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*Eine historische Phonologie der Niger-Volta-Sprachen.* By Henning Schreiber. Köln, Rüdiger Köppe Verlag, 2008. 331 pp.

In today's Mande language studies, where scholars' main efforts are concentrated on synchronic descriptions and typology, a publication dealing with comparative historical matters is a rare bird. In this context, Henning Schreiber's book is an important and very positive event: it is the very first serious and systematic attempt at reconstructing the proto-language of the Eastern Mande group<sup>1</sup> at the phonological and morphological levels<sup>2</sup>. It should be mentioned that the Eastern group had remained, till this publication, one of the few big loopholes in comparative Mande linguistics (along with the Samogho group, Bobo and Soninke-Bozo). Therefore, it brings us much closer to a step-by-step reconstruction of the Proto-Mande language, being based on the rich data accumulated during recent decades through extensive field research, some by Henning Schreiber himself, some by other Mandeists.

Below I will try to combine an overview of the content and of the most interesting findings of the book with a critical scrutiny of its weak points and topics which, to my mind, need further elaboration and substantiation.

The **first chapter**, "Foundations and prerequisites", introduces the principal languages of the Eastern Mande group ("Volta-Niger") dealt with in the book under review: San ("Samo"), Bisa, Boko-Busa, and their dialects. In fact, each of these is a "macrolanguage" whose varieties are often not mutually intelligible and can be regarded as different languages. Schreiber also mentions two endangered languages of NW Nigeria, Tyenga (Kyenga) and Shanga, but, in respect to these, he merely writes that they "can be used only as external evidence, as far as information on these languages is scarce" (p. 5).

There follows a discussion of ethnohistorical evidence available for the peoples speaking Eastern Mande languages<sup>3</sup>. The author concludes that in the

<sup>&</sup>lt;sup>1</sup> Henning Schreiber follows Raimund Kastenholz's labels for the groupings within Mande family: Niger-Volta for the Eastern group, and Mani-Bandama for the Southern group. In the current review, I will use traditional names, "Eastern" (EM) and "Southern" (SM; and "South-Eastern", or SE Mande, for the grouping of the next level of the hierarchy, which includes both these groups, conforming with William Welmers' usage of this term).

When transcribing forms in Mande languages, I follow the principles of the African variant of IPA: *j* is used for the voiced palatal affricate, and *y* stands for the palatal glide.

<sup>&</sup>lt;sup>2</sup> To be more precise, I am aware of one previous attempt at a comparative study of the Eastern Mande languages, in the context of a general reconstruction of the initial consonants of Proto-Mande; it is Konstantin Pozdniakov's dissertation [1978]. Unfortunately, this work, very innovative in method and ground-breaking in results for its time, exists only in Russian and has never been published, for which reason it has passed almost unnoticed for Mandeists outside Russia. In any case, Henning Schreiber's study is based on new data that was not available in the 1970s, and his results differ very much from those of Pozdniakov.

<sup>&</sup>lt;sup>3</sup> Concerning this division, I have a minor objection to H. Schreiber's interpretation of R. Caillé's note concerning "Bambara inhabitants (who) did not understand the Mandingo language at all": "One should assume that the designation «Mandingo» could have been used in the historical sources not only for the speakers of Bambara and Malinke, but also as an ethnonyme" (p. 15). In my opinion, the situation described by René Caillé may have two explanations. First, in the 19th century, "Bambara" was not a true ethnonym, but rather a term for non-Muslims, whatever language they may have spoken. Even today, in the NE Côte-d'Ivoire and in the Sikasso area of Mali, "Bambara" are not Manding, but rather non-islamized Senufo, in opposition to the Jula, who are Muslim Manding people. (The vagueness of ethnic identities in West Africa in pre-colonial times was the subject of an extensive discussion in French cultural anthropology, see, for example, [Bazin 1985].) The other reason may be the fact that Caillé might have tried to speak Mandinka (the Senegambian variety) with Bamana speakers. In this case, his failure seems to me quite natural: although both languages belong to the Manding group, they are pretty distant

past, the East Mande speakers constituted, most probably, a unity that stretched from the Volta basin to the Northwestern Nigeria. Then they were split by Gur-speaking groups, and some of them (Bisa and Boko-Busa) were partly integrated into political organisms of Gur groups. Oral tradition data show that the Bisa and the San are aware of each other's existence and former unity, while Busa-Boko do not remember about their former unity with Bisa and San (and this ignorance is mutual), which testifies to the fact that the first split from East Mande was Busa-Boko (in agreement with glottochronological data, see [Vydrin 2009]).

In the second chapter, "Vorgliederung" ("Subdivision"?), H. Schreiber makes a short survey of the history of the external and internal classification of Mande, with extra consideration for the position of Eastern Mande, and deals with the theoretical problems of lexicostatistics and its practical application to SE Mande. He repeats the standard reproaches addressed to glottochonology: its principle of a constant rate of replacement in the basic vocabulary, resulting in wrong dating for historically well-known events, such as the division between English and German, and its acceptance of similar forms (rather than true cognates) for evaluation. Unfortunately, the author, while blaming the "classical" variant of glottochronology for its well-known shortcomings, seems to be unaware of more sophisticated versions of this method where these (and other) shortcomings have been taken care of (primarily, Sergei Starostin's "improved glottochronology", see [Starostin 2000/ 2007]). As an alternative, he suggests a statistical method of "Neighbour Joining" borrowed from biology and actively used in comparative linguistics as of late.

In relation to the application of lexicostatistics to the Mande languages, Schreiber mentions the following difficulties: (a) compound words; (b) great variability of quantifiers and qualifiers; (c) consonant alternation. He makes up his comparative list based on his own data for Bisa and San, on Ross Jones' data for Busa, Boko, Bokobaru, Kyenga and Shanga, on H.-C. Grégoire's 600-word list for Southern Mande. This list then undergoes a lexicostatistical handling according to the method of "Neighbour Joining". The resulting classification manifests certain serious divergences from those suggested by other authors (Grégoire & Halleux 1994; Vydrin 2009) in what concerns the arrangement of Southern Mande languages. The most visible innovation<sup>4</sup> is the position of Beng which, according to Schreiber, should either be included into the Eastern ("Niger-Volta") group or singled out into a separate group within the SE Mande. This point merits more careful consideration.

Apart from the statistical evidence, H. Schreiber mentions the innovations that Beng shares with Eastern Mande (presumably, not attested in other Southern Mande languages): the disappearance of the implosive b; the lexical innovation /z3/ 'fish'; and probably also a couple of shared retentions (Beng and Eastern Mande), such as the words for "stomach" and "hand", as well as "flesh".

