.*
 Fatou CPL.NEG Fanta help money.D LOC
 ‘Fatou did not help Fanta financially.’

2.2.5. Transitivity marking

Predicative markers may be sensitive to transitivity distinctions, especially those expressing completive aspect. For a historical analysis of this phenomenon and a discussion of proposals previously made by other authors (including Creissels 1997), see Idiatov (2020).

For example, in Mandinka, as illustrated in example (4), to be compared with (3), negative intransitive clauses in the completive aspect are marked by the same predicative marker *mâŋ* as the corresponding transitive clauses, but in positive clauses, the suffix *-ta* expressing the completive aspect in intransitive clauses is in complementary distribution with the predicative marker *yè* expressing the same TAM value in transitive clauses.

(4) Mandinka (pers.doc.)

(4a) *Fàatú táa-tá fàrôo tó.*
 Fatou go-CPL.INTR rice.field.D LOC
 ‘Fatou went to the rice field.’

(4b) *Fàatú mâŋ táa fàrôo tó.*
 Fatou CPL.NEG go rice.field.D LOC
 ‘Fatou did not go to the rice field.’

2.2.6. Flagging and indexation

As can be seen from the examples above, in Mande clauses, the general rule is that subjects and objects are not flagged. The only case of core argument flagging I am aware of in a Mande

language is the system of differential subject flagging found in Soninke, with a special suffix used exclusively to flag focalized NPs and interrogatives in subject function – Creissels (2018a: 772-773).

As a rule, in Mande clauses, obliques are flagged by adpositions, although obliques flagged by prepositions and/or unflagged obliques can also be found, depending on language-specific rules. Example (2b) above illustrates a case of oblique flagging involving both a preposition and a postposition. Note that, given the rigidity of the S O V X constituent order, in Mande languages, unflagged obliques cannot be confused with objects. On the special status of obliques (including oblique arguments) in Mande syntax, see Nikitina (2009a, 2011).

Indexation is absent from most West Mande languages, but in Southwestern Mande languages and in the majority of South and East Mande languages, the cliticization of subject pronouns has resulted in subject indexation mechanisms.⁶ In all cases, subject indexes attach to the predicative marker (with which they tend to fuse), not to the verb. Some of the languages in question have subject indexes in complementary distribution with free pronouns in subject function, whereas others have obligatory subject indexes and optional subject NPs, as illustrated in (5) for Kpelle.

(5) Kpelle (Konoshenko 2017: 304, 327)

(5a)	<i>Dàǎ pá.</i>	/1SG.RES/come/	‘I have come.’
	<i>Yàǎ pá.</i>	/2SG.RES/come/	‘You (sg.) have come.’
	<i>Àǎ pá.</i>	/3SG.RES/come/	‘He/she has come.’
	<i>Gwàǎ pá.</i>	/1PL.INCL.RES/come/	‘We (incl.) have come.’
	<i>Kwàǎ pá.</i>	/1PL.EXCL.RES/come/	‘We (excl.) have come.’
	<i>Kàǎ pá.</i>	/2PL.RES/come/	‘You (pl.) have come.’
	<i>Dàǎ pá.</i>	/3PL.RES/come/	‘They have come.’

(5b) *Pépèè àǎ pá.*
 Pepe 3SG.RES come
 ‘Pepe has come.’

(5c) *Nàákàì dà Pépèè dàǎ pá.*
 Niakwei 3.and Pepe 3SG.RES come
 ‘Niakwei and Pepe have come.’

(5d) *Dàǎ wílú bélé.*
 1SG.RES tree saw
 ‘I sawed the tree.’

(5e) *(Zààwòlò) àǎ bá mèě.*
 Zawolo 3SG.RES rice eat
 ‘Zawolo / he has eaten the rice.’

In Southwestern Mande languages, cliticization also affects object pronouns, resulting in paradigms of object indexes attached to transitive verbs. The object indexes are always in

⁶ The discussion of indexation is limited here to indexation mechanisms operating within the limits of the clause, but person-number agreement on clause linking markers is also found in a limited number of Mande languages, see Idiatov (2010).

complementary distribution with object NPs. Their interaction with the initial consonant of the verb may result in total fusion, as in (6b), where the initial *z* of the verb form results from the fusion of its initial consonant with a 1st person singular index whose underlying form can be analyzed as *ɟ*- (Konoshenko 2017: 330).

(6) Kpelle (Konoshenko 2017: 303)

(6a) *Dàǎ é-háyá.*
 1SG.RES 2SG-hurt
 ‘I have hurted you.’

(6b) *Dàǎ záyá.*
 1SG.RES 1SG.hurt
 ‘I have hurted myself.’

2.2.7. *Unspecified core arguments*

A salient feature of Mande clause structure is that in almost all Mande languages, there is a total ban on unexpressed subjects or objects, be it with a non-specific or anaphoric reading (see Creissels (2015) for a detailed discussion of this aspect of Mandinka syntax). In particular, it is generally impossible to refer to an unspecified participant normally encoded as the object of a transitive construction by simply deleting the object NP. However, as illustrated in (5), the strategies used to leave the object argument of transitive verbs unspecified vary from one language to another: antipassive derivation (Soninke), antipassive periphrases (Manding languages), or generic nouns in object function (Wan).

(7a) *Sámáqqè-n qíñí-ndì*
 snake-D bite-ANTIP
 ‘The snake bit (someone).’ (Soninke, pers.doc.)

(7b) *Fàatú yè ñ̀ǹǹỳk̀àar̀ôo ké.*
 Fatou CPL.TR asking.D do
 ‘Fatou asked (someone).’ (Mandinka, pers.doc.)

(7c) *Dèlòtò á p̄ ló lé*
 Deloto COP thing eat PROG
 ‘Deloto is eating.’ (Wan, Nikitina 2018: 108)

2.2.8. *Lability*

As a rule, Mande languages have very limited classes of A-labile verbs (i.e. verbs used transitively or intransitively with the same semantic role assigned to their subject), whereas P-lability, illustrated in (8), is pervasive.

(8) Wan (Nikitina 2018:108)

(8a) *Dèlòtò séngè klā tābālī é tā.*
 Deloto knife put.PST table D on
 ‘Deloto put a knife on the table.’

(8b) *Yrēé klā à tā.*
 tree put.PST 3SG on
 ‘A tree fell on him.’

Moreover, in Mande languages, P-lability is not limited to the cross-linguistically common causal / noncausal type illustrated in (8). Cobbinah and Lüpke (2009) rightly observe that particularly clear cases of languages with morphologically unmarked passive constructions can be found among Mande languages. Example (9) illustrates active-passive lability in Guro.⁷

(9) Guro (Kuznetsova & Kuznetsova 2017: 786)

(9a) *Tālá vā̀̀ k̄l̄l̄.*
 Tra shirt sew.CPL
 ‘Tra sewed the shirt.’

(9b) *Vā̀̀ k̄l̄l̄ (Tālá p̄̀̀ yā̀).*
 shirt sew.CPL Tra track with
 ‘The shirt was sewn (by/because of Tra).’

