

# Perfective marking conditioned by transitivity status in Western Mande

## Constructional competition, specialization and merger

Dmitry Idiatov

Languages and Cultures of Africa (CNRS – USPC/INALCO)

This paper provides a diachronic construction-based explanation of the differential perfective marking conditioned by transitivity status in Western Mande languages, using the Greater Manding group as an exemplar case. This typologically unusual phenomenon has previously been erroneously cast in terms of case alignment, either synchronically (in terms of bidirectional case markers) or historically (in terms of an earlier split-ergative stage). The central insight of my explanation is that the Positive Perfective constructions of the Western Mande languages are multiple-source constructions. The in-depth reconstruction of these constructions presented in the paper provides a theoretically significant illustration of a pattern of repeated emergence of constructional competition in a particular semantic domain, which is subsequently resolved through constructional specialization and merger, resulting in multiple-source constructions and a typologically unusual pattern of differential TAM and polarity marking.

**Keywords:** alignment, bidirectional case markers, differential TAM and polarity marking, historical syntax, Mande languages, multiple-source constructions, perfective, construction-based reconstruction, split-ergativity, transitivity status

### 1. Introduction

A number of Western Mande languages use different Positive Perfective PFV<sup>+</sup> construction markers depending on the transitivity status of the clause, as illustrated

in (1) from Standard Bamana.<sup>1</sup> Thus, in PFV<sup>+</sup>, the verb is marked by the suffix *-rá ~ -lá ~ -ná* in the intransitive variant of the construction PFV<sub>I</sub><sup>+</sup> (1a), while the transitive variant PFV<sub>T</sub><sup>+</sup> (1b) uses the marker *yé* in the post-subject slot. There is no such formal distinction in constructions with other tense, aspect, modality and polarity (TAMP) values, including the Negative Perfective PFV<sup>-</sup>.

Standard Bamana

- (1) a. *Músá yáálá-lá súgú <sup>4</sup>lá* (PFV<sub>I</sub><sup>+</sup>: *-rá ~ -lá ~ -ná*)  
 Musa wander-PFV<sub>I</sub><sup>+</sup> market.ART at  
 “Musa wandered through the market.”<sup>2</sup>
- b. *Músá yé súgú <sup>4</sup>yáálá* (PFV<sub>T</sub><sup>+</sup>: *yé*)  
 Musa PFV<sub>T</sub><sup>+</sup> market.ART wander  
 same meaning as (1a)

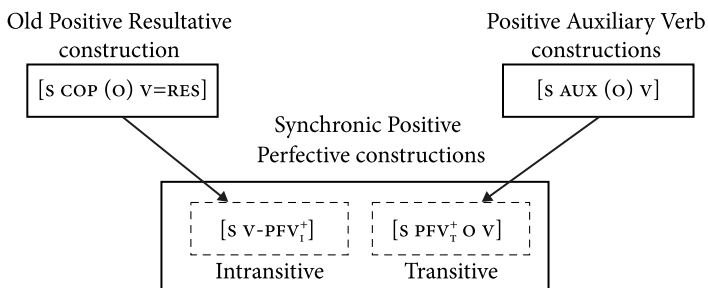
Such differential perfective marking conditioned by transitivity status appears to be uncommon cross-linguistically. Basically the same type of marking is found in the neighboring Songhay languages, even though it is analyzed differently in the source (cf. Heath 2007). A similar pattern may also be found in Indo-Aryan languages, such as Shina (cf. Schmidt & Kohistani 2008: 130–134). A somewhat more distant parallel is represented by the so-called “status markers” of the Mayan languages (cf. Hofling 2006; Polian 2017: 373–380, 387–393). For Mande (and Songhay), this phenomenon has previously been cast in terms of case alignment, either by analyzing the TAMP markers immediately following the subject as (“bidirectional”) case markers synchronically (cf. Heath 2007 for Songhay, Bamana and Soninke, and Nikitina 2018 for Wan) or by presuming that, historically, this differential perfective marking goes back to a split-ergative alignment system in which the current post-subject TAMP markers were postpositions flagging subjects of transitive clauses (cf. Creissels 1997 for Manding languages).

1. There are approximately seventy Mande languages, spoken across much of inland West Africa up to the northwest of Nigeria as their eastern limit. The center of gravity of the Mande-speaking world is situated in the southwest of Mali and the neighboring regions. The major subdivision within Mande is between Western Mande, which comprises the majority of both languages and speakers, and Southeastern Mande (aka Southern Mande or Eastern Mande, which are also the names for the two subbranches of Southeastern Mande), a comparatively small but linguistically diverse and geographically dispersed group. Traditionally, Mande languages have been classified as one of the earliest offshoots of Niger-Congo. All Mande languages mentioned in the paper are listed in Appendix 1 with their ISO 639-3 codes and classification.

2. The homophony between the allomorph *-lá* of the PFV<sub>I</sub><sup>+</sup> marker and the postposition *lá* “at” is accidental.

This paper provides a diachronic construction-based explanation of the differential perfective marking conditioned by transitivity status in Western Mande languages. For the sake of argumentation, I primarily focus on Greater Manding languages, such as Bamana. The central insight of my explanation is that the synchronic Positive Perfective constructions of the Western Mande languages are multiple-source constructions, i.e. they result from blending of several source constructions (cf. Van de Velde, De Smet & Ghesquière 2013). As schematically represented in (2), the intransitive variants of the synchronic Positive Perfective constructions  $\text{PFV}_1^+$  inherit from an earlier Positive Resultative construction  $\text{RES}^+$  of the structure [S COP (O) V=RES], while the transitive variants  $\text{PFV}_T^+$  inherit from two subtypes of the Positive Auxiliary Verb construction [S AUX (O) V]. The older layer of the Auxiliary Verb constructions in question is formed by Positive Perfective Auxiliary Verb constructions with the Perfective form of a motion verb as auxiliary conveying various flavors of a more general perfective semantics.<sup>3</sup> The newer layer is formed by Positive Resultative Auxiliary Verb constructions with the Resultative form of a “be, happen” verb as auxiliary. In this process of constructional merger, the source constructions became specialized as dedicated intransitive and transitive constructions respectively. Remarkably, in some Manding languages, constructional merger and constructional specialization have occurred repeatedly in the history of Positive Perfective constructions, as suggested by the existence of two layers of the Auxiliary Verb construction and by the fact that in some languages several auxiliaries were conflated into one paradigm as conditioned or free allomorphs.

- (2) Synchronic Western Mande Positive Perfective constructions as multiple-source constructions inheriting from the Old Positive Resultative construction and different Positive Auxiliary Verb constructions



3. That is, they combined general perfective semantics with some other functions. Thus, they may have additionally expressed the notion that the action happened unexpectedly or against the will of the subject, or that it took the subject more time or effort than expected, etc. (cf. §5.3). The evolution of motion verbs into auxiliaries and later TAMP<sub>1</sub> markers is a well-known path of change in Mande (cf. Kastenholz 2003: 49; Tröbs 2009, among others).

Although Positive Perfective constructions are not the only case of predicative constructions whose TAMP marking is conditioned by transitivity status in Western Mande, they do represent by far the most common case and offer the best window on the range of diachronic processes that have led to the emergence of TAMP marking conditioned by transitivity status.<sup>4</sup> The question of why in Western Mande the differential TAMP marking conditioned by transitivity status has evolved primarily in Positive Perfective constructions can be accounted for naturally within the diachronic construction-based account proposed in the paper. I come back to this question in §7.

The in-depth reconstruction of a conglomerate of constructions provided in this paper showcases the general relevance of the explanatory mechanism of multiple-source constructions beyond European languages. The history of the Positive Perfective constructions provides a theoretically significant illustration of a pattern of repeated emergence of constructional competition in a particular semantic domain, which is subsequently resolved through constructional specialization and merger, resulting in multiple-source constructions and a typologically unusual pattern of differential TAMP marking. This suggests that the blending of constructions resulting in constructions with multiple inheritance is greatly favored by intense constructional competition. In the case of the Western Mande Positive Perfective constructions, this constructional competition is triggered by the tendency for the positive perfective domain to be particularly crowded in these languages. I cannot elaborate on the ultimate cause of this tendency but I show that it is brought forth by a number of typologically trivial semantic and formal changes, such as the evolution of resultative into perfect and perfective, the

---

4. The difference in the TAMP marking conditioned by transitivity status in the other constructions has a similar diachronic construction-based explanation to the one argued here for Positive Perfective constructions. For instance, we find differential TAMP marking conditioned by transitivity status in the Intentional or Immediate Future constructions in a number of Ivorian Manding lects, such as those of Bodugu, Vandugu and Barala (cf. Derive 1990: 226–232), the Soninke 2PL Positive Imperative, Positive Imperfective with Constituent Focus and (a variant of) Positive Subjunctive constructions (cf. Diagana 1995; Creissels & Urmanchieva 2017). Note that I do not consider as differential TAMP marking conditioned by transitivity status those cases where the TAMP markers used in the transitive and intransitive variants of a given construction only differ in that one of the two markers has an additional nasal (as in one variant of the Soninke Positive Subjunctive construction) or a floating low tone at its right edge (as in the Negative Perfective construction in Mandinka of Sédhiou). From an explanatory perspective, such minimally different TAMP markers are best analyzed as allomorphs of the same TAMP marker rather than as two different TAMP markers. As I argue elsewhere (Idiatov 2016), the emergence of the two allomorphs is a result of a differential phonological evolution of a single TAMP marker as a function of its right context, where both the nasal and the (currently floating) low tone should be reconstructed as an integral part of the respective TAMP markers.

tendency for resultatives to be intransitive and positive, the semantic generalization of originally specialized auxiliary-based TAM constructions, and copula loss.

As well as explaining this typologically unusual phenomenon, I argue against its analysis in terms of case alignment, either synchronically or historically. On a broader level, I also argue against all kinds of ahistorical explanations proposed in the literature for differential TAMP marking conditioned by transitivity status and split-ergativity, such as various functional (DeLancey 1981; Tsunoda 1981; Heath 2007), formal (Abraham 1996) and “structural” (Coon 2013a, 2013b) explanations. Thus, the paper contributes to a growing body of evidence that explanation in linguistics is above all diachronic and construction-based.

The paper is organized as follows. I begin by providing an overview of Mande clausal morphosyntax in §2, including word order on the clause-level and TAMP marking (§2.1), the typical ways the transitivity status of a predication is manifested in Mande (§2.2) and the alignment patterns typically found in Mande, with a note on split-ergativity (§2.3). In §3, I outline the scenario for the emergence of perfective marking conditioned by transitivity status in terms of multiple-source constructions, with particular focus on Greater Manding languages. In §4, I discuss the details of formal and semantic changes of the Old Positive Resultative construction which served as the source of the intransitive variants of the present-day Positive Perfective constructions  $\text{PFV}_I^+$  in Greater Manding. I also provide the reconstruction of the Resultative marker of the Old Positive Resultative construction and its possible lexical source. In §5, I discuss the details of formal and semantic changes of the two different types of Auxiliary Verb constructions which have subsequently evolved into the transitive variants of the synchronic Positive Perfective constructions  $\text{PFV}_T^+$ . I also reconstruct the TAMP markers in  $\text{PFV}_T^+$  constructions as motion and “be, happen” verbs. In §6, I discuss the two alternative accounts of the differential TAMP marking conditioned by transitivity status in terms of case alignment that have been proposed in the literature for Western Mande, viz. Heath (2007) (§6.1) and Creissels (1997) (§6.2). Section 7 provides some concluding remarks.

## 2. Mande clausal morphosyntax

### 2.1 Word order on the clause-level and TAMP marking

All Mande languages have a strict SOVX constituent order in transitive constructions and SVX in intransitive constructions. X stands for “oblique”, which is any constituent (an argument or an adjunct) other than S and O. There is no evidence across Mande that may suggest that Mande clausal morphosyntax has ever been

significantly different or less rigid than it is today.<sup>5</sup> Morphologically unanalyzable markers tend to encode combinations of different predicative categories, including TAM and polarity. It is not uncommon for these categories to be marked in more than one place within a clause, resulting in templatic constructions (cf. Good 2016). Typically, the morphology involved consists of auxiliary-like morphemes immediately following the subject, of verbal inflection (segmental and/or suprasegmental), and sometimes also of clause-final or, exceptionally, clause-initial elements, as well as various secondary operators occupying different slots within the clause structure, which need not be fixed. This typical clause structure is schematized in (3). TAMP stands for tense, aspect, modality and polarity and is a cover label for any possible combination of these categories or any subset thereof in a given construction.

(3)  $TAMP_0 S TAMP_1(O) V-TAMP_2 X TAMP_3$

Across Mande,  $TAMP_1$  (aka predicative markers in the Mandeist tradition) is the most common site for marking predicative categories, closely followed by  $TAMP_2$ , while  $TAMP_3$  is relatively uncommon and  $TAMP_0$  is exceptional. These differences are reflected in (3) by the differences in font size and style of the respective TAMP labels.