However, this evidence turns to be shaky. In the Southern Mande group, it is not only Beng who lost the distinction between plosive and implosive bilabial consonants; another such language is Gban. It is true that in Beng, the word for "fish" is  $z\tilde{i}\eta$  which probably represents a reflex of the same root as Bisa-Lebir  $z\hat{\tilde{z}}$ , Southern San  $z\dot{z}$ , etc. However, there is another South Mande language, Gban, that has  $z\tilde{j}$  'fish', which looks much closer to the Eastern Mande forms and invalidates the idea of shared lexical innovations in this point. The word for "hand and arm" in Beng is  $w\bar{\sigma}$ , which doubtlessly reflects the same root as Wan  $\bar{\jmath}$ , Mwan kóć, Mano kò, Tura kòò, Dan kò, Gban kố. The only instance that remains is the Beng form  $n\tilde{2}$  'stomach' (a reflex of a root very well attested in Western Mande as well), but this single common retention seems too slim as evidence for reclassifying this language with the Eastern group.

Unfortunately, Schreiber does not provide the full list used in his lexicostatistical study, which prevents me from verifying his calculations<sup>5</sup>. I can simply mention that, according to my own lexicostatistical study based on the standard 100-wordlist [Vydrin 2009], Beng turns out to be an obviously Southern, not Eastern (nor "intermediate") language. Here are the percentages of cognates it shares with other Southern and Eastern languages:

from each other, and their mutual intelligibility is very limited (or even impossible at first contact).

<sup>&</sup>lt;sup>4</sup> More precisely, in this point Henning Schreiber follows Oswin Köhler, whose idea to include Beng into Eastern Mande, expressed in 1975 and based on one single isogloss (the word for "flesh"), passed unnoticed outside Germany.

<sup>&</sup>lt;sup>5</sup> I can only guess that the divergence in our results may stem from the fact that Schreiber has used H.-Cl. Grégoire's data, notorious for their unreliability. In all honesty, I do not understand why he did not use in his study the more precise South Mande data, collected by members of the Russian research group and abundantly represented in [Vydrin 2005b] and [Vydrin 2007] (the former publication, by the way, is mentioned in Schreiber's list of references) and in the dictionaries available on the website MandeSud (now: Mandelang) since 2004.

		Southern Mande										
	Yaure	Tura	Guro	Dan-Blo	Dan-Gweeta	Dan-Kla	Mwan	Mano	Gba	in	Wan	
Beng	67	66	65	63	61	61	61	60	58		55	
	•											
					Eastern	Mande						
	Kyenga	a Bis	a-Lebri	San (Souther	n) Bo	ko	Busa	Bokob	aru	S	hanga	
Beng	49		48	46	4	3	42	41			41	

The **third chapter**, "Description", represents a lengthy (almost 120 pages) synchronous analysis of the morphology (noun derivation and compounds, the problem of adjectives, verbal derivation, complex predication) and phonology (syllabic structures, nasality, tone, consonants, vowels, morphophonology) of each single language: Boko/Busa, Bisa, and San. The data are compared and summed up in the **fourth chapter**, where reconstructions of the corresponding segments of the Proto-Eastern system are represented. For the convenience of discussion, I will consider the reconstruction of each segment together with its synchronic overview (language by language).

First comes noun morphology (pp. 66-81 for the synchronic presentation, pp. 195-205 for the reconstruction). Schreiber singles out five derivative suffixes in Busa-Boko-Bokobaru (plus a zero suffix, a conversion marker), six to eight in Bisa (six in Barka, eight in Lebri), and six in Southern San (data for the Northern San varieties being not available). Certain suffixes are classified by Schreiber as innovations, and four are reconstructed for the Proto-Eastern-Mande (PEM) level: \*-{/da/} 'female', \*-{/sa/} 'male', \*-{/de/} 'proprietor, master of', 'nominal', and \*-{/nı/} 'diminutive'. In addition, he reconstructs two suffixes and one prefix that were unproductive already at the PEM level: \*-{/si/} 'uncountable', \*-{/ka/} 'body part', \*{/N/}- 'inalienable'. Finally, he reconstructs one inflection, \*-{/li/}, whose reflexes, according to Schreiber, are represented in modern EM languages as agent noun suffixes, although he prefers to interpret them as verbal noun markers6.

Schreiber's analysis, however detailed and interesting, needs some comments and elaboration. Thus, he projects the PEM suffix \*-*sa* 'male; small' onto the Proto-Mande level, referring to [Dwyer 1988]. However, David Dwyer's reconstructed Proto-Mande form is rather \**gure-n* 'man'. Even worse, in Proto-South-Western Mande the suffix \*-*sa* (well represented in all the languages of that group) means 'female', while the suffix for 'male' is \**sina*.

The reconstruction of the suffix \*-li as a definite marker (thus, an article; a definite/referential article, represented by a front vowel, is widely attested in the Western Mande branch), albeit highly original and challenging, needs further substantiation. First of all, Schreiber regards the agent noun suffixes -ri in Bisa, Busa, Bokobaru and -li in Southern San as reflexes of the \*-li in question, and to make the semantic transition smoother, he argues that "the agentive meaning proceeds however ... not from {/li/} itself, but from the verbal root contained by the compound word. Therefore, the function of  $\{/li\}/$  is a nominalization" (p. 79). This argument seems rather strained: if -li is really a nominalization (rather than agent noun) marker, I do not understand why Boko /màán-pīi-li/ should mean 'buyer' rather than \*'buying', or why Bisa-Barka /dumo-ba-l/ should mean 'weaver' rather than \*'weaving'. It is true that in many Southern Mande languages and in Manding, verbal noun or gerund suffixes with the -LI structure are very common (Mandinka -ri/-ndi, Bamana and Maninka -li/-ni, Dan-Gwèètaa -dē, Guro -l1, Mwan -lē, etc.), but it seems to be not the case for Eastern Mande.

Another piece of counterevidence is the fact that definite/referential articles which look like reflexes of \*-*li* or \*-*ri* are rather uncommon for the Mande family<sup>7</sup>. In the numerous Western Mande languages where such an article is attested, it is most often a front vowel, sometimes preceded by a palatal resonant (-*yi*). Raimund Kastenholz [1986] derives it from the demonstrative \**kE*; I provide arguments for an origin in another demonstrative, represented by Mende *ji*, Soso and Jalonke *yi* [Vydrin 2006: 209–210]. Therefore, Schreiber's reconstruction looks somewhat mismatching: in EM languages, \*-*li* does not function as an article, but rather as an agent noun marker, and in Western Mande, there is no article that looks like -*LI*.

On the other hand, Schreiber's interpretation (p. 198) of vowel Ablaut in Bisa-Barka (front vowel in

<sup>&</sup>lt;sup>6</sup> Oddly enough, Schreiber does not include the plural markers of EM languages into his consideration, which is a serious loophole.