Manding languages are an extreme case of languages with systematic active / passive lability, since in Manding languages, all the verbs that can be used in a transitive construction can also be freely used without any specific marking in an intransitive construction in which their subject is assigned the same semantic role as the object in the transitive construction, as in (10). Note that, with the Bambara verb *dún* ‘eat’ (and this constitutes the general rule in Bambara), there is no possible ambiguity on the semantic role of the subject, since a periphrasis with the light verb *ké* ‘do’ (10c) is the only way to avoid specifying the patient.

(10) Bambara (pers.doc.)

(10a) *Wùlú má sògò dún.*
 dog.D CPL.NEG meat.D eat
 ‘The dog didn’t eat the meat.’

(10b) *Sògò má dún (wùlú fê).*
 meat.D CPL.NEG eat dog.D by
 ‘The meat was not eaten (by the dog).’

⁷ In most cases, in the passive construction of the verbs having this kind of lability, either the expression of the demoted agent as an oblique is not possible, or the oblique phrase that can be interpreted as expressing the demoted agent has other possible readings, as in the Guro example (9).

- (10c) *Wùlù má dímúni ké.*
 dog.D CPL.NEG eating do
 ‘The dog didn’t eat.’

2.3. The basics of Mande morphosyntax: NP structure

Mande languages do not have gender / noun classes. The structure of Mande noun phrases can be schematized as follows, with two possible positions for demonstratives and other determiners:⁸

(AdPoss) (Det₁) N (Attr) (Quant) (Det₂)

- (11) Mandinka (pers.doc.)

i lá ñŋ dímúsu màlùbáli sàbòo
 2SG GEN DEM daughter cheeky three.D
 AdPoss Det₁ N Attr Quant.Det₂
 ‘these three cheeky daughters of yours.’

The noun modifiers occupying the Det₁ position may be proclitics, and those occupying the Det₂ position may be enclitics. The phonological interaction between clitic determiners and their host may go as far as complete fusion, as in example (10), where the enclitic determiner *-ò* fuses with the last vowel of *sàbá* ‘three’.

Many Mande languages have a clitic determiner (glossed D) that can be characterized semantically as a definite article with a very wide range of uses, or as a default determiner (i.e., a determiner which in most contexts carries no particular semantic specification, and must simply be present if the speaker does not consider useful to select a determiner with a more specific meaning). In most Manding varieties, the default determiner (Mandinka *-ò*) is reduced to a floating tone.

Most Mande languages express number on nouns by means of a single plural marker (with just phonologically conditioned variants) occupying the Det₂ position. However, more complex systems of number marking are found in Soninke and Bobo.

Mande languages may have a single adnominal possession construction (this is for example the case in Soninke), but most of them have two possible constructions for adnominal possessors distinguished by the presence vs. absence of a postposition (glossed GEN) following the adnominal possessor, depending on the semantic nature of the relationship between adnominal possessors and their head, as in Mandinka *Músáa dīŋòlú* ‘Moussa’s children’ vs. *Músáa lá nìnsòolú* ‘Moussa’s cows’ – on this question, see section 5 below.

In some other languages (for example, Kpelle), adnominal possessors are obligatorily indexed, either directly on their head, or on a possessive pronoun that precedes their head, depending on the semantic nature of the relationship between adnominal possessors and their head, as in Kpelle (*Hèhèè*) *ńáŋ* /Hehe/3SG.father/ ‘Hehe’s father / his father’ vs. (*Hèhèè*) *ŋò béléáá* /Hehe/3SG.POSS/sheep/ ‘Hehe’s sheep / his sheep’ (Konoshenko 2017: 299).

In some languages, adnominal possessors trigger the use of a tonally marked ‘construct form’ of their head (as in Soninke *kítáabè* ‘book’ vs. *Múusá kítáabè* ‘Moussa’s book’).

⁸ AdPoss = adnominal possessor, Det = determiner, N = noun, Attr = attributive modifier, Quant = quantitative modifier (including numerals).

Mande languages may have postnominal relative clauses occupying the rightmost position in the noun phrase, but in many of them, the commonest relativization strategy is a correlative strategy, illustrated in (12), displaying the following characteristics:

- the relative clause precedes the matrix clause;
- whatever the relativized position may be, the constituent order within the relative clause is invariably the same as in the corresponding independent clause;
- the semantic head of the relative clause occupies the relativized position;
- the semantic head of the relative clause is marked by a relativizer, and resumed in the matrix clause by a demonstrative or personal pronoun.

(12) Mandinka (pers.doc.)

Sùŋôo yè mùsôo; mîŋ ná kódóo tǎa,
 thief.D CPL.TR woman.D REL GEN money.D take
í níŋ wǒo; bĕn-tà.
 man.D with DEM meet-CPL.INTR
 ‘I met the woman whose money was taken by the thief.’
 lit. something like ‘The thief took which woman’s money, I met that one.’

3. Nouns and verbs

3.1. Introductory remarks

Given the rigidity of word order patterns in Mande languages, there is no difficulty in identifying verbs and common nouns on the basis of the following definitions: in Mande languages, verbs have the ability to act as the nucleus (V) of the S O V X* predicative construction in association with a paradigm of TAM-polarity markers that follow either S or V, and common nouns have the ability to act as the nucleus of noun phrases having the structure described in section 2.3. In fact, not all descriptions of Mande languages operate with an explicit definition of the verb vs. noun distinction, but the way they manipulate the labels ‘noun’ and ‘verb’ is always consistent with the definitions formulated above.

V-N polycategoriality can be broadly defined as the use of identical forms with related meanings both as verbal stems and as nominal stems, as in (13) and (14).

(13) Mandinka (pers.doc.)

(13a) *Kèé kúmà-tá à ñíŋ-ò kótò.*
 man.D speak-CPL.INTR 3SG tooth-PL under
 S V X
 ‘The man mumbled.’ lit. ‘The man spoke under his teeth.’

(13b) *Kèé yè wǒo kúmá kiliŋ-ò lè sèyìnkàŋ.*
 man.D CPL.TR DEM word one-D FOC repeat
 S pm O V
 ‘The man repeated the same words.’

(14) Mandinka (pers.doc.)

(14a) *Músáa nǎa-tà ntè dóróŋ nè yé jǎŋ.*
 Moussa come-CPL.INTR 1SG only FOC for here
 S V X X
 ‘It is only for me that Moussa came here.’

(14b) *Músáa lá nǎâ mâŋ kúyáa ǐ ñè.*
 Moussa GEN coming.D CPL.NEG be.unpleasant 1SG for
 S pm V X
 ‘Moussa’s coming does not bother me.’

This phenomenon is widespread across Mande languages, and is particularly prominent within three particular subgroups of Western Mande languages, viz. Central Mande, Soso-Jalonke, and Southwestern Mande.⁹

The first question that should be clarified is how general V-N polycategoriality is in the lexicon of Mande languages. The second question is whether it involves semantic regularities making it possible to analyze it in terms of general conversion rules, either from V to N or from N to V.

