

On the origin of some predicative markers in imperfective constructions in Manding

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1. Introduction

In this paper I will discuss the question of the origin of certain imperfective predicative markers (PMs) in Manding, a dialect cluster belonging to the Central Mande languages (for an internal and external classification of Central Mande, see Kastenholtz 1996). The term "predicative markers" applies to portmanteau morphemes occurring immediately after the subject NP. They are both exponents of the tense-aspect-modality system and the affirmative-negative polarity. They are obligatory formal means of "sentence constitution" (Sasse 1991:77).

The term "imperfective" comprises progressive and habitual meaning which are cross-linguistically the most common sub-senses of imperfective (cf. Bybee et al. 1994:151).

Starting from the hypothesis that predicative markers expressing progressive and habitual meanings do originate from copulas in locative sentences, I will examine different channels of grammaticalization through which the copulas used in locative constructions in Manding may arise. Furthermore, I will comment on the difficulties in dividing the copulas occurring in local constructions (see Appendix) into different types.

2. On the rise of imperfectives in Manding

Cross-linguistic research on tense-aspect systems (see Bybee & Dahl 1989, Bybee et al. 1994) has made it possible to establish and predict (with a high degree of probability) evolution paths. The predictability of the rise of tense-aspect-mood categories is based on the *Unidirectionality principle*, "according to which change in meaning from less to more grammatical is viewed as a linear and irreversible process" (Herring 1991:253).

In the literature on grammaticalization, it has been argued that the evolution of imperfectives turns up as a chain of grammaticalization and involves the following processes:

- a. The formation of imperfectives starts out with nomino-periphrastic progressive constructions (cf. Bybee et al. 1994).
- b. The progressive use is extended to describe habitual and generic situations, i.e. progressives tend to develop into general imperfectives (Bybee & Dahl 1989:56f., Bybee et al 1994)).
- c. A highly generalized imperfective tends to assume the function of an aspectual future¹ marker in future contexts (Bybee et al. 1994:275f.).

In Tröbs (1998:§3.5.2.) I discussed the marking of progressive and habitual aspects in Manding within the framework of the grammaticalization theory. I have shown that the data on Manding dialects corroborates the above mentioned cross-linguistic observations: on the one hand, all progressives do derive from locative periphrastic constructions involving a locative support item, a nominalization marker, and a locative marker (Postposition), on the other hand, all habitual forms in my corpus do go back to a generalization of the progressive aspect.

The pattern of the rise and development of imperfectives in Manding can be summarized in the following scale:

- (1) Location Schema² (“X is at/in/on Y”) > Progressive > Habitual

Furthermore, in Tröbs (2001 forthc.) I provided evidence for the fact that the evolution of progressives (as the starting point for imperfectives) in Manding does occur in morphological cycles³, i.e. a new progressive tends to be built on identical or similar conceptual patterns as the old one. These cycles “may follow so closely upon each other that various layers of grammaticalization can still be discerned synchronically” (Haspelmath 1998:54).⁴ Every old imperfective is potentially in danger of becoming replaced by a new progressive periphrasis. The old imperfective has not necessarily disappeared, but remains to coexist and compete with the new imperfective. The rise of a new progressive can lead to a situation in which the old imperfective loses the ability to express ongoing senses and only the habitual sense remains. The habitual form can, thus, be understood and identified as being a remnant of an earlier imperfective cycle, that started out with the Location Schema.

¹ Bybee et al. (1994:244) distinguish aspectual and primary futures. Primary futures derive from movement verbs, markers of obligation, desire, and ability, and temporal adverbs. Aspectual futures arise when the imperfective is extended to the future use.

² For the term “Location Schema”, see Heine (1994).

³ Following Heine & Reh (1984:71), I will use the term “morphological cycle” with reference “to both cyclic and spiral like evolutions.”

- (2a) Maninka (Friedländer 1992:108); Habitual
 Lónlon Soriba **dí** wá à lá sè nè dó.
 dayday S. PM go 3.SG POSS field Pp
 ‘Every day Soriba goes to his field.’
- (2b) Maninka (Friedländer 1992:108), Habitual
 Lónlon Soriba **yé** wá-**la** à lá sè nè dó.
 dayday S. PM go-VS 3.SG POSS field Pp
 ‘Every day Soriba goes to his field.’
- (2c) Maninka (Spears 1972:15); Progressive
 à **yé** nà-**la**.
 3.SG PM come-VS
 ‘He is coming.’
- (2d) Maninka (Friedländer 1992:69); Progressive
 sánjì **yé** nà **kàn**
 rain PM come Pp
 ‘It’s raining.’