<sup>&</sup>lt;sup>7</sup> The only language that has such an article (with two allomorphs,  $n\tilde{i}$  after - $\eta$  and  $l\hat{e}$  after any other vowel) seems to be Beng [Paperno 2006: 43], but it looks like an innovation in this language.

singular vs. back vowel in plural, e. g. *bir* 'goat' – *burɔ* 'goats', *gyir* 'man' – *gɔ-rɔ* 'men') as the result of adjoining a singular marker (historically, an article) seems quite plausible, although even in these cases, I would reconstruct this marker as \*-*i* rather than \*-*li* (I think that the final -*r* in the singular forms belongs to the root, not to the suffix, cf. Proto-Southern Mande \* $k\bar{\delta}l\bar{\epsilon}$  'man', \* $b\delta l\bar{i}$  'goat'; Proto-South-Western Mande \*siniŋ 'husband', \*bOli 'goat'). However, in other cases Schreiber's eagerness to explain the oscillation between *i* and *u* among different languages through the influence of the definite article seems too hasty. Thus, the Southern Mande forms for "animal, meat" given on p. 197 (borrowed from Grégoire 1990) are partly wrong and partly misinterpreted<sup>8</sup>.

Schreiber's reconstruction of an "unalienable noun prefix" \**N*- seems to be shaky as well. His key evidence here is represented by the forms for "woman" and "wife" in Southern Mande languages ("Mani-Bandama"): he assumes that the forms for "wife" are derived (presumably, at the proto-language level) from those for "woman". Let us consider these forms<sup>9</sup>:

	Beng	Gban	Wan	Mwan	Guro	Tura	Mano	Dan-Ka
woman	lēŋ	lè	lē	lē	lī	<i>lé</i> 'wife'	lēē	dē
wife	nā	nà /lầ/	nò /lồ/	nā /lā̯/	nā /lā̄/	<i>nőý /</i> lỗý/ 'wife; woman'	nā /lā̄/	n <i>ó</i> ô /dɔ̃ɔੈ/

It seems to me quite evident that what we have here are reflexes of two separate roots which differ not only in the nasality of their vowels, but also in the vowel itself, and often in tone.

Another bit of counterevidence is that, in many Mande languages, words for "wife" and "(one's) child" (another key word in Schreiber's argumentation) are not "unalienable", but free nouns. Such is the case with the majority of Southern Mande languages, languages of the Mokole group, and others.

Let us consider the list of PEM forms where Schreiber reconstructs the "unalienable prefix" \*N-: \*(N-)bina 'horn', \*(N-)bo'a wound', \*N-bo.i 'pus', \*(N-)gero 'bone', \*(N-)goN(-nē) 'finger', \*(N-)goN.kā 'wing', \*N-ya 'to end', \*N-yen.ta 'to sit down', \*(N-)yɛ-si 'medicament', \*(N-)yē 'nose', \*N-yiN 'a fear', \*N-yɔ´ 'breast', \*N-yɔ´-yi 'milk', \*(N-)yɔN.ta 'sand', \*N-lɛ 'tongue', \*(N-)līµī 'soul', \*N-lo 'wife', \*masue (< (\*N-wo-se) 'broom', \*N-wuli 'tail', \*N-wī 'head', \*(N-)wa(-ru) 'blood'. Almost half of these words represent items that are typically alienable in Mande ("wound", "pus", "medicament", "fear", "sand", "broom"); there is even a verbal root in the list ("to end"). On the other hand, many typically unalienable nouns are not on the list, such as \*dari 'father', \*boN 'intestine', \*ga 'cheek', etc.

Yet another strong argument against the reconstruction of this prefix is of a typological nature: the relation between possessor and alienable noun (in Welmers' terminology, "free noun") is semantically more complex than a rather natural relation between possessor and unalienable ("relational") noun. Languages which grammaticalize this opposition tend to explicitly mark the former, not the latter. In the Mande family, to the best of my knowledge, there is not a single example where a particular morpheme would mark the syntactic relation "possessor — relational noun", while markers of the relation "possessor — free noun" are omnipresent<sup>10</sup>. An unalienable noun prefix in a Mande language would be anomalous.

Not very convincing is Schreiber's reconstruction of the PEM suffix \*-si for uncountable nouns. In fact, among the four "core" stems enumerated on the p. 202 ("flour", "sand", "salt", "dust"), two of Schreiber's reconstructions do not contain the suffix in question ("dust": \*bu.ta, "sand": \*N-yoN.ta, pp. 325-326). In Scheiber's list of reconstructions, I have found the following forms which presumably contain the suffix \*-si: \*(N-)yɛ-si 'medicament', \*yi/wi(-si) 'millet', \*yõ.bi-si 'animal', \*yõ(-si) 'fat', \*noN(-si) 'bowels', \*no-si 'pregnant', \*wi-si 'flour', \*wu-si 'salt'. Three out of eight words ("animal", "bowels", "pregnant"), to my mind, do not belong to the semantic group in question; on the other hand, there are many uncountable nouns which have no \*-si at all (\*N-bo.i 'pus', \*(go.)boN 'excrement', etc.). Therefore, the heuristic value of this suffix is not high. The same can be said about Schreiber's PEM "body part suffix" \*-ka, attested only in four

<sup>10</sup> With the exception of very few languages (such as Gban) that do not distinguish between these two groups of nouns.

<sup>&</sup>lt;sup>8</sup> E. g., the Tura form is not wu, but wii; in Tura back unrounded vowels do not exist. As for the Dan form  $w\bar{w}$  (in Grégoire's transcription, wu), its back unrounded vowel regularly corresponds to *i* in other South Mande languages. There is, in fact, a Kla-Dan form wu, but its back rounded vowel can be easily explained through the influence of the initial labial consonant. Therefore, the Proto-Southern Mande form is certainly \*wi, and it is unnecessary to perceive a fossilized definite article in it.

<sup>&</sup>lt;sup>9</sup> The forms are from my Mande Etymological Dictionary (ms.). H. Schreiber provides forms from H.-Cl. Grégoire's dissertation, usually without tonal marks and often in an erroneous segmental transcription.

H. SCHREIBER. Eine historische Phonologie der Niger-Volta-Sprachen

stems:  $*g_{2}N(-ka)$  'arm + hand',  $*m\tilde{e}(-ka)$  'body', \* $s_{2}N(-ka)$  'tooth', \*wu(-ka) 'neck' (and not attested in many other names of body parts: \*gwaN 'foot', \*toro 'ear'...). In my opinion, even if we reconstruct \*si and \*ka as separate morphemes (and do not consider them as simply parts of the roots), they should be regarded not as derivational suffixes, but as roots that have broadened their lexical semantics and begun to easily enter into compound relations with other roots; such situations are very common in Mande languages<sup>11</sup>.