In the literature, the question of the recognition of ‘parts of speech’ in Mande languages has been much discussed, especially with reference to the languages of the Manding group, due to the imbalance between the documentation available on Manding languages and on the Mande languages belonging to other groups. Recall that Manding languages are among those in which V-N polycategoriality is particularly prominent, to the point that a superficial observation of the categorial flexibility of lexemes in Manding languages may suggest the absence of any distinction between nouns and verbs at lexical level, as was argued by Tomčina (1978) for Guinean Maninka.

Vydrine 1999 provides an overview of the positions taken by different authors on this matter.

The views expressed by Maurice Houis in several publications (see among others Houis 1981) have been particularly influential. Houis rightly observed that, in the description of many sub-Saharan languages (including Manding and other Mande languages), approaches that do not posit lexical categories as logically secondary in relation to the notions of noun phrase and verbal predicate are problematic because of the categorial flexibility of many lexemes. Expressed in terms less idiosyncratic than the ones Houis used, the idea was that verbal clauses should be defined as constructions with a given structure, and noun phrases should be defined with reference to their internal structure and contribution to the construction of the clause, without presupposing the existence of classes of lexemes specialized in the role of nuclei of either clauses or NPs. Houis further elaborated a theory according to which sub-Saharan languages have two major lexical categories he designated as ‘nominal lexemes’ and ‘verbo-nominal lexemes’. According to Houis’ definitions:

- ‘nominal’ lexemes in their underived form can be used as nuclei of NPs, but not of verbal clauses;

⁹ Idiatov (2018) puts forward a historical explanation of the fact that the Mande languages characterized by a particular prominence of V-N polycategoriality are also those in which P-lability is particularly prominent.

- ‘verbo-nominal’ lexemes can be used in both functions without necessitating the intervention of derivational morphology.

For example, according to Houis’ definitions, *kúmà* in example (13) and *nǎa* in example (14) are equally verbo-nominal lexemes.

The position I defended in an article devoted to the verb vs. noun distinction in Mandinka (Creissels 2017), similar to that defended for Bambara by Dumestre (2003), is that the dichotomy proposed by Houis results in an over-simplified view of the categorial flexibility of Mandinka lexemes, because it leads to grouping together lexemes that are equally productive in the function of verbal predicate but greatly differ in the way they can be used as nuclei of NPs, both formally and semantically. In Creissels (2017), I argued that three major classes of lexemes must be distinguished in Mandinka, ‘verbal’, ‘verbo-nominal’, and ‘nominal’, and I proposed to define the contrast between verbal and verbo-nominal lexemes as follows:

- a verbal lexeme can be used in its non-derived form as the verbal nucleus of predicative constructions, and its only possible meaning as the nucleus of noun phrases is that of action nominalization; this is the case of *nǎa* ‘come’ illustrated in example (14);
- a verbo-nominal lexeme, in addition to its use as the verbal nucleus of predicative constructions, can be used as the head of noun phrases with meanings that, although semantically related to the meaning it conveys in its verbal use, are not limited to action nominalization; this is the case of *kúmà* ‘speak / word’ illustrated in example (13), and also for example of *kèlé* ‘fight / war’, *búsà* ‘hit / whip’.

3.2. The flexibility of the noun vs. verb distinction in Mande languages

An accurate assessment of the flexibility of the noun vs. verb distinction in Mande languages must take into account the distinction between the various possible types of semantic relationships between the verbal and nominal uses of the stems that lend themselves to both types of uses without any change in their form.

A first important observation is that no documented Mande language allows prototypical nominal lexemes (i.e., lexemes referring to concrete entities) to act as nuclei of intransitive verbal predication with the meaning of ‘be/become an X’. In other words, the flexibility of the noun vs. verb distinction in Mande languages is very different from omnipredicativity as defined by Launey (1994).

A second important observation is that many Mande languages have a general conversion rule according to which any stem that can be used as the nucleus of the verbal predication construction can also be used nominally, without any change in its form, as an action nominalization (i.e., the pure reification of the action denoted by the verb). This is in particular the situation found in Mandinka, as illustrated by example (14) above.¹⁰

By contrast, for the other possible semantic types of nominal uses of stems also used verbally (event, result, instrument, manner of action, etc.), no similar generalization can be made in any of the Mande languages for which the relevant information is available, and the ability to be used

¹⁰ Cross-linguistically, morphologically unmarked action nominalization may be limited to some specific constructions, or involve restrictions in the combination of the verb used nominally with nominal modifiers, which may affect its ‘visibility’. In this respect, Mandinka is among the languages in which morphologically unmarked action nominalization is particularly visible.

nominally and verbally with related meanings must be considered as a lexical property of individual lexemes, which may be relatively widespread but is nevertheless not predictable.

For example, in Mandinka, *búsà* is used as a noun with the meaning ‘whip’, and as a transitive verb with the meaning ‘hit’. However, in contrast to the type of N-V polycategoriality illustrated by *nǎa* ‘come / coming’, there is no general rule allowing nouns typically used as instruments to be used as verbs with the meaning ‘do what one typically does with the help of X’, and there is no general rule allowing verbs referring to actions typically performed with an instrument to be used as nouns with an instrumental meaning either. In Mandinka, instrument nominalization is regularly marked by the suffix *-ráŋ* (as in *sii-ráŋ* ‘seat’ < *sii* ‘sit’), and the possibility of using *búsà* nominally with the meaning ‘whip’ and verbally with the meaning ‘hit’ must be viewed as an unpredictable lexical property of this individual lexeme.

Similarly, in Dan, unmarked action nominalizations can be produced for all verbs, but according to Vydrin (2017), only 7% of the verbs have formally identical nouns of other semantic types.

However, some very limited generalizations may be possible about stems that lend themselves to nominal and verbal uses without any formal marking and cannot be characterized as action nominalizations in their nominal use. For example, in Manding languages, nouns referring to things typically offered as gifts can also be used as transitive verbs with the meaning ‘offer s.o. X as a gift’, as in (15).

(15) Mandinka (pers.doc.)

(15a) *Músáa yè kùdée nàatí ñ ñé.*
 Moussa CPL.TR meat.portion.D bring 1PL for
 S pm O V X
 ‘Moussa brought a portion of meat for us.’

(15b) *Músáa yè ñ kùdée.*
 Moussa CPL.TR 1PL give.a.meat.portion
 S pm O V
 ‘Moussa gave us a portion of meat.’

3.3. Unmarked action nominalization in Mande languages

It is difficult to evaluate the cross-linguistic variation in the proportion of the lexicon showing the type of N-V polycategoriality illustrated above by Mandinka *búsà* ‘hit / whip’. It seems to be present, at least sporadically, in all Mande languages, but it is never fully productive. By contrast, at least for the languages for which relatively precise descriptions are available, it is possible to establish a distinction between Mande languages in which no type of relationship between nominal and verbal meanings gives rise to systematic N-V polycategoriality (and in which suffixation is the regular way of forming action nominalizations), and others in which a general conversion rule allows verbs to be used as action nominalizations without any change in their form.

Soninke illustrates the first type of situation, which is basically similar to that observed in French or English. There is in Soninke (as in French or in English) a non-negligible proportion of event nouns with the same form as the corresponding verb (for example *sónqò* ‘dispute (N & V)’

or *téxù* ‘cough (N & V)’), but the only productive way of forming action nominalizations is the addition of a derivational suffix to verb stems (as *dàgá* ‘go, leave’ > *dàgá-yè* ‘going, departure’).

