Denis Creissels

16. Grammaticalization in Manding languages

1. Introduction

1.1. The aim of the present chapter

In this chapter, I review grammaticalization processes that can be reconstructed in the history of Manding languages on the basis of internal reconstruction and/or comparative data (both within Manding languages and between Manding languages and languages belonging to other branches of the Mande language family), and also phenomena found in present-day Manding languages that can be analyzed as grammaticalization in progress.

1.2. The Manding languages: inventory, location, and genetic affiliation

The Manding languages are a group of closely related languages (sometimes considered dialects of a single macro-language) included in the Central sub-branch of the Western branch of the Mande language family.[1] Manding is the second largest dialect cluster / macro-language of West Africa after Hausa, with a total number of speakers exceeding 20 million. It is a typical dialectal continuum where sharp linguistic boundaries are rare, which makes it impossible to decide on the basis of purely linguistic criteria how many Manding languages should be distinguished. The most important and best-known Manding varieties are Bambara (aka Bamanan, the most widely spoken language in Mali), Maninka-mori (a major language of Guinea),[2] Mandinka (the main language of Gambia, also spoken in Senegal and Guinea Bissau), and Jula (or Dyula, a lingua franca of Northern Ivory Coast and Western Burkina Faso, linguistically close to Bambara). The other Manding varieties mentioned in the present article are Baninko Bambara (Southern Mali), Kita Maninka (Western Mali), Korokan (Central Ivory Coast), Koyaga (Central Ivory Coast), Marka (Burkina-Faso), Maukakan (Western Ivory Coast), Niokolo Maninka (Eastern Senegal), and Xasonga (Western Mali).[3]

---

[1] The Mande language family was included by Greenberg in the Niger-Congo phylum, but the evidence for a Niger-Congo affiliation of Mande is rather slim, and, for example, Dimmendaal (2011) argues that Mande is best treated as an independent language family. It is commonly admitted that the time distance between the most ancient branches of the Mande language family exceeds 5 millenia, whereas the time depth of the Manding dialect cluster does not exceed 8 centuries. On the classification of Mande languages, see Vydrin (2009).

[2] Maninka or Malinke is a cover term for several Manding varieties that are not particularly close together. For example, linguistically, Niokolo Maninka is much closer to Gambian Mandinka than to Maninka-mori or to Kita Maninka.

[3] In the present paper, Manding forms quoted without further specification are Standard Bambara forms as recorded in Dumestre's reference dictionary (Dumestre 2011). The dialectal origin of other forms is systematically indicated by the following abbreviations: BBm = Baninko Bambara, Ju = Jula, KMnk = Kita Maninka, Kor = Korokan, Koy = Koyaga, Mdk = Mandinka, Mnkm = Maninka-mori, Mau = Maukakan, Xs = Xasonga. When the context requires it, Standard Bambara forms are indicated as Bm.

1.3. The Manding languages: typological characteristics

1.3.1. Phonology

As a rule, Manding languages have typologically unremarkable phoneme inventories including 5 to 7 vowels, plus nasality and/or length contrasts (depending on the individual varieties), and about 20 consonants. Manding languages are tonal languages with complex systems of combinatory rules responsible for frequent discrepancies between underlying tones and surface tones (see for example Creissels 2009: 19-39 on the tonal system of Kita Maninka). In this connection, the reader is invited to keep in mind that, whenever the same word with exactly the same gloss occurs across examples with different tones on its last syllable (as Mandinka 'money.D': *kódóo* in Ex. [2], *kódòo* in Ex. [3d]), this variation results from automatic tone sandhi rules and has no morphological significance.

1.3.2. Word classes and constructional morphology

Manding languages have rich systems of derivational morphology (mainly suffixal). Compounding is also very productive. By contrast, inflectional morphology is very limited, and most grammaticalized semantic distinctions are expressed by grammatical words or clitics rather than affixation or other morphological operations.

In Manding languages, nouns cannot be freely converted into verbs; by contrast, as a rule, verbal lexemes can also be used as event nouns (or in the case of transitive verbs, as the second formative of compound nouns whose first formative is a nominal lexeme representing their object argument) without any specific morphological marking.

1.3.3. Nouns and noun phrases

Manding languages have no grammaticalized system of nominal classification. The structure of Manding noun phrases can be schematized as follows, with two possible positions for determiners:[4]

(Gen) (Det$_1$) N (Attr) (Num) (Det$_2$)

All Manding varieties have a clitic determiner (glossed D) that can be characterized semantically as a default determiner, since in most contexts it 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. The default determiner occupies the position Det$_2$ in the template above, and its combination with nouns tends to behave as the default form of nouns, whereas its absence must be licensed by otherwise overtly expressed grammatical features of the noun phrase or of the clause in which it is included. There are, however, contexts in which the default determiner still contrasts with its absence, in particular negative contexts.

(1) Mandinka
  a. *Mùsôo   máŋ   nǎa.   (mùsôo < mùsú + ò)*
     woman.D   CPL.NEG   come
     'The woman did not come.'

---

[4] Gen = genitival modifier, Det = determiner, N = head noun, Attr = attributive adjective, Num = numeral; on relative clauses, see 8.1.

    b. *Mùsú   máŋ   năa.*
       woman   CPL.NEG come
       'No woman came.'

As indicated in (1a), in Mandinka, the default determiner is underlyingly -*ò*, but in many Manding varieties it is reduced to a floating tone added to the inherent tonal melody of its host (compare Mdk *básà* 'lizard' + D → *básòo* with KMnk *básá* 'lizard' + D → *básà*).

    Manding languages have no agreement mechanism between head nouns and their dependents, and more generally, head-dependent relationships within NPs are not morphologically marked, with the only exception of indirect (or 'alienable') possession, in which the genitival dependent is marked by a postposition.

    Relative clauses are not constructed as modifiers in a noun phrase headed by the noun they modify. The commonest relativization strategy in Manding languages is a correlative strategy in which the relative clause precedes the matrix clause; the semantic head of the relative clause occupies the relativized position; it is marked by a relativizer, and resumed in the matrix clause by a demonstrative or personal pronoun – Ex. (2).

(2)   Mandinka
     [Mùsôo   yè   kèwôo$_i$ mîŋ   ná   kódóo   tăa],
     woman.D   CPL.TR   man.D   REL   GEN   money.D   take
     ý   níŋ   wŏo$_i$ běn-tà.
     1SG   with   DEM   meet-CPL.INTR
     'I met the man whose money was taken by the woman.'
     lit. something like 'The woman took which man's money, I met that one.'

1.3.4. Verbs and clauses

Verbal clauses are characterized by a particularly rigid constituent order. Their construction can be schematized as S pm (O) V X, with a so-called 'predicative marker' (a kind of auxiliary) immediately after the subject NP.

    Most grammaticalized TAM and polarity distinctions are expressed by the predicative markers. Verbal inflection in independent clauses is very limited. As a rule, the only verbal affix that expresses a TAM / polarity value independently, in a construction including no overt predicative marker, is a verbal suffix encoding 'completive, positive' in intransitive predication – Ex. (3a). Note that this verbal suffix is in complementary distribution with a predicative marker expressing the same value in transitive predication – Ex. (3c). As illustrated in Ex. (3b) and (3d), as a rule, the grammaticalized TAM and polarity values other than 'completive, positive' are expressed in the same way in transitive and intransitive predication.

(3)   Mandinka
    a. *Yíróo bòyí-tà   sílòo   kâŋ.*
       tree.D   fall-CPL.INTR   road.D   on
       'The tree fell down on the road.'
    b. *Nèwóo kà   kómôŋ jíyòo   kónò.*
       iron.D   INCPL rust   water.D   in
       'Iron rusts in water.'
    c. *Wùlôo yè   díndíŋó tàŋkàndí dìmbâa má.*
       dog.D   CPL.TR child.D save   fire.D   POSTP
       'The dog saved the child from the fire.'

    d. *Kèwóo   kà   à   téerímáa   máakóyì   kódòo   tó.*
       man.D INCPL 3SG friend   help   money.D LOC
       'The man helps his friend financially.'

As can be seen from Ex. (3), subjects and objects are neither flagged nor indexed, and obliques are commonly encoded as postpositional phrases, although some prepositions can also be found. Prepositions seem to be mostly recent innovations, with the exception of the comitative preposition *ní*, which has cognates in other branches of the Mande language family.

Personal pronouns are found in the same positions as ordinary NPs, and have the same form in all their possible functions.