In dealing with noun morphology, Schreiber pays special attention to compound formation. I can only approve of this approach: it is true that no lexical, morphological and even phonological reconstruction of Mande is possible if compounding is not taken into account. However, the example of the stem \*(gɔ)boN 'excrement' ("human's excrement") presented to illustrate this phenomenon (p. 200) does not look very appropriate, for several reasons. First of all, the author provides forms borrowed from old publications with imprecise transcription (H.-C. Grégoire 1990; Prost 1953) and disregards newer and more exact sources<sup>12</sup>, even if they are mentioned in the bibliography accompanying the book (I have to mention, quite immodestly, my own publication), cf.:

	PSM	Beng	Tura	Wan	Guro	Dan	Mwan	Gban	Mano	Yaure
Schreiber 2008	-	γbo	γbo	ßи	ßo	γbo	γbo	үbe	gbọ	-
Vydrine 2004	*gbī	gbō	gbó	bù	bū	gbō	gbō	(gbè) <sup>13</sup>	gbō	рѷ

The correspondence "Guro b — Yaure p — Wan b — Beng, Tura, Mwan, Mano, Gban gb'' before upper vowels is not at all "unsystematic"; it reflects, quite regularly, Proto-Southern \*gb-, and it is superfluous to interpret the labiovelars as the results of compounding followed by contraction. It should also be mentioned that the reflexes of the root for "excrement" have an initial labiovelar consonant in all South-Western Mande languages (\* $kp\delta$ ), in Soso (gbii) and in Northern Jalonke (gwii); as such, the explanation of the initial labiovelar in Busa, Boko and Proto-Southern Mande as the result of relatively recent compounding does not work<sup>14</sup>.

On the other hand, words for "excrement" in SM are used not only for human feces, but also for animal droppings, and in many languages, for waste in general (I am sure that it was the same way on the Proto-Mande level as well). Therefore, if we follow Schreiber's reconstruction, in Dan-Gwèètaa, gbɛ̃ gbồ 'dog's excrement' should be interpreted etymologically as "dog's human excrement", and mliv gbo 'rice husk' as "human excrement of rice", which seems to me to run against common sense. Another argument: there are no reflexes of the root \*go 'human' in Southern Mande. There is, however, a root  ${}^{*}k\bar{\jmath}l\bar{\varepsilon}$  'man, male' (Dan-Gwèètaa gɔ̃ɔ̈́ 'man', Tura gɔ̃ɔ̃ 'man', etc.), but an interpretation of the form  $*gb\bar{v}$  'excrement' as originating from  $k\bar{z}-b\bar{v}$  'male ecxrement' (as opposed to "female excrement"?) looks even more bizarre.

A short section (p. 81–86) deals with **the category of adjectives**. It should be noted, however, that Schreiber's criterion for classifying words as adjectives (possibility of being used with a copula in the predicative function) does not seem to me convincing. Why should one take the predicative use, which is not prototypical for adjectives, as the diagnostic one? Studies of adjectives (and their correlation with stative/qualitative verbs) in Mande languages have a long history (see, for example and for references: Tröbs 2008a, 2008b), and it is clear that much more subtle criteria are necessary here.

In his analysis of the **verbal morphology** (pp. 86–93 for the synchronic presentation, pp. 205–207 for the reconstruction), Schreiber again, for some obscure reason, lets alone inflectional morphology; he contents himself with derivation and compounding. First of all, he singles out derivative means available in modern EM languages. In Boko/Busa, there are:

<sup>&</sup>lt;sup>11</sup> For a very detailed and accurate analysis, both synchronic and diachronic, of a couple of such semi-grammaticalized roots, see [Erman 2005]. It is unfortunate that the author of the book under review is not acquainted with this publication.

<sup>&</sup>lt;sup>12</sup> Even for Bamana, a very well documented language, Schreiber gives the form  $\beta o$  originating from (Prost 1953); the correct form is  $b\partial$ . For Bobo, he provides the form *sanga* from the same source, although a more accurately transcribed form (*sàngàa*, pl. de *sùn*) could have been quoted from a more recent and widely known publication [Le Bris & Prost 1981]. Such negligent treatment of the data of languages outside the EM group is quite characteristic of the book under review, which seriously depreciates Schreiber's attempts at external comparison.

<sup>&</sup>lt;sup>13</sup> The Gban form may represent a reflex of a different root; its original meaning seems to be 'remainder, rest'.

<sup>&</sup>lt;sup>14</sup> In some other roots, however, it is possible to reconstruct a historical transformation \*gu > gb; see Series 31 of regular correspondences in Southern Mande in [Vydrine 2004]. See also a highly instructive article by Denis Creissels that deals specially with the establishment of labiovelars in Mande languages [Creissels 2004]; unfortunately, this paper, despite having been published in the only periodical specializing in Mande linguistics and available online, has not been taken into account by H. Schreiber.

– "altrilocal"/intransitive suffix  $-l\varepsilon$  (on p. 86, the author contests its intensive interpretation; in the comparative section, however, he attributes to this suffix the meaning of repetition or duration). Schreiber finds certain fossilized verbal forms in Bisa and San that serve him as evidence for the reconstruction of the suffix \*- $l\varepsilon$  in PEM<sup>15</sup>;

reciprocal suffix -aa;

- reduplication expressing iterative meaning.

In Bisa, Schreiber singles out:

 the "stative" suffix -ta (actually, his reasons for interpreting its semantics as "stative" seem unclear to me);

— reduplication which expresses the plural of the direct object or subject NP. Verbal reduplication is also found in San; its meaning can be interpreted either as intensive or that of verbal plural. Schreiber hesitates to make any statements about the semantics of reduplication in PEM and admits that the verbal plural meaning of reduplication may result from the influence of Moore<sup>16</sup>;

— Ablaut, which is "no more productive in any modern language", but can be established "because of systematic similarity of semantically close verbal forms" (p. 206). This point, which, to me, seems highly controversial, needs more detailed analysis. The author mentions, in this relation, five couples of verbs in PEM and two in Bisa. Forms with unrounded vowels seem to be regarded by Schreiber as initial (this is not expressed directly, but follows from Schreiber's data), and forms with rounded root vowels presumably result from Ablaut:

1) \**mini* 'drink' – \**muli* 'swallow';

2) \**da* 'learn' – \**dɔN* 'know';

3) \*yar 'break' – \*wu 'break';

 \*ta 'go' - \*to 'leave, abandon' - \*tola 'put a foot on something';

5) \**ka* 'hold, take' – \**ku* 'pull toward oneself';

6)  $z\dot{e}$  'beat' – zo 'thrash millet';

Bisa:

7) *bon* 'draw to oneself' – *wurun* 'take to oneself completely'.