Suffixation as the regular way of forming action nominalizations is also found in Wan (Nikitina 2009b).

By contrast, Soso (Touré 1994) and Jalonke (Lüpke 2005: 129-130) are uncontroversial cases of languages in which morphologically unmarked action nominalization is the rule.

Example (16) illustrates morphologically unmarked action nominalization in Jalonke. In this example, *dǝ* ‘pull out’ does not undergo any derivational operation, but the fact that it combines with the definite article *-na* and that the phrase it projects (*lángée kwü dǝná*) is the complement of the postposition *yí* provides clear evidence of nominalization.

(16) Jalonke (Lüpke 2005)

Ǫ bírà lángée kwü dǝn'éé.
Ǫ bírá lángé-ná kwü dǝ-ná yí
 1SG fall garden-D in pull.out-D POSTP
 ‘I started weeding in the garden.’
 lit. ‘I fell in the pull(ing) out in the garden.’

3.4. Marked vs. unmarked action nominalization in Manding

As regards the possibility of unmarked action nominalization, Manding languages present some complications that are interesting to examine, since they suggest a possible origin of action nominalization markers that has not been discussed so far in the general grammaticalization literature.

As already mentioned, Mandinka is basically a language in which all verbs lend themselves to unmarked action nominalization. However, with transitive verbs (and only with transitive verbs!), a suffix *-ri* (with phonologically conditioned allomorphs *-li* and *-diri*) is required IF AND ONLY IF THE PATIENTIVE ARGUMENT OF THE TRANSITIVE VERB IS NOT MENTIONED IN THE CONSTRUCTION. This suffix is not a typical antipassive marker, since with just one exception (*dómó-rì* < *dómò* ‘eat’),¹¹ the *ri*-form of Mandinka verbs can be used as the nucleus of noun phrases, but not of intransitive clauses. However, the suffix *-ri* is involved not only in the nominal use of verbal lexemes, but also in a number of derivational processes operating on verbs in which it regulates semantic role assignment, and in all cases, the way it does this job fully meets the definition of antipassivization.¹²

As illustrated by examples (17) and (18), the suffix *-ri* does not occur if the P argument is expressed as a modifier of the nominalized verb, forms a compound with it, or can be identified with the referent of a noun phrase included in the same construction:

- In (17a), the role that *sòsò* ‘contradict’ assigns to its object in the transitive construction is assigned to the genitival modifier of *sòsò* used nominally, and the agentive argument of *sòsò* is interpreted as non-specific.

¹¹ A possible historical explanation of this anomaly, suggested by Grégoire’s (1990) etymological analysis of the Manding verbs for ‘eat’, is that *dómò* might be a back-formation from a verb root (originally a compound) whose direct reflex would be *dómóri*.

¹² As discussed in (Creissels, To appear), the hypothesis that *ri*-forms were originally verbal forms that have only subsisted in their use as event nouns is supported by the fact that Soninke has a perfectly canonical antipassive marker *-ndí* ~ *-ndi* which constitutes a plausible cognate of *-ri*.

- In (17b), *Músáa* cannot be identified with the agentive argument of *sòosóo*, since this would leave the role of patientive argument of *sòosóo* unassigned, hence the passive interpretation.
- In (17c), the presence of *-ri* blocks the assignment of the semantic role of patientive argument of *sòosóo*, and *Músáa* can be identified to the agentive argument of *sòosóo*.

(17) Mandinka (pers.doc.)

(17a) *Kèebâa-lú sòosóo mâṅ díyâa Músáa yè.*
 elder.D-PL contradict.D CPL.NEG be.pleasant Moussa for
 ‘Moussa doesn’t like to contradict elders.’
 lit. ‘Contradicting elders is not pleasant for Moussa’

(17b) *Sòosóo mâṅ díyâa Músáa yè.*
 contradict.D CPL.NEG be.pleasant Moussa for
 ‘Moussa doesn’t like to be contradicted.’
 lit. ‘Contradicting is not pleasant for Moussa.’

(17c) *Sòosóo-róo mâṅ díyâa Músáa yè.*
 contradict-ANTIP.D CPL.NEG be.pleasant Moussa for
 ‘Moussa doesn’t like to contradict.’
 lit. ‘Contradicting.ANTIP is not pleasant for Moussa.’

- In (18a), *màani* ‘rice’ saturates the P valency of *tũu* ‘pound’, and consequently the subject of the copula can only be identified with the unexpressed A argument.
- In (18b), none of the arguments of *tũu* ‘pound’ is expressed within the phrase projected by *tũu*, and in the absence of *-ri*, the subject of the copula is identified with the unexpressed P argument.
- In (18c), none of the arguments of *tũu* ‘pound’ is expressed within the phrase projected by *tũu*, but *-ri* saturates the P valency of *tũu* ‘pound’, so that the subject of the copula is identified to the unexpressed A argument. Note that *mùsôo bé tũwôo lá* could only be interpreted as ‘the woman is being pounded’.

(18) Mandinka (pers.doc.)

(18a) *Mùsôo bé màani-tũwôo lá.*
 woman.D LCOP rice-pound.D POSTP
 ‘The woman is pounding rice.’
 lit. ‘The woman is at the rice-pounding.’

(18b) *Màanôo bé tũwôo lá.*
 rice.D LCOP pound.D POSTP
 ‘The rice is being pounded.’
 lit. ‘The rice is at the pounding.’

- (18c) *Mùsôo bé tùu-rôo lá.*
 woman.D LCOP pound-ANTIP.D POSTP
 ‘The woman is pounding.’
 lit. ‘The woman is at the pounding.ANTIP.’

To summarize, when a transitive verb is used nominally, in the absence of *-ri*, the semantic role assigned by the verb to its object in the transitive construction has priority over that of the subject of the transitive construction. By contrast, in the presence of *-ri*, the only semantic role available is that of the subject of the transitive construction, and the patientive argument of the transitive verb must be interpreted as non-specific.

The suffix *-ri* is involved, in exactly the same conditions and with exactly the same consequences on semantic role assignment, in several types of morphological operations (for example, the derivation of agent or instrument nouns, as for example in *màani-tùu-láa* ‘person who pounds rice’ vs. *tùu-rì-láa* ‘person who pounds’, where *-láa* is the suffix used to derive agent nouns from verbs, or in *màani-tùu-ráŋ* ‘rice-pestle’ vs. *tùu-rì-láŋ* ‘pestle’, where *-ráŋ ~ -láŋ* is the suffix used to derive nouns of instruments from verbs – for a detailed discussion, see Creissels & Sambou 2013: 63-65, 119-120). When followed by other suffixes, *-ri* cannot be analyzed as marking nominalization, since the suffixes that follow it select verbal stems. When *-ri* is not followed by another suffix, it is true that its presence implies nominalization. Nevertheless, rather than a true nominalization marker, *-ri* must rather be analyzed as regulating semantic role assignment for verbs used as action nominalizations, since all verbs have the ability to be used as action nominalizations without any morphological marking.