With the only exception of the implicit 2nd person singular subject of imperative clauses, in verbal predication, the subject and object slots cannot be left empty. As argued in Creissels (2015a), constructions in which one of the core arguments of a potentially transitive verb is left unexpressed must not be analyzed as transitive constructions with a null subject or object, but as intransitive constructions with the remaining argument in subject function, and the possibility of such intransitive constructions of potentially transitive verbs depends on the valency properties of individual verbs. In this respect, it is noteworthy that Manding 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 is pervasive. Moreover, as illustrated by Ex. (4), Manding languages do not have only P-lability of the cross-linguistically common causative / anticausative type, but also active / passive lability, and are even, according to Cobbinah and Lüpke (2009), a particularly clear case of languages with morphologically unmarked passive constructions.

(4)   Bambara
    a. *Sékù   má   nègèsô   dílán.*
       Sékou   CPL.NEG bicycle   repair
       S   pm   O   V
       'Sékou did not repair the bicycle.'
    b. *Nègèsô má   dílán   Sékù   fɛ̀.*
       bicycle CPL.NEG repair   Sékou   by
       S   pm   V   X
       'The bicycle was not repaired by Sékou.'

Causative is the only valency operation encoded by derivational affixes.

Morphologically unmarked predication is quite marginal in Manding languages, and copulas are systematically used in non-verbal predication.

2. Grammaticalization of nominal categories

2.1. Class/gender

As already mentioned, Manding languages have no grammaticalized system of nominal classification of any type, and there is no evidence that they might have had such systems in the past. They don't show phenomena that might be interpreted as emergent nominal classification either.

2.2. Number

2.2.1. The origin of ordinary plural markers

Western and Southwestern Manding languages have a plural marker *-lú ~ -lí*, probably cognate among others with Soninke *-nú ~ -ní* and Bobo *-re ~ -ne ~ -ri ~ -ni*. In the Manding varieties that have this suffix, it is used with all nouns without exception, whereas in Soninke, *-nú ~ -ní* is used with some common nouns only, but at the same time combines with proper names as an associative plural marker. In Bobo, *-re ~ -ne ~ -ri ~ -ni* is mainly found with kinship terms and human nouns. Since associative plural markers *ni* are found in Southwestern Mande languages and in Mano (South Mande), a Proto-Mande associative plural marker **ni* can be reconstructed, and it seems reasonable to assume that Manding *-lú ~ -lí* is a reflex of this associative plural marker which was reanalyzed as an ordinary plural marker and subsequently generalized to all nouns.

Moreover, comparative data suggest that the Proto-Mande associative plural marker **ni* might have resulted from the grammaticalization of a comitative preposition **ni* also used for NP additive coordination, whose reflex in Manding is *ní*. The diachronic scenario (supported by data from languages as diverse as Sara languages [Nilo-Saharan] and Basque) could be the reanalysis of an additive coordination marker as an associative plural marker in a coordinative construction in which the elision of the second conjunct was possible (N and Ø → 'N and other persons') – Creissels (2015b).

Bambara and some other Manding varieties have a plural suffix *-ú* whose relationship with *-lú ~ -lí* is problematic, since there is no regular *l ~ Ø* correspondence between Bambara and the varieties in which the plural marker is *-lú ~ -lí*. I am aware of no plausible etymology for this plural suffix, which however may be cognate with the plural suffix *-u* found in Soninke. The resemblance with the Bambara 3rd person plural pronoun *ǔ* has sometimes been emphasized, but the rising tone of the 3rd person plural pronoun rather suggests that it results from the contraction of a dissyllabic form with a LH tonal melody, which casts some doubt on the hypothesis that the plural suffix *-ú* might straightforwardly originate from the 3rd person plural pronoun *ǔ*.[5]

2.2.2. The grammaticalization of associative plural markers

In most Manding languages, the associative plural is expressed analytically as lit. 'those of N'. Mandinka has an associative plural marker *-ñòlú* (as in Mdk *Fàatú-ñòlú* 'Fatou and other persons with her'). The univerbation of 'those of N' is a possible etymology, since *ñù-lú* is attested as a variant of the plural of the Mdk demonstrative *ñǐŋ*. However, the univerbation of 'the likes of N' is another possible etymology, since the Mandinka equivalent of 'like (N)' is *ñóo ~ ñóŋ*.

2.3. Possession

Some Manding varieties mark inalienable possession by means of a postposition (Mdk *lá*, KMnk *yé*) also used to mark oblique terms of predicative constructions.

According to Grégoire (1984), the construction of alienable genitives as attested in present-day Manding languages results from the grammaticalization of a construction that initially described the relationship between the possessor and the possessee as a spatial relationship with the possessor in the role of ground and the possessee in the role of figure.

---

[5] Outside Manding, a full coincidence between the plural marker of nouns and the 3rd person plural pronoun is found in Soso, but with the entirely different form *è*.

The scenario put forward by Grégoire explains the coincidence between postpositions and genitival linkers marking alienable possession, since there is ample evidence that even the postpositions that synchronically have no locative use started as spatial postpositions (see Section 2.5.1). However, in some Manding languages, the genitival linker does not coincide with a postposition marking oblique terms in predicative constructions, but with the proprietive pronoun *tá*. The meaning of this pronoun it that the dependent in a genitival construction must be identified with a discursively salient notion, as in (5b) and (6b), and its grammaticalization as a genitival linker is illustrated in (6a), to be compared with (5a). The origin of (6a) is an appostive construction with the literal meaning 'that of the woman, money'.

(5) Mandinka
    a. *mùsôo*   *lá*   *kódòo*
       woman.D   GEN   money.D
       'the money of the woman'
    b. *mùsôo*   *tâa*
       woman.D   PROPR
       'that of the woman'

(6) Jula
    a. *mùsô*   *tá*   *wárî*
       woman.D   GEN   money.D
       'the money of the woman'
    b. *mùsô*   *tá*
       woman.D   PROPR
       'that of the woman'

2.4. Determiners

2.4.1. The default determiner

Given the coincidence between the full form **ò** of the default determiner and the demonstrative *ŏ* (see Ex. [1] in Section 1.3.3), the default determiner can be analyzed, within the frame of the definiteness cycle put forward by Greenberg (1978), as a reflex of this demonstrative which probably functioned as a definite article at some stage in the history of Manding languages, but is now at an advanced stage of a semantic bleaching process.

Some varieties also have a determiner resulting from the evolution of the demonstrative *nĭn*. For example, Mdk *ŋ`* is an optional variant of the default determiner for nouns combined with the demonstrative *ñĭŋ* (the definite form of *mùsú* 'woman' is *mùsôo*, but *ñĭŋ mùsôo* 'this woman' is in free variation with *ñĭŋ mùsûŋ*).

2.4.2. Third person singular possessive > definiteness marker

In Manding languages, nouns combined with the third person singular pronoun *à* in genitive function can be found sporadically with the meaning 'the aforementioned N', 'the N in question' instead of their usual meaning 'the N in the personal sphere of *x* (where *x* must be identified to a discursively salient entity)'. Synchronically, this particular use of the third person singular pronoun can be analyzed as an instance of 'vague reference' comparable to the use of third person singular pronouns in meteorological expressions like 'it rains': the third person pronoun in genitive function can be interpreted as referring to a situation taken as

a whole rather than to a particular entity, and consequently 'its N' can be interpreted as 'the N of the situation in question' > 'the N in question'. Diachronically, this can be viewed as the first step in a grammaticalization process whose outcome could be the creation of a definiteness marker.

2.4.3. The grammaticalization of *do 'one'

The Proto-Mande reconstruction for the numeral 'one' is *do*. In Manding languages, the numeral *kélén* 'one' is clearly not a reflex of *do*, and probably comes from an adjective meaning something like 'single', 'isolated', but the indefinite determiner *dó* 'some' is the obvious reflex of Proto-Mande *do* 'one'.

2.4.4. The grammaticalization of *fɛ́n 'thing'

Fɛ́n ô fɛ́n 'everything' (also used quite regularly with a free choice meaning – 'anything', and in negative contexts with a negative meaning – 'nothing') is the distributive form of the noun *fɛ́n* 'thing'. In some Manding varieties, *fɛ́n ô fɛ́n* has grammaticalized as a distributive / free choice / negative determiner that can indiscriminately combine with animate as well as inanimate nouns, as in Mandinka *í díŋò féŋ wóo fèŋ* 'any of your children', lit. 'anything of your children'.

    The same grammaticalization path is attested with Soninke *hó wó hò* 'everything'. In Soninke, *hóonú* 'things' has similarly grammaticalized as a pronoun meaning 'some of them', without any distinction between animate and inanimate referents, but as far as I know, this evolution is not attested in Manding languages.