## 2.2 Transitivity status marking in Mande: The general situation

The transitivity status of a given predication is always obvious in Mande. Thus, not only is constituent order rigidly SOV, but both S and O are also obligatorily present and are typically separated by a  $TAMP_1$  marker. Except for imperatives, null subjects are impossible. Fusion processes affecting person indexes may introduce some minor complications to this neat pattern. Thus, in an important number of languages, especially in the Southwestern group of Western Mande and in Southeastern Mande, subject person indexes have become fused with certain  $TAMP_1$  markers into portmanteau STAMP markers. In a few languages, such as Guro (Kuznetsova & Kuznetsova 2017), we find cases of further fusion of STAMP markers with object person indexes into portmanteau STAMPO markers. Null objects are similarly impossible, except under some very specific conditions in Bobo (Le Bris & Prost 1981:59–64) and the Boko-Busa cluster (Jones 1998:212–213). In all other languages, objects are obligatorily expressed at least as a dummy 3SG pronoun. In a number of mostly Western Mande languages, the

---

5. Rigid constituent order is typical for the languages of Northern Sub-Saharan Africa in general.

transitivity status of a predication can to various extents also be deduced from the presence of detransitivizing and transitivity verbal derivational affixes, such as the detransitivizing suffix *i*, antipassive suffix *ndi* and causative suffix *ndí* in Soninke (cf. Creissels 1991, 2012, forthcoming; Creissels & Diagne 2013).

### 2.3 Typical alignment patterns (with a note on split-ergativity)

The canonical alignment in Mande is a form of neutral alignment (i.e., the core syntactic terms all pattern together), characterized by a lack of marking, be it argument flagging or argument indexing, while most types of obliques are flagged by postpositions. This is the situation in Standard Bamana illustrated in §1. Through the emergence of portmanteau STAMP markers (cf. §2.2), an important number of languages, especially in the Southwestern group of Western Mande and in Southeastern Mande, have developed a kind of nominative-accusative alignment for person indexes and/or subject person indexation. Mostly in the same groups, in a limited number of languages person indexation has evolved with clause-linking markers (cf. Idiatov 2010).

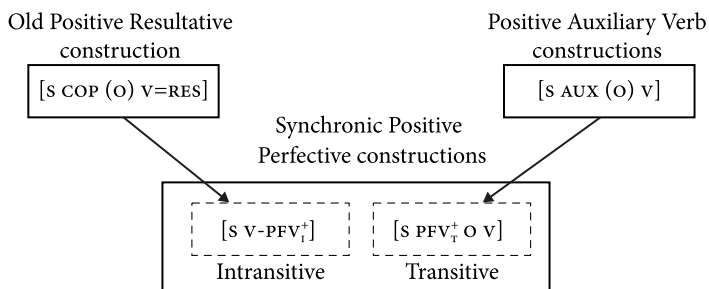
The only unambiguous Mande example with TAMP-based split-ergativity is found in a number of Guinean Looma dialects (Southwestern subgroup of Western Mande; cf. Vydrin 2011), where it is restricted to the Positive Resultative constructions with core arguments that are person indexes or plural nominals. With singular nominals, we find the canonical Mande neutral alignment. The split-ergativity of Guinean Looma is particularly unusual because in Western Mande the transitivity status of a given predication is always obvious due to the rigid word order and the fact that subject and object arguments are obligatorily present. This fact alone strongly precludes any kind of ahistorical explanations often proposed in the literature for such phenomena, such as various functional (DeLancey 1981; Tsunoda 1981), formal (Abraham 1996) and “structural” (Coon 2013a, 2013b) explanations. I do not further discuss the TAMP-based split-ergativity of Guinean Looma, for which a different diachronic construction-based explanation can be offered.

### 3. Positive perfective constructions are multiple source constructions: The scenario

I argue that the difference in perfective marking conditioned by transitivity status in Western Mande languages is the result of a merger of two different source construction types. I illustrate this scenario with the example of Greater Manding languages. The first source construction is the Old Positive Resultative construction

of the structure [s COP (o) v=RES] with the Resultative marker \*=tà. This source construction has evolved into the intransitive variant of the synchronic Positive Perfective constructions  $\text{PFV}_T^+$  with the earlier Resultative marker now occupying the  $\text{TAMP}_2$  slot as the  $\text{PFV}_T^+$  marker, as in Bamana (1a). The transitive variants of the synchronic Positive Perfective constructions  $\text{PFV}_T^+$  inherit from two subtypes of the Positive Auxiliary Verb construction [s AUX (o) v] with the earlier auxiliary verbs now occupying the  $\text{TAMP}_1$  slot as the  $\text{PFV}_T^+$  markers, as in Bamana (1b). The older layer of the Auxiliary Verb constructions in question is formed by Positive Perfective Auxiliary Verb constructions with the Perfective form of a motion verb as auxiliary conveying various flavors of a more general perfective semantics. The newer layer is formed by Positive Resultative Auxiliary Verb constructions with the Resultative form of a “be, happen” verb as auxiliary. The proposed scenario of constructional specialization and merger is schematically represented in (2), reproduced here as (4). This scheme does not differentiate between the two types of the Positive Auxiliary Verb construction because at the moment of their merger with a reflex of the Old Positive Resultative construction they must have had the same structure [s AUX (o) v] and largely similar semantics; broadly perfective with varying proportions of traces of their earlier flavored perfective and resultative uses respectively.

- (4) Synchronic Western Mande Positive Perfective constructions as multiple-source constructions inheriting from the Old Positive Resultative construction and different Positive Auxiliary Verb constructions



The proposed scenario involves a number of semantic and formal changes, most of which are both trivial typologically and natural within Mande morphosyntax, with ample supporting evidence available across Western Mande. For the evolution of the Old Positive Resultative construction into the intransitive variant of the synchronic Positive Perfective constructions  $\text{PFV}_T^+$ , the changes are summarized in (5) and discussed in §4 with the example of Greater Manding. For the evolution of Positive Auxiliary Verb constructions into the transitive variant of the Positive Perfective constructions  $\text{PFV}_T^+$ , the changes are summarized in (6) and discussed



in §5, also with the example of Greater Manding. For reasons of space, the discussion of the changes that bear less immediate relevance for the multiple-source scenario, such as (5a), (5b), (6a) and (6b), or are more trivial, such as (5b), (5f), (6c), (6d) and (6e), will be summary.

- (5) Formal and semantic changes of the Old Positive Resultative construction
  - a. The gradual increase in the degree of bonding of the TAMP<sub>2</sub> marker \*tà: verb > clitic > suffix (§4.2).
  - b. Lenition processes lead to a formal erosion of TAMP<sub>2</sub> marker \*tà: consonant lenition, reduction of vowel quality, loss of the etymological tone (becoming toneless or H) (§4.2).
  - c. Resultative constructions strongly tend to become confined to intransitive uses (§4.3.1).
  - d. [S COP V-RES] > [S V-RES COP]: the verb marked by a Resultative marker is reinterpreted as a modifier of the subject and attracted to the adnominal modifier slot immediately following the subject (§4.3.2).
  - e. Copula loss: [S V-RES COP] > [S V-RES] (§§4.3.3, 4.3.4).
  - f. Resultative > perfect > perfective (§§4.3.4, 4.3.1).
  - g. RES<sup>+</sup> > PFV<sub>1</sub><sup>+</sup>: the Old Positive Resultative construction ends up specialized as the intransitive variant of the Positive Perfective construction and merges with reflexes of the Positive Auxiliary Verb constructions (§§4.3.3, 4.3.4).
- (6) Formal and semantic changes of the Auxiliary Verb constructions
  - a. Positive Perfective constructions [S v<sub>1</sub> (O<sub>2</sub>) v<sub>2</sub>] with a motion verb as [v<sub>1</sub>] > [S AUX (O) v]: the motion verb gradually loses its verbal features and evolves into a TAMP<sub>1</sub> auxiliary expressing various flavors of perfective semantics (§§5.3, 5.6).
  - b. New Positive Resultative constructions [S v<sub>1</sub>-RES COP (O<sub>2</sub>) v<sub>2</sub>(-INF)] with a “be, happen” verb as [v<sub>1</sub>] > [S AUX (O) v]: the Resultative form of the “be, happen” verb gradually loses its verbal features and evolves into a TAMP<sub>1</sub> Resultative auxiliary (§§5.4, 5.6).
  - c. Lenition processes lead to the erosion of the TAMP<sub>1</sub> marker: consonant lenition, reduction of vowel quantity and quality, loss of the etymological tone (becoming toneless or H) (§§5.6).
  - d. Resultative > perfect > perfective (§4.3.4).
  - e. Flavored perfective > perfective (§5.3).
  - f. The range of competing TAMP<sub>1</sub> auxiliaries in the Positive Auxiliary Verb constructions [S AUX (O) v] is reduced: TAMP<sub>1</sub> auxiliaries are lost or become allomorphs within a single paradigm (§§5.2, 5.5).

- g.  $AUX^+ > PFV_T^+$ : Earlier Positive Auxiliary Verb constructions lose the possibility to be used intransitively and specialize as transitive variants of the Positive Perfective constructions through merger with a reflex of the Old Positive Resultative construction (§5.5).

#### 4. The Old $RES^+$ construction as the source of the $PFV_I^+$ construction in Greater Manding: Formal and semantic evolution

##### 4.1 Overview

The Old  $RES^+$  construction that resulted in the  $PFV_I^+$  construction, had the structure [s COP (o) v=RES] with the Resultative marker  $*=t\grave{a}$ . It is comparable to the Positive Resultative construction of Maninka of Niokolo with the Resultative marker  $-^Hri\eta$ , as in (7), intransitive, and (8), transitive.

Maninka of Niokolo

- (7) *kéé lù bè síyì-rìṅ bàntàbáá tò* (Creissels 2013: 70–71)  
 man.ART PL COP sit-RES public.square.ART at  
 “The men are sitting in the public square.”

- (8) *múnj bè ì hàmmée-rìṅ?*  
 what COP 2SG worry-RES  
 “What are you worried about?”

First, in §4.2, I briefly discuss the formal evolution of the Resultative marker  $*=t\grave{a}$  that developed into the  $PFV_I^+$  marker. Second, in §4.3, I discuss new Resultative constructions that have replaced the Old  $RES^+$  construction with  $*=t\grave{a}$  across Greater Manding. In particular, I focus on a number of generalizations emerging across Greater Manding with respect to these new Resultative constructions, that are relevant for the understanding of the formal and semantic evolution of the earlier Resultative construction with  $*=t\grave{a}$  and further confirm that the proposed reconstruction is natural within Mande morphosyntax.

##### 4.2 The $TAMP_2$ marker $*=t\grave{a}$

The Old  $RES^+$  construction with  $*=t\grave{a}$  can be reconstructed at least to Proto Central-Southwestern Mande. Beyond Greater Manding and Central Mande, its reflexes are found in Southwestern Mande languages, such as Looma  $PRF^+ -(d)\acute{a}$ . In Susu and Jalonke, the reflexes are represented by the  $PRF^+$   $TAMP_1$  markers

*bá.rà* and *bán.tà* respectively, where the syllables *rà* and *tà* are reflexes of  $*=t\grave{a}$  and the first syllables *bá* and *bán* are earlier auxiliary verbs (cf. §5.6).

The etymological tone of this TAMP<sub>2</sub> marker is L, as preserved in a few Manding lects, such as Mandinka of Paakawu *tà*, Jula of Bondoukou and Jula of Kong *rà* (Denis Creissels p.c.; Sangaré 1984). As is normal for bound morphemes in Central-Southwestern Mande, the reflexes of  $*=t\grave{a}$  tend to lose their etymological L tone and become either toneless or H.

Typically, the reflexes of the marker  $*=t\grave{a}$  in modern languages are unambiguous suffixes. Yet, in at least a few modern Western Manding languages its reflexes are marginally separable from the verb by a limited number of manner modifiers (see Creissels & Sambou 2013: 320 on Mandinka of Sédhiou and Creissels 2013: 112–113 on Maninka of Niokolo). Thus, compare the use of the manner modifier *báákè* “very much, a lot” in the PFV<sub>1</sub><sup>+</sup> construction in Mandinka of Sédhiou in (9), where it is postposed to the verb as an ordinary adverbial modifier, with its use in (10), where it is inserted between the verb stem and the TAMP<sub>2</sub> marker.

Mandinka of Sédhiou (Creissels & Sambou 2013: 320)

- (9) *tàŋkálòd dáyáá-tà báá-kè díndíŋ-ò-lù yè*  
 candy.ART become.nice-PFV<sub>1</sub><sup>+</sup> big-MAN child-ART-PL for  
 “Children like candy a lot.”

- (10) *í lá jǐŋ dèŋkílòd dáyáá báá-kè=tá lè*  
 2SG GEN DEM song.ART become.nice[NMLZ] big-MAN=PFV<sub>1</sub><sup>+</sup> FOC  
 “This song of yours is really nice.”

For this reason, I represent the reconstructed TAMP<sub>2</sub> marker  $*=t\grave{a}$  as a clitic at least for the Proto Greater Manding stage. This clitic must itself have evolved out of an earlier free form  $*t\grave{a}$ . The gradual increase in the degree of bonding of  $*t\grave{a}$  with the preceding verbal root is likely to have proceeded independently in various Central-Southwestern Mande languages. It is difficult to say at what stage this process was completed in each given language. However, within Manding this TAMP<sub>2</sub> marker must still have been separable from the verbal root at the moment when Proto Western Manding split off the rest of Manding.

From the point of view of Mande morphosyntax, when the TAMP<sub>2</sub> marker in the PFV<sub>1</sub><sup>+</sup> construction is detached from the verb by a manner modifier in languages such as Mandinka of Sédhiou, the verb stem is basically an unmarked action nominalization (nominalization by conversion) [<sub>N<sub>v</sub></sub>]. In this position, the structure [<sub>N<sub>v</sub></sub> TAMP<sub>2</sub>] can instantiate three constructions, viz. the [<sub>N</sub> PP] construction (something like “in (the process of) going”), the [o v] construction (something like “do going”), and the [x v] Oblique before Verb construction (something like “out-go”), where the element preposed to the verb can alternatively be con-

strued as the oblique argument [x] of the regular [v x] Oblique construction (something like “go out”). For reasons that it would take too long to develop here, I believe that the source construction of the Old RES<sup>+</sup> construction was the Oblique before Verb construction involving the intransitive verb \*tǎ: “establish, settle, get (in a place, a position)”, with the oblique having the thematic role of Goal or Endpoint.