A suffix *-li* cognate with Mandinka *-ri* and also involved in action nominalization can be found in Bambara, but the details of its distribution are very different. Crucially, in the conditions that trigger the use of *-ri* in Mandinka, *-li* is obligatory in Bambara too, but *-li* is also widely used in conditions in which the use of *-ri* in Mandinka would be rejected by speakers as incorrect (Dumestre 2003: 74-5). In other words, the distribution of *-li* is not strictly bound to the conditions on valency and semantic role expression described above for Mandinka.

A first crucial observation is that, contrary to Mandinka *-ri*, Bambara *-li* can attach to intransitive verbs used nominally. Forms like *sìgì-lí < sìgí* ‘settle’ or *nà-lí < nã* ‘come’ are perfectly correct (and usual) in Bambara, whereas in Mandinka, intransitive verbs like *sĩ* ‘settle’ or *nãa* ‘come’ simply cannot combine with the suffix *-ri*.

The second crucial observation is that, in Bambara, contrary to Mandinka, *-li* does not block the expression of the patientive argument of transitive verbs. In the nominalization of transitive verbs, Bambara and Mandinka make the same distinction between direct genitives (simply juxtaposed to their head) referring to the patientive argument of the transitive verb, and indirect genitives (marked by *ká* (Bambara) or *lá* (Mandinka)) referring to the agentive argument. However, in Mandinka, this distinction strictly correlates with the absence vs. presence of the *-ri* suffix, whereas there is no such correlation in Bambara, as illustrated by examples (19) and (20).

- (19) Bambara (pers.doc.)

- (19a) *jàrá fàgà-lí*
 lion.D kill-LI.D
 ‘the fact that the lion was killed’

(19b) *jàrà ká fàgà-lí*
 lion.D GEN kill-LI.D
 ‘the fact that the lion killed (someone)’

(20) Mandinka (pers.doc.)

(20a) *jàtóo fàâ*
 lion.D kill.D
 ‘the fact that the lion was killed’

(20b) **jàtóo fàa-rôo*
 lion.D kill-RI.D

(20c) *jàtóo lá fàa-rôo*
 lion.D GEN kill-RI.D
 ‘the fact that the lion killed (somone)’

Consequently, contrary to Mandinka *-ri*, there would be no justification for analyzing Bambara *-li* as an atypical kind of antipassive marker. Bambara *-li* can only be analyzed as an action nominalization marker whose use is obligatory in the conditions in which Mandinka speakers use the antipassive marker *-ri*, and optional in the conditions in which the use of *-ri* would be incorrect in Mandinka.

Moreover, as observed by Dumestre (2003: 75), the extensive use of *-li* is not typical of traditional texts, in which the use of *-li* tends to be restricted to the contexts in which *-ri* is used in Mandinka, whereas the tendency to generalize the use of *-li* is particularly strong in educational material produced by various non-governmental organizations or within the frame of official literacy programs, that is, in the kind of written texts in which calques from French abound. This suggests that Bambara *-li* had formerly the same distribution as Mandinka *-ri*, but the conditions that limited its use have been relaxed, resulting in the reanalysis of an atypical antipassive marker as a plain action nominalization marker.

4. Subclasses of verbs

In Mande languages, verbs can be divided into valency classes (see among others Lüpke (2005) on Jalonke and Creissels (2015) on Mandinka), but regardless of the possible complexity of the classification of verbs according to their valency properties, most Mande languages have a single inflectional class of verbs, in the sense that all verbs combine with the same set of predicative markers and TAM suffixes, the only possible complication being that some TAM-polarity values may be expressed differently in transitive and intransitive clauses. However, a more complex situation is found in most of the languages belonging to the Central sub-branch of the West Mande branch, including Manding languages (Mandinka being an exception), and in Soninke. In the languages in question, the lexemes identifiable as verbs in the sense that they can be analyzed as occupying the V slot in the S O V X* pattern divide into two classes associated to two distinct sets of predicative markers (Creissels 1985, 2018b, Dumestre 2003: 169-178, Vydrine 1990, 1999). In such situations, one of the two inflectional classes of verbs has the following characteristics:

- it includes a relatively limited number of lexemes (about few tens);
- all the verbs belonging to this class are intransitive;
- the verbs belonging to this class have no suffixal inflection, and are compatible with a single pair of predicative markers, one positive and the other negative.

An important property of such verbs is that they cannot express the aspectual and modal distinctions that the other verbs express via suffixal inflection and/or combination with a variety of predicative markers. They can only refer to states, hence the label ‘stative verbs’ I proposed in my 1985 article.¹³ In the languages that have a class of stative verbs, the verbs combining with a set of predicative markers and/or suffixes expressing aspectual distinctions can conveniently be termed ‘dynamic verbs’.

In the languages in which an inflectional class of stative verbs can be recognized, it typically includes verbs with meanings commonly considered as typically adjectival, such as ‘be big’, ‘be small’, ‘be young’, ‘be old’, ‘be short’, ‘be long’, ‘be hot’, ‘be cold’, ‘be easy’, ‘be difficult’, etc.

Note that, in the Mande languages that do not have an inflectional class of stative verbs (and also in the languages that have a class of stative verbs, for the meanings that are not lexified as stative verbs), states are commonly expressed by means of the completive form of dynamic verbs. Reference to states by means of a completive form of change-of-state verbs also interpretable with a dynamic meaning is a very common strategy throughout sub-Saharan Africa, and Mande languages are no exception. For example, in Bambara (a language with an inflectional class of stative verbs), ‘be far, distant’ is expressed by the stative verb *jǎn*, and ‘move away’ by the dynamic verb *jànfá*, but in Mandinka (a language with a single inflectional class of verbs), ‘is far’ is expressed by a form of the verb *jàm fá* ‘move away’ also interpretable as ‘has moved away’, depending on the context.

(21) Bambara (pers.doc.)

(21a) *Yàn ní Bàmàkó ká jàn.*
 here and Bamako ST be.distant
 ‘Bamako is far from here.’

(21a) *Móbíli jànfà-rá dùgú lá.*
 car.D move.away-CPL.INTR village.D POSTP
 ‘The car moved away from the village.’

(22) Mandinka (pers.doc.)

(22a) *Ì ná sàatée jàm fá-tà.*
 1PL GEN village.D move.away-CPL.INTR
 ‘Our village is far (from here).’

(22a) *Wòtóo jàm fá-tá sàatée lá.*
 car.D move.away-CPL.INTR village.D POSTP
 ‘The car moved away from the village.’

¹³ Terms such as ‘predicative adjectives’ or ‘qualifying verbs’ are also found in the literature as labels for this particular class of verbs.

5. Subclasses of nouns

5.1. Locative nouns

A very common phenomenon in the languages of sub-Saharan Africa, also found in Mande languages, is that proper names of places can be used in oblique syntactic role with the semantic role of ground in a spatial relationship without necessitating the flagging otherwise required for obliques in the semantic role of ground, and this property may be shared by a limited number of common nouns among those typically used in the semantic role of ground, as illustrated in (23).

(23) Mandinka (pers.doc.)