2.4.5. Sí 'kind' > negative determiner

In Manding languages, it is always possible to express negative determination by using bare nouns in negative contexts – see Ex. 1 in Section 1.3.3. However, in addition to a distributive / free choice / negative determiner originating from the distributive form of *fɛ́n* 'thing' (see Section 2.4.3), some Manding varieties also have a negative determiner originating from the noun *sí* 'seed', 'kind'. For example, the etymological meaning of Bm *Tùbàbù sí má nà* 'No European came.' is 'Kind of European did not come' (where *má* is a completive negative marker).

    As a rule, the use of these overt negative determiners is perceived as more emphatic than the mere use of bare nouns in negative contexts.

2.5. Case/adpositions

Manding languages do not have morphological case, but have rich inventories of adpositions (mainly postpositions).

2.5.1. The grammaticalization of postpositions

Some postpositions have quite obviously grammaticalized from a nominal lexeme still attested with the same form:

    – Mdk *bálà* 'in contact with' < *bálà* 'body';
    – Mnkm *bárá* 'at N's place' (French 'chez') < *bárá* 'home';
    – *cɛ́* 'between' < *cɛ́* 'waist', 'middle';

- *bóló* 'under the responsibility of', 'in the personal sphere of', also used to mark agent phrases in passive constructions < *bóló* 'hand, arm';
- *kɔ́* 'behind', 'after' < *kɔ́* 'back';
- *kɔ́nɔ́* 'in' < *kɔ́nɔ́* 'belly', 'pregnancy';
- *kɔ́rɔ́* 'under' is probably cognate with *kɔ́rɔ́* 'meaning': a reasonable hypothesis is that the original meaning of this noun (maintained by the postposition) was something like 'bottom' or 'underneath', and its present-day meaning results from a metaphorical shift;
- *kŭn* 'on' < *kŭn* 'head';
- *ɲɛ́* 'in front of', 'before' < *ɲɛ́* 'eye', 'face';
- Mdk *yǎa* 'at N's place' (French 'chez') < *yǎa* 'home'.

The origin of the other postpositions is less obvious. For some of them, an etymology can however be put forward on the basis of comparative data:

- the multifunction postposition *lá*, particularly productive in instrumental function, is also productive in locative function in the Manding varieties that do not have the dedicated locative postposition *rɔ́* (Mdk *tó*, Mnkm *dɔ́*). As argued by Grégoire (1984), the comparison with cognate forms in other Mande languages supports the hypothesis that it has its origin in the grammaticalization of the noun 'mouth' (found in Manding as *dá*) into a spatial postposition which subsequently acquired non-spatial uses, and in some Manding varieties has been replaced by *rɔ́* in concrete spatial function;[6]
- Western and southwestern Manding varieties have a postposition (Mdk *tí*, Mnkm *dí*) productive in similative and functive-transformative uses only; however, comparison with Soninke `*dí* 'in' and Bobo *tí* 'place' suggests that this postposition originated from a locational noun that first grammaticalized into a spatial postposition which subsequently acquired non-spatial uses and lost its original spatial uses;
- synchronically, the meaning of the postposition *mǎ* is difficult to define, since this postposition is mainly used to mark oblique arguments whose semantic role is implied by the lexical meaning of the verb, but it is probably cognate with a noun *mǎa* 'body' found in Sangala Jalonka, and other internal and comparative evidence confirms that, as commonly assumed, it started as a spatial postposition expressing 'in contact with'.

The postposition *kǎn* 'on' may be cognate with the Soninke postposition *kànmá* 'on', and consequently with the Soninke noun *kànmê* 'sky', since in Soninke, the root of *kànmê* 'sky' is *kàn-*. The problem is however that 'sky' is found in Manding languages as *sán*, which may also be cognate with Soninke *kànmê* 'sky', since there is a regular sound correspondence Manding *s* ~ other West Mande languages *k*. It is difficult to explain how the same Soninke root might have a Manding cognate with an initial *s*, and another with an initial *k*.[7]

As regards the benefactive postposition *yé*, the only possible cognate I have been able to find is the Bobo proprietive pronoun *yì*.

2.5.2. The grammaticalization of prepositions

Among prepositions, *kó* 'like' results from the grammaticalization of the quotative *kó* 'say' – see 4.1.

---

[6] *Rɔ́* is one of the postpositions for which I am aware of no evidence of a lexical origin.

[7] Dumestre (2003: 262) proposes *kán* 'neck' as the lexical origin of *kǎn* 'on'. Comparative data make this hypothesis doubtful, since in Soninke, *kànmá* 'on' is quite obviously cognate with *kànmê* 'sky' and not with *qánnè* 'neck'.

Yànní and *sání* 'before' can be decomposed as *yăn* 'here' + *ní* 'with' and *sá* 'now' + *ní* 'with' respectively. [8]

The fact that the preposition *jànkó* 'even more so' is found as *sákó* or *sókó* in some Manding varieties suggests a similar decomposition, with the quotative kó as the second element.

The infinitives *kà bɔ́* < *bɔ́* 'come from' and *kà táa* < *táa* 'go' have uses in which they arguably function as prepositions meaning 'starting from' and 'until', respectively.

Kàbí(ní) (Mdk *(kà)bíríŋ*) is a preposition expressing 'since'. Its form suggests that it originates from an infinitive form, but I am aware of no verb, either in Manding or in other Mande languages, that could provide a plausible etymology. It is however intriguing to observe that Xasonga has a predicative marker *bíríŋ* expressing recent past, which might well be cognate with this preposition.

2.6. Comitative and NP additive coordination ('and')

Like many other Subsaharan languages, Manding languages express NP additive coordination by means of the same morpheme (the preposition *ní*) as comitative adjunction. It is commonly assumed that the coordinative use of such morphemes develops from their comitative use, but in the case of Manding languages, I am aware of no evidence that the evolution occurred in this direction rather than in the opposite one. See Section 2.2.1 for another grammaticalization process in which the ancestor of this comitative preposition might have been involved.

2.7. Nominal derivation

Several derivational suffixes used to form nouns have a plausible lexical origin:

- *-bá* augmentative is probably cognate with *bá* 'mother';
- *-bálí* privative is probably cognate with *bàlí* 'hinder', 'fail';
- *-lá* 'place occupied by ...' (as in *Fàràjèlá* 'Europe' < *Fàràjé* 'white-skinned person') comes probably from the same noun 'mouth' as the postposition *lá* (cf. 2.5.2);
- *-lén* resultative may be cognate with *dén* 'child';
- *-nín* diminutive is probably cognate with *dén* 'child'. [9]

2.8. Personal pronouns

2.8.1. Reflexive pronoun > 2nd person pronoun

In Manding languages, the 2nd person singular pronoun *í* is homonymous with a residual reflexive pronoun used for object reflexivization with a limited set of verbs. Since for example Soninke has a productive reflexive pronoun *í* distinct from the 2nd person singular pronoun (Soninke *án*), one may imagine that perhaps the Manding 2nd person singular pronoun resulted from the reanalysis of a reflexive pronoun (a relatively common grammaticalization scenario). Unfortunately, I am aware of no additional evidence supporting this hypothesis, and it must be added that, if 2nd person *í* developed from reflexive *í*, this evolution must have occurred very early in the history of Mande languages, since potential reflexes of both 2nd person **í* and reflexive **í* can be found in various branches of the Mande language family (Valentin Vydrin, p.c.)

---

[8] Soso *béenùŋ* 'before' and Soninke *sádò* 'before' lend themselves to similar decompositions.
[9] In most Manding varieties, the resemblance between 'child' and the diminutive suffix is much greater than in Bambara; cf. for example Mdk *díŋ* 'child and *-ríŋ* ~ *-díŋ* ~ *-ndíŋ* diminutive suffix.

2.8.2. Intensive pronouns

In Manding languages, intensive pronouns are formed by combining a personal pronoun in genitive function with an element comparable to English *self*: Mdk *ý fáŋò* 'myself', *í fáŋò* 'yourself', etc.

I am aware of no possible etymology for Mdk *fáŋò* 'self', but Bm *yèrɛ́* 'self' is problably cognate with Soninke *yèrú* 'same'.

2.8.3. 'Owner' > emphatic third person pronoun

Several Manding varieties have an emphatic third person pronoun whose transparent etymology is 'its owner'. For example, in Bambara, depending on the context, *à tìgî* can be interpreted with its literal meaning 'its owner', or as 'the person in question'.

3. Grammaticalization of verbal categories

3.1. Valency

3.1.1. Passive

Manding languages do not have passive morphology, but have very productive morphologically unmarked passive constructions – see Section 1.3.4. Interestingly, as illustrated in (7), causative-anticausative lability is also common in Manding languages (although never as general as active-passive lability).