For Maninka (cf. (2a-d)), three consecutive cycles involving the development of a locative copula to an imperfective marker can, thus, be reconstructed:

1st cycle: A progressive periphrasis containing the copula *di* and a local postposition developed into an imperfective. The semantic generalisation was paralleled by the loss of phonetic substance, i.e. the loss of the locative marker. The construction has become non-periphrastic and *di* became reanalysed as an imperfective PM.

2nd cycle: A new progressive periphrasis was formed, by means of another copula, namely *yé*, and the local postposition *lá* ‘at’, with the result that the old imperfective PM *di* became restricted to habitual, generic and future uses. The new progressive itself was extended to habitual use. This generalization was not accompanied by the breakdown of the periphrastic construction, but the postposition *lá* has lost its tonological distinctiveness and exhibits allomorphic variation. As a result of the generalization of the new progressive we have two different constructions in Maninka to mark habitual meaning.

3rd cycle: A third progressive periphrasis cycle has now emerged with the same copula *yé* but using a different local meaning, namely *kàn* ‘on’.

3. The *BE* and *YE* types

Creissels (1997b:10) argues that there are two types of copulas used in locative sentences in Manding, namely *BE* and *YE*. *BE* has to be considered an old copula, cognate forms of *BE* are found in a large number of Niger-Congo languages, for example, *ba* (Temne), *woni* (Fulani), *be/bye* (Dagomba), *be* (Moore), *bo* (Gurenne), *ba* (Nupe), *be* (Duala), *be* (Mandinka, Vai, Bambara), and Babungo (*bii*) (cf.

⁴ Compare Hopper’s (1991:22) definition of *Layering*: ”Within a broad functional domain, new layers are continually emerging. As this happens, the older layers are not necessarily discarded, but remain to

Stassen 1997:95). Moreover, *YE* acquired its present status as a locative copula by virtue of a more recent evolution, and is thought to be cognate with the homonymous verb *yé* ‘to see’ (Creissels 1997a:12).

Note, however, that according to Kastenholz (2001 MS), the *BE* and the *YE* type are etymologically related, i.e. the dialectal variations concerning the locative copula in the Manding dialects (*bé, bɛ́, bí, wɛ́, yé, yɛ́*) are reflexes of a single “diaform” (for more details, see §3.3.).

3.1. On the origin of the *BE* type

From a typological viewpoint, a very frequent origin of the locative copula is a ‘be’- or ‘exist’- verb. Lehmann (1982) describes the development of ‘be’- verbs as follows:

It commences as a ‘verbum substantivum’, a verb of existence. Subsequently, it comes to be used in location predications, with the meaning ‘to be in a place’. Then it appears as a copula in nominal sentences. As such, it may be employed when the predicate is a nominalized verb form, and in this way it ends up as an auxiliary. (Lehmann 1982:34)

Supportive items in locative sentences are usually called ‘substantive verbs’ or ‘locative verbs’, because they have verbal properties, i.e. they inflect for tense, aspect, modality, etc.

Thus, taking into account that the existential meaning of *BE* is still present in examples like (3a, b), it is possible that *BE* derives from an existential verb, and has, at some historical level, lost its verbal properties, i.e. it does not occur with any of the PMs or flexional and derivational verbal suffixes in any Manding dialect.. That existential be-verbs are defective verbs is a very common property universally (cf. Veselinova 2001 MS).

(3a) Bambara
 néné bé.
 chill PM
 ‘It’s cold (< chill exists)’

(3b) Bambara
 dibi bé
 darkness PM
 ‘It’s dark (< darkness exists)’

Furthermore, in order to explain the lack of verbal morphosyntactic categories on *BE*, one may also assume, that *Be* originates from a category that is not equivalent to the category of verbs such as deictic markers (for such a scenario in Tura (Southern Mande), see Bearth (1995)). The demonstrative pronoun *be* ‘this’ in Bobo (Northwestern Mande) seems to be a possible candidate as regards an assumed non-verbal origin of *BE*.

3.2. On the origin of the *YE* type

There is a well documented grammaticalization path of locative copulas in Mande languages that starts out with perception verbs like “to see” and “to look at”.

A well known example of this process is the verb *kaa* ‘to see’ in Kpelle (Southwestern Mande) which appears in its singular imperative form as a PM in locational and progressive constructions, as shown in (4a, b).