(23a) *Músáa taa-tà kúnkòo tó.*
 Moussa go-CPL.INTR field.D LOC
 ‘Moussa went to the field.’

(23b) *Músáa taa-tá Sěejò.*
 Moussa go-CPL.INTR Sédhiou
 ‘Moussa went to Sédhiou.’

(23c) *Músáa taa-tà síu.*
 Moussa go-CPL.INTR house
 ‘Moussa went home.’

In Mandinka, the behavior of *síu* ‘house’ in (23c) is quite exceptional among common nouns,¹⁴ and can be accounted for as an isolated and unpredictable case of N > Adv conversion, especially as the use of *síu* illustrated in (23c) is only possible in the absence of any modifier. In some other Mande languages, such as Gban (Fedotov 2017: 914), the ability of being used without any flagging as obliques fulfilling the semantic role of ground extends to a large set of nouns for which the semantic role of ground in spatial relationships can be viewed prototypical, hence the proposal of distinguishing a subclass of locative nouns in such languages. Note that, in the languages that have a large class of locative nouns, many of them result from the fusion of a regular noun with a postposition.

5.2. Free vs. relative nouns

As already mentioned in section 2.3, many Mande languages have two possible constructions for adnominal possessors distinguished either by flagging vs. lack of flagging of adnominal possessors, or by the presence vs. absence of a possessive pronoun preceding the possessee, depending on the semantic nature of their relationship with their head (as in Mandinka *Músáa díjòlú* ‘Moussa’s children’ vs. *Músáa lá ninsóolú* ‘Moussa’s cows’).

¹⁴ Among the common nouns that do not inherently refer to spatial relationships, *síu* ‘house’, *wílà* ‘bush’ and *túnjáa* ‘foreign countries’ are the only uncontroversial cases I am aware of. The other cases I came across in texts or in elicitation sessions (for example *lòpitáani* ‘(at the) hospital’) are not accepted by all speakers.

In descriptions of Mande languages that have a contrast between two variants of the adnominal possession construction, this contrast is commonly analyzed as the manifestation of a division of nouns into two subclasses reflecting their degree of semantic autonomy. According to this analysis, ‘free’ nouns (sometimes called ‘autosemantic’) denote entities that are conceived independently of any possessor, and combine with flagged adnominal possessors (or are obligatorily preceded by a possessive pronoun on which the possessor is indexed), whereas ‘relative’ nouns have a valency for a possessor, and combine with unflagged adnominal possessors (or do not require the presence of a possessive pronoun, the adnominal possessor being directly indexed on its head).

I am not in a position to say whether there are really Mande languages for which this analysis of the contrast between two variants of the adnominal possession construction is correct, since discussing this point would require much more data than those provided by the available descriptions. I am sure, however, that at least for Mandinka and the other languages of the Central Mande group on which I have detailed first-hand data, the analysis of the two variants of the adnominal possession construction as straightforwardly conditioned by a division of nouns into two subclasses of ‘free/autosemantic’ and ‘relative’ nouns doesn’t stand to scrutiny. In Central Mande languages, nouns that can combine with unflagged adnominal possessors only, or with flagged possessors only, are the exception rather than the rule, and whether the possessor is flagged or not depends both on the semantics of the possessed noun and on that of the possessor. To take just a few examples among many others, in Mandinka:

- a semantically ‘relative’ noun such as *pérésidán* ‘president’ combines with an unflagged adnominal possessor in *Sènèkáalì pérésidánò* lit. ‘the president of Senegal’, but with a flagged adnominal possessor in *Sènèkàalìnkòólú là pérésidánò* lit. ‘the president of the Senegalese people’;
- with a semantically ‘relative’ noun such as *dìnkée* ‘son’, the presence of a demonstrative determiner triggers the use of a flagged adnominal possessor, as in *Músáa dìnkèe* ‘Moussa’s son’ vs. *Músáa lá ñĩŋ dìnkèe* ‘this son of Moussa’s’;
- a semantically ‘free’ noun such as *kòdì* ‘money’ takes a flagged adnominal possessor in *Músáa là kòdòò* ‘Moussa’s money’, but an unflagged adnominal possessor in *wòtòò kòdòò* ‘the money of the car’, whatever the semantic relationship between ‘car’ and ‘money’ (the money necessary to buy the car, or to take the car, or the money from the sale of the car, etc.). Similarly, *nìnsí* ‘cow’ takes a flagged adnominal possessor in *Músáa lá nìnsòólú* ‘Moussa’s cows’, but an unflagged adnominal possessor in *ñĩŋ sàatée nìnsòólú* ‘the cows of this village’.

The contrast between flagged and unflagged adnominal possessors in Mandinka and other Central Mande languages has clear semantic correlates that are very interesting to investigate, but it is impossible to achieve an adequate description by trying to reduce it to the manifestation of a division of nouns into two subclasses on the basis of their ability to combine with flagged or unflagged adnominal possessors. For a detailed description of the choice between flagged and unflagged adnominal possessors in a Central Mande language, see Creissels & Sambou (2013: 241-252) on Mandinka.

5. Adjectives

In Mande languages, common nouns and verbs are the only word classes that can be defined with reference to their ability to act as the nucleus of a given type of construction. However, a possible starting point for defining a word class ‘adjective’ in Mande languages is the recognition of a construction that can be designated as the attributive construction.

The internal structure of noun phrases in Mande languages (see 2.3 above) makes it possible to define the attributive construction as a *noun – modifier* construction in which the noun and its modifier are obligatorily adjacent to each other (i.e., cannot be separated by the insertion of an additional modifier). It may even happen that attributive modifiers form morphological compounds with their head. In Soninke, this concerns all subtypes of attributive modifiers, whereas in Manding languages, the fact that attributive modifiers form compounds with their head or not depends on their morphological structure (see for example Creissels & Sambou 2013: 230-237).

Adjectives can be defined as words acting as modifiers in the attributive construction. However, the words meeting this definition are very heterogeneous with respect to their possible formal relationships with semantically related nouns and/or verbs.

As a rule, Mande languages have relatively few ‘primary’ adjectives in the sense of words that meet the definition of adjectives formulated above, do not have the same form as a semantically related noun or verb, and are not derived from a noun or a verb either. For example, according to Creissels & Sambou (2013: 230-231), Mandinka has about 30 primary adjectives, and the number of primary adjectives is considerably lower in the other Manding languages, in which many of the words corresponding to the primary adjectives of Mandinka belong the class of stative verbs.

In Mande languages, the words for ‘man’ and ‘woman’ are typically found among the nouns that also have uses in which they meet the definition of ‘adjective’, with the meanings ‘male’ and ‘female’, respectively. The case of verbs also used as adjectives without any formal modification is illustrated in (24) by Mandinka *kóyì* ‘be/become white’.

(24) Mandinka (pers.doc.)

(24a) *Ñĩŋ nìnsí fùlôo kóyì-tá lè.*
 DEM cow two.D be/become.white-CPL.INTR FOC
 ‘These two cows are white.’ (*kóyì* as a verb)

(24b) *Í ñá nìnsì-kóyí fùlá sãŋ.*
 1SG CPL.TR cow-white move.away.CPL.INTR FOC
 ‘I bought two white cows.’ (*kóyì* as an adjective)

However, there is no possibility of predicting which nouns or verbs lend themselves to an adjectival use without any formal modification, and which ones can only give rise to adjectives via morphological derivation.