(7) Mandinka
    a. *Kèwôo yè mùróo jòlóŋ bàŋkôo tó.*
       man.D CPL.TR knife.D drop ground.D LOC
       'The man dropped the knife on the ground.'
    b. *Máŋkóo jòlôn-tá bàŋkôo tó.*
       mango.D fall-CPL.INTR ground.D LOC
       'The mango fell on the ground.'

Since cross-linguistically, unmarked anticausative constructions are much more widespread than unmarked passive constructions, and the reanalysis of anticausatives as passives is a widely attested process, one may assume that the fully productive active-passive lability that characterizes present-day Manding languages developed historically from the reanalysis of causative-anticausative lability.

3.1.2. Causative

The westernmost Manding varieties have a causative suffix (Mdk *-ndí*) that has cognates in Soninke (*ndí*) and Bozo (*-ni*). In (Creissels, forthcoming), I argue that the etymology of this suffix is a verb reconstructable at Proto-West-Mande level as **ti(n)* 'do, make'.

In the other Manding varieties, as illustrated in (8), causative verbs are formed by means of a preverb *lá-*.

(8) Bambara
    a. *Dénmísên bɛ́ sírán wùlû ñɛ́.*
       child.D INCPL be_afraid dog.D before
       'The child is afraid of the dog.'
    b. *Wùlû bɛ́ dénmísên **lá**-sírán.*
       dog.D INCPL child.D CAUS-be_afraid
       'The dog frightens the child.'

This causative prefix is probably cognate with the postposition *lá* (see section 2.5.1), since in Soso-Jalonka (a language belonging to another branch of West Mande), a similar coincidence is observed between a causative preverb *rá-* and a postposition *rá*. Unfortunately, given the extreme rigidity of word / constituent order in Mande languages, it is difficult to imagine how a postposition and a causative preverb may have developed from a common ancestor. It is, however, interesting to observe that (a) *lá*-causatives expressing indirect causation sometimes contrast with morphologically unmarked causative constructions expressing direct causation, and (b) in some of the Manding varieties that have the causative preverb *lá-*, its productivity is very low, and many verbs that are strictly intransitive in other varieties can be found in morphologically unmarked causative constructions. This suggests that the causative prefix *lá-* started as an optional marker of indirect causation in morphologically unmarked causative constructions. However, this does not completely solve the problem.

3.1.3. Permissive causation

In Manding languages, *bìlá* 'leave' is regularly used to express permissive causation.

3.1.4. Reflexive

Manding languages have a reflexive pronoun whose productivity is rather limited. Reflexivity is more commonly expressed by means of intensive pronouns (see Section 2.8.2).

3.1.5. Reciprocal

The reciprocal pronoun *ɲɔ́gɔ́n* is cognate with the noun *ɲɔ̀gɔ́n* 'the like of', and also with a suffix that derives nouns of co-participants from verbs (as in *sìgì-ɲɔ́gɔ́n* 'neighbor' < *sìgí* 'sit, settle').

3.1.6. Antipassive

Mandinka has an antipassive marker *-rí* (with the allomorph *-dírí* in combination with stems ending with a nasal), but this suffix does not straightforwardly convert transitive verbs into intransitive ones, and its precise status in the Mandinka system of word formation is not easy to define. Its identification as an antipassive marker follows from the fact that it is found exclusively in combination with transitive verbal lexemes in constructions in which the P argument is left unexpressed, cannot be identified to the referent of a noun phrase included in the same construction, and is interpreted as non-specific. However, Mdk *dómò* 'eat' is the only verb whose antipassive form *dómórì* can be used as the verbal predicate of finite clauses. With other transitive verbs, the antipassive form can only be used as an antipassive event noun, as in Ex. (9), or as a stem to which typically verbal suffixes can be attached: the agent nominalization suffix *-láa ~ -náa*, the instrument nominalization suffix *-ráŋ ~ -láŋ ~ -dáŋ*, etc.

(9) Mandinka

    a. *Mùsôo*   *bé*   *màanì-túwòo*   *lá.*
        woman.D LOCCOP rice-pound.D   POSTP
        lit. 'The woman is at the rice-pound(ing).'
        → 'The woman is pounding rice.'

    (*màaní* 'rice' saturates the P valency of *tŭu* 'pound', and the subject of the copula is identified to the unexpressed A argument)

    b. *Màanôo* *bé*   *tùwôo*   *lá.*
        rice.D   LOCCOP pound.D   POSTP
        lit. 'The rice is at the pound(ing).'
        → 'The rice is being pounded.'

    (if none of the arguments of *tŭu* 'pound' is expressed, in the absence of the antipassive suffix, the subject of the copula is identified to the unexpressed P argument)

    c. *Mùsôo*   *bè*   *tùu-rôo*   *lá.*
        woman.D LOCCOP pound-ANTIP.D POSTP
        lit. 'The woman is at the pound(ing).ANTIP.'
        → 'The woman is pounding.'

    (the antipassive suffix saturates the P valency of *tŭu* 'pound', and the subject of the copula is identified to the unexpressed A argument)

In other Manding varieties, the suffix cognate with this atypical antipassive marker (Bm *-lí*, etc.) cannot be analyzed as an antipassive marker, and can only be analyzed as an overt event nominalization marker in competition with morphologically unmarked event nominalization, since it can be found with intransitive verbs and is compatible with the expression of the object argument of transitive verbs.

    In (Creissels, forthcoming), I argue that this suffix is cognate with the Soninke antipassive marker *-ndì*, and originates from the same verb **ti(n)* 'do' as the causative suffix **-ndí** also found in Mandinka and Soninke, which implies the following grammaticalization path:

    'DO' VERB FOLLOWING ANOTHER VERB USED NOMINALLY IN OBJECT ROLE > ANTIPASSIVE MARKER > ANTIPASSIVE NOMINALIZATION MARKER > NOMINALIZATION MARKER

Manding languages also have antipassive uses of the reflexive pronoun, but the grammaticalization of the reflexive pronoun as an antipassive marker is limited to a very small number of verbs, typically including *mĭn* 'drink'.

3.2. Aspect

3.2.1. Incompletive, habitual, progressive

The use of the locational copula as a progressive or incompletive aspect marker is pervasive in Manding, and Manding languages provide ample evidence that progressive periphrases involving the locational copula tend to evolve toward a less specific incompletive meaning. In many Manding varieties, a former progressive periphrasis that has undergone this evolution

and synchronically can express meanings such as habitual or future coexists with a (formally distinct) younger periphrasis specifically expressing a progressive meaning.

Mandinka also has an incompletive aspect marker *kà* mainly used with reference to habitual situations. The plausible origin of this marker is a habitual auxiliary *kàrí ~ kàrá* also found in Mandinka, which to the best of my knowledge has no cognates in other Manding varieties.

3.2.2. Completive

As a rule, for the completive positive, Manding languages have two semantically equivalent markers in complementary distribution: a verbal suffix (Mdk *-tá*, Mnkm *-dá*, Bm *-rá*) in intransitive predication, and a predicative marker in post-subjectal position (Mdk *yè*, Bm *yé*, KMnk *dí*, etc.) in transitive predication. I am aware of no evidence suggesting a plausible etymology for the completive positive suffix. As regards the completive positive predicative marker, it is interesting to observe that it has very different forms across Manding varieties, which, however, have in common to be homonymous with postpositions (or at least to have the same segmental form as postpositions). Ex. (10) illustrates the quasi-homonymy between the completive positive marker and the benefactive postposition in Mandinka, and Ex. (11) illustrates the same phenomenon with the completive positive marker and the similative-functive-transformative postposition in Kita Maninka.

(10) Mandinka
Kèwôo **yè** *bàtáayòo sáfée à díŋò yé.*
man.D   CPL.TR   letter.D   write   3SG   son.D   BEN
'The man wrote a letter to his son.'

(11) Kita Maninka
Jínè **dí** *mìnán yèlèmá tŭn dì.*
jinn.D   CPL.TR   antelope.D   change   anthill.D   FUNCT
'The jinn changed the antelope into an anthill.'

As developed in Creissels (1997a), a possible explanation is that, in Manding languages, the completive positive markers result from the reanalysis of postpositions marking the agent phrase in passive constructions with a topicalized agent phrase. See however Idiatov (2016) for a criticism of this hypothesis, and an alternative proposal according to which they might result from auxiliarization processes.

3.2.3. Perfect

A distinction between perfect and narrative past can be found in several Manding varieties.