The Oblique before Verb construction with \*tǎ: “establish, settle, get (in a place, a position)” that served as a building block for the Old RES<sup>+</sup> construction with \*=tǎ can be reconstructed to at least the Proto Western Mande level. Thus, it is very likely that this construction is the source of the Soninke suffix *-nta* used to derive Quality verbs (“verbes statifs”) from adjectives and verbs, such as *bòndò* “(vt) spoil” > *bòndòntá* “be harmful”, *bòndòntê* / *bòndòntà*- “spoiled; harmful” and *ɲáálí* “(vi) shine” > *ɲáálíntá* “be shiny”, *ɲáálíntê* / *ɲáálíntá*- “shiny” (cf. Creissels 2018). Furthermore, many Southeastern Mande languages have frozen reflexes of this construction for verbs derived from basic color terms, as in “black” > “blacken (become black or make black)”<sup>6</sup>

#### 4.3 New Resultative constructions mirror the evolution of the Resultative construction with \*=tǎ

All Greater Manding languages have new Resultative constructions that are structurally similar to the Old RES<sup>+</sup> construction with \*=tǎ but use different TAMP<sub>2</sub> markers.<sup>7</sup> The generalizations that emerge with respect to these new Resultative constructions across Greater Manding are relevant for the understanding of the evolution of the Old RES<sup>+</sup> construction with \*=tǎ and further confirm that the proposed reconstruction is natural within Mande morphosyntax. These generalizations concern both morphosyntax and semantics and will be discussed in turn in the following subsections. In §4.3.1, I show that the new Resultative constructions tend to become confined to intransitive uses, which parallels the tendency for the reflexes of the Resultative TAMP<sub>2</sub> marker \*=tǎ to become confined to intransitive uses. In §4.3.2, I show that along with the tendency of the Resultative constructions to become confined to intransitive uses, the verb marked by a Resultative marker tends to be reinterpreted as a modifier of the subject and moved to the

6. For example, Tura *tíí* “black” and *tálá* “(vi, vt) blacken”, Mano *tíí* “black” and *tílè* “(vi) blacken”, Wan *tí* “black” and *tílá* “black; (vi, vt) blacken”, Bisa *tíndà* “black”; Tura *téé* “red” and *táá* “(vi) redden; (vi) ripen”, Guro *tété* “red” and *tānā* ~ *trā* “(vi) redden; (vi) ripen”.

7. Typically, the Resultative marker in these new constructions belongs to the same cognate set as the Resultative markers of Maninka of Niokolo, <sup>-H</sup>*Riŋ* illustrated in §4.1, and Bamana, *-lén* illustrated in §4.3.2.

adnominal modifier slot immediately following the subject resulting in the change from [S COP V-RES] to [S V-RES COP]. This change in semantic relations and linear structure creates conditions propitious for the loss of the copula, resulting in an intransitive [S V-RES] construction structurally identical to the PFV<sub>1</sub><sup>+</sup> constructions based on the reflexes of the TAMP<sub>2</sub> marker \*=tà. As I argue in §4.3.3, the copula loss offers a simple explanation for the fact that the TAMP marking in the Negative Perfective construction PFV<sup>-</sup> is not conditioned by transitivity status and has the same structure as the PFV<sub>1</sub><sup>+</sup> construction rather than PFV<sub>1</sub><sup>+</sup>. In §4.3.4, I show that the original resultative meaning with its focus on the current state resulting from an earlier action may give way to perfect, where it is just some current relevance of an earlier action that matters most, or perfective, where the focus is on the action itself and on its temporal boundedness. I do not discuss the degree of morphological bonding of the new Resultative markers, since they are all unambiguous suffixes inseparable from the verb.

#### 4.3.1 *Resultative constructions strongly tend to be intransitive*

The most important generalization is that the new Resultative constructions strongly tend to be intransitive, with only a few languages still allowing for their transitive use, as in (8). Even in these languages, transitive uses are much less common than intransitive ones (see Creissels 2013:71 on Maninka of Niokolo and Vydrina 2017:70–71 on Kakabe).<sup>8</sup> Typologically, this is a very common situation as well (cf. Nedjalkov 1988). It accounts naturally for the specialization of the Old RES<sup>+</sup> construction with \*=tà as the intransitive variant PFV<sub>1</sub><sup>+</sup> of the present-day PFV<sup>+</sup> constructions. Note that outside of Greater Manding, some reflexes of the Old RES<sup>+</sup> construction with \*=tà are still indifferent to transitivity status, such as the Jogo PFV<sup>+</sup> construction using the marker -rɛ (Kastenholz 1997) and the Guinean Looma PRF<sup>+</sup> construction with the marker -(d)á (Mishchenko 2017). Apparently, in these languages the earlier resultative semantics (favoring intransitive uses) gave way to perfect and perfective semantics largely insensitive to transitivity status much faster than in Greater Manding (cf. §4.3.4).

#### 4.3.2 *Resultative constructions tend to change from [S COP V-RES] to [S V-RES COP]*

Related to the tendency of the Resultative constructions to become confined to intransitive uses is the tendency for the verb marked by a Resultative marker to be reinterpreted as a modifier of the subject and to be attracted to the adnominal

---

8. Thus, Vydrina (2017:71) reports that in her Kakabe corpus she found 390 examples of intransitive uses of the Resultative construction as opposed to only 35 transitive examples.

modifier slot immediately following the subject and preceding the copula, viz. [s v-RES COP]. While the change of position of the [v-RES] form with respect to the copula is necessarily categorical, its semantic reinterpretation and morphosyntactic transformation into a regular postnominal modifier are gradual, and different stages tend to co-exist within one language. This can be illustrated with examples from Standard Bamana (cf. Dumestre 1987, 2003: 208–210, 233–240). In Bamana, the regular position of [v-RES] in the Resultative construction is immediately before the copula, as in (11), where postposed adnominal determiners, such as the article or the plural marker, follow the subject. Here, the only indication that [v-RES] is evolving into a kind of modifier is its position.

Bamana

- (11) *dàgà kòrɔ́ †fálén bé bèlèkíséw †lá*  
*dàga kòrɔ-L fá-lén bé bèlèkise-w lá*  
 pot old-ART fill-RES COP stone-PL with  
 “The old pot is filled with stones.”

A further step in the morphosyntactic transformation of [v-RES] into a regular postnominal modifier is illustrated in (12), which is an example of the Secondary Predicate construction. Here, [v-RES] is nominalized, as can be seen by the fact that it is marked by the article. Note that the subject also has its own postposed adnominal determiners and that the nominalized [v-RES] only takes the article but not the plural marker.

Bamana

- (12) *kàńɔ́w jèlén †bé bíí*  
*kòńɔ-w jè-lén-L bé bíí*  
 bird-PL gather-RES-ART COP IDEO  
 “It’s when they are gathered together that the birds make a kind of buzz sound.” [*lit.* “The birds, gathered together, make a kind of buzz sound”]  
 (Dumestre 2003: 209)

The final step in the transformation of [v-RES] into a regular postnominal modifier achieved in Bamana so far is illustrated in (13). Here, all the postposed adnominal determiners follow [v-RES]. The only difference with regular postnominal modifiers that remains is that [v-RES] keeps its tone whereas the lexical tone of regular postnominal modifiers, such as *kòrɔ́* “old” in (11), is deleted and in accordance with the tone rules of the language is realized as H.

Bamana

- (13) *fílén cìlénw †bé yèn*  
*fílén cì-lén-w bé yèn*  
 calabash break-RES-PL COP there  
 “There are broken calabashes.”

Finally, although [V-RES] normally precedes the copula in Bamana, we also find a few relics of the older stage where [V-RES] follows the copula. Thus, [V-RES] follows the copula in the Immediate Intention construction with *nà* “come” and *táá* “go” (cf. Idiatov 2000: 39–40), illustrated in (14) and (15).

Bamana

- (14) *ń b́é táálén d̀ùgú †k̀ónó*  
*ń b́é táá-lén d̀ùgu-L k̀ónó*  
 1SG COP go-RES town-ART in  
 “I am off to town.” [*lit.* “I am gone into town”] (Idiatov 2000: 39)

- (15) *ń b́é ǹàlèn*  
*ń b́é ǹà-lén*  
 1SG COP come-RES  
 “[A: Hey, come here! B:] I’m already on my way.” [*lit.* “I have come”]  
 (Idiatov 2000: 39–40)

#### 4.3.3 Resultative constructions tend to lose the copula

The next relevant tendency in the evolution of the Resultative constructions is the emergence of the possibility of dropping the copula, particularly in intransitive uses. Most Manding lects that have been reported to allow copula omission, such as Maninka of Kita (Creissels 2009: 85–86), Standard Guinean Maninka (Vydrin 2016: 730) and Standard Bamana (Dumestre 2003: 237–238), have retained only intransitive uses of the Resultative constructions. A more interesting example is provided by Kakabe, whose Resultative construction has both intransitive and transitive uses (Vydrina 2017: 70–71). In Kakabe, the copula (*b*)*i* is obligatory in the transitive variant of the Resultative construction in the TAMP<sub>1</sub> slot but it is regularly absent in the intransitive variant of the Resultative construction in natural discourse. Thus, Vydrina (2017) found the copula (*b*)*i* in only 3 out of 390 intransitive examples of the Resultative construction in her corpus. Importantly, the copula is obligatory in all the other constructions based on the copula (*b*)*i* in Kakabe, irrespective of their transitivity status, viz. the Progressive construction and the Locative Predication construction. That is, copula omission is a specific property of the intransitive variant of the Resultative construction in Kakabe. The latter fact suggests that in Kakabe copula loss did not proceed directly from the [S COP V-RES] construction, since in that case we would have expected the other copula-based constructions to behave alike with respect to copula loss, but that first [V-RES] was attracted to the position between the subject and the copula, similar to Bamana (11). That is, first the regular word order in the intransitive variant of the Resultative construction changed from [S COP V-RES] to [S V RES COP] and subsequently the copula was lost resulting in [S V-RES]. The few instances of

[S COP V-RES] in Vydrina's (2017) corpus are just relics of the older [S COP V-RES] stage, whose status is comparable to those of the Bamana Examples (14) and (15). Furthermore, it is likely that the copula loss in the construction [S V-RES COP] started propagating from one more specific environment, viz. [S V-RES COP X] where the copula was not utterance-final but was followed by some other clause-final element [x], such as an oblique flagged with a postposition, an adverbial or an information-structure marker. Such restriction on copula loss in the Resultative construction has been reported for Bamana by Dumestre (2003: 238).

The copula loss offers a simple explanation for the fact that the TAMP marking in the Negative Perfective construction is not conditioned by transitivity status and has the same structure as the  $PFV_T^+$  construction rather than  $PFV_T^+$ . In a copula-based construction, such as [S COP (O) V=RES], negation would normally be expressed in the copula and when the latter is lost, the expression of negation also becomes problematic. Of course, the negative copula may be preserved, while the positive copula is deleted, as in Maninka of Kita (Creissels 2009: 85–86). However, it is also known that cross-linguistically, negation of resultative constructions tends to be avoided for semantic reasons anyway (cf. Nedjalkov 1988: 36–37) and thus negated resultative constructions are expected to have low frequency, which may eventually lead to their obsolescence.

#### 4.3.4 *Resultative semantics tend to evolve into perfect and perfective*

The final observation with respect to the evolution of the Resultative constructions pertains to their semantics. Typologically, it is well-known that constructions with resultative semantics tend to develop into constructions with perfect and perfective semantics so that the focus shifts from the current state resulting from an earlier action to the action itself. The Resultative constructions in Greater Manding are no exception to this tendency. While in some languages, such as Standard Bamana (cf. Idiatov 2000: 38), perfect and perfective uses of the Resultative constructions may still be marginal, in others, such as Guinean Maninka (cf. Vydrin 2016: 730–732) and many Manding lects of Côte d'Ivoire (cf. Derive 1990: 237), they are much more common, where they compete with the regular Perfect and Perfective constructions. Note that across Manding, the semantic evolution of the Resultative constructions to perfect and perfective uses tends to correlate strongly with copula omission. Thus, the more regular the copula omission is in a given lect, the more likely perfect and perfective uses of the originally resultative construction are. Similarly, while the reflexes of the Old RES<sup>+</sup> construction with *\*=tà* typically have straightforward perfective semantics, in most Greater Manding languages they still allow perfect, resultative and stative uses in a number of contexts, as in Mandinka of Sédhiou Examples (9) and (10) (cf. also Idiatov 2000: 28–32 on Bamana).



## 5. Auxiliary verb constructions as source constructions of the $\text{PFV}_T^+$ constructions in Greater Manding: Formal and semantic evolution

### 5.1 Overview

While the  $\text{PFV}_T^+$  markers show impressive uniformity across Greater Manding and allow us to reconstruct one  $\text{TAMP}_2$  marker  $*=\text{t}\grave{\text{a}}$  (§4.2), we find several cognate sets of the  $\text{TAMP}_1$  markers that may function as dedicated  $\text{PFV}_T^+$  markers across Greater Manding (cf. Derive 1990: 232–238; Creissels 1997: 10; Tröbs 2009: 222–223, 229–230). I provide an overview of these cognate sets in §5.2.