However, if we examine these pairs in a broader context and in more detail, the idea of Ablaut as a derivational means grows less attractive.

Pair 1: The first root is well represented in all the groups of Mande family (cf., in this relation: [Cl. Grégoire 1990]), while the second does not seem to be found outside South-Eastern Mande. Cf. their forms in Southern Mande languages (my own data):

	PSM	Dan-Blo	Dan- Gwèètaa	Kla-Dan	Tura	Mano	Guro	Yaure	Mwan	Wan	Gban	Beng
drink	*mī́nī̀(?)	тū	тū	mấŋ	mí	mī	míní	mìnì	mī	_	_	mīn
swal- low	*mani(?)	_	тл́ӈ	ฑก็ทุ	mấi	mānī	míní	?	mii	bồni (?)	mlế	mÌή

If we are to postulate a derivation through Ablaut, we should postulate it on the Proto-South-Eastern Mande level rather than for PEM; however, the SM data testifies against any \*i - \*u type Ablaut. It seems plausible that both roots may be related by some kind of derivation, but it can hardly involve Ablaut<sup>17</sup>.

Pair 2: the Proto-Southern form for "learn, teach" looks like  $*d\tilde{a}l\tilde{a}$ , and it is not attested outside the South-Eastern branch, while "know" is  $*d\tilde{5}$ , and re-

flexes of the latter are widely spread among the entire Mande family (with the exception of South-Western Mande and Soso-Jalonke). It would be strange to suppose that Proto-Mande  $*d\tilde{j}$  'to know' could have been derived from a Proto-South-Eastern root  $*d\tilde{a}l\tilde{a}$  whose meaning ('to teach, to learn') is more complex semantically, and that the Ablaut had to be accompanied by a truncation of the second syllable.

Pair 3: In Proto-Southern Mande, the verbs of the second pair are reconstructed as \*yEli and \*wii or \*wii correspondingly. It is evident to me that the rounded vowel in the PEM reconstruction \*wu results from a progressive assimilation after a labial consonant (cf. Dan-Blo, Dan-Gwèètaa wu, Kla-Dan wu; in the latter variety the modification \*i > u is regular in this context).

Pair 4: \*ta 'go' and \*to 'leave, abandon' are PEM reflexes of the roots well represented in many Mande groups; their Proto-Mande reconstructions will be, most probably, \*táxa and \*tó. Here again, if we are to accept the Ablaut hypothesis, we should postulate it

<sup>&</sup>lt;sup>15</sup> Unfortunately, the author is unaware of Dmitry Idiatov's work [2003] where a detailed synchronic and diachronic analysis of the verbal derivational morpheme *-LA* in Tura and in other Southern and Eastern Mande languages is carried out.

<sup>&</sup>lt;sup>16</sup> Cf. a similar function of verbal reduplication in the South-Western Mande language Loko spoken in Sierra-Leone [Vydrine 2004: 66–67].

<sup>&</sup>lt;sup>17</sup> Another strong hypothesis is a borrowing of the root for "swallow" from Proto-Kru into Proto-South-Eastern Mande, cf. the following forms for "swallow" in different Kru languages: Krumen Tepo *mná*, Jrewe *mná*, Krahn *mlà*, Grebo *mlá*, Gere, Wobe *mlà*, Niabua *mānā*, Bete-Daloa *mlà*, Bete (g) *mànà*, Neyo *mlā*, Koyo *mlā*, Godie *mānā*, Dida *mnā*, Aizi *mra*.

on the Proto-Mande (rather than PEM) level, and even there, it seems doubtful.

Pair 5: the root \**kun* or \**kũ* 'catch' (and similar meanings) is broadly attested in the Mande family (SM, Samogho, Bozo, Manding, Vai), while \**ka* appears to be an EM root. The chronological priority of the form \**kũ* over \**ka* makes impossible the derivation of the former from the latter through Ablaut.

Pair 6: In Bisa-Lebri, the former root is reflected as  $z\dot{\epsilon}$  'kill; beat; play (musical instrument), ply', etc.; the latter as  $z\dot{s}$  'thrash (millet); strike (iron); pound' [Vanhoudt 1999]. It may seem that these two forms provide a good illustration of the proposed Ablaut, however, reflexes of both roots in SM and in some EM languages rule out this hypothesis:

	PSM	Dan-Blo	Dan-Gwèètaa	Kla-Dan	Tura	Mano	Guro	Yaure
beat, kill	*cē (?)	zā	zā	zè	zέ	$Z\bar{E}$	jē	tề
beat, pound	$^{*}zar{ ilde{z}}$	zĪ	zī	zồ	zź	zĪ	zĪ	sồ

	Mwan	Wan	Gban	Beng	Southern San
beat, kill	dē	té	zè	dē	dε
beat, pound	zĨ	_	zồ	zĨ	zĩ 'push, move'

Pair 7: the only argument in favor of a derivative relation between these two roots seems to be a remark in André Prost's Bisa-Barka Dictionary (Prost 1950: 186): "**wurun** ... sert de F(orme) PL(urielle) à *bon*". Apart from this judgment, I do not see any reason to regard *wurun* as a form derived from *bon* and not as a different root.

This leaves us without a single reliable minimal pair, making the reconstruction of vocalic Ablaut in the PEM verbs groundless.

Schreiber devotes much attention to the "complex predicates", i. e. idiomatic combinations of noun stems with verbal stems. He proceeds from the idea that such combinations might have played an important role in the history of East Mande languages, and that they should be taken into account in the reconstruction. I fully agree with him; my experience with other Mande languages (especially Southern Mande) shows that contraction of such combinations is a considerable source of verbal roots in modern languages. For instance, in Dan-Gwèètaa gboo 'to defecate' doubtlessly ascends to \*gbo bo (lit.: "excrement + get out"). What represents a difficult problem here is the morphosyntactic status of such combinations in the synchronic perspective (which also has diachronic implications)18. H. Schreiber follows Klaus Wedekind in his interpretation of "complex predicates" in Boko/Busa as instances of incorporation. However, it seems to me that what we have here is not incorporation in the usual technical sense of the term, which implies that the complex in question functions morphologically as one word, and that noun stems that can be inserted into the incorporating complex make an open list. In Boko/Busa, neither of these requirements is fulfilled: there is no morphological marking of the "onewordness" of the complex, and the nouns which can appear in that position, although quite numerous, make a closed list. What we have here are, rather, more or less lexicalized idiomatic word complexes.

Contrary to the established tradition, Schreiber precedes his analysis of the phonemic inventories with those of the **rhythmical structure: syllabic structures**, **nasality, tone.** Let us follow him in this arrangement.