In Kita Maninka, the perfect has a clear resultative origin, since the intransitive perfect is simply marked by a suffix *-nín* whose cognates can be found in all Manding varieties as resultative derivational suffixes, whereas the transitive perfect is marked by a predicative marker *nànín* resulting from the grammaticalization of *nà-nín*, resultative form of *nǎ* 'come'.

A predicative marker *bárá ~ bádá* expressing perfect is found in Maninka-mori, and more or less obvious cognates of this perfect marker can be found not only in other Southern Manding varieties (Kor *báa*, Koy *wá*, Mau *wɛ́ɛ*, etc.), but also in Koranko (*wára*), Soso (*bárà*) and Jalonka (*bántà*). Since *-rá ~ -dá ~ -tá* is a verbal suffix marking the completive aspect in Manding languages, a plausible hypothesis is that this perfect marker originates from the completive form of *bán* 'finish'.

3.2.3. 'Already'

Across Manding languages, *bán* 'finish' is more commonly grammaticalized, either in its bare form *bán* or in the infinitive form *kà bán*, as a particle occurring in post-verbal position with the meaning 'already'.

3.2.4. 'Fall' or 'move towards' > inchoative

As illustrated by Ex. (12) and (13), the verbs *bĭn* 'fall' and *sín* 'move toward' are used as inchoative auxiliaries.

(12) Mandinka
    a. *Yíróo* **bòyí**-*tà*   *sílòo*   *kâŋ.*
        tree.D   fall-CPL.INTR   road.D   on
        'The tree fell on the road.'
    b. *Mùsóo*   **bòyí**-*tá*   *kùmbôo-lá.*
        woman.D   fall-CPL.INTR   cry-INF
        'The woman burst into tears.'

(13) Bambara
    a. *Mùsô*   **sín**-*ná*   *só*   *mà.*
        woman.D   move_toward-CPL.INTR   house.D   POSTP
        'The woman moved toward the house.'
    b. *Mùsô*   **sín**-*ná*   *kà*   *kàsí.*
        woman.D   move_toward-CPL.INTR   INF   cry
        'The woman burst into tears.'

3.2.5. 'Want' or 'search' > 'almost do', 'come close to'

The verb *ɲíní* 'search' is used as an auxiliary with the meaning 'come close to', as in *Ù bɛ́ ɲíní kà sà* lit. 'They are looking for dying > 'They are about to die'. Mdk *làfí* 'want' is used as an auxiliary with the same meaning, as in *À làfí-tá fǎa-là* lit. 'He wanted to die' > 'He almost died'.

3.2.6. 'Return' > repetitive

The verb *sègín* 'return' is used as a repetitive auxiliary, as in *À sègìnná kà kùlò* lit. 'He returned to scream' > 'He screamed again'.

3.2.7. 'Remain' > continuative or habitual

The verb *tó* 'remain' is used as a continuative or habitual auxiliary.

3.2.8. 'Separate, escape' > 'eventually'

The verb *tílá* 'separate, escape' is used as an auxiliary with the meaning 'eventually', as in *Ù tílálá kà sábálí* lit. 'They escaped to calm down' > 'They eventually calmed down'.

3.2.9. 'Say' > 'be about to'

In Manding languages, the quotative *kó* 'say' (cf. Section 4.1) is commonly used to express imminence (as in Mdk *Yíròo kó à bé bòyílà* 'The tree is about/close to fall', lit. 'The tree says it is falling').

3.3. Modal categories

3.3.1. Hortative/subjunctive

The hortative/subjunctive markers found in Manding languages can be divided into four etymologically distinct subsets represented by Bm *ká*, Mdk *yè*, Kor *yá*, and BBm *lá*. Three of these hortative/subjunctive markers coincide (at least in their segmental form) with completive markers attested either in the same varieties, or in other varieties, and all of them coincide (at least in their segmental form) with postpositions. Ex. (14) shows that, in Mandinka, the benefactive postposition *yé* is almost homonymous not only with the completive positive marker, but also with the subjunctive positive marker, used in independent clauses with a hortative meaning.

(14)   Mandinka
      Díndíŋò **yè**   *táa*   *kàràmbúŋò*   *tó!*
      child.D   SUBJ   go   school.D   LOC
      'Let the child go to school!'

As proposed in (Creissels 1997b), a possible explanation of these coincidences is that not only completive markers, but also hortative markers may have resulted from the reanalysis of postpositions. In the case of the hortative/subjunctive markers, constructions of the type illustrated by English '(it is) up to N to V' or French 'à N de Vinf' constitute a plausible context for such a reanalysis.

In the particular case of Bm *ká*, the resemblance with Infinitive *kà* may suggest other possible connections, discussed in (Vydrin 2014).

3.3.2. 'Don't come' > prohibitive marker

Most Manding varieties have a dissyllabic prohibitive marker (Mdk *kánàa*, Bm *kànâ*), but Southern varieties have monosyllabic forms such as Koy *ká* in free variation with the dissyllabic form, which suggests that *kànâ* and similar forms were originally the prohibitive form of *nă* 'come'.

3.3.3. Possibility

The verb *sé* 'reach' is also used as a modal auxiliary expressing possibility. Mandinka has a predicative marker *sí ~ sé* labeled 'potential' by Creissels and Sambou (2013), which probably resulted from the further grammaticalization of this verb.

Mandinka also has a verb *nŏo* 'overcome', 'master' that can be used as a modal auxiliary expressing possibility.

3.3.4. Obligation

In Manding languages, *kán* 'be equal' has grammaticalized as a modal auxiliary of obligation. This grammaticalization path, also attested in Soninke, can be explained with reference to an abstract meaning 'have an affinity with' which, depending on the nature of the complement, may concretize either as 'be equal to' or 'be obliged to'. See Creissels (2017a) for a more detailed presentation of cross-linguistic data supporting this analysis, and a discussion.

3.3.5. Intention

In Manding languages, the quotative *kó* 'say' (cf. Section 4.1) is commonly used to express not only imminence (as already mentioned in Section 3.2.9), but also intention (as in Koyaga, where the etymological meaning of *À kó mabri làda* 'He wants to repair the car' is something likes 'He says [he will] repair the car').[10]

3.4. Tense

3.4.1. Past

Three etymologically distinct past markers can be found in Manding languages.

Mdk *nŭŋ* (also found, outside Manding, in Koranko) is cognate with a nominal root **núŋ* still attested as the first formative of the adverb *núntò* 'previously' and of compounds such as *númmòolú* 'people of ancient times'.

A plausible etymology of KMnk *tèré* is the completive form of *tèré* 'find / be found', since the same grammaticalization path is also attested for example in Soninke, where the completive of `*ñí* 'find / be found' is used as a past auxiliary.

As regards the past marker of Bambara *tŭn*, I am not convinced by Dumestre's proposal according to which it would be cognate with *túgún* 'again', but I am aware of no evidence of a more convincing etymology.

3.4.2. Future

The use of *nă* 'come' in the incompletive aspect as a future auxiliary is common in Manding languages, and the future predicative marker *ná* found among others in Bambara results from the further grammaticalization of this verb.

In Mandinka, the potential marker *sè ~ sì* (cognate with a verb found in Mandinka as *síi* 'reach') has uses in which its meaning is not very different from that of a future marker.

Similarly, in Koyaga, the intentional marker that grammaticalized from the quotative marker *kó* (see 3.3.5 above) can be interpreted as expressing future rather than intention, depending on the nature of the subject.

3.5. Subject/object agreement

As a rule, Manding languages have neither subject nor object agreement. However, a phenomenon analyzable as the emergence of a (still very marginal) mechanism of subject agreement can be observed in Mandinka.

---

[10] To be precise, in Koyaga, *kó* as an intentional marker does not have the same tonal properties as the quotative *kó*, and a precise hypothesis about the construction in which the reanalysis occurred (a question that I leave open) should account for this fact.

In Mandinka, the completive positive marker in the transitive construction is *yè*, with the variant *ŋà* in immediate contact with the first person non-emphatic pronouns *ŋ́* (1SG) and *ŋ̀* (1PL); Interestingly, at least some speakers use *ŋà* CPL.TR.1PL and *ŋá* CPL.TR.1SG instead of *yè* in constructions with an emphatic 1st person pronoun in subject function, even if this 1st person pronoun is not in immediate contact with the predicative marker, as in (15b).

(15)   Mandinka
a.   *Ń-tè   lè   **yè**   fòolèesúwòo   dádâa.*
      1SG-EMPH   FOC   CPL.TR   bicycle.D   repair
      'It's me who repaired the bicycle.'
b.   *Ń-tè   lè   **ŋá**   fòolèesúwòo   dádâa.*
      1SG-EMPH   FOC   CPL.TR.1SG   bicycle.D   repair
      same meaning as (15a)

3.6. Preverbs

Most Manding languages have two or three productive preverbs, cognate with postpositions: *lá-, mǎ-,* plus *tɔ́- ~ dɔ́- ~ rɔ́-* in the western and south-western varieties that have a homonymous locative postposition.