Example (25) illustrates the possibility of V-Adj polycategoriality for ordinals derived from numerals: in Mandinka, ordinals (formed via the addition of the suffix *-ñjájŋ* to numerals) can be used not only as adjectives, but also as intransitive verbs with the meaning ‘occur for the nth time’ and as transitive verbs with the meaning ‘do something for the nth time’.

(25) Mandinka (pers.doc.)

(25a) *Í dímmúsú-sábá-ñjâñ-ò fútùu-tá lè.*
 1SG daughter-three-ORD-D get.married-CPL.INTR FOC
 ‘My third daughter got married.’ (*sábá-ñjâñ* as an adjective)

(25b) *Níñ ñññ sábá-ñjâñ-tá, íj bé í báyi-lá lè.*
 if DEM three-ORD-CPL.INTR 1SG LCOP 2SG chase-INF FOC
 ‘If this happens a third time, I will chase you.’ (*sábá-ñjâñ* as an intransitive verb)

(25c) *Í kánáa ñññ sábá-ñjâñ!*
 2SG PROH DEM three-ORD
 ‘Don’t do this a third time!’ (*sábá-ñjâñ* as a transitive verb)

In Mande languages, adjectives do not have forms fully similar to the comparative and superlative forms found in many European languages, but they may have a ‘selective’ form whose meaning is that, among the potential referents of their head that are present in a given situation, the NP in which the adjective is included refers either to the only one that has the quality expressed by the adjective, or to the one that outranks the others with respect to the quality in question (see for example Creissels & Sambou (2013: 235-236) on the selective form of Mandinka adjectives).

6. Adverbs

Three particularities of Mande adverbs are worth being mentioned here.

First, Mande languages have words that can be labeled adverbs according to the criteria commonly used to classify words as adverbs, but as a rule, the derivation of adverbs from other categories is very limited, or totally inexistent.

Second, the Mande equivalents of many words whose classification as adverbs in other languages is uncontroversial have a syntactic behavior which might suggest to classify them rather as a sub-type of nominals, alongside with pronouns and proper names. For example, at least in Manding languages, the equivalent of ‘today’ is quite commonly found in sentences such as those quoted in (26) and (27), in which it fulfills the role of subject of transitive clauses.

(26) Mandinka (pers.doc.)

Bïi mâñ dúniyáa dáa, bïi fánánj té dúniyáa bán-nà.
 today CPL.NEG world create today also COP.NEG world finish-INF
 lit. ‘Today did not create the world, today will not finish the world either.’
 > ‘The world was not created today, it will not finish today either.’

(27) Bambara (pers.doc.)

Bì má Sékù nà.
 today CPL.NEG Sékou come
 lit. ‘Today did not make Sékou come.’ > ‘Sékou arrived long ago.’

Third, as usual in sub-Saharan languages, Mande languages have large inventories of ideophonic adverbs whose most obvious syntactic characteristic is that each of them combines with a very limited set of verbs or adjectives (often just one).

7. Adpositions

In comparison with most other language families of sub-Saharan Africa, Mande languages have relatively rich inventories of adpositions, mainly postpositions. Postpositions are preceded by their complement NP in the same way as nouns by adnominal possessors. What distinguishes them is that nouns as nuclei of noun phrases are compatible with a variety of modifiers, whereas postpositional phrases cannot include additional elements.

Grammaticalization of body part names is a particularly common source of postpositions in Mande languages ('back' > 'behind', 'eye' > 'before', 'belly' > 'in', etc.), and N-Postp polycategoriality is common, as for example Mandinka *búlù* 'hand / in the sphere of'.

(28) Mandinka (pers.doc.)

(28a) *Á búlù-kénsɛŋ-ò lè nǎa-tà.*
 2SG hand-empty-D FOC come-CPL.INTR
 'He came empty-handed.' (*búlù* as a noun)

(28b) *Kódi té ń búlù.*
 money COP.NEG 1SG in.the.sphere.of
 'I don't have money.' lit. 'Money is not in my sphere.' (*búlù* as a postposition)

In the Southern Mande languages that have a category of locative nouns (see section 5.1 above), many postpositions can be analyzed as relational locative nouns, but at the same time, the languages of question always have at least one or two "true" postpositions that do not lend themselves to such an analysis, most commonly those translatable as 'with' or 'for / as' (Dmitry Idiatov, pers.com.)

8. Copulas

Some Mande languages (for example, Soso and Jalonke) make a productive use of non-verbal predicative constructions involving mere juxtaposition of noun phrases and postpositional phrases, but this is not very common. Most Mande languages have an equative copula and a locational copula with suppletive negative forms, and very often, the equative copula and the locational copula share the same negative counterpart.

Syntactically, the copulas found in Mande languages can be viewed as defective/irregular verbs, since as illustrated in (29), they combine with an unflagged NP and a postpositional phrase into a construction that can be viewed as an instance of the S V X pattern, without, however, being able to combine with the predicative markers and/or TAM suffixes normally found in intransitive verbal predication.

(29) Soninke (pers.doc.)

(29a) *Démbà wá kónpè-n dí.*
 Demba LCOP room-D in
 ‘Demba is in the room.’

(29b) *Démbà ntá kónpè-n dí.*
 Demba LCOP.NEG room-D in
 ‘Demba is not in the room.’

(29c) *Démbà ní sòxáanà-n ñà yí*
 Demba ECOP farmer-D FOC POSTP
 ‘Demba is a farmer.’

(29d) *Démbà hètí sòxáanà yí*
 Demba ECOP.NEG farmer POSTP
 ‘Demba is not a farmer.’

In Mande syntax, copulas have a special relationship with intransitive verbs acting as copulative verbs, in the sense that copulative verbs substitute copulas to express TAM values that cannot be expressed in clauses whose nucleus is a copula, due to their incompatibility with predicative markers and TAM suffixes. For example, in Mandinka, the locational copula *bé* can be substituted by *tàrá* ‘(tr.) find, (intr.) be found’, and the equative copula *mú* can be substituted by *ké* ‘(tr.) do, transform, (intr.) occur, become’. In examples (30b) and (30d), what motivates the replacement of a non-verbal copula by a copulative verb is the expression of habitual aspect, usually encoded in Mandinka by means of the incomplete predicative marker *kà*.

(30) Mandinka (pers.doc.)

(30a) *Fàatú bé fàróo to.*
 Fatou LCOP rice.field.D LOC
 ‘Fatou is at the rice field.’

(30b) *Fàatú ká tàrá fàróo to.*
 Fatou ICPL be rice.field.D LOC
 ‘Fatou is at the rice field all the time.’

(30c) *Ñĩj mòô-lú mú Sùrùwâa-lú lè tí.*
 DEM person.D-PL ECOP Wolof.D-PL FOC POSTP
 ‘Those people are Wolof people.’