Another important difference with the  $\text{PFV}_T^+$  construction is that across Greater Manding we find two different layers of  $\text{PFV}_T^+$  constructions going back to the transitive variants of two types of Auxiliary Verb constructions [S AUX (O) V]. The older layer, discussed in §5.3, is formed by Positive Perfective Auxiliary Verb constructions with the Perfective form of a motion verb as auxiliary. The newer layer, discussed in §5.4, is formed by Positive Resultative Auxiliary Verb constructions with the Resultative form of a “be, happen” verb as auxiliary. The evolution of verbs into auxiliaries and later  $\text{TAMP}_1$  markers is a well-known path of change in Mande (cf. Kastenholz 2003: 49; Tröbs 2009, among others).

Originally, both layers of source constructions were indifferent to transitivity status. Thus, there is no principled reason from the perspective of Mande morphosyntax for the transitivity status of [V<sub>2</sub>] in the original constructions [S V<sub>1</sub> (O<sub>2</sub>) V<sub>2</sub>] and [S V<sub>1</sub>-RES COP (O<sub>2</sub>) V<sub>2</sub>(-INF)] to have been restricted in any way. By way of illustration, in §5.5, I take the two most common specialized  $\text{PFV}_T^+$   $\text{TAMP}_1$  markers and demonstrate that there are abundant traces of their former indifference to transitivity status. Importantly, while we find reflexes of the two types of the Auxiliary Verb constructions that are confined to transitive uses, such as  $\text{PFV}_T^+$  constructions, we never find reflexes that are confined to intransitive uses, with the only exception of the Positive Quality Verb constructions  $\text{QUAL}^+$  which are necessarily intransitive due to the semantics of the verbs involved, such as “be(come) big” or “be(come) nice”. This provides additional support to the idea that it is only due to their later integration with another construction that strongly tended to be used intransitively that both Auxiliary Verb constructions have become confined to transitive uses in some languages.

The  $\text{TAMP}_1$  markers that may function as dedicated  $\text{PFV}_T^+$  markers across Greater Manding go back to motion and “be, happen” verbs. Given that originally none of such  $\text{PFV}_T^+$   $\text{TAMP}_1$  markers was restricted to transitive constructions, the actual generalization is that in Western Mande languages motion verbs and “be, happen” verbs are the typical source of  $\text{TAMP}_1$  markers in constructions with resultative, stative, perfect and perfective semantics in general, as well as in other

related Positive constructions, such as Quality Verb  $QUAL^+$ , Narrative  $NARR^+$ , Conditional  $COND^+$ , Infinitive  $INF$  and Subjunctive  $SBJV^+$ . I identify the source verbs for all the  $TAMP_1$  markers in question and propose their reconstructions in §5.6.

## 5.2 The dedicated $PFV_T^+$ markers across Greater Manding: Cognate sets and reconstructions

The cognate sets of the  $TAMP_1$  markers that may function as dedicated  $PFV_T^+$  markers across Greater Manding, with some examples, are summarized in (16).<sup>9</sup> For ease of further reference, I use capital letters to label them. I also propose a reconstructed form for each set. These reconstructions pertain only to the earliest stage that can be reconstructed within Greater Manding, which corresponds to Proto Greater Manding for the cognate sets KA, YA, TA,  $NA_1$  and BA, and probably to some more recent level for the cognate sets  $NA_2$ , NO and BATA.

### (16) Cognate sets of $TAMP_1$ markers that may function as dedicated $PFV_T^+$ markers across Greater Manding

Cognate set	Reconstruction	Examples
KA	*kà	Kakabe <i>ka</i> (lexically toneless), Vehicular Jula of Côte d'Ivoire <i>kà</i> , Jula of Kong <i>kà</i> , Xasonka <i>xà</i> , Mandinka of Sédhiou <i>ɲá</i> (the allomorph of $PFV_T^+$ $TAMP_1$ marker <i>yé</i> after a nasal) (Sangaré 1984; Derive 1990; Tveit 1997; Creissels & Sambou 2013; Vydrina 2017)
YA	*yá	Standard Bamana <i>yé</i> , Mandinka of Sédhiou <i>yé</i> (in all contexts except after a nasal where the marker is <i>ɲá</i> ), Koranko <i>yá</i> (Dumestre 2003; Creissels & Sambou 2013)
TA	*tà	Kagoro <i>ta<sup>L</sup> ~ da<sup>L</sup></i> , Maninka of Kita <i>ti ~ di</i> (lexically toneless), Northern Lele <i>ré ~ ré</i> ( <i>dé ~ dé</i> after a nasal) (Creissels 1986, 2009; Vydrine 2001, 2009)
$NA_1$	*nà	Marka <i>ní</i> (Diallo 1988)
$NA_2$	*nà-RES COP	Ivorian Manding lects of Folo, Sienko and Gbeleban <i>na</i> (Derive 1990)
NO	*nòŋ-RES COP	Ivorian Manding of Vandugu <i>nɔ</i> (Derive 1990)
BA(TA)	*bá(-RES COP)	Bolon <i>wé</i> (Zougrana 1987)

The first four cognate sets, KA, YA, TA and  $NA_1$  belong to the older layer of  $PFV_T^+$  constructions that evolved from Positive Perfective Auxiliary Verb constructions discussed in §5.3. The  $TAMP_1$  markers of the cognate sets,  $NA_2$  and NO, belong to the newer layer of  $PFV_T^+$  constructions that evolved from Positive Resultative Auxiliary Verb constructions, discussed in §5.4. The last label BA(TA) covers two dif-

9. The cognate sets here are not exactly identical to the ones proposed by Creissels (1997:10), Derive (1990:232–238) and Tröbs (2009:222–223, 229–230).

ferent cognate sets based on the same verb, viz. BA, which is a reflex of a Positive Perfective Auxiliary Verb construction, and BATA, which is a reflex of a Positive Resultative Auxiliary Verb constructions with the Old Resultative marker \*=tà. I prefer to use the combined label BA(TA) in (16) because in a number of cases (such as the case of the Bolon marker *wé*), the reflexes of BATA are difficult to distinguish from those of BA. The reason is that the intervocalic consonant of BATA forms tends to undergo lenition, which may sometimes end in its deletion resulting in a long vowel, which in turn tends to be shortened, thus making a reflex of BATA undistinguishable from a reflex of BA. That the two sets are indeed different is made particularly clear by languages such as Koranko. Koranko distinguishes between the COND<sup>+</sup> TAMP<sub>1</sub> marker *wá* (*bá* after a nasal), which belongs to the set BA and reflects the older PRF<sup>+</sup> construction, and the PRF<sup>+</sup> TAMP<sub>1</sub> marker *árá* (*wárá* after *í* 2SG, *bárá* after a nasal), which belongs to the set BATA and reflects an innovative PRF<sup>+</sup> construction.<sup>10</sup>

### 5.3 The older layer of PFV<sub>1</sub><sup>+</sup> constructions in Greater Manding: Positive Perfective Auxiliary Verb constructions

The older layer of PFV<sub>1</sub><sup>+</sup> constructions, involving TAMP<sub>1</sub> markers of the cognate sets KA, YA, TA, NA<sub>1</sub> and BA, evolved from Positive Perfective Auxiliary Verb constructions of the structure [s v<sub>1</sub> (o<sub>2</sub>) v<sub>2</sub>], where the Perfective form of an intransitive motion verb [v<sub>1</sub>] came to function as an auxiliary. These constructions were sub-constructions of the general Positive Perfective construction [s (o) v], which itself was indifferent to transitivity status. At least for the earliest stage that can be reconstructed for Greater Manding, neither [v<sub>1</sub>] nor [v<sub>2</sub>] in [s v<sub>1</sub> (o<sub>2</sub>) v<sub>2</sub>] had any further morphological marking, neither for the Positive Perfective TAMP value nor for the dependent status in the case of [v<sub>2</sub>]. Compare Tröbs (2009: 226) who suggests that at some point, the Perfective form was formally unmarked by adducing Positive Perfective constructions of modern Bozo languages as an example.

Across Mande, the dependent status of [v<sub>2</sub>] in [(o<sub>1</sub>) v<sub>1</sub> (o<sub>2</sub>) v<sub>2</sub>] sequences is usually marked by an infinitive marker, either postposed to [v<sub>2</sub>] (which is sometimes also overtly nominalized), viz. [(o<sub>1</sub>) v<sub>1</sub> (o<sub>2</sub>) v<sub>2</sub> INF], or in some Greater Manding languages and Soninke, postposed to [v<sub>1</sub>], viz. [(o<sub>1</sub>) v<sub>1</sub> INF (o<sub>2</sub>) v<sub>2</sub>].<sup>11</sup>

10. In this respect, compare a similar situation in most Ivorian Manding lects which use a reflex of KA in the protasis of conditional sentences as the COND<sup>+</sup> marker but not as the PFV<sup>+</sup> marker in main clauses (§5.5).

11. The infinitive markers postposed to [v<sub>2</sub>] are sourced from postpositions, such as the Maninka of Kita postposition and Infinitive marker *la*, nouns with locative semantics or a com-

With a very limited number of  $[v_1]$  verbs, many Western Mande languages also allow for the unmarked Infinitive construction  $[(o_1) v_1 (o_2) v_2]$ . Importantly, this set minimally includes two intransitive generic motion verbs, “come” and “go”. Thus, in Dzuun, the unmarked Infinitive construction is used when  $[v_1]$  is  $nà^H$  “come” or  $bè^H$  “go” (cf. Solomiac 2007: 472–475, 478–480). Besides their literal motion uses, the two verbs can also be used in other functions. Thus,  $nà^H$  “come” can indicate that the action expressed by  $[v_2]$  somehow affects the speaker or the narrator, while  $bè^H$  “go” would rather suggest that the action expressed by  $[v_2]$  somehow affects a third person participant. The verb  $nà^H$  “come” can also be used as  $[v_1]$  with the unmarked Infinitive with meanings “end up (by doing something), finally (do something)” or “happen (to do something), it so happened that ( $[v_2]$ )”. Very similar uses are also found with  $nà$  “come” and  $táá$  “go” in Bamana (cf. Idiatov 2000: 43–45), the two Bamana verbs that, when used as  $[v_1]$ , require the unmarked Infinitive construction (Dumestre 2003: 402).

#### 5.4 The newer layer of $PFV_T^+$ constructions in Greater Manding: Positive Resultative Auxiliary Verb constructions

The newer layer of  $PFV_T^+$  constructions, involving  $TAMP_1$  markers of the cognate sets  $NA_2$ ,  $NO$ , and  $BATA$ , evolved from Positive Resultative Auxiliary Verb constructions of the structure  $[s v_1\text{-RES COP } (o_2) v_2\text{-INF}]$ , where the Resultative form  $[v_1\text{-RES}]$  of a “be, happen” verb came to function as an auxiliary. The Resultative Auxiliary Verb constructions are a subtype of the standard Resultative constructions (cf. 4). Importantly, although  $[v_1]$  in Resultative constructions strongly tends to be intransitive (cf. §4.3.1), the transitivity status of the dependent verb  $[v_2]$  within a Positive Resultative Auxiliary Verb construction must have been irrelevant. The dependent status of the lexical verb  $[v_2]$  was optionally or obligatorily (depending on the language) marked by an Infinitive marker (cf. §5.3).  $[v_1]$  is an intransitive verb, such as  $*nà$  “come; end up (by doing something), finally (do something); happen (to do something), it so happened that ( $[v_2]$ )” and  $*nòŋ$  “manage, succeed (to do something); finally (do something)”.

In mostly Ivorian Manding lects, transitive variants of Positive Resultative Auxiliary Verb constructions outcompeted transitive variants of Positive Perfec-

---

bination of the two and tend to evolve into bound infinitive markers. The infinitive markers postposed to  $[v_1]$  have the same source as the  $TAMP_1$  markers of the cognate sets  $KA$  (in Greater Manding) or  $NA_1$  (in Soninke and Greater Manding) and typically maintain their free morphological status.

tive Auxiliary Verb constructions as  $\text{PFV}_T^+$  in what can be conceived as a new cycle in the evolution of the  $\text{PFV}_T^+$  constructions. The fact that the Positive Resultative Auxiliary Verb constructions again provided the transitive variant of the Positive Perfective construction, just as the Positive Perfective Auxiliary Verb constructions did before, suggests that at the stage when the transitive variants of Positive Resultative Auxiliary Verb constructions started their merger with the intransitive Positive Perfective construction, the merger of the latter construction with transitive variants of Positive Perfective Auxiliary Verb constructions into one new Positive Perfective was not yet complete in the Manding lects in question.

### 5.5 Source constructions of $\text{PFV}_T^+$ constructions were indifferent to transitivity status: Cognate sets KA and YA

From the perspective of Mande morphosyntax, there is no principled reason for the transitivity status of  $[v_2]$  in the original constructions  $[s\ v_1\ (o_2)\ v_2]$  and  $[s\ v_1\text{-RES}\ \text{COP}\ (o_2)\ v_2\text{-INF}]$  to have been restricted in any way. By way of illustration, I take here the two most common specialized  $\text{PFV}_T^+$   $\text{TAMP}_1$  markers, KA and YA, and demonstrate that there are abundant traces of their former indifference to transitivity status. Next to their transitive uses, we find numerous cases of intransitive use of these markers, sometimes even within one and the same language. There are six types of these traces summarized in (17) and illustrated in Appendix 2, where I make a distinction between  $\text{TAMP}_1$  markers that are reflexes of either KA or YA and  $\text{TAMP}_1$  markers that combine reflexes of both KA and YA as allomorphs.