The problem of the causative preverb *lá-* has been discussed in Section 3.1.2.

The semantic analysis of the preverb *mǎ-* is particularly difficult, since it is lexicalized to a considerable extent. A meaning of superficial or attenuated action is however discernible, and this is consistent with the hypothesis that the postposition *mǎ* developed from a noun meaning 'body' which initially grammaticalized with the meaning 'in contact with'.

As regards *rɔ́-*, its contribution to the meaning of the verbs it derives is generally not difficult to relate to the locative meaning expressed by the corresponding postposition, but as already mentioned, I am aware of no evidence suggesting a plausible lexical origin.

3.7. Non-finite verb forms

3.7.1. Postposition > non-finite verb form marker

Mandinka and other Western Manding varieties have a non-finite verb form used in the complementation of modal verbs and in combination with the locational copula in incompletive auxiliary function. This form has no nominal property, but the coincidence between the suffix **-lá** marking this form and the postposition *lá* suggests the reanalysis of a construction in which the verb used nominally combined with the postposition *lá*.

3.7.2. 'Place' > purpose converb (supine) marker

Compounds consisting of a verbal lexeme plus the noun *yɔ́rɔ́* 'place' (or its equivalent in Manding varieties other than Bambara: Mdk *dùláa*, etc.) are frequently found in combination with movement verbs, in a construction whose literal meaning is 'move to the place dedicated to V-ing', but which is commonly interpreted as 'move in order to do V-ing', without necessary reference to a place specifically dedicated to the activity in question. This can be viewed as the first step in an evolution by which forms whose initial meaning is 'V-ing place' could be converted into purpose converbs. [11]

---

[11] Perekhvalskaya (2016) analyzes similar facts in South Mande languages.

4. Grammaticalization of complex constructions

4.1. Complement clauses: quotative > complementizer

Manding languages have a quotative marker *kó*. This quotative marker is an invariable word used to introduce reported speech in a construction in which it is followed by a quotation and preceded by an NP representing the person to which the quotation is attributed. A postpositional phrase representing the addressee may be inserted between *kó* and the quotation, in which case the quotative is optionally repeated, as in Ex. (16).

(16) Mandinka
      *Kèwôo   kó   díndíŋò yé   (**kó**)   "ŋ́   kòntôŋ!"*
      man.D   QUOT   child.D   BEN   QUOT   1SG   greet
      'The man told the child to greet him.'

Ex. (17) illustrates the use of the quotative *kó* in complementizer function. The complement clause follows the matrix clause, within which it is represented by a cataphoric pronoun occupying the position that corresponds to its role in the argument structure of the main verb (in this example, the object position between the predicative marker and the verb).

(17) Mandinka
      *Ŋ́   ŋá   à$_i$ lôŋ   [**kó**   à   bé   dòokúwóo*
      1SG   CPL.TR   3SG   know   QUOT   3SG   COPLOC   work.D
      sòtó-lá   ŋ́   yè]$_i$
      get-INF   1SG   BEN
      'I know that he will get work for me.'

4.2. Relative clauses

4.2.1. Demonstrative > relativizer

All Manding languages have a relativizer *mên* or *mîn*, typically used in the construction illustrated by Ex. (2) in Section 1.3.3. In most Manding varieties, this relativizer has no other possible function, but in the varieties spoken in Ivory Coast, it is homonymous with a demonstrative. Among the Central Mande languages that have a relatively close relationship with Manding, a demonstrative *mɛ* is also found among others in Vai and in Jeli. This suggests that the Manding relativizer resulted from the grammaticalization of a demonstrative, and that in most Manding varieties, this demonstrative lost its original demonstrative function after grammaticalizing as a relativizer.

4.2.2. The grammaticalization of the distinction between stage level and individual level properties in Mandinka relative clauses

As explained in more detail in Creissels and Sambou (2013: 472–473) and Creissels and al. (2015), the construction of Mandinka relative clauses is sensitive to the distinction between stage level and individual level properties. The construction also found in other Manding varieties tends to be reserved to the expression of stage level properties, for example 'the tree whose fruits we ate yesterday' (Ex. [18a]), whereas relative clauses referring to a permanent characteristic of the referent they describe, such as 'a tree whose fruits are eaten by monkeys'

(Ex. [18b]), have a special construction which in this particular case is lit. 'a tree which you know that monkeys eat its fruits'.

(18) Mandinka

    a. *ŋ̀*   *ŋà*   *yír-òo*   *mîŋ*   *díŋ-ò-lú*   *dómò*   *kúnùŋ*
       1SG   CPL.TR   tree.D   REL   fruit.D-PL   eat   yesterday
       'the tree whose fruits we ate yesterday'

    b. *yír-òo*   *mîŋ*   *í*   *yè*   *à*   *lôŋ*   *kó*   *sùlôo-lú*
       tree.D   REL   2SG   CPL.TR   3SG   know   that   monkey.D-PL
       kà   *à*   *díŋò-lú*   *dómò*
       INCPL   3SG   fruit.D-PL   eat
       'a tree whose fruits are eaten by monkeys'

This grammaticalization of an expression whose literal meaning is 'which you know that' as a relativizer implying that the relative clause refers to an individual level property can be analyzed as an instance of contact-induced grammaticalization, since the same phenomenon is pervasive in the Atlantic languages spoken in Senegal – Creissels et al. (2015).

4.3. Adverbial clauses

4.3.1. 'When', 'since'

The preposition *kàbíní* 'since' (cf. 2.5.2) is also used as a subordinating conjunction. In this use, it has a broader temporal meaning, and depending on the context can be interpreted as 'since' or 'when'.

4.3.2. 'As soon as'

Dɔ́rɔ́n occurs in independent clauses as an adnominal or clause-final particle whose meaning is equivalent to English 'only'. Postposed to the first clause in a sequence of two clauses, it expresses the temporal relationship 'as soon as'.

(19) Mandinka

     À   *yè*   *ŋ́*   *háyínâŋ*   **dóróŋ**,   *à*   *yè*   *ŋ́*   *súutêe.*
     3SG   CPL.TR   1SG   see   only   3SG   CPL.TR   1SG   recognize
     'As soon as he saw me, he recognized me.'

In Mandinka, the temporal relationship expressed by the construction illustrated in (19) can also be expressed by means of the manner relativizer *ñáamìŋ* 'the way in which' occupying the same position as *dóróŋ* in a sequence of two clauses.

4.3.3. 'Before'

The preposition *yànní* or *sání* 'before' (see Section 2.5.2) is also used as a temporal conjunction with the same meaning.

4.3.3. 'It has found that' > 'whereas'

Inserted at the beginning of the second clause in a biclausal sequence, Mdk *à yè à tàrá*, lit. 'it has found that', expresses the same contrast as English *whereas*. The same phenomenon is

observed not only in the other Manding languages, but also elsewhere in the Mande language family.

4.3.4. 'If' and 'and'

In Manding, the conjunction introducing hypothetical and conditional clauses is homonymous with the comitative preposition *ní*, also used as an additive coordination marker ('and') – Ex. (20).

(20)   Bambara
        a. *Ń*   *yé*   *Sékù*   ***ní***   *Fàtú*   *wélé.*
            1SG   CPL.TR Sékou   and   Fatou   call
            'I called Sékou and Fatou.'
        b. ***Ní***   *Fàtú*   *nà-ná,*   *wárî*   *dí*   *à*   *mà!*
            if   Fatou   come-CPL.INTR money.D give 3SG to
            'If Fatou comes, give her the money!'

The fact that the same coincidence is found in a number of unrelated languages suggests the existence of a grammaticalization path 'and' > 'if', whose details are however unclear to me.

4.3.5. Purpose > sequential

Adverbial subordination with a meaning of purpose is expressed in Manding by means of biclausal constructions in which the second clause (the subordinate purpose clause) is in the subjunctive, and can be reduced to an infinitival phrase if its subject is co-referent with that of the matrix clause. However, this construction can also express sequentiality without any purpose implication, and depending on the context, the sequential reading may be the only one available.

4.3.6. The quotative *kó* in adverbial subordination

The quotative *kó* can be optionally added at the beginning of subjunctive clauses expressing purpose.
    Alone or in combination with *ní* 'if', the quotative *kó* can introduce similative clauses ('as if').
    Inserted at the beginning of the second clause in a biclausal sequence, the quotative *kó* can be interpreted as 'saying that', but also as 'under the pretext that', 'on the ground that'.

