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South Mande Reconstruction: Initial consonants¹

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1. Introduction.

1.1. The Mande language family belongs to the Niger-Congo macro-family. It includes up to 70 languages. The genetic distance among different Mande languages is comparable to that among Indo-European languages.

In comparative Mande studies the Southern group is usually neglected. Unfortunately, this situation is only but natural, as it is very much in conformity with the degree of availability of the data on these languages. Until recently, only Guro, Tura and Dan had more or less advanced grammatical descriptions, and dictionaries were published only for Guro, Gban and Beng. The data on the other languages of the group were restricted mainly to the short sketches and wordlists in [Prost 1953], which ignored tones and important segmental phonological oppositions; a source of more precise South Mande comparative data is [Halaoui et al. 1983]. There were two attempts of reconstruction of the Proto-Mande consonants where South Mande data were taken into account. The first one was undertaken by Konstantin Pozdniakov in his unpublished PhD thesis [Pozdniakov 1978]. The second one belongs to Claire Grégoire [Grégoire 1988] and deals with labial consonants. Despite the scarcity of the data available and their insufficient accuracy, both these authors achieved interesting results which remain valid, although new data make

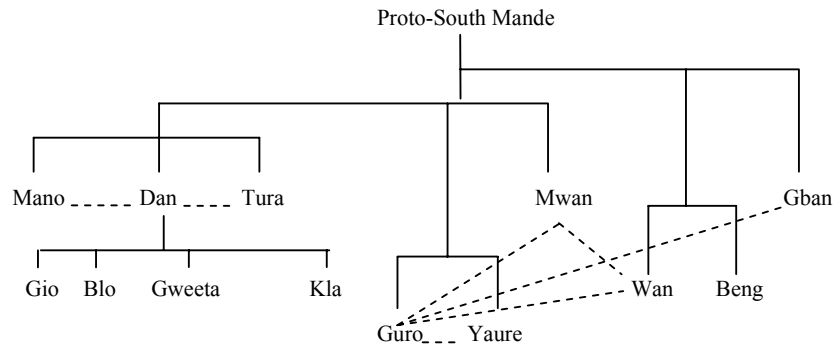
¹ I wish to thank Anna Erman, Dmitry Idiatov, Tatiana Nikitina, Olga Kuznetsova, Natalia Kuznetsova and Elena Perekhvalskaya for checking the data of Dan-Blo (Erman), Tura (Idiatov), Wan (Nikitina), Guro (O. & N. Kuznetsova) and Mwan (Perekhvalskaya). I am grateful to Thomas Bearth for his scholarly, logistical and moral support in this study, and to Margrit Bolli for all her efforts and her help, that made our work fruitful.

necessary some serious corrections (for a comparative analysis of Grégoire's paper, see division 3.2.4.).

1.2. Since 2000, a considerable change took place. Within the framework of the Swiss-Russian joint research project 'Mande Lexicology' supported by the Swiss National Foundation of Scientific Research (grant SUBJ 062156.00), a team of Russian researchers and students accomplished six field trips to Côte d'Ivoire working on grammars and dictionaries of nearly all the languages of the South Mande group. Only a part of the language data collected during the trips has been handled so far, but even at the current stage, creation of a relatively reliable comparative database became possible, from which stems the presented reconstruction of the Proto-South Mande consonant system.

1.3. Before proceeding to the reconstruction, I am going to present a short survey of the language group and the sources of the language data. A preliminary genetic filiation of the languages of the group is represented on Diagram 1, which is based on my experience of work with these languages and needs further elaboration. On this diagram, dotted lines represent strong horizontal relationships between languages.

Diagram 1. Genetic tree of South Mande languages



1.3.1. The languages of the South Mande group, a subbranch of the Eastern Mande branch of the Mande family, are located almost exclusively in Côte d'Ivoire. The only exception is **Mano**, spoken mainly in the north of Liberia, plus a small compact area at the extreme South of Guinea. I used two language manuals of Mano: [DeZeeuw & Kruah 1981] and [Neal et al. 1946], as well as my modest field notes for the Guinean dialect

of this language. Unfortunately, the data in [Becker-Donner 1965] are too unreliable.

1.3.2. **Dan** is spoken by nearly one million of people in Liberia, Côte d'Ivoire and in some single villages of Guinea. Being the largest language of the group, it represents, in fact, a continuum of about 40 dialects only in Côte d'Ivoire. In the course of the dialectological study by Summer Institute of Linguistics in the late 1960s, it was decided that the divergences between Dan dialects are considerable enough to elaborate two literary norms. Eastern Dan is based on the **Gweetaa** dialect. The first phonological study of this dialect was performed by Thomas Bearth and Hugo Zemp [Bearth & Zemp 1967], this job was continued by Margrit Bolli and Eva Flik; a grammatical description and dictionary work was begun by my student Alyona Tcherdyntseva and continued by myself (unfortunately, only a small part of the data collected has been handled; my dictionary counts so far about 2100 entries). The **Blo** dialect is taken as reference for the Western Dan. Its phonological study was performed by Margrit Bolli and Eva Flik [Bolli & Flik 1973; Bolli 1976]. My student Anna Erman continues to carry out a grammatical study of this dialect (unfortunately, the unpublished dissertation of Eva Flik remains inaccessible to us) and is also working on the Blo dictionary initiated by Margrit Bolli. This dictionary is in a relatively advanced stage (more than 2800 well elaborated entries). Jean Doneux's grammar of the Ka dialect, close to Blo, should also be mentioned [Doneux 1968]. The current name for the Liberian variants of Dan is **Gio**. They might be close enough to Western Dan, but for political reasons, a separate literary norm was elaborated for Gio by missionaries.² There seems to be no dictionary or reference grammar for Liberian Dan, therefore, its data will not be used for the current study.