(4a) Kpelle (Welmers 1973:315)
 ` káa nāa
 3.SG PM there
 ‘He/she/it is there.’ (< see him/her/it there)

(4b) Kpelle (Welmers 1973:314)
 ` káa pāi
 3.SG PM come:LOC
 ‘He/she is coming.’

Similarly, the PM *i* in locational and imperfective sentences in Manyá is assumed to be derived from the verb *yé* ‘to see’ (Welmers 1974:95).

The conceptual manipulation underlying the grammaticalization path See > Copula/PM in locational and progressive sentences is explained by Creissels as follows:

[...] a number of languages belonging to various language families all around the world attest the possibility of reanalyzing sentences like “See him here” or “He can be seen here” as meaning simply “He is here”. (Creissels 1997a:12)

In other words, the path of development from perception verbs like “to see” or to “look at” to the locative copula comprises an imperative speech act expressing a presentational value, as shown in (5).

(5) Bambara (Blecke 1994:53)
 à file (nin yé!)
 3.SG lookat (DEM Pp)
 ‘There he is!’ (<‘Look at him!’)

Whereas the perception verb *file* ‘to look at’ in Bambara has not been further grammaticalized into a locative copula and its use is restricted to expressions like (5), this was the case with the perception verb *yé* ‘to see’⁵ in Kpelle, Manyá, and other Manding dialects.

3.3. Discussion

In §3. I hinted at the problem concerning the etymological relation between the *BE* and *YE* type. On the one hand, the locative copula form *wɛ* can easily be derived from the more conservative *BE* type by spirantisation. The situation is much more complex, if one takes a look at Koranko. Here the copula *ye*

⁵ For a detailed discussion of different grammaticalization paths of the verb “to see” in Bambara, see Blecke (1994).

has an alternant *be* after a nasal. Kastenholz (1996:§4.2.4.), who examines the consonant ‘permutation’ in Southwest-Mande, comes to the conclusion that the observed morphophonological rules of consonant ”weakening” in the intervocalic non-postnasal position are at least of Proto-Central/Southwest Mande origin. The consonant permutation system has now been eroded in Central Mande.

In den Zentral-Mande-Sprachen muß man demzufolge von einem historischen Abbau des Permutationssystems ausgehen, mit dem Resultat von möglicherweise lange Zeit konkurrierenden, aber funktionslosen Allomorphen im Lexikon. (Kastenholz 1996:104)

Ebenso klar scheint mir, daß die starken Konsonanten im wesentlichen eine durch die Existenz eines vorangehenden Nasals gestützte Retention älterer Laute darstellen, die in den heutigen Sprachen durch die Übernahme der entsprechenden Allomorphe in Lexikon gefestigt sind.” (Kastenholz 1996:108)

Following Kastenholz (1996), I will assume that in Koranko the locative copula alternant *ye* is the result of a consonant ”weakening” or ”gradation” of the type *BE*. In intervocalic postnasal position the ”weakening” has been blocked and the older form *bé* has still been preserved.

Therefore, it is sometimes difficult or even impossible to decide, whether the locative copula *ye* originates from the homonymous verb *ye* ‘to see’, or has to be interpreted as historically connected (as a vestige of an older consonant ”weakening”) to the type *BE*.

Note that there is, however, an additional criterion (based on the *Unidirectionality principle*) to account for the origin of the locative copula. If one takes into account that the future use of an imperfective is a late development, then it follows that in languages employing the element *be* or *bε* for expressing future meaning, but using *ye* in locative and progressive constructions, the copula/PM *ye* does belong to the newer See-to-Locative Copula cycle. This holds true for some Eastern Manding dialects (L3-L6) where the future meaning is expressed by a combination of the locative auxiliary *bε* and the motion verb *nà* ‘to come’ (see Appendix). Furthermore, in Kita-Maninka (L15) within the future domain we observe the coexistence of a newer imperfective layer (*yé*) expressing progressive, habitual and future meaning, and an older imperfective layer (*bé*) having become restricted to future use due to the competition with the newer imperfective layer.

4. The **DI* or **TI* type

In the introduction I argued that imperfective PMs in the Manding dialects, which are restricted in their usage in the sense that they express only habitual meaning, can be understood and identified as being remnants of an earlier imperfective cycle that started out with the Location Schema. I, therefore, assume the PMs *dí* (Maninka), *sí* (Xasonga) and (Maninka of Niokolo) to be remnants of an older locative copula, which had developed into a general imperfective marker. The form of the underlying locative copula can be reconstructed as **TI*, **TE*, **DI* or *DE* (cf. Creissels 1997b:11).