4.3.7. Causal conjunctions

Inserted at the beginning of the second clause in a biclausal sequence, the noun *sábú* 'cause' (borrowed from Arabic) serves as a conjunction expressing a causal relationship.
    Among the other causal conjunctions, *kàtúgú* 'because' might have originated from an infinitive, since *kà* is an infinitive marker. There is a verb *túgú* 'do something deliberately', 'insist on doing something', but this etymology is semantically dubious.

4.4. Insubordination

4.4.1. Infinitival phrases as interrogative clauses

In some Manding languages, infinitival phrases can be used as independent interrogative clauses whose function is to check or confirm a command (for example, in Bambara, *kà táa*, infinitive of *táa* 'go', uttered with an interrogative intonation, is interpreted as 'Should I / we go?').

4.4.2. 'Until' > obligation marker

In Manding languages, *fő* is a preposition/conjunction used in particular to introduce subordinate clauses with the temporal meaning 'until',[12] but also introduces independent subjunctive clauses expressing obligation.

(21) Mandinka
    a. *Kèlôo   ké-tà   fő   tìlóo   bòyí-tà.*
       fight.D   take_place-CPL.INTR   until   sun.D   fall-CPL.INTR
       'The fight took place until the sun went down.'
    b. *Fő   í   yè   bóoróo   mĭŋ.*
       OBLIG   2SG   SUBJ   medecine.D   drink
       'You must drink the medecine.'

This might be a mere coincidence, or perhaps the result of the borrowing of French *(il) faut*, but the same coincidence is observed in Soninke and in Bozo with completely different forms (Soninke *mà*, Bozo *kara*), which suggests that this is rather the result of a grammaticalization process. The most plausible explanation is the insubordination of *until*-clauses in a construction in which the matrix clause was perhaps an imperative clause with a verb like 'strive', 'do one's best', or something like that.

5. Other patterns of grammaticalization and reanalysis

5.1. Associated motion

Mandinka has a centripetal marker *năŋ* whose probable origin is the grammaticalization of *năa jăŋ* 'come here' – Creissels (2014). This kind of marker is not found in the other Manding languages, and its development in Mandinka is probably a consequence of contact with Atlantic languages.

5.2. Manner adverbs

5.2.1. 'Matter, manner' > manner adverb marker

Most Manding varieties have a small number of manner adverbs in which an adjective is preceded by a first formative *kó-* (*kú-* in Kita Maninka and other Western varieties), such as *kóɲùmán* 'well' < *ɲùmán* 'good'. The lexical origin of this formative *kó-* is probably the noun *kó.* In most Manding varieties, *kó* is only attested with the meaning 'matter', which is not a

---

[12] On *fő* 'until', see also Sections 5.5 and 5.6.

very good candidate as the lexical source of a manner adverb marker, but this noun is also clearly attested at least in Marka with the meaning 'manner'.

5.2.2. *'Do' > manner adverb marker*

Mandinka does not have manner adverbs of the type dealt with in 5.2.1, but has a relatively productive suffix *-ké*, as in *kéndè-ké* 'well' > *kéndè* 'good, healthy' – Ex. (22).

(22)   Mandinka
  *Fàatú yè búŋò fítà **kéndè**-ké.*
  Fatou CPL.TR room.D sweep good-MAN
  'Fatou swept the room well.'

As explained in more detail in Creissels and Sambou (2013: 319–320), synchronically, words such as *kéndèké* can only be analyzed as de-adjectival adverbs, but some of their properties (in particular, but not only, their tonal behavior) suggest that they result from the reanalysis of a construction in which the object of *ké* 'do' was a verb used nominally and combined with an adjective. In the case of Ex. (22), this means that, before this reanalysis, the adjective *kéndè* modified the verb used nominally (*fítá-kéndè* 'good sweeping'), the noun which is synchronically in object function fulfilled the function of genitival modifier (*búŋò fítá-kéndè* 'good sweeping of the room'), and the whole phrase was the object of *ké* 'do', subsequently reanalyzed as a suffix converting adjectives into manner adverbs.

5.3. Copulas

5.3.1. *Imperative of 'see / look' > copula*

As illustrated by Ex. (23), most Manding languages have an equative and/or locational copula *yé* homonymous with the verb *yé* 'see'.

(23)   Kita Maninka
  a. *Ń dí Sékù **yé** kúnùn.*
    1SG CPL.TR Sékou see yesterday
    'I saw Sékou yesterday.'
  b. *Kóngò **yè** ǹ   nà.*
    hunger.D COP 1SG POSTP
    'I am hungry.' (lit. 'Hunger is in me')

In (Creissels, 2017b), I review evidence from languages belonging to various branches of West Mande (including Manding languages) supporting the reconstruction of a grammaticalization path IMPERATIVE OF 'SEE / LOOK' > OSTENSIVE MARKER > COPULA.

 This evolution explains not only the creation of this copula *yé* in the history of Manding languages, but also the existence of sporadic copular-like uses of the ostensive marker *fílé* 'here is' < *fílé* 'look'.

5.3.2. Others

The other copulas found in Manding languages are *mú* (positive equative copula),[13] *bɛ́* (positive locational copula), and *tɛ́* (negative copula). I am aware of no evidence of a plausible lexical origin of *mú*. As regards *bɛ́*, Tröbs (2003) evokes the possibility that it originates from a Mande demonstrative found in Bobo as *bĕ*. Finally, the negative copula might be etymologically a negative form of a verb 'be' found in Bobo as *tī*, whose all other form would have been lost in Manding languages.

5.4. 'Limit' > 'only'

Across Manding varieties, 'only' is most commonly expressed as *dɔ́rɔ́n* (whose lexical origin is not known), but *dăn* 'only', whose lexical origin is the noun *dăn* 'limit', is also attested in Bambara and Marka.

5.5. 'Until' > 'except'

In Manding languages, the preposition/conjunction *fó* 'until' (already mentioned in Section 4.4.2 for its grammaticalization as an obligation marker) also expresses 'except'. Interestingly, in other languages (cf. for example Italian *fino (a)*), 'until' has grammaticalized as a scalar additive particle ('even'), i.e., with an opposite meaning. A plausible explanation is that, in its original spatio-temporal meaning, 'until *x*' refers to the right limit of an interval but leaves open the choice between a right-open interval ...*x*[(> 'except *x*') and a right-closed interval ...*x*] (> 'even x').

5.6. Alternative question marker > yes/no question marker

Fó, already mentioned in sections 4.4.2 and 5.5 with the meanings 'until', 'except', and 'it is necessary that', has also uses in interrogative clauses whose relationship to its other meanings is not clear to me. What is however clear is that its use as a yes/no question marker, as in (24b), can be explained as resulting from the conventionalization of the ellipsis of the first conjunct in the construction illustrated in (24a), in which it serves as a marker of alternative question.

(24) Mandinka
    a. *Í*   *yé*   *sùbôo*   *bóndì,*   ***fó***   *wùlôo*   *yè*
        2SG   CPL.TR   meat.D   put_aside   ALTERN   dog.D   CPL.TR
        à   *tăa*   *lè?*
        3SG   take   FOC
        'Did you put aside the meat, or did the dog take it?'
    b. ***Fó*** *wùlôo*   *yè*   *sùbóo*   *tăa?*
        Q   dog.D   CPL.TR   meat.D   take
        'Did the dog take the meat?'

---

[13] In Bambara, the equative copula *mú* is not attested as such, but Bambara has an identificational copula *dŏn* whose plausible etymology is *dĕ* (focus marker) + *mú* (equative copula).

6. Summary

In this paper, I have tried to show that Manding languages show evidence of the following grammaticalization/reanalysis paths, either as emerging processes in present-day Manding languages, or as processes having operated in the history of the Mande language family. In this enumeration, small capitals highlight relatively little-known grammaticalization scenarios for which at the same time the evidence from Manding languages is particularly convincing.