In Boko/Busa, he singles out the following syllabic types: N, CV, CVV, CCV<sup>19</sup>. In Bisa, these are N, CV, CV:, CCV, CVC, CV:C, and in San, they are the same as in Boko/Busa. For PEM, Schreiber reconstructs the "syllabic types" \*N, \*CV, \*CCV, \*CV.C<sub>lenis</sub>V. He discusses the phonological status of long vowels in Boko/Busa (pp. 99–100) and seems to share Ross Jones' opinion that we have here combinations of two short vowels rather than a single long vowel (the main criterion being the availability of different tones on CVV sequences, while modulated tones on CV are impossible<sup>20</sup>). However, Schreiber's position looks contradictory: if VV sequences are not long vowels (or diphthongs), but sequences of vowels, CVV should

<sup>&</sup>lt;sup>18</sup> On this matter, see my article concerning the status of preverbs in Dan-Gwèètaa [Vydrin 2009b].

<sup>&</sup>lt;sup>19</sup> Busa forms with the structure CVVV, e. g. *zũaa* 'loose', provided by Schreiber himself on the same page, remain unexplained.

<sup>&</sup>lt;sup>20</sup> Unfortunately, Schreiber does not apply the criterion of morphemic boundary, which often provides more relevant results.

not be regarded as one syllable, but rather as a sequence of two syllables, CV-V, and in this case, we should establish a separate syllabic type V (otherwise, Schreiber should explain which definition of the syllable he is following)<sup>21</sup>. The same problem is valid for Bisa (pp. 121–123) and San (pp. 149–150).

Schreiber's problem is clear, and it is not new to Mande studies: he desperately needs a one-way unit, intermediary between a syllable and a phonetic word (not the same as a morpheme, which is a two-way unit). Meanwhile, such a unit in Mande languages, a metric foot, has been discussed in special literature for quite a long time. One can mention Joseph Le Saout's work of 1979 (this author preferred the term of "syllabème"), as well as more recent publications [Vydrine 2005a; Vydrine 2009c; Kuznetsova 2007]. It is unfortunate that this discussion has passed unnoticed by Schreiber; otherwise, he could have avoided some logical inconsistencies. Another mismatch of this kind is the reconstruction of a "syllable type" CV.ClenisV in PEM (p. 209) which should rather be interpreted as a disyllabic foot. In other words, Schreiber's "syllable types" should better be regarded as "metric foot types".

An important place is allotted in Schreiber's interpretation of EM data to the "underspecified" nasal element N that appears in all EM languages in the position of coda. The author interprets it as a vowel, for the reason of consistency of syllabic structures: "Otherwise, in Boko/Busa ... appears no closed syllable, and the nasal consonant would be the only consonant that could appear at the end of a syllable" (p. 104). Although I assume that a foot-final -N might be a vowel (like in the majority of Southern Mande languages), it should be noted that Schreiber's argument is insufficient. Languages where CVN is the only type of closed syllable are not rare at all; in the Mande family, they are represented by Mandinka, Xasonka and Vai (to mention but some of them). To display the vocalic status of a foot-final -N, for example, in Tura, one can adduce the case of perfect marking on the Subject whose final vowel is then doubled and acquires an extra-high tone: Nế-ế lố 'A child has come'. If the word ends in -N (transcribed as  $-\eta$ ), we have: N  $j \eta - \eta l$   $\delta$  woman has come'<sup>22</sup>. However, no evidence of this kind is given by Schreiber for EM languages,

which leaves the reader unconvinced. In fact, I agree with him that reconstruction of a foot-final -N (quite probably, of a vocalic nature) is highly plausible, but his data favoring this conclusion are insufficient (and his reconstruction of an "inalienable marker" \*N- is not helpful in this respect; see my discussion of this marker above).

There follows a section on **consonant alternation** in EM (p. 221–243), which, to me, seems among the most controversial passages in the book. H. Schreiber recognizes that, in modern EM languages, no consonant alternation exists, but he follows Kastenholz in his idea that it could have existed in Proto-Mande (resp. in PEM), and this phenomenon could have been responsible for all kinds of irregularities in consonant correspondences (my criticism of Kastenholz's approach was published in *Journal of African Languages and Linguistics*, vol. 21, No. 1, 2000, pp. 106–118). I shall try to formulate my objections to his reasoning.

1. In those Mande languages that do have incontestable consonant alternation on the phonemic (not merely phonetic) level, primarily in South-Western Mande (SWM), the mechanism of alternation is quite clear: the morphological elements (a definite/referential article for nouns, a direct object 3SG pronoun for verbs) that trigger this alternation can be easily reconstructed on the Proto-SWM level23. For PEM, however, it is not clear at all. Schreiber's explanation of the model of PEM and Proto-South-Eastern consonant alternation (p. 239-243) is rather confused. The only morphological means that is credited for triggerring this alternation seems to be the "inalienable noun prefix" \*N-. However, as has already been shown above, its reconstruction is highly problematic, and even if we accept it, I do not understand how this prefix could be responsible for the alternation in such roots (adduced by Schreiber) as "to rot", "dew", "field" or "water".

It turns out that the consonant alternation here is not a precise tool, but, rather, a magic wand, produced each time the linguist encounters a difficulty in the reconstruction process. It is probably a philosophical question: Do we want a reconstruction "at any price", or is our priority to make it as sound and verifiable as possible? In the former case, we can be completely satisfied with a "magic wand"; in the latter, we are obliged to cast it away and to look for a ruler instead.

<sup>&</sup>lt;sup>21</sup> In some instances, Schreiber tries to avoid this contradiction by treating -V in terms of "morae", but the introduction of morae implies that we deal with long vowels and diphthongs (otherwise, he is operating with a non-standard definition of the term "mora"), which seems not to represent the opinion of our author.

<sup>&</sup>lt;sup>22</sup> According to personal communication from Dmitry Idiatov.

<sup>&</sup>lt;sup>23</sup> It is true that the word-final nasal element in the majority of SWM languages also produces the same effect as the article and the 3SG pronoun, but, to my knowledge, there is not a single Mande language in which this element by itself, without being supported by a grammatical morpheme (like an article), would result in a *phonological* consonantal alternation.

2. Schreiber's interpretation of the mechanism of consonant alternation in SWM languages is erroneous: he postulates a transformation Fortis  $\rightarrow$  Lenis in the intervocalic position, even though it actually took place anywhere in the absence of a preceding \*–*N*, even in the context #\_V (see in detail: [Vydrin 2006: 99–108]). Understanding this relieves us from the obligation to postulate a hypothetic vocalic prefix in order to justify the lenition in SWM languages. Since Schreiber's "two steps of consonant change" in PEM (p. 239:

I.  $C_f \rightarrow C_1 \setminus V_V$ ; III.  $V \rightarrow \emptyset \setminus \#_C$ ) follow the SWM model, invalidation of step I of this model depreciates the suggested PEM model as well.