This position is maintained by the following observations. First, Vai (Central Mande) has still preserved an auxiliary *tí* ‘to be (at), to become’ (cf. Koelle 1954:127, 220; Heydorn 1971:181f.; Welmers 1976:78).

Furthermore, a copula *ti* does still occur in Bobo-Fing (Northwestern Mande) and Bisa (Eastern Mande) and is used to form the progressive aspect in combination with the locative suffix *-hó* or *hú* (see Prost 1950, Le Pris & Prost 1981).

In contrast to the copula *BE*, the auxiliary *ti* in Vai exhibits verbal properties, i.e. inflection for tense, as shown in (6) and (7). Another characteristic of *ti* is that it is not used in present tense (cf. Welmers 1976:77).

(6) Vai, Koelle (1854:220)
 ánu ti-a nu sam féra.
 3.PL be-PAST there year two
 ‘They were two years there.’

(7) Vai, Welmers (1976:77)
 ài ti’a mànjáa kò
 3.SG:FUT be:FUT chief thing
 ‘He will be(come) the chief.’

Heydorn (1971:181) mentions that in constructions where the gerund of the progressive is used in place of a temporal clause, the auxiliary *be* may be replaced by *ti*, as shown in (8), where *ti* goes with the past participle *-le*.

(8a) Vai, Heydorn (1971:181)
 hĩ i be kola kili-na
 when 2.SG be cloth tie-VS
 ‘When you are dressing...’

(8b) Vai, Heydorn (1971:181)
 ya ti-lee kola kili-na...
 2.SG:PERF be-PAST.PART cloth tie-VS
 ‘When you are dressing...’

In Bisa the verb *ti* ‘to be’ is suppletive, i.e. *ti* is only used in the present tense, whereas other forms such as *bor* or *hinna* are employed in other tense or aspect forms (cf. Prost 1950:39). Moreover, in Bobo-Fing the verb *ti* means ‘to be at, to exist’. It is inflected for past and future (cf. Le Pris & Prost 1981:55,71).

5. Conclusion

In this paper I have examined different channels of grammaticalization through which the copulas used in locative and imperfective constructions in Manding may arise.⁶ Besides the *SEE-to-Locative Copula channel* (type *YE*), two different ‘*Exist*’- *verb-to-Locative Copula cycles* (type *BE* and type **DI* or **TI*) have been identified. The source of type *BE* remains, however, less clear, because it exhibits no verbal features at all. However, defective or suppletive existential verbs are cross-linguistically a very common phenomenon. In order to account for the lack of verbal properties on the *Be* type alternative options for copulas like demonstrative pronouns and discourse particles, i.e. so-called nonverbal copulas, should also

⁶ For the moment I exclude Bolon (L11) *mú*, Kagoro (L17) *mi*, and Mandinka (L13) *ka* of the discussion.

be taken into consideration. To conclude, the classification of a language as having verbal or nonverbal copulas has to be taken with care.

Appendix

Table 1. Predicative markers in locative, imperfective, and future constructions in Eastern Manding

Language/Dialect (Source)	Location Affirmative	Progressive Affirmative	Habitual Affirmative	Futur Affirmative
L1 Maukakan (Derive 1990)	yé	yé V(-la)	yé V(-la)	yaa V
L2 Wojenekakan (Derive 1990, Braconnier 1983)	yè	yè V-ra yè VN+T rà	yè V-ra	ná V
L3 Folokakan (Derive 1990)	yé	(yé) kà V	yé V-la	bé nà V
L4 Gbelebankakan (Derive 1990)	yé	(yé) kàa V	yé V-la	bé nà V
L5 Tudugukakan (Derive 1990)	yé	(yé) kà V	yé V-la	bé nà V
L6 Nowolokakan (Derive 1990)	yé	(yé) V-la	yé V-la	bé nà V
L7 Worodugukan (Derive 1990)	yé~yé~é	(yé) V-la	(yé) V-la	ya V
L8 Korokan (Derive 1990)	wé	wé V-la	yé V	yé nà V
L9 Dyula of Kong (Derive 1990)	bé	bé V-ra	yé V	bé (nà)~yé (nà) V
L10 Dyula vehicular (Derive 1990)	bé	bé V-la	bé V	bé nà V
L11 Bolon (Zoungrana 1987)	mú	mú V-la	mú V	nà V
L12 Mæeka (Diallo 1988)	yè	yè V só	yè V	yè náa
L13 Manyá (Welmers 1974)	ì/vé	ì V-là	ì V-là	ì V-là
L15 Maninka (Friedländer 1992)	yé	yé V-la yé V kàn	yé V-la dí V	dí V
L16 Bambara of Bamako (Koné 1984)	bé	bé V bé kà V	bé V	bé nà V
L17 Bambara of Segu (Diallo 1989)	bé/bí	bí V bí kà V	bí V	bí nà V