- (17) Six types of traces of the original insensitivity of KA and YA to transitivity
- a. Positive Perfective or Perfect constructions indifferent to transitivity status
  - b. In the protasis of conditional sentences, Positive Conditional Perfective constructions indifferent to transitivity status
  - c. In narrative contexts, Positive Narrative Perfective constructions indifferent to transitivity status
  - d. In Positive Perfective constructions sensitive to transitivity status, only with particular verbs, as fossilized, lexically conditioned intransitive  $\text{TAMP}_1$  markers
  - e. With  $\text{TAMP}$  values other than Positive Perfective, in constructions that are insensitive to transitivity status, such as Positive Subjunctive or Optative  $\text{SBJV}^+$  and Infinitive  $\text{INF}$
  - f. Positive Quality Verb  $\text{QUAL}^+$  constructions that are strictly intransitive due to the semantics of the verbs involved

Remarkably, we never find reflexes that are confined to intransitive uses, with the only exception of the Positive Quality Verb constructions  $QUAL^+$  which are necessarily intransitive due to the semantics of the verbs involved, such as “be(come) big” or “be(come) nice”. This provides additional support for the idea that it is only due to their later integration with another construction that strongly tended to be used intransitively that both Auxiliary Verb constructions have become confined to transitive uses in some languages.

### 5.6 Motion and “be, happen” verbs as sources of $TAMP_1$ markers in $PFV_T^+$ constructions

The  $TAMP_1$  markers that may function as dedicated  $PFV_T^+$  markers across Greater Manding go back to motion and “be, happen” verbs. Given that originally none of such  $PFV_T^+$   $TAMP_1$  markers was restricted to transitive constructions (cf. §5.5), the actual generalization is that in Western Mande languages motion verbs and “be, happen” verbs are the typical source of  $TAMP_1$  markers in constructions with resultative, stative, perfect and perfective semantics in general, as well as in other related constructions, such as  $QUAL^+$ ,  $NARR^+$ ,  $COND^+$ ,  $INF$  and  $SBJV^+$ . I identify the source verbs for all the  $TAMP_1$  markers in question and propose a Proto Mande reconstruction for them in (18). I provide the cognates for each verb in Appendix 3.

#### (18) Cognate sets of $PFV_T^+$ $TAMP_1$ markers in Greater Manding and their Proto Mande source verbs

$TAMP_1$ markers (Greater Manding)		Source verbs (Proto Mande)
Cognate set	Reconstruction	
KA	*kà	*gà: “go, leave”
YA	*yá	*yà “go”
TA	*tà	*tá: “establish, settle, get and stay (in a place, a position)”
NA <sub>1</sub>	*nà	*ná:ŋ “stick to, stay or get close to”
NA <sub>2</sub>	*nà-RES COP	
NO	*nòŋ-RES COP	*nòŋ “transfer, move (to somewhere)”
BA(TA)	*bá(-RES COP)	*bà “fructify, produce in abundance” <sup>12</sup>

12. Creissels (1997: 11) argues that  $TAMP_1$  markers of the type BATA all go back to a form of the verb \*báj “finish”. He cites the Jalonke  $PRF^+$  marker *bántà* (insensitive to transitivity) as evidence for his hypothesis. However, to the best of my knowledge, the Jalonke form is the only Central Mande form with any traces of the final nasal of the verb “finish” in the relevant  $TAMP_1$

The scenario argued for here is semantically trivial, as is also confirmed by numerous similar evolutions of motion and “be, happen” verbs in the languages of the world (cf. Maisak 2005). The formal similarity between the TAMP<sub>1</sub> markers in question and their proposed source verbs is also striking and systematic enough not to require a lengthy discussion. Thus, the formal changes in the history of the TAMP<sub>1</sub> markers can all be described as instances of lenition and formal erosion.<sup>13</sup> The proposed evolution is also absolutely natural within Mande morphosyntax, as discussed in §§5.3 and 5.4.

## 6. Alternative accounts in terms of case alignment: Synchronic bidirectional case markers and a historical split-ergativity stage

The two accounts that have been proposed in the literature for the differential perfective marking conditioned by transitivity status in Western Mande languages have in common that they cast this phenomenon in terms of case alignment, either synchronically, invoking the notion of functionally motivated bidirectional case markers (Heath 2007), or diachronically, presuming the emergence of a split-ergative alignment in an earlier stage (Creissels 1997). I will discuss them in turn in §§6.1 and 6.2.

### 6.1 Bidirectional case markers: Heath (2007)

For a number of Mande and Songhay languages, TAMP<sub>1</sub> markers in the transitive variant of the Positive Perfective construction, such as the Standard Bamana  $\text{PFV}_T^+$  TAMP<sub>1</sub> marker *yé* in (1b), have sometimes been analyzed as “bidirectional” case markers rather than transitivity status markers or auxiliaries with a restricted distribution (cf. Heath 2007, 2019 for Songhay, Bamana and Soninke, and Nikitina

---

markers. Therefore, I believe that Creissels’ reconstruction with the verb “finish” should be confined to Jalonke alone.

13. The initial consonants of the TAMP<sub>1</sub> markers tend to undergo lenition, such as  $t > d > r > \emptyset$ ,  $k > g$ ,  $x, \gamma > \emptyset$ ,  $b > w > \emptyset$  and  $\gamma > \emptyset$ . The tonal distinctions tend to become neutralized with the TAMP<sub>1</sub> markers, becoming toneless or H (compare similar tonal changes with affixes mentioned in §4.2). The reason is that in many Western Mande languages that have two surface tone levels, L and H, only the L tone tends to be phonologically active, while H can often be construed as the default tone, being the typical tone of functional morphemes, such as TAMP markers and various clitics and suffixes. A somewhat more specific reduction process affects the final vowels of the TAMP<sub>1</sub> markers. This reduction is realized through the fronting and raising of the final vowel towards the high front vowel *i*.

2018 for Wan). Such an analysis in terms of differential argument marking may be acceptable within a synchronic description insofar as it allows for a more parsimonious description. However, it also inevitably entails certain unfounded hypotheses about the synchronic function of such markers and most importantly precludes any natural pathway of their emergence within the rigid framework of Mande morphosyntax.

Heath (2007) suggests that the primary function of a bidirectional case marker is to facilitate syntactic parsing of a transitive clause by marking the syntactic boundary between the subject and the object, which according to Nikitina (2018) should be “particularly useful in languages that lack nominal dependent marking and do not use intonation to mark constituent boundaries.” Such functional explanations strongly imply that language change is teleological. Beyond this fundamental issue, they make wrong predictions for both other constructions in the same SOV languages and other similar SOV languages where no such bidirectional case markers have emerged or where a less parsimonious “solution” with flagging both the subject and the object has been applied.

Heath (2007:100) further specifies that such a bidirectional case marker serves to “prevent an initial mis-parsing of  $[NP_1 NP_2 \dots]$  sequences as beginning in a loose compound [...] in subject function, and prevent a mis-parsing of [pronoun NP...] as a possessed NP (‘my dog’).” Although this reasoning may have a certain appeal for Songhay, the danger of such “mis-parsing” is virtually non-existent in the relevant Mande languages, such as Greater Manding and Soninke. First, Greater Manding languages distinguish between inalienably and alienably possessed nouns, where the latter are obligatorily separated from the possessor that precedes them by a possessive relator and the former are always immediately preceded by a possessor with no such possessive relator. Second, in both Greater Manding and Soninke, nouns are by default marked by a postposed determiner except when they are used as the first element in a nominal compound. In Soninke, most nouns further distinguish free and bound forms by means of final vowel alternations. The bound form is used as the first element in nominal compounds. Third, in both Greater Manding and Soninke, possessive phrases and nominal compounds differ in the specific tonal patterns that either or both constructions impose on the nouns involved. Summing up, the functional account in terms of ease of syntactic parsing proposed by Heath (2007) is not convincing for Mande. The so-called bidirectional case markers in Mande simply correlate with the transitivity status of the construction without having any function of differential argument marking facilitating syntactic parsing.

Furthermore, at least prosodically,  $TAMP_1$  markers in transitive constructions are not really “bidirectional” in that across Mande they regularly show a closer prosodic relation with the subject that precedes them than with the object that



follows them. Thus, a secondary pause may follow a TAMP<sub>1</sub> marker in a transitive construction (cf. Bailleul 2005: 2, 53 on Bamana).<sup>14</sup> Across Mande, TAMP<sub>1</sub> markers often become subject enclitics by partly or completely losing their segmental and/or tonal specification so that their form is determined by the form of the right edge of the subject. As already mentioned in §2.2, in an important number of languages this has resulted in the emergence of portmanteau STAMP markers. Of course, prosodic bracketing need not coincide with morphosyntactic bracketing, but it is clearly relevant for both the synchronic description and diachronic reconstruction.

Finally, if we posit such bidirectional case markers and assume that their function is to facilitate syntactic parsing of a transitive clause by marking the syntactic boundary between the subject and the object, we should also ask ourselves what possible sources such markers could have had. Such markers are not only typologically exceptional, but they are also absent from most other Mande languages. Moreover, within Greater Manding, which is a very shallow genetic grouping, we find several cognate sets of such markers (see §5.1). All this implies that these markers must be recent innovations in the Mande languages that have them and that their sources should be relatively easily traceable, if not in terms of specific source roots then at least in terms of general morphosyntactic categories to which their source roots could have belonged. It is in this respect that the rigid framework of Mande morphosyntax poses a fundamental objection to the analysis of the TAMP<sub>1</sub> markers in question as bidirectional case markers, since Mande morphosyntax simply offers no natural pathway for the emergence of such bidirectional case markers.

## 6.2 Postpositions as the source of TAMP<sub>1</sub> PFV<sub>T</sub><sup>+</sup> markers: Creissels (1997)

Bird & Kendall (1986) and later Creissels (1997) hypothesize that TAMP<sub>1</sub> markers in PFV<sub>T</sub><sup>+</sup> constructions are related to postpositions. Although the two accounts offer the same insights, Creissels (1997) was the first to flesh out a detailed historical scenario. The core idea of Creissels (1997) is that TAMP<sub>1</sub> markers in PFV<sub>T</sub><sup>+</sup> constructions in Manding languages go back to postpositions which originally marked the “topicalized NP (representing a person concerned by the state of affairs in question).” His hypothesis is based on two observations. The first observation is that if we look across Manding languages, we find several cases of formal similarity between postpositions and TAMP<sub>1</sub> markers in PFV<sub>T</sub><sup>+</sup> (and SBJV<sup>+</sup>) con-

---

14. Clearly related to this is the tendency of newly literate Bamana speakers to write TAMP<sub>1</sub> markers together with the preceding subjects (cf. Bird & Kendall 1986: 396).

structions. The second observation is that passive and causative/anticausative P-ability is typical for Manding. As I show here, although typologically plausible, Creissels' (1997) account is not natural within Mande morphosyntax either and implies a number of unlikely formal evolutions.

Creissels' (1997) scenario has two main ingredients. First, he presumes that the  $\text{PFV}_1^+$  marker is the older one and the  $\text{PFV}_T^+$  marker is relatively recent and that the  $\text{PFV}_T^+$  construction has evolved out of the  $\text{PFV}_1^+$  construction that had a resultative ("stative" in his terminology) meaning. Second, he argues that the  $\text{TAMP}_1$  marker of the  $\text{PFV}_T^+$  construction is originally a postposition that marked a "topicalized NP (representing a person concerned by the state of affairs in question)". The topicalized NP preceded the subject of the  $\text{PFV}_1^+$  construction. Creissels presumes that Manding "was engaged, at a certain stage of its history, in the kind of evolution whose result is usually the phenomenon known as split-ergativity", but instead of becoming an ergative flag the postposition came to function as a  $\text{TAMP}_1$  marker (1997: 14). The topicalized NP itself was reanalyzed as the subject and the earlier subject as the object of the new  $\text{PFV}_T^+$  construction, as schematized in (19). Transposed to English (Creissels 1997: 13), this evolution would have corresponded to the change from something like *As for me, the letter is written* to *I have written the letter* with *me* becoming the subject, *as for* becoming the  $\text{TAMP}_1$  marker, and *the letter* changing its status from subject to object.

(19) The evolution of the  $\text{PFV}_T^+$  construction in Manding following Creissels (1997)

$*\text{PFV}_1^+$ with a topicalized oblique:	[NP	PostP] <sub>OBL</sub>	[NP] <sub>S</sub>	V-TAMP <sub>2</sub>
	↓	↓	↓	↓
$\text{PFV}_T^+$ :	[NP] <sub>S</sub>	TAMP <sub>1</sub>	[NP] <sub>O</sub>	V

Typologically, the account proposed by Creissels (1997) is surely plausible (cf. McGregor 2017 for an overview of various sources of ergative markers). However, it is not natural from the point of view of Mande morphosyntax. First, as already acknowledged by Creissels (1997: 16–17) himself, the presumed source construction, viz.  $*\text{PFV}_1^+$  with a fronted (topicalized) agentive oblique is extremely rare in West Africa, and more importantly, absent in Mande. Second, in intransitive constructions with passive or anticausative interpretation most Mande languages equally forbid or at least strongly avoid an agentive oblique even in the regular (non-fronted) post-verbal position. In other words, both the presumed source construction with a fronted agentive oblique and the construction from which it is supposed to have been derived by fronting the agentive oblique are extremely unusual for Mande.