3. The next objection, probably the most serious one, concerns the entire book and deals with H. Schreiber's presentation and handling of his comparative data. In his comparative series, we often find forms that certainly do not stem from one and the same root, e.g. (example 94, p. 240–241):

	PEM	Busa [Jones 2004]	Bisa-Lebri [Prost 1953]	South San [Prost 1953]	North San [Prost 1953]	Bobo [Prost 1953]	Beng [Prost 1953]
tail	*N-wuri (<*guri)	vlã	mun	mui	muli	pègè	pinon

	Tura	Wan	Gban	Guro	Yaure	Dan	Mano
	[Prost 1953]						
tail	wi	wé	wi	wori	weri	wén/wi	won

It is evident that Bobo and Beng forms do not reflect the same root of the proto-language as the forms in Bisa, San, Tura, Wan, Gban, Guro, Yaure, Dan, and Mano. A further third root might be represented by the Busa form. However, the author does not offer the slightest comment on this subject; the forms are given just like that! Such situations are encountered practically everywhere in the book; I could easily fill many pages by quoting and critically analyzing the examples. Sometimes it is easy to sort out the reflexes of different roots, but in many instances it remains unclear whether the author regards the forms as cognates or not.

It is, of course, normal that at the beginning stage of a comparative work, the linguist arranges forms from different languages according to their English (or German, or Russian...) equivalent, i. e. their basic semantics; it is the "ethic" stage of a study. However, one of the goals of the work is the creation of a root dictionary, in which forms are arranged according to the proto-language roots they reflect; this is the "emic" stage. My impression is that H. Schreiber essentially remains at the "ethic" stage; at least, I have not remarked any attempt at sorting the forms according to their proto-roots.

This attitude results in an "extra-lumping" approach: Schreiber tends to regard forms as cognates if there is even the slightest phonetic similarity, or if there exists, somewhere in the Mande family, another form which could be regarded as an intermediate link. For example, we find the following forms for "neck" (p. 228): Looma (SWM)  $k \eta / w \eta$ , Busa *waka*, South San

*wi*, Beng *lo*, Tura *vele*, Guro *bɔlɔ*. For me, these are reflexes of at least four (may be, even six) different proto-roots<sup>24</sup>, but Schreiber puts them together and looks for plausible explanations (such as hypothetic consonant alternation in the proto-language...) for this great divergence in the forms.

In my opinion, this approach greatly depreciates Schreiber's entire work: the reader is, in fact, confronted with a pile of raw data and obliged to perform an analysis that normally should have been done by the author.

Returning to the issue of consonant alternation in PEM, I have to conclude that this idea does not seem to me sufficiently grounded. Before more substantiated arguments are given, it can hardly be taken seriously.

Unfortunately, this lack of rigorousness in both presentation and interpretation of the data has negatively affected the entire **reconstruction of the phonemic inventory** of PEM. And it is regretful, because the thorough analysis of the phonological systems of modern EM languages in Chapter 3 disposes the reader towards expecting a solid comparative proce-

<sup>&</sup>lt;sup>24</sup> In some cases, this can be proven very effectively. Thus, in South San there is a form  $b\dot{s}l\dot{s}$  'throat' which doubtlessly reflects the same root as the Guro word; therefore,  $w\dot{i}$  'neck' in the same language stems from a different root. In the SWM languages Mende and Loko we have, respectively,  $mb\dot{s}l\dot{s}/bolo$  and  $mb\dot{s}r\dot{s}/boro$  for 'neck', but cf. in Mende  $k\dot{s}ng\dot{a}/gonga$  'back of the head', in Loko konga 'neck' (Koelle's data), which proves that  $ko\eta/wo\eta$  in Looma cannot reflect the same root as bolo in Guro, etc.

dure. The abovementioned flaws (above all, the indiscriminate approach to the establishment of cognates and the "magic wand" of consonant alternation) are magnified by the selectivity in the illustration of phonemic correspondences: as a rule, each one is illustrated by one or two series of cognates, while all the others are represented only by proto-forms on the PEM level (without their reflexes in the modern languages) given in a list at the end of the book. As a result, the author's lexical reconstructions remain, to a great extent, unverifiable (unless the reader undertakes anew the entire job of the compilation of a comparative EM dictionary). In compiling a volume of 300-odd pages, it would hardly be a problem to include a full-fledged comparative lexicon for a small group of languages<sup>25</sup>; such a lexicon would raise the value of the book enormously, even in the eyes of those who disagree with interpretations advanced by the author.

It should also be mentioned that the book is riddled with inaccuracies, misprints and errors. I will mention only a few.

On page 67, the Boko and Busa forms for 'give' are presented as /gba/; in fact, in both languages, the form is *kpá*.

On page 77, /gún.nɛ:m/ is given as the Bisa-Lebri word for 'chicken'; in fact, this word means 'kitten', whereas 'chicken' is k vr |k vr | [Vanhoudt 1999].

On page 103, in the chart of resonant allophones in Dan, p appears twice instead of d, which is completely misleading for the understanding of the mechanism of the nasal/oral variants distribution in this language.

On page 141, it is said that "Hidden (1986) proceeds, for the dialect of Lebri, from five phonemic oral vowels...", while in the chart below, seven vowels are given.

In Table 34 (p. 155), the imperfective negative marker in Southern San is erroneously given as /tá/ (instead of /bā/).

On page 163, in the charts of distribution of voiceless labials in two San varieties (Tougan and Toma), each consonant is given two lines (with different sets of vocalic contexts in each case), without any explanation concerning their differences.

On page 167 it is said that in San, /n/, "just like /m/, does not go together with /e/ and /o/...", yet immediately following that paragraph, the author mentions the forms  $n\dot{e}$  and  $m\dot{e}$ , blatantly contradicting his own assertion (p. 168).

On page 83, when presenting his example 41 (Bisa: /záá nyíntáā-m/), the author simply forgets to switch to a different keyboard layout, and its German translation looks as follows: |der meg ist sandig.|... etc.

Any comparative linguist knows how difficult it is, when dealing with the data of many languages at the same time, to avoid errors and misprints, and, to some extent, they can be regarded as an unavoidable evil. But still, one wishes the author had invested more care into the editing of the work before publication.

\* \*

My review of Henning Schreiber's book has turned out to be much more critical than I had intended at the beginning. Now, reading my text again, I see that this issue is rather natural: I disagree with Henning not only in certain particular interpretations, but over some basic methodological principles of comparative linguistics as well.

However sharp my criticism may be, I still think that the reviewed book is an important step forward in Mande comparative linguistics, and even those hypotheses and interpretations of Schreiber that, to me, seem erroneous, will play a positive role in triggering fruitful discussions among Mandeists. And I hope very much that my severe judgments will not discourage Henning Schreiber from the continuation of his research in the field of Mande comparative linguistics, but, rather, encourage him to undertake a new attempt of Eastern Mande reconstruction, for which I would be happy to write a laudatory review.