Table 2. Predicative markers in locative, imperfective, and future constructions in Western Manding

Language/Dialect (Source)	Location Affirmative	Progressive Affirmative	Habitual Affirmative	Future Affirmative
L13 Mandinka (Creissels et al. 1983)	bé	bé VN+o lá bé V káj	ká (kàri/káli) V	sí V
L14 Xasonga (Tveit 1997)	bé	bé VN+o lá	bé V-lá sí V	si V
L15 Kita-Maninka (Keita 1986)	yé	yé VN+T lá yé kà V	yé V-la	yé (nà)~bé (nà) V
L16 Maninka of Niokolo (Meyer 1983)	bé	bé V kan	se V	se V, benaa V
L17 Kagoro (Creissels 1986)	mi	mi à ná kà V	bi V	bí V

Abbreviations

DEM	Demonstrative	PM	Predicative marker
FUT	Future	POSS	Possessive marker
LOC	Locative marker	Pp	Postposition
PART	Participle	SG	Singular
PERF	Perfect	VS	Verbal suffix
PL	Plural		

Bibliography

- Bearth, Thomas 1995. 'Nominal periphrases and the origin of the predicative marker in Mande languages - an alternative view'. *Afrikanistische Arbeitspapiere* 41:89-117.
- Blecke, Thomas 1994. 'Vollverb, Kopula, Postposition: Das Morphem yé im Bambara'. In: Thomas Geider & Raimund Kastenholz (eds.) *Sprachen und Sprachzeugnisse in Afrika. Eine Sammlung philologischer Beiträge Wilhelm J.G. Möhlig zum 60. Geburtstag zugeeignet*. Pp. 49-62. Cologne: Köppe.
- Braconnier, C. 1983. 'L'inaccompli neutre en dioula d'Odienné: construction nominale ou verbale?'. *Mandenkan* 6: 3-8.
- Bybee, Joan & Östen Dahl 1989. 'The creation of tense and aspect systems in the languages of the world'. *Studies in Language* 13,1:51-103.
- Bybee, Joan et al. 1994. *The evolution of grammar*. Chicago and London: The University of Chicago Press.
- Creissels, Denis 1986. 'Le système prédicatif du kagoro'. *Mandenkan* 11:1-16.
- Creissels, Denis 1997a. 'Postpositions as a possible origin of certain predicative markers in Mande'. *Afrikanistische Arbeitspapiere* 50:5-17.
- Creissels, Denis 1997b. 'Une tentative d'explication de particularités typologiques de la négation en mandingue'. *Mandenkan* 32:3-22.