Finally, Creissels' (1997) account implies a number of unlikely formal evolutions. To begin with, it is not clear how or why the  $\text{TAMP}_2$  suffix of the original

$\text{PFV}_1^+$  construction could have disappeared without trace in the process of reanalysis of the  $\text{PFV}_1^+$  construction as a  $\text{PFV}_T^+$  construction. Furthermore, under Creissels' (1997) account, the formal reduction of the  $\text{TAMP}_2$  suffix of the original  $\text{PFV}_1^+$  construction must have occurred in exactly the same way across Manding languages. However, this is rather unlikely given that  $\text{PFV}_T^+$  constructions must have developed independently on several occasions within Manding. Thus, we find several cognate sets of  $\text{TAMP}_1$   $\text{PFV}_T^+$  markers across Manding (cf. §5.2), which is also a very shallow genetic grouping.

## 7. Conclusion

In this paper, I have provided a diachronic construction-based explanation of the differential perfective marking conditioned by transitivity status in Western Mande languages, using Greater Manding languages as an illustration. The central insight of my explanation is that the synchronic Positive Perfective  $\text{PFV}^+$  constructions of the Western Mande languages are multiple-source constructions. The different constructions that contributed to the synchronic  $\text{PFV}^+$  constructions could originally be used with transitive and intransitive predications. However, the source construction [s COP (o) v=RES] used to function primarily as intransitive due to its resultative semantics and later evolved into a dedicated intransitive construction, the intransitive variant  $\text{PFV}_1^+$  of the new  $\text{PFV}^+$  construction, with the resultative marker \*=tà evolving into the  $\text{TAMP}_2$  marker of the new  $\text{PFV}_1^+$  construction (§4). This Old Resultative construction with the marker \*=tà can be reconstructed to at least Proto Central-Southwestern Mande. The Old Resultative construction itself inherits from the Oblique before Verb construction based on the intransitive verb \*tã: “establish, settle, get (in a place, a position)”, with the oblique having the thematic role of Goal or Endpoint. The latter construction can be reconstructed to at least Proto Western Mande.

I also showed that across Greater Manding, the transitive variant  $\text{PFV}_T^+$  of the new  $\text{PFV}^+$  construction was sourced from two different types of construction. One with the structure [s v<sub>1</sub> (o<sub>2</sub>) v<sub>2</sub>], having various flavors of a more general perfective semantics (§5.3), and the other with the structure [s v<sub>1</sub>-RES COP (o<sub>2</sub>) v<sub>2</sub>(-INF)], a type of resultative construction (§5.4). In both construction types, [v<sub>2</sub>] is the lexical verb and [v<sub>1</sub>] is an intransitive verb that came to function as a kind of auxiliary and later evolved into a  $\text{TAMP}_1$  marker. The [v<sub>1</sub>] auxiliary verbs were sourced from a limited pool of motion verbs in the case of [s v<sub>1</sub> (o<sub>2</sub>) v<sub>2</sub>] and “be, happen” verbs in the case of [s v<sub>1</sub>-RES COP (o<sub>2</sub>) v<sub>2</sub>(-INF)]. I equally provided reconstruc-

tions of these auxiliary verbs both for the stage when they came to function as auxiliaries or TAMP<sub>1</sub> markers within Greater Manding (§5.2) and for their lexical source verbs that can all be reconstructed to Proto Mande (§5.6).

As briefly mentioned in §1, Positive Perfective PFV<sup>+</sup> constructions are the most common yet not the only case of predicative constructions whose TAMP marking is conditioned by transitivity status in Western Mande. An interesting question in this respect is why in Western Mande the differential TAMP marking conditioned by transitivity status has evolved primarily in PFV<sup>+</sup> constructions. In my opinion, probably the most important factor favoring this direction of changes is that the positive perfective domain tends to be rather crowded in Western Mande languages with additional distinctions made by using various verbs as auxiliaries or by recruiting constructions with originally resultative semantics. The situation is radically different in the negative perfective domain where many fewer distinctions tend to be made, with the plain Negative Perfective PFV<sup>-</sup> construction being normally the preferred choice.<sup>15</sup> In this respect, it is clearly not accidental that the differential TAMP marking conditioned by transitivity status is always confined to positive constructions in Western Mande. In the particular case of Perfective constructions, what is also relevant is that one of the source constructions was a copula-based Resultative construction where polarity was expressed by the copula and where the copula was later lost (cf. §4.3.3).

Over time, the various constructions that populate the positive perfective domain and the semantically adjacent resultative domain tend to lose the more specific components of their semantics and evolve into general Positive Perfective constructions, which brings them into direct competition with each other. The specialization of the Old Positive Resultative construction to intransitive uses has an independent motivation in its resultative semantics. The subsequent semantic evolution of this exclusively intransitive Resultative construction to perfective semantics is relatively natural in itself, although it may have been particularly enhanced by the loss of the copula (cf. §4.3.3) and by the emergence of new resultative constructions (cf. §4.3). At the same time, the specialization of some of the Positive Perfective Auxiliary Verb constructions as the transitive variants PFV<sub>T</sub><sup>+</sup> of the new PFV<sup>+</sup> construction and the loss of the intransitive variants of those Positive Perfective Auxiliary Verb constructions can only be motivated by the competition with an already present exclusively intransitive PFV<sub>I</sub><sup>+</sup> construction. In this respect, note that the only cases where the reflexes of the Positive Perfective Aux-

---

15. In fact, this may be a more general property of constructions with auxiliaries in Western Mande not specific to perfective constructions. Thus, Dumestre (2003:221) notes that in Bamana the use of negation with auxiliaries is generally limited, and in some cases, impossible.

iliary Verb constructions may be confined to intransitive uses are the Positive Quality Verb constructions  $QUAL^+$  which are necessarily intransitive due to the semantics of the verbs involved, such as “be(come) big” or “be(come) nice” (cf. §5.5). That is, when the emerging construction is itself exclusively intransitive, like the  $QUAL^+$  construction and unlike the new  $PFV^+$  construction, the  $PFV_1^+$  construction originating in the Old Positive Resultative construction had no clear competitive advantage over the intransitive variants  $PFV_1^+$  of the Positive Perfective Auxiliary Verb constructions.

On top of explaining the differential perfective marking conditioned by transitivity status in Western Mande, I have argued against its analysis in terms of case alignment, either synchronically (in terms of bidirectional case markers, cf. §6.1) or historically (in terms of an earlier split-ergative stage, cf. §6.2). On a broader level, this paper contributes to a growing body of evidence on the nature of explanation of morphosyntactic patterns in linguistics, which is above all historical, construction-based and grounded in language use and frequency patterns and by consequence largely language-specific.

## Funding

This work is part of the projects LC2 “Areal phenomena in Northern Sub-Saharan Africa” and GL7 “Reconstruction, genealogy, typology and grammatical description in the world’s two biggest phyla: Niger-Congo and Austronesian” of the Labex EFL (program “Investissements d’Avenir” overseen by the French National Research Agency, reference: ANR-10-LABX-0083).

## Acknowledgements

I would like to thank Denis Creissels and Valentin Vydrin for their comments on an earlier version of this paper. Special thanks with respect to the present paper are due to Mark Van de Velde. Last but not least, I am grateful to the referees and the editors for their comments.

## Abbreviations

... <sup>-</sup>	negative construction	COND	conditional
... <sup>+</sup>	positive construction	COP	copula
... <sub>I</sub>	intransitive construction	DEM	demonstrative
... <sub>T</sub>	transitive construction	FOC	focus
ART	article	GEN	genitive
AUX	auxiliary	H	high tone

IDEO	ideophone	QUAL	quality verb
INF	infinitive	RES	resultative
L	low tone	S	subject
MAN	manner	SBJV	subjunctive
NARR	narrative perfective	SG	singular
NMLZ	nominalization	STAMP	subject-tense-aspect-modality-
O	object		polarity
OBL	oblique	STAMPO	subject-tense-aspect-modality-
PFV	perfective		polarity-object
PL	plural	TAMP	tense-aspect-modality-polarity
POSTP	postposition	vi	intransitive verb
PRF	perfect	vt	transitive verb
PST	past		

## References

- Abraham, Werner. 1996. The aspect-case typology correlation: Perfectivity triggering split ergativity. *Folia Linguistica* 30(1–2). 5–34.
- Bailleul, Charles. 1996. *Dictionnaire bambara-français*. Bamako: Donniya.
- Bailleul, Charles. 2005. *Cours pratique de bambara*. Bamako: Donniya.
- Bird, Charles S. & Martha B. Kendall. 1986. Postpositions and auxiliaries in Northern Mande: Syntactic indeterminacy and linguistic analysis. *Anthropological Linguistics* 28(4). 389–403.
- Coon, Jessica. 2013a. TAM split ergativity, Part I. *Language and Linguistics Compass* 7(3). 171–190. <https://doi.org/10.1111/lnc3.12011>
- Coon, Jessica. 2013b. TAM split ergativity, Part II. *Language and Linguistics Compass* 7(3). 191–200. <https://doi.org/10.1111/lnc3.12025>
- Creissels, Denis. Forthcoming. Antipassive derivation in Soninke (West Mande). In Katarzyna Janic & Alena Witzlack-Makarevich (eds.), *The multifaceted nature of antipassive*. Amsterdam & Philadelphia: John Benjamins. <http://www.deniscreissels.fr/public/Creissels-antip.deriv.Soninke.pdf>
- Creissels, Denis. 1986. Le système prédicatif du kagoro. *Mandenkan* 11. 1–16.
- Creissels, Denis. 1991. La voix en soninké. *Mandenkan* 23. 1–24.
- Creissels, Denis. 1997. Postpositions as a possible origin of certain predicative markers in Mande. *Afrikanistische Arbeitspapiere* 50. 5–17.
- Creissels, Denis. 2009. *Le malinké de Kita: Un parler mandingue de l'ouest du Mali*. Cologne: Rüdiger Köppe.
- Creissels, Denis. 2010. Liste lexicale du dialonké de Faléya. *Mandenkan* 46. 49–71.
- Creissels, Denis. 2011. Lexique mandinka-français (revised March 2011). Unpublished ms [http://www.deniscreissels.fr/public/Creissels-lexique\\_mandinka\\_2011.pdf](http://www.deniscreissels.fr/public/Creissels-lexique_mandinka_2011.pdf)
- Creissels, Denis. 2012. *The origin of antipassive markers in West Mande languages*. Stockholm. [http://www.deniscreissels.fr/public/Creissels-West\\_Mande\\_antipassives.pdf](http://www.deniscreissels.fr/public/Creissels-West_Mande_antipassives.pdf)
- Creissels, Denis. 2013. Le maninka du Niokolo (Sénégal oriental): Esquisse phonologique et morphosyntaxique, liste lexicale, textes glosés. *Mandenkan* 49. 1–218.

- Creissels, Denis. 2018. La catégorie des verbes statifs dans le système morphosyntaxique du soninké. *Mandenkan* 59. 3–30.
- Creissels, Denis & Anne-Marie Diagne. 2013. Transitivity in Bakel Soninke. *Mandenkan* 50. 5–38. <https://doi.org/10.4000/mandenkan.211>
- Creissels, Denis & Pierre Sambou. 2013. *Le mandinka: phonologie, grammaire, textes*. Paris: Karthala.
- Creissels, Denis & Anna Urmanchieva. 2017. Сонинке язык. In Valentin Vydrin, Yuliya Mazurova, Andrey Kibrik & Elena Markus (eds.), *Languages of the world: Mande languages*, 248–283. St. Petersburg: Nestor-Istorija.
- DeLancey, Scott. 1981. An interpretation of split ergativity and related patterns. *Language* 57. 626–657. <https://doi.org/10.2307/414343>
- Derive, Marie-Jo. 1990. *Etude dialectologique de l'aire manding de Côte-d'Ivoire*. 2 vols. Paris: Peeters.
- Diagana, Ousmane Moussa. 1995. *La langue soninké: morphosyntaxe et sens (à travers le parler de Kaédi (Mauritanie))*. Paris: L'Harmattan.
- Diallo, Mohamadou. 1988. *Éléments de systématique et de dialectologie du Marka-kan (Burkina faso)*. PhD dissertation, Université Stendhal Grenoble 3.
- Dumestre, Gérard. 1987. Remarques sur la construction attributive en bambara. *Mandenkan* 14–15. 129–137.
- Dumestre, Gérard. 2003. *Grammaire fondamentale du bambara*. Paris: Karthala.
- Erman, Anna. 2009. Dictionnaire dan blo-français. Unpublished ms.
- Fedotov, Maxim. 2009. Dictionnaire gban-français. Unpublished ms.
- Good, Jeff. 2016. *The linguistic typology of templates*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139057479>
- Heath, Jeffrey. 2007. Bidirectional case-marking and linear adjacency. *Natural Language & Linguistic Theory* 25(1). 83. <https://doi.org/10.1007/s11049-006-9000-y>
- Heath, Jeffrey. 2019. Caught in the middle: Songhay bidirectional case-marker \*nà and its likely Mande origin. *Journal of Pidgin and Creole Languages* 34(1). 126–146. <https://doi.org/10.1075/jpcl.00030.heath>
- Heath, Jeffrey. 2016. Jalkunan lexical database. Unpublished ms.
- Hofling, Charles Andrew. 2006. A sketch of the history of the verbal complex in Yukatekan Mayan languages. *International Journal of American Linguistics* 72(3). 367–396. <https://doi.org/10.1086/509490>
- Idiatov, Dmitry. 2000. Le sémantisme des marqueurs aspecto-temporels du bambara: une tentative d'analyse. *Mandenkan* 36. 1–60.
- Idiatov, Dmitry. 2008. Dictionnaire toura-français. Unpublished ms. [http://idiatov.mardi.myds.me/papers/Idiatov\\_2008\\_Dictionnaire.pdf](http://idiatov.mardi.myds.me/papers/Idiatov_2008_Dictionnaire.pdf)
- Idiatov, Dmitry. 2010. Person-number agreement on clause linking markers in Mande. *Studies in Language* 34(4). 832–868. <https://doi.org/10.1075/sl.34.4.o3idi>
- Idiatov, Dmitry. 2016. Development of TAM and polarity marking conditioned by transitivity status in Western Mande. Paper presented at the Syntax of the World's Languages VII, Mexico City, Mexico. [http://idiatov.mardi.myds.me/talks/2016\\_SWL7\\_TAMP\\_Markig\\_Transitivity\\_Status\\_Idiatov\\_SLIDES.pdf](http://idiatov.mardi.myds.me/talks/2016_SWL7_TAMP_Markig_Transitivity_Status_Idiatov_SLIDES.pdf)
- Idiatov, Dmitry. 2018. Isomorphism, conversion and lability in Mande verbal morphosyntax: Big consequences of small changes. Paper presented at the Syntax of the World's Languages VIII, Paris. [http://idiatov.mardi.myds.me/talks/2018\\_SWL8\\_MANDE\\_N\\_V\\_Isomorphism\\_Lability\\_Idiatov\\_SLIDES.pdf](http://idiatov.mardi.myds.me/talks/2018_SWL8_MANDE_N_V_Isomorphism_Lability_Idiatov_SLIDES.pdf)