The Ivoirean dialects of Dan are currently referred to as Yakuba (Yacouba). However, there is a Dan-speaking enclave in the North, in the Kla area to the West of Touba, which stands apart. Speakers of local Dan do not consider themselves «Yakuba», and my short study proved that their variant is different enough from the Gweetaa dialect (not to speak about Blo) to make mutual understanding difficult or even impossible. For this reason, **Kla** can be considered as a separate language.

² It is difficult to say anything about the state of the literacy and language planning work in Liberia after the long civil war.

Thus, we deal, within the Dan entity, with at least three (closely related) languages: Western Dan (Blo), Eastern Dan (Gweetaa), and Kla. If we consider Gio a separate language, the number reaches four.

Occasionally, forms from other Dan dialects (from my field data) will be given as well.

1.3.3. **Tura** is adjacent to Dan. Its dialects are not very divergent (at least, those whose data are available). Its grammatical description is represented in the works of Thomas Bearth [Bearth 1971, 1986, and numerous articles] and of my student Dmitry Idiatov (most of them are not yet published) who also works on a Tura dictionary. At the current stage, the dictionary counts more than 2600 well elaborated entries.

1.3.4. **Guro** is next to Dan in what concerns the number of speakers (about 330,000; according to other sources, about 450,000). Its dialects must be rather divergent, but a study of the Guro dialectology is yet to be done. So far, most of published data on this language stems from the northern dialect group (the Zuénoula area; there are however some forms from other dialects in Benoist's works). There is one typically «missionary grammar» of Guro by Jean-Paul Benoist [Benoist 1969] and two medium-size dictionaries, [Benoist 1977] and [Grégoire 1976]. Unfortunately, the former makes no distinction between implosive *ɓ* and explosive *b*, and the latter marks this difference inconsistently and with errors; neither distinguishes between +ART and –ATR vowels. This flaw can be only partly amended by the data from the phonological study by Le Saout [Le Saout 1979] and from my own data. The phonology of Guro has been dealt with by H.-C. Grégoire [Grégoire 1976], Le Saout [Le Saout 1979] and myself [Vydrin 2003]. Quite recently, Olga Kuznetsova and Natalia Kuznetsova got involved in a phonological, morphological and lexicographical study of Guro, which makes segmental and tonal transcription much more advanced.

1.3.5. **Yaure** is a language closely related to Guro (for some tonal correspondences between both languages see [Vydrine 2003]). Some central segments of its grammar and phonology are represented in [B. Hopkins 1982, 1987; E. Hopkins 1987; Lautenschlager 1992]. These publications provide, at the same time, some lexical data for comparative work. Unfortunately, no dictionary is available so far.

1.3.6. **Gban** is a southern neighbor of Guro. Its phonological description was done by Le Saout [Le Saout 1973]; at the same time, this work contains a vocabulary of about 1000 units. This vocabulary was transformed into electronic form by my colleague Alexandre Zheltov, who, un-

fortunately, had enhanced it with only a few forms from his own data collected during two field trips. The dictionary work has been resumed recently by my student Ekaterina Kotchmar.

1.3.7. **Mwan** is the western neighbour of Wan; the close interaction between speakers of both languages results in a great number of mutual borrowings. The main source for the Mwan data is a dictionary by my colleague Elena Perekhval'skaya which presently counts more than 1450 entries.

1.3.8. **Wan** is spoken by a small language community to the north of the Guro area. The data were collected by my student Tatiana Nikitina who continues her work on Wan grammar and dictionary. The dictionary, in its present form, counts more than 1450 well elaborated entries (it also includes the data from the publications of predecessors).

1.3.9. **Beng** is the easternmost language of the group, geographically isolated from the other South Mande languages and seemingly having undergone the strongest (in the SM group) influence of Jula and Baule. There is a Beng-English Dictionary [Gottlieb & Murphy 1995] which provides rich anthropological data but contains numerous errors, especially in tonal notation. There is a phonological description by Wolfgang Paesler [Paesler 1992] who also created an unpublished Beng dictionary in electronic form. My student Denis Paperno has transformed this dictionary into usable form, verified the transcription, grammar and semantics of the words and added his own data collected during three visits to Côte d'Ivoire (2004-2006). His dictionary counts today more