(30d) *Ñĩj mòô-lú ká ké Sùrùwâa-lú lè tí.*
 DEM person.D-PL ICPL be Wolof.D-PL FOC POSTP
 ‘In general, those people are Wolof people.’

9. The quotative

In Manding languages, reported discourse is introduced by a word *kó*, distinct from the transitive verb *fɔ̃* ‘say’, and a similar situation is found in the other Mande languages. This word, whose use is illustrated in (31), is designated here as the quotative. It has no negative counterpart and cannot combine with negative markers either.

(31) Mandinka (pers.doc.)

Kèé kó dindīŋ-ò yé: “Táa í báamáa yǎa!”
 man.D QUOT child-D to go 2SG mother home
 ‘The man said to the child: “Go to your mother’s place!”’

Generally speaking, the status of quotatives in parts-of-speech systems is a complex issue. In Mande languages, a possible analysis is that the quotative belongs to the same class of defective/irregular verbs as the copulas, with, however, the additional property of requiring a complement representing the reported utterance (usually, but not necessarily, a sentence). The point is that the combination of the quotative with the NPs referring to the reporting speaker and the addressee can be viewed as an instance of the S V X pattern (S and X referring to the reporting speaker and the addressee, respectively), without, however, the predicative markers and/or TAM suffixes normally found in intransitive verbal predication.

For a more detailed discussion of quotatives, see Idiatov (2010, 2011).

10. Predicative markers

Predicative markers (see section 2.2) are a class of grammatical words (or clitics) that play a central role in the syntax of the clause in most Mande languages. Their characteristic properties are their fixed position immediately after the subject NP and their interaction with the TAM suffixes of verbs. As a rule, the mere deletion of predicative markers either results in ungrammaticality, or changes the TAM-polarity value of the clause.

A very common polycategoriality pattern in Mande languages is the use of the same words as locational copulas in non-verbal predication and as predicative markers expressing the aspectual value ‘incomplete’ in verbal predication.

(32) Soninke (pers.doc.)

(32a) *Dénbà wá kónpè-n dí.*
 Demba LCOP room-D in
 ‘Demba is in the room.’

(32b) *Dénbà wá yillê-n tippí.*
 Demba ICPL millet-D sow.GER
 ‘Demba is sowing millet.’

As already mentioned in section 2.2, in Mande languages, the division of labor between predicative markers in immediate post-verbal position and verbal inflectional suffixes varies from

one language to another. Some languages (Soso for example) make little use of predicative markers and have a relatively developed suffixal inflexion of verbs, whereas in others, almost all the values that constitute the TAM paradigm require the use of predicative markers.

Predicative markers typically express TAM and polarity distinctions, but they may also be sensitive to information structure. For example, in Soninke, in intransitive clauses in the incompletive aspect, if one of the terms of the clause is focalized, the position of the predicative marker must be left empty.

(33) Soninke (pers.doc.)

(33a) *Démbà wá sállì-ní.*
 Demba ICPL pray-GER
 ‘Demba is praying.’

(33b) *Démbà Ø sállì-ní yà.*
 Demba pray-GER FOC
 ‘Demba is PRAYING.’

In Southwestern Mande languages and in most Southern and Eastern Mande languages, subject indexes attach to predicative markers, and sometimes fuse with them. In some of the languages in question, subjects are obligatorily indexed, even in the presence of a co-referent NP, and subject NPs are syntactically optional, as illustrated in (5) above for Kpelle.

Finally, as already mentioned in section 2.2.5, predicative markers may also be sensitive to transitivity. In some cases, the same TAM-polarity value is marked by distinct predicative markers in transitive and intransitive clauses. For example, in Soninke, the subjunctive positive is marked by the predicative marker *nàn* in intransitive clauses, *nà* in transitive clauses.

(34) Soninke (pers.doc.)

(34a) *Démbà wá à mùndá án nàn dàgá.*
 Demba ICPL 3SG want 2SG SBJV.INTR go
 ‘Demba wants you to leave.’

(34b) *Démbà wá à mùndá án nà búurù-n qóbó.*
 Demba ICPL 3SG want 2SG SBJV.TR bread-D buy
 ‘Demba wants you to buy bread.’

It may also happen that a predicative marker used exclusively in transitive clauses is in complementary distribution with a verbal suffix expressing the same value in intransitive clauses, as in (35).

(35) Kita Maninka (pers.doc.)

(35a) *Mùsú dí sùbú sà̀n.*
 woman.D CPL.TR meat.D buy
 ‘The woman bought meat.’

- (35b) *Mùsù wá-dá sùgù dò.*
woman.D go-CPL.INTR market.D LOC
'The woman went to the market.'

Finally, it may happen that a given TAM polarity value marked by a predicative marker in transitive clauses is not overtly marked in intransitive clauses, as in (35).

- (36) Soninke (pers.doc.)

- (36a) *Démbà dà máarò-n qóbó.*
Demba CPL.TR 3rice-D buy
'Demba bought rice.'

- (36b) *Démbà Ø múxú tàgáyè-n pàllé.*
Demba hide wall-D behind
'Demba hid behind the wall.'

11. Others

The following word classes are commonly distinguished in descriptions of Mande languages, in addition to those discussed in the previous sections:

- numerals,
- determiners,
- pronouns,
- proper names,
- conjunctions,
- discourse particles,
- interjections.

However, they do not display special properties that would merit discussion here.¹⁵

12. Conclusion

In this chapter, I have discussed the most salient properties of the word class systems of Mande languages. The main points are as follows:

- In most Mande languages, morphological criteria are of little use for the delimitation of word classes; by contrast, the extreme rigidity of word order patterns greatly facilitates the delimitation of word classes on the basis of distributional criteria.
- As a rule, lexical polycategoriality, although very common in Mande languages, can only be dealt with as an unpredictable property of individual lexemes, with, however, an

¹⁵ For a detailed presentation of the numeral systems of Mande languages, readers are referred to Perekhval'skaya & Vydrin (2019). Blecke (1996) provides a detailed discussion of the lexical categories of a Bozo language (Tigemaxo).

important exception: in many Mande languages, morphologically unmarked action nominalization is a general property of verbs.

- In comparison with the word class systems commonly found in the world's languages, the main specificity of Mande languages is the central role played in verbal predicative constructions by a special class of grammatical words designated as 'predicative markers' in descriptions of Mande languages.

Abbreviations

Adj = adjective, Adv = adverb, ANTIP = antipassive, COP = copula, CPL = completive, D = definite article, or default determiner, DEM = demonstrative, ECOP = equative copula, EXCL = exclusive, FOC = focalization marker, FUT = future, GEN = genitive, GER = gerundive, ICPL = incomplete, INCL = inclusive, INF = infinitive, INTR = intransitive, LCOP = locative copula, LOC = locative, N = noun, NEG = negative, NP = noun phrase, O = object, ORD = ordinal, PL = plural, POSTP = postposition, pm = predicative marker, POSS = possessive, PROG = progressive, PROH = prohibitive, PST = past, QUOT = quotative, REL = relativizer, RES = resultative, S = subject, SBJV = subjunctive, SG = singular, ST = stative, TR = transitive, V = verb, X = oblique

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