## References

- BAZIN, Jean. A chacun son Bambara // J.-L. AMSELLE & E. M'BO-KOLO (éds.). Au coeur de l'ethnie. Ethnies, tribalisme et l'état en Afrique. Paris: La Découverte, 1985, pp. 87–129.
- CREISSELS, Denis. L'occlusive vélaire sonore *g* et les labiovélaires (*w*, *gw*, *kw*, *gb*, *kp*) en mandingue // Mandenkan, 39, 2004, pp. 1–22.
- DWYER, David J. Towards Proto-Mande morphology // Mandenkan, 14/15, 1988, pp. 139–152.
- ERMAN, Anna. Le grammaticalisateur -ga en dan-blo // Mandenkan, 41, 2005, pp. 41–61.
- GRÉGOIRE, Claire. Etude comparative des items pour «boire» et «manger» dans les langues mandé // Mandenkan, 19, 1990, pp. 39–46.
- GRÉGOIRE, Claire & DE HALLEUX, Bernard. Etude lexicostatistique de quarante-trois langues et dialectes mandé // Africana Linguistica XI, Annales du Musée Royal de l'Afrique Centrale, Sciences Humaines, vol. 142. Tervuren, 1994, pp. 53–71.
- GRÉGOIRE, Henrie-Claude. *Tonétique et tonologie d'un groupe de langues mandé. Etude théorique et expérimentale.* Thèse pour le Doctorat d'Etat, Paris III, 1990, 465 p.
- ІDIATOV, Dmitry. Структура глагола в языке тура (Западная Африка, семья манде): Элемент ILÁI. Магистерская дис-

<sup>&</sup>lt;sup>25</sup> Certainly, in this case, the comparative series should not be given in columns, which is a very uneconomical; in the current presentation, as a rule, two comparative series take an entire page.

сертация. СПбГУ, 2003. [*The Tura verb structure (Mande, West Africa): the element* |LÁ|. MA Thesis, St. Petersburg State University, 2003.]

- KASTENHOLZ, Raimund. Specification and the morpheme -(Y)É in Central Mande (and beyond) // Afrikanistische Arbeitspapiere, 7, 1986, pp. 97–113.
- KUZNETSOVA, Natalia. Le statut fonctionnel du pied phonologique en gouro // Mandenkan, 43, 2007, pp. 13–45.
- LE BRIS, Pierre & PROST, André. Dictionnaire bobo-français, précédé d'une introduction grammaticale et suivi d'un Lexique français bobo. Paris, SELAF, 1981, 415 p.
- LE SAOUT, Joseph. Notes sur la phonologie du Gouro (zone de Zuénoula). Nice: C.E.P.L.A.N., 1979, 76 p.
- PAPERNO, Denis. Базовый синтаксис языка бен (южные манде). [Basic syntax of the Beng language (Southern Mande). MA theses. Moscow State University, 2006, 110 p. http://mandelang. kunstkamera.ru/files/mandelang/dipl\_beng.pdf
- РОZDNIAKOV, Konstantin. Языки манде: Сравнительно-исторический анализ. Кандидатская диссертация. М.: Ин-т языкознания АН СССР, 1978, 149+210 с. [Mande Languages: A historical comparative analysis. Moscow: Institute of Linguistics, 1978, 149 + 210 p.]
- PROST, André. La langue bisa: grammaire et dictionnaire. Ouagadougou: Centre IFAN, 1950.
- PROST, André. Les langues mandé-sud du groupe mana-busa. Mémoires de l'Institut français d'Afrique Noire, Dakar, 1953, 182 p.
- STAROSTIN, Sergei. Сравнительно-историческое языкознание и лексикостатистика // С. А. СТАРОСТИН. Труды по языкознанию. М.: Языки славянских культур, 2007, с. 407–447. [English version: Comparative-historical linguistics and lexicostatistics // Time Depth in Historical Linguistics, vol. 1. Cambridge: The McDonald Institute for Archaeological Research, 2000, pp. 223–265.] http://www.nostratic.ru/books/(140)Starostin\_Glotto1.pdf
- TRÖBS, Holger. Bambara // TRÖBS, Holger, Eva ROTHMALER & Kerstin WINKELMANN (eds.). La qualification dans les langues

africaines. Qualification in African Languages. Pp. 13–28. Köln: Köppe, 2008a.

- TRÖBS, Holger. Duun // TRÖBS, Holger, Eva ROTHMALER & Kerstin WINKELMANN (eds.). La qualification dans les langues africaines. Qualification in African Languages. Pp. 71–86. Köln: Köppe, 2008b.
- VANHOUDT, Bettie. Lexique bisa-français // Mandenkan, 34, 1999.
- VYDRINE, Valentin. La réduplication des adjectifs dans les langues mandé // Mandenkan, 39, 2004, p. 61–67.
- VYDRINE, Valentin. Quelques recommendations méthodologiques concernant la description des langues mandé-sud // Mandenkan, 41, 2005a, pp. 1–22.
- VYDRIN, Valentin. Reconstruction of initial consonants in Proto-South-Mande // Koen BOSTOEN & Jacky MANIACKY (eds.). Studies in African comparative linguistics. Tervuren: Royal Museum for Central Africa, 2005b, pp. 43–88.
- VYDRIN, Valentin. К реконструкции фонологического типа и именной морфологии пра-манде // Труды Института лингвистических исследований. Т. 2, Ч. 2. СПб: Наука, 2006. С. 3–246. [Toward the reconstruction of the phonological type and the noun morphology of the Proto-Mande. *Acta Linguistica Petropolitana*. Vol. 2, Part 2. St. Petersburg: Nauka, pp. 3–246].
- VYDRIN, Valentin. South Mande reconstruction: Initial consonants // Аспекты компаративистики 2. Orientalia et classica XI: Труды Института восточных культур и античности. М.: Издательство РГГУ, 2007. С. 409–498. http://www.nostratic. ru/books/(353)Journal11.pdf
- VYDRIN, Valentin. On the problem of the Proto-Mande homeland // Вопросы языкового родства — Journal of Language Relationship 1, 2009a, pp. 107–142.
- VYDRIN, Valentin. Превербы в языке дан-гуэта // Вопросы языкознания, 2009b, №2. С. 75–84. [Preverbs in Dan-Gwèètaa // Voprosy jazykoznanija, 2, 2009, pp. 75–84.]
- VYDRINE, Valentin. Le pied métrique dans les langues mandé // Essais de typologie et de linguistique générale. Mélanges offerts à Denis Creissels. Lyon: ENS Éditions, 2009c, pp. 53–62.