- Creissels, Denis, Sidia Jatta & Kalifa Jobarteh. 1983. *Eléments de grammaire de la langue mandinka*. Grenoble: Université des Langues et Lettres.
- Derive, M.J. 1990. Etude dialectologique de l'aire manding de Côte-d'Ivoire. 2 volumes. (Langues et Cultures africaines 11) Paris: Peeters.
- Diallo, Mohamadou 1988. *Eléments de systématique et de dialectologie du Marka-kan*. Vol.1: *Esquisse du Marka-kan de Zaba, esquisse du Marka-kan de Yankasso; phonologie et grammaire*. Grenoble: Université Stendhal.
- Diallo, Mohamed Larabi 1989. *Zur Verbalstruktur und Syntax des Bambara*. (Ph.D. Thesis). Bayreuth: Universität Bayreuth.
- Friedländer, Marianne 1992. *Lehrbuch des Malinke*. Leipzig, Berlin, München: Langenscheidt Verlag Enzyklopädie.
- Haspelmath, Martin 1998. 'The semantic development of old presents: new futures and subjunctives without grammaticalization'. *Diachronica* XV:1.29-62.
- Heine, Bernd 1994. 'Grammaticalization as an explanatory parameter'. In: *Perspectives on grammaticalization*, ed. by William Pagliuca. (Current Issues in Linguistic Theory, 109). Pp. 255-287. Amsterdam and Philadelphia: Benjamins.
- Heine, Bernd & Mechthild Reh 1984. *Grammaticalization and reanalysis in African languages*. Hamburg: Buske
- Herring, Susan C. 1991. 'The grammaticalisation of rhetorical questions in Tamil'. In: E.C. Traugott & B. Heine (eds.) 1991. Vol 1. Pp. 253-284.
- Heydorn, Richard W. 1971. 'The Vai language in Liberia'. *Afrika und Übersee* 54,3:149-205. [MS 1934].
- Hopper, Paul J. 1991. 'On some principles of grammaticization'. In: E.C. Traugott & B. Heine (eds.) 1991. Vol 1. Pp. 17-35.
- Kastenholz, Raimund 1988. *Mande languages and linguistics*. Hamburg: Buske.
- Kastenholz, Raimund 1996. *Sprachgeschichte im West-Mande: Methoden und Rekonstruktionen*. (Mande Languages and Linguistics, 2) Cologne: Köppe.
- Kastenholz, Raimund 2001. MS. 'Aspektsysteme und Grammatikalisierung im Zentral-Mande'. Typescript. University of Mainz.
- Keita, Boniface 1986. *Eléments de description du malinké de Kita (Mali)*. Grenoble: Université de Grenoble III.
- Koelle, Sigismund W. 1854. *Outlines of a Grammar of the Vei language, together with a Vei-English vocabulary; and an account of the discovery and nature of the Vei mode of syllabic writing*. London: Church Missionary House. (Republished 1968, Farnborough: Gregg International Publishers).
- Koné, Dramane 1984. *Le verbe bambara: essai sur les propriétés syntaxiques et sémantiques*. Grenoble: Université des Langues et Lettres.
- Le Bris, Pierre & André Prost 1981. *Dictionnaire bobo-français; précédé d'une introduction grammaticale et suivi d'un lexique français-bobo*. Paris: SELAF et ACCT.
- Lehmann, Christian 1982. *Thoughts on grammaticalization. A programmatic sketch*. (Arbeiten des Kölner Universalienprojekts 48) Cologne: Institut für Sprachwissenschaft der Universität.
- Meyer, Gérard 1983. *Lexique élémentaire malinké-français; suivi d'éléments de grammaire; dialecte maninkaa du Niokolo (Sous-Préfecture de Bandafassi)*. Roneotyped. Kédougou (Senegal): Mission Catholique.
- Prost, André 1950. *La langue bisa: grammaire et dictionnaire*. Ougadougou (Haute-Volta): Centre IFAN.

- Sasse, Hans-Jürgen 1991. 'Predication and sentence constitution in universal perspective'. In: Zaefferer D. (ed.) *Semantic universals and universal semantics*. Pp. 75-95. Berlin, New York: Foris Publications.
- Spears, Richard A. 1968. 'Tonal dissimilation in Maninka'. *Journal of African Languages* 7,2:88-100.
- Spears, Richard A. 1972. 'A typology of locative structures in Manding languages'. Paper read at the International Congress on Manding Studies, 1972. London, School of Oriental and African Studies. (Mimeographed).
- Stassen, Leon 1997. *Intransitive Predication*. Oxford: Clarendon.
- Traugott, Elizabeth C. & Bernd Heine (eds.) 1991. *Approaches to grammaticalization*. 2 volumes. Amsterdam/Philadelphia: J. Benjamins.
- Tröbs, Holger 1998. *Funktionale Sprachbeschreibung des Jeli (West-Mande)*. (Mande Languages and Linguistics, 3) Cologne: Köppe.
- Tröbs, Holger (forthc.) 'Progressive and habitual aspects in Central Mande'. To appear in LINGUA.
- Tveit, Harald 1997. *Grammaire de la langue Khassonke*. Bamako: Mission Protestante Norvégienne.
- Veselinova, Ljuba 2001. Suppletion in tense and aspects categories. Paper presented at the 4th International Conference of the Association for Linguistic Typology. Santa Barbara, July 19-22, 2001. Typescript.
- Welmers, William E. 1973. *African language structures*. Berkeley: University of California Press.
- Welmers, William E. 1974. *Manya*. Typescript. Los Angeles.
- Welmers, William E. 1976. *A grammar of Vai*. (University of California Publications in Linguistics, 84). Berkeley, Los Angeles and London: University of California Press.
- Zoungrana, Ambroise 1987. *Esquisse phonologique et grammaticale du Bolon (Burkina-Faso) - contribution à la dialectologie Mandé*. Paris: Université de la Sorbonne Nouvelle (Paris III).