– 'and' > associative plural marker > ordinary plural marker (2.2.1)
– locative postposition > alienable possession marker (2.3)
– proprietive pronoun > alienable possession marker (2.3)
– demonstrative > definiteness marker > default determiner (2.4.1)
– 3rd person singular possessive > definiteness marker (2.4.2)
– 'one' > indefinite pronoun/determiner (2.4.3)
– 'thing' > indefinite pronoun/determiner (2.4.4)
– 'kind' > negative determiner (2.4.5)
– noun (in particular body part noun) > postposition (2.5.1)
– proprietive pronoun > benefactive postposition (2.5.1)
– 'say' > similative preposition or conjunction (2.5.2, 4.3.6)
– infinitive of 'come from' and 'go' > prepositions 'starting from' and 'until' (2.5.2)
– 'mother' > augmentative derivational affix (2.7)
– 'hinder, fail' > privative derivational affix (2.7)
– 'mouth/side' > derivational affix meaning 'place occupied by...' (2.7)
– 'child' > resultative derivational affix (2.7)
– 'child' > diminutive derivational affix (2.7)
– reflexive pronoun > 2nd person pronoun (2.8.1)
– 'OWNER' > EMPHATIC 3RD PERSON PRONOUN (2.8.3)
– anticausative construction > passive construction (3.1.1)
– 'do' > causative marker (3.1.2)
– 'leave' > permissive causation marker (3.1.3)
– 'the like of' > reciprocal pronoun (3.1.5)
– 'the like of' > affix forming names of co-participants from verbs (3.1.5)
– 'do' > antipassive marker > antipassive nominalization marker > nominalization marker (3.1.6)
– locational copula > progressive marker > incompletive marker (3.2.1)
– postposition > completive aspect marker (3.2.2)
– resultative marker > perfect marker (3.2.3)
– 'finish' > perfect marker (3.2.2)
– 'finish' > 'already' (3.2.3)
– 'fall' > inchoative auxiliary (3.2.4)
– 'move toward' > inchoative auxiliary (3.2.4)
– 'want' or 'search' > auxiliary 'almost do', 'come close to' (3.2.5)
– 'return' > repetitive auxiliary (3.2.6)
– 'remain' > continuative or habitual auxiliary (3.2.7)
– 'separate, escape' > auxiliary 'eventually do' (3.2.8)
– 'SAY' / QUOTATIVE > AUXILIARY EXPRESSING INTENTION OR IMMINENCE > FUTURE MARKER (3.2.9, 3.3.5, 3.4.2)
– postposition > hortative marker > subjunctive marker (3.3.1)
– 'don't come' > prohibitive marker (3.3.2)
– 'reach' > potential marker > future marker (3.3.3, 3.4.2)

- 'overcome, master' > potential marker (3.3.3)
- 'BE EQUAL' > OBLIGATIVE AUXILIARY (3.3.4)
- 'FIND' > PAST MARKER (3.4.1)
- 'come' > future marker (3.4.2)
- personal pronoun > person agreement marker (3.5)
- 'body' > spatial postposition 'in contact with' / preverb with a meaning of attenuated or superficial action (3.6)
- postposition > non-finite verb form marker (3.7.1)
- 'place' > purpose converb (supine) marker (3.7.2)
- 'say' > complementizer (4.1)
- demonstrative > relativizer (4.2.1)
- 'WHICH YOU KNOW THAT' > RELATIVIZER IMPLYING REFERENCE TO INDIVIDUAL LEVEL PROPERTIES (4.2.2)
- 'only' (restrictive particle) > 'as soon as' (conjunction) (4.3.2)
- 'it has found that' > 'whereas' (4.3.3)
- 'and' > 'if' (4.3.4)
- purposive construction > sequential construction (4.3.5)
- 'say' > 'under the pretext that', 'on the ground that' (4.3.6)
- 'cause (noun) > because (conjunction)
- infinitival phrase > interrogative clause (4.4.1)
- 'UNTIL' > OBLIGATION MARKER (4.4.2)
- 'come here' > centripetal marker (5.1)
- 'matter, manner' > manner adverb marker (5.2.1)
- 'do' > manner adverb marker (5.2.2)
- IMPERATIVE OF 'SEE/LOOK' > OSTENSIVE PREDICATOR > COPULA (5.3.1)
- 'limit' (noun) > 'only' (restrictive particle) (5.4)
- 'UNTIL' > 'EXCEPT' (5.5)
- alternative question marker > yes/no question marker (5.6)

Abbreviations

ANTIP = antipassive, BEN = benefactive, CAUS = causative, CPL = completive, D = default determiner, DEM = demonstrative, EMPH = emphatic, FOC = focus marker, FUNCT = functive, INCPL = incompletive, INF = infinitive, INTR = intransitive, LOC = locative, LOCCOP = locational copula, NEG = negative, OBLIG = obligative, POSTP = postposition, PROPR = proprietive pronoun, QUOT = quotative, REL = relativizer, GEN = genitival linker, SG = singular, SUBJ = subjunctive, TR = transitive

References

Cobbinah, Alexander & Friederike Lüpke. 2009. Not cut to fit – zero coded passives in African languages. In Matthias Brenzinger & Anne-Maria Fehn (eds.), *Proceedings of the 6th World Congress of African Linguistics*, 153–165. Cologne: Rüdiger Köppe.

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

Creissels, Denis. 1997b. Une tentative d'explication de particularités typologiques de la négation en mandingue. *Mandenkan* 32. 3–21.

Creissels, Denis. 2009. *Le malinké de Kita*. Cologne: Rüdiger Köppe.

Creissels, Denis. 2013. Le maninka du Niokolo (Sénégal Oriental): esquisse phonologique et morphosyntaxique, liste lexicale, textes glosés. *Mandenkan* 49. 1–218.

Creissels, Denis. 2014. Le développement d'un marqueur de déplacement centripète en mandinka. In Carole de Féral, Maarten Kossman & Mauro Tosco (eds.) *In and out of Africa, languages in question, In Honor of Robert Nicolaï, Vol. 2 Language contact and language change in Africa*, 95–102. Louvain-la-Neuve & Walpole MA: Peeters.

Creissels, Denis. 2015a. Valency properties of Mandinka verbs. In Andrej Malchukov & Bernard Comrie (eds.), *Valency classes in the world's languages,* vol. 1, 221–260. Berlin: Mouton De Gruyter.

Creissels, Denis. 2015b. Polysemy patterns involving non-scalar additive particles in Subsaharan languages: the coordinative connection. Paper presented at the 48th annual meeting of the SLE, Leiden, 2–5 September.

Creissels, Denis. 2017a. Similarity, suitability, and non-epistemic modalities (volitionality, ability, and obligation). In Yvonne Treis & Martine Vanhove (eds.), *Similative and equative constructions: A cross-linguistic perspective*, 79–89. Amsterdam: John Benjamins.

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

Creissels, Denis. Forthcoming. Reconstructing the origin of the Soninke voice system.

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

Creissels, Denis, Sokhna Bao Diop, Alain-Christian Bassène, Mame Thierno Cissé, Alexander Cobbinah, El Hadji Dieye, Dame Ndao, Sylvie Nouguier-Voisin, Nicolas Quint, Marie Renaudier, Adjaratou Sall & Guillaume Segerer. 2015. L'impersonnalité dans les langues de la région sénégambienne. *Africana Linguistica* 21. 29–86.

Dimmendaal, G. 2011. *Historical linguistics and the comparative study of African languages*. Amsterdam & Philadelphia: John Benjamins.

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

Dumestre, Gérard. 2011. *Dictionnaire bambara-français*. Paris: Karthala.

Grégoire, Claire. 1984. Le syntagme déterminatif en mandé nord. *Journal of African Languages and Linguistics.* 6(2). 173–193.

Greenberg, Joseph. 1978. How does a language acquire gender markers? In Joseph Greenberg (ed.), *Universals of human language Volume 3: Word structure*, 49–81. Stanford: Stanford University Press.

Idiatov, Dmitry. 2016. Development of TAM and polarity marking conditioned by transitive status in Western Mande. *Syntax of the World's Languages VII*.

Perekhvalskaya, Elena. 2016. "Oni prišli iz mesta ubyvanija kozy": ob odnoj strategii grammatikalizacii v južnyx mande [From locative construction to relative time: On a strategy of grammaticalisation in South Mande]. *Vestnik Sankt-Peterburgskogo universiteta*. Serija 9. 2016. N° 1. 89–99.

Tröbs, Holger. 2003. On the origin of some predicative markers in imperfective constructions in Manding. *Mandenkan* 38. 1–14.

Vydrin, Valentin. 2009. On the problem of the Proto-Mande homeland. *Вопросы языкового родства – Journal of Language Relationship* 1. 107–142.

Vydrin, Valentin. 2014. Infinitiv v jazyke bamana [The infinitive in Bambara]. In Mikhail Daniel, Ekaterina Ljutikova, Vladimir Plungian, Sergej Tatevosov & Olga Fedorova (eds.), *Jazyk. Konstanty. Peremennyje. Pam'ati Aleksandra Jevgenjevicha Kibrika* [Language. Constants. Variables. In memoria Alexandre Kibrik], 653–676. St. Petersburg: Aleteia.