- Jones, Ross McCallum. 1998. *The Boko/Busa language cluster*. Munich: LINCOM Europa.
- Jones, Ross McCallum. 2004. *Boko dictionary*. Munich: LINCOM Europa.
- Kastenholz, Raimund. 1997. Some notes on the TAM-system of Jogo and its implications for comparative grammar within Mande. *St. Petersburg Journal of African Studies* 6. 51–62.
- Kastenholz, Raimund. 2003. Auxiliaries, grammaticalization, and word order in Mande. *Journal of African Languages and Linguistics* 24(1). 31–53.  
<https://doi.org/10.1515/jall.2003.003>
- Konoshenko, Maria. 2009. Dictionnaire kpelle de Guinée-français. Unpublished ms.
- Kuznetsova, Natalia & Olga Kuznetsova. 2017. Гуро язык. In Valentin Vydrin, Yuliya Mazurova, Andrey Kibrik & Elena Markus (eds.), *Languages of the world: Mande languages*, 765–877. St. Petersburg: Nestor-Istorija.
- Le Bris, Pierre & André Prost. 1981. *Dictionnaire bobo-français, précédé d'une introduction grammaticale et suivi d'un lexique français-bobo*. Paris: SELAF.
- Maisak, Timur A. 2005. *Tipologija grammatikalizacii konstrukcij s glagolami dviženija i glagolami pozicii*. Moscow: Jazyki slavjanskix kul'tur.
- McGregor, William B. 2017. Grammaticalization of ergative case marking. In Jessica Coon, Diane Massam & Lisa Demena Travis (eds.), *The Oxford handbook of ergativity*, 447–464. Oxford: Oxford University Press.
- McPherson, Laura. 2017. Seenku lexical database. Unpublished ms.
- Mishchenko, Daria F. 2017. Лоома язык. In Valentin Vydrin, Yuliya Mazurova, Andrey Kibrik & Elena Markus (eds.), *Languages of the world: Mande languages*, 343–413. St. Petersburg: Nestor-Istorija.
- Nedjalkov, Vladimir P. (ed.). 1988. *Typology of resultative constructions*. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/tsl.12>
- Nikitina, Tatiana. 2009. Dictionnaire wan-français. Unpublished ms.
- Nikitina, Tatiana. 2018. Bidirectional case marking in Wan. Paper presented at the 5th International Conference on Mande Languages and Linguistics, Villejuif. [https://mandes.sciencesconf.org/data/pages/MANDE5\\_Abstracts\\_1.pdf](https://mandes.sciencesconf.org/data/pages/MANDE5_Abstracts_1.pdf)
- Paperno, Denis. 2009. Dictionnaire beng-français. Unpublished ms.
- Persson, Andrew M. & Janet Persson. 1980. *Collected field reports on aspects of Ligbi grammar*. Legon: Institute of African Studies, University of Ghana.
- Polian, Gilles. 2017. Morphology. In Judith Aissen, Nora C. England & Roberto Zavala (eds.), *The Mayan languages*, 201–225. Abingdon, Oxon: Routledge.  
<https://doi.org/10.4324/9781315192345-8>
- Sangaré, Aby. 1984. *Dioula de Kong (Côte d'Ivoire): Phonologie, grammaire, lexique et textes*. Thèse de 3ème cycle, Université Stendhal Grenoble 3.
- Schmidt, Ruth & Razwal Kohistani. 2008. *A grammar of the Shina language of Indus Kohistan*. Wiesbaden: Harrassowitz.
- Smeltzer, Brad & Susan Smeltzer. nd. Soninke-French-English lexicon. [http://www.asawan.org/en/Soninke\\_lexicon](http://www.asawan.org/en/Soninke_lexicon)
- Solomiac, Paul. 2007. Phonologie et morphosyntaxe du dzùngoo de Samogohiri. PhD dissertation, Université Lumière Lyon 2.
- Touré, Aboubacar. 1994. Éléments de description de la langue soso. PhD dissertation, Université Stendhal Grenoble 3.
- Tröbs, Holger. 1998. *Funktionale Sprachbeschreibung des Jeli (West-Mande)*. Cologne: Rüdiger Köppe.



- Tröbs, Holger. 2009. *Sprachtypologie, TAM-Systeme und historische Syntax im Manding (West-Mande)*. Cologne: Rüdiger Köppe Verlag.
- Tsunoda, Tasaku. 1981. Split case-marking patterns in verb types and tense/aspect/mood. *Linguistics* 19. 389–438.
- Tveit, Harald. 1997. *Grammaire de la langue khassonké*. Bamako: Mission Protestante Norvégienne.
- Van de Velde, Freek, Hendrik De Smet & Lobke Ghesquière. 2013. On multiple source constructions in language change. *Studies in Language* 37(3). 473–489.  
<https://doi.org/10.1075/sl.37.3.01int>
- Vydrin, Valentin. 2011. Ergative/Absolutive and Active/Stative alignment in West Africa: The case of Southwestern Mande. *Studies in Language* 35(2). 409–443.  
<https://doi.org/10.1075/sl.35.2.06vyd>
- Vydrin, Valentin. 2016. Перфект в языке манинка Гвинеи. In Timur A. Maisak, Vladimir A. Plungian & Kseniya Semenova (eds.), *Типология перфекта* (Acta Linguistica Petropolitana 12), vol. 2, 709–742. St. Petersburg: Nauka. [https://alp.iling.spb.ru/static/alp\\_XII\\_2.pdf](https://alp.iling.spb.ru/static/alp_XII_2.pdf)
- Vydrina, Alexandra. 2017. A corpus-based description of Kakabe, a Western Mande language: Prosody in grammar. PhD dissertation, INALCO.
- Vydrine, Valentin. 2001. *Esquisse contrastive du kagoro (Manding)*. Cologne: Rüdiger Köppe.
- Vydrine, Valentin. 2009. Esquisse de la langue lélé (groupe mokolé). *Mandenkan* 45. 29–104.
- Vydrin, Valentin & Yury Koryakov. 2017. Классификация языков манде по данным лексикостатистики. In Valentin Vydrin, Yuliya Mazurova, Andrey Kibrik & Elena Markus (eds.), *Languages of the world: Mande languages*, 1140. St. Petersburg: Nestor-Istorija.
- Zoungrana, Ambroise. 1987. Esquisse phonologique et grammaticale du bolon (Burkina-Faso) – contribution à la dialectologie mandé. PhD dissertation Université de la Sorbonne Nouvelle.

## Appendix 1. Mande languages mentioned with their ISO 639-3 codes and classification

For the sake of reference, the classification here follows Vydrin & Koryakov (2017). The capital letters N, S, E, W stand for the cardinal directions and C for Central. The rest is spelled out. For ease of reference, I coined the labels *Nimba-Kossou* (all Southern Mande without Beng and Gban), *Nimba-Marahoue* (Nimba-Kossou without Wan), *Nimba* (Mano, Dan, Tura, Goo) and *Marahoue* (Guro, Yaure, Mwan) using some of the prominent topographic elements of the region to refer to the two groups for which Vydrin & Koryakov (2017) do not provide any labels. Another additional label is *Borgu* to refer together to the languages of the Boko-Busa cluster and Kyanga-Shanga by the traditional name of the region where these languages are spoken.

Language	ISO 639-3	Classification
Bamana	bam	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Beng	nbb	SE, S
Bisa	bib	SE, E, Bisa-San

Language	ISO 639-3	Classification
Bobo	bwq, bbo	W, Samogo-C-SW, Samogo-Bobo
Boko	bqc	SE, E, Borgu, Boko-Busa
Bolon	bof	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Busa	bqp	SE, E, Borgu, Boko-Busa
Dan	daf	SE, S, Nimba-Kossou, Nimba-Marahoue, Nimba
Dzuun	dnn	W, Samogo-C-SW, Samogo-Bobo, Samogo
Gban	ggv	SE, S
Guinean Maninka	emk	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Guro	goa	SE, S, Nimba-Kossou, Nimba-Marahoue, Marahoue
Jalkunan	bxl	W, Samogo-C-SW, C-SW, C, Greater Manding, Jogo-Jeli
Jalonke	yal	W, Samogo-C-SW, C-SW, Susu-SW, Susu-Jalonke
Jogo	lig	W, Samogo-C-SW, C-SW, C, Greater Manding, Jogo-Jeli
Jeli	jek	W, Samogo-C-SW, C-SW, C, Greater Manding, Jogo-Jeli
Jula	dyu	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Kagoro	xkg	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Kakabe	kke	W, Samogo-C-SW, C-SW, C, Greater Manding, Mokole
Koranko	knk	W, Samogo-C-SW, C-SW, C, Greater Manding, Mokole
Kpelle	gkp, xpe	W, Samogo-C-SW, C-SW, Susu-SW, SW
Lele	llc	W, Samogo-C-SW, C-SW, C, Greater Manding, Mokole
Ligbi	lig	W, Samogo-C-SW, C-SW, C, Greater Manding, Jogo-Jeli
Looma	lom, tod	W, Samogo-C-SW, C-SW, Susu-SW, SW
Mandinka	mnk	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Maninka of Kita	mwk	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Maninka of Niokolo	mlq	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Mano	mev	SE, S, Nimba-Kossou, Nimba-Marahoue, Nimba
Marka	rkm	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Mau	mxx	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding
Seen	sos	W, Samogo-C-SW, Samogo-Bobo, Samogo
Susu	sus	W, Samogo-C-SW, C-SW, Susu-SW, Susu-Jalonke
Soninke	snk	W, Soninke-Bozo
Tura	neb	SE, S, Nimba-Kossou, Nimba-Marahoue, Nimba
Wan	wan	SE, S, Nimba-Kossou
Xasonka	kao	W, Samogo-C-SW, C-SW, C, Greater Manding, Manding

## Appendix 2. Examples of traces of the original insensitivity of KA and YA to transitivity

I provide in (1) some examples for the six types of traces of the original insensitivity of KA and YA to transitivity that I summarized in (17) in §5.5. I make a distinction between TAMP<sub>1</sub> markers that are reflexes of either KA or YA and TAMP<sub>1</sub> markers that combine reflexes of both KA and YA as allomorphs. Note that identical or slightly divergent reflexes of KA and YA often co-exist as TAMP<sub>1</sub> markers within the same language in a range of TAMP constructions, viz. PFV<sup>+</sup>, NARR<sup>+</sup>, QUAL<sup>+</sup>, INF and SBJV<sup>+</sup>. Sometimes, these TAMP<sub>1</sub> markers are identical across a whole range of constructions up to their irregular allomorphy patterns, as in Maninka of Niokolo (Creissels 2013) where the same TAMP<sub>1</sub> marker *ye* (*ɲa* ~ *ɲe* after a nasal; toneless) is used in PFV<sup>+</sup>, QUAL<sup>+</sup> and SBJV<sup>+</sup> constructions. Sometimes, the relevant TAMP<sub>1</sub> markers have undergone a slightly divergent evolution in different constructions with minor tonal or segmental differences as a result. Thus, in the same Maninka of Niokolo again, the relevant INF marker is <sup>H</sup>*ka* ~ <sup>H</sup>*ke*, which is also a reflex of KA just as the *ɲa* ~ *ɲe* allomorphs of the other TAMP<sub>1</sub> markers and the free variant *ya* of the PFV<sup>+</sup> TAMP<sub>1</sub> marker. In Maninka of Kita, the same TAMP<sub>1</sub> marker *ka*<sup>L</sup> is used in the QUAL<sup>+</sup>, NARR<sup>+</sup>, and SBJV<sup>+</sup> constructions, while the relevant INF marker is *kà*. However, the QUAL<sup>+</sup> *ka*<sup>L</sup> differs from the NARR<sup>+</sup> and SBJV<sup>+</sup> *ka*<sup>L</sup> in the way the floating <sup>L</sup> tone behaves when followed by a toneless tone-bearing unit.

### (1) Examples of traces of the original insensitivity of KA and YA to transitivity

#### a. Positive Perfective or Perfect constructions indifferent to transitivity status

KA:

- Guinean Maninka PFV<sup>+</sup> *kà* (Vydrin 2016: 712, 727)

YA:

- Ivorian Manding of Worodugu PRF<sup>+</sup> *yé*, Ivorian Manding of Tenen PRF<sup>+</sup> *yé* ~ *yé* (Derive 1990)

KA and YA as allomorphs:

- Maninka of Niokolo PFV<sup>+</sup> *ye* ~ rarely *ya*, while after a nasal the allomorph *ɲa* ~ *ɲe* is used (all allomorphs are toneless) (Creissels 2013)

#### b. In the protasis of conditional sentences, Positive Conditional Perfective constructions indifferent to transitivity status

KA:

- Most Ivorian Manding lects (with the exception of Vehicular Jula and Vandugu) use a reflex of KA, such as Mau *kè* and Jula of Kong *kà*, as COND<sup>+</sup> (cf. Derive 1990: 237–238)

#### c. In narrative contexts, Positive Narrative Perfective constructions indifferent to transitivity status

KA:

- Maninka of Kita *ka*<sup>L</sup> (when followed by a toneless tone-bearing unit, the leftward linking of the floating <sup>L</sup> tone is optional resulting in free variation *kà* ~ *ká*, cf. Creissels 2009: 31, 211–212)
- KagoRO NARR<sup>+</sup> *ka*<sup>L</sup> (Vydrine 2001: 92)
- Jula of Kong as NARR<sup>+</sup> *kà* (distinct from PFV<sub>T</sub><sup>+</sup> *kà*) (Sangaré 1984: 197–199)

- d. In Positive Perfective constructions sensitive to transitivity status, only with particular verbs, as fossilized, lexically conditioned intransitive TAMP<sub>1</sub> markers
- KA:
- Mandinka of Sédhiou PFV<sub>1</sub><sup>+</sup> *ká* only with two intransitive verbs *múntà* and *tínj*, both meaning “resemble” (cf. Creissels & Sambou 2013: 69–70). With other verbs, another reflex of KA, *ɲá*, is used as PFV<sub>T</sub><sup>+</sup> after a nasal. Elsewhere, PFV<sub>T</sub><sup>+</sup> uses *yé*, the reflex of YA.
- YA:
- Standard Bamana PFV<sub>1</sub><sup>+</sup> *yé* only with the verb *sé* in the meaning “be(come) capable; succeed” (cf. Dumestre 2003: 204). With other verbs, *yé* is PFV<sub>T</sub><sup>+</sup>, while the suffix *-rá ~ -lá ~ -ná* marks PFV<sub>1</sub><sup>+</sup>.
- e. With TAMP values other than Positive Perfective, in constructions that are insensitive to transitivity status, such as Positive Subjunctive or Optative SBJV<sup>+</sup> and Infinitive INF.
- KA:
- Many Manding lects use a reflex of KA as the Infinitive marker insensitive to transitivity, such as Bamana and Mandinka of Sédhiou INF *kà* (cf. Dumestre 2003: 393–405; Creissels & Sambou 2013: 125–130)
  - Maninka of Niokolo INF <sup>H</sup>*ka* ~ <sup>H</sup>*ke* (Creissels 2013)
  - Maninka of Kita INF *kà* and SBJV<sup>+</sup> *ka*<sup>L</sup> (when followed by a toneless tone-bearing unit, the leftward linking of the floating<sup>L</sup> tone is optional resulting in free variation *kà ~ ká*, cf. Creissels 2009: 31)
  - Xasonka SBJV<sup>+</sup> *xà*
  - Jula of Kong (at least for some speakers) mild SBJV<sup>+</sup> *ká* (Sangaré 1984: 194–195; Derive 1990: 240)
- YA:
- Jula of Kong neutral SBJV<sup>+</sup> *yé ~ yá* (Sangaré 1984: 194–195; Derive 1990: 240)
- KA and YA as allomorphs:
- Standard Bamana SBJV<sup>+</sup> *yé* with 2PL subject *á*, elsewhere *ká*
  - Kgoro SBJV<sup>+</sup> *ka*<sup>L</sup> ~ rarely *yé*
  - Maninka of Niokolo SBJV<sup>+</sup> *ɲa ~ ɲe* after a nasal, elsewhere *ye* (both are toneless; no allomorph *ya* is reported) (Creissels 2013)
- f. Positive Quality Verb QUAL<sup>+</sup> constructions that are strictly intransitive due to the semantics of the verbs involved
- KA:
- Standard Bamana QUAL<sup>+</sup> *ká*
  - Maninka of Kita QUAL<sup>+</sup> *ka*<sup>L</sup> (when followed by a toneless tone-bearing unit, the leftward linking of the floating<sup>L</sup> tone is obligatory resulting in *kà*, cf. Creissels 2009: 31)
  - Kgoro QUAL<sup>+</sup> *ka*<sup>L</sup>
  - Xasonka *xà*
- KA and YA as allomorphs:
- Maninka of Niokolo QUAL<sup>+</sup> *ɲa ~ ɲe* after a nasal, elsewhere *ye* (both are toneless; no allomorph *ya* is reported) (Creissels 2013)
  - Jula of Kong *ká ~ yá*

### Appendix 3. Cognate sets of $\text{PFV}_T^+$ $\text{TAMP}_1$ markers in Greater Manding and their Proto Mande source verbs

Here, I provide the cognate sets and reconstructions for the motion and “be, happen” verbs that developed into dedicated  $\text{PFV}_T^+$   $\text{TAMP}_1$  markers across Greater Manding, as summarized in §5.6. I divided the cognates for each related verb between Western Mande (WM) and South-eastern Mande (SEM), since these  $\text{TAMP}_1$  markers are specific to Western Mande and it is the meaning of the reflexes of the verbs in Western Mande which is most relevant for the development of these  $\text{TAMP}_1$  markers.

TAMP <sub>1</sub> markers (Greater Manding)		Source verbs	
Cognate set	Reconstruction	Examples	Reconstruction (Proto Mande)
KA	*kà	WM: Southern Seen <i>kà</i> “(vi) go (somewhere)” (McPherson 2017), Jeli <i>kà</i> “(vi) leave” (Tröbs 1998: 53, 85), Jalkunan <i>kà</i> “(vi) leave” (Heath 2016), Bamana X <i>ka</i> “the native of X, somebody who is originally from X” SEM: Wan <i>gà</i> “(vi) go (somewhere)” (Nikitina 2009)	*gà: “go, leave”
YA	*yá	WM: Jogo and Ligbi <i>yá</i> “(vi) go (somewhere)” (Kastenholz 1997; Persson & Persson 1980), Southern Bobo <i>yā</i> “(vi) go (somewhere), leave; walk” (Le Bris & Prost 1981) SEM: Gban <i>yā</i> “(vi) go, leave” (Fedotov 2009), Beng <i>yā</i> “(vi) walk” (Paperno 2009)	*yà “go”
TA	*tà	WM: Southern Bobo <i>tā</i> “(vi) stand, stop; (vi) get (in a place, a position); (vi) take, accept (something – <i>nā</i> )” (Le Bris & Prost 1981), Bamana <i>tā</i> “(vt) take” (Bailleul 1996), Soninke <i>taa.xu</i> “(vi) sit down; become established, exist, take place; (vi) be ready (to do something)” (Smeltzer & Smeltzer nd.), Jalonke of Faléya <i>tàà.qú</i> “(vt) entrust something (to somebody)” (Creissels 2010) SEM: Boko <i>tāà</i> “(vi) wait for an answer (from somebody), importune (somebody)”, <i>tāà.lé</i> “(vi) spread (all over something)” (Jones 2004), Wan <i>tā</i> “(vi) sit down; (vi) get (into a fight, in a vehicle, in a place); (vi) start, begin (something); (vt) put something (somewhere); (vt) give a task (to somebody); (vt) put on (clothes); (vt) sow (seeds into a hole)”	*tā: “establish, settle, get and stay (in a place, a position)”

TAMP <sub>1</sub> markers (Greater Manding)		Source verbs	
Cognate set	Reconstruction	Examples	Reconstruction (Proto Mande)
NA <sub>1</sub>	*nà	WM: Bamana <i>nà</i> “(vi) come, arrive (somewhere); end up (by doing something), finally (do something); happen (to do something), it so happened that ([v <sub>2</sub> ])” (Idiatov 2000), Dzuun <i>nà<sup>H</sup></i> “(vi) come; end up (by doing something), finally (do something); happen (to do something), it so happened that ([v <sub>2</sub> ])” (Solomiac 2007), Southern Seen <i>nã</i> “(vi) come (somewhere)” (McPherson 2017) SEM: Tura <i>nãã</i> and Blo Dan <i>nãñ ~ nãl</i> “(vi, vt) fasten, stick (to something); (vi) get stuck, blocked (somewhere)” (Idiatov 2008; Erman 2009)	*nã:ŋ “stick to, stay or get close to”
NA <sub>2</sub>	*nà-RES COP	See NA <sub>1</sub>	
NO	*nòŋ-RES COP	WM: Guinean Maninka <i>nò</i> “(vt) be able to, succeed in, win over, overcome” (Vydrin 2016), Mandinka of Sédhiou <i>nòo</i> “(vt) be able to, master, win over, overcome” and <i>nùŋ</i> PST (Creissels 2011), Jalonke of Faléya <i>nòŋ</i> “(vt) be able to, master, overcome” and <i>nù</i> PST (Creissels 2010) SEM: Gban <i>nò</i> “(vt) give something (to somebody)” and <i>nù</i> “(vi) come” (Fedotov 2009), Tura <i>nú</i> “(vi) come (somewhere); (vi) approach (to somewhere); (vt) give something (to somebody)” and <i>nú-ú</i> PST (come\PFV-PFV) (Idiatov 2008)	*nòŋ “transfer, move (to somewhere)” <sup>16</sup>
BA(TA)	*bá(-RES COP)	WM: Guinean Kpelle <i>bá</i> “(vi) bear fruit; (vt) do; (vi) be” (Konoshenko 2009), Susu <i>rà-bàà</i> “(vt) do, make” ( <i>rà</i> -CAUS) (Touré 1994), Bamana <i>bá.(g)á</i> “occasional agent nominalizer” and <i>bá.árá</i> “work, activity; job; (vi) work, act, function; (vt) work, process, treat something; (vt) bewitch somebody” (Bailleul 1996) SEM: Tura <i>bá</i> “(vi) fructify in abundance” (Idiatov 2008), Beng <i>bã</i> “(vi) bear fruit” (Paperno 2009)	*bà “fructify, produce in abundance”

16. The reflexes with mid and close back rounded vowels are historically base transitive, and respectively, derived intransitive forms of the same verb (cf. Idiatov 2018).

## Résumé

Cet article fournit une explication diachronique (liée à la construction) du marquage perfectif différentiel conditionné par la transitivité dans les langues du groupe mandé occidental, en prenant le groupe mandingue comme exemple. Ce phénomène, typologiquement rare, a été conçu antérieurement de manière erronée en termes d'alignement casuel, soit de manière synchronique (en termes de marqueurs de cas bidirectionnels), soit de manière historique (en invoquant un stade antérieur d'ergativité scindée). L'idée centrale de mon explication est que les constructions perfectives positives des langues du groupe mandé occidental sont des constructions à sources multiples. La reconstruction détaillée de ces constructions, telle que présentée dans l'article, fournit une illustration théoriquement significative d'un exemple d'émergence répétée de la concurrence de différentes constructions dans un domaine sémantique particulier, qui est ensuite résolu par la spécialisation et la fusion des constructions, donnant lieu à des constructions à sources multiples et un système inhabituel sur le plan typologique de marquage différentiel des valeurs de TAM et de polarité.


## Zusammenfassung

Dieser Artikel liefert eine diachrone konstruktionsbasierte Erklärung der unterschiedlichen Perfektivmarkierungen in den West-Mande-Sprachen am Beispiel der Manding-Gruppe. Die Perfektivmarkierung hängt in diesen Sprachen von der Transitivität des Verbs ab. Dieses typologisch ungewöhnliche Phänomen wurde bisher irrtümlicherweise als Kasusausrichtung interpretiert, entweder synchron (als bidirektionale Kasusmarker) oder diachron (auf ein früheres gespalten ergatives Stadium verweisend). Die zentrale Erkenntnis meiner Erklärung ist, dass die positiv perfektiven Konstruktionen der West-Mande-Sprachen aus verschiedenen Quellen hervorgegangen sind. Die detaillierte Rekonstruktion dieser Konstruktionen, die im Artikel vorgestellt wird, ist von erheblicher theoretischer Bedeutung, da sie illustriert, wie in einem bestimmten semantischen Bereich wiederholt ein Wettbewerb zwischen verschiedenen Konstruktionen entstehen kann, der sich anschließend durch die Spezialisierung und Fusion dieser Konstruktionen wieder auflöst. Dies führt wiederum zu sogenannten Mehrfachquellenkonstruktionen, also zu Konstruktionen die gleichzeitig mehreren historischen Quellen entspringen, und zu einem typologisch ungewöhnlichen Muster unterschiedlicher TAM- und Polaritätsmarkierung.

## Address for correspondence

Dmitry Idiatov  
Llacan – UMR 8135 du CNRS  
7, rue Guy Môquet – BP 8  
94801 VILLEJUIF CEDEX  
France

[dmitry.idiatov@cnrs.fr](mailto:dmitry.idiatov@cnrs.fr)

 <https://orcid.org/0000-0002-9662-1340>

## Publication history

Date received: 18 October 2018

Date accepted: 5 August 2019

Published online: 19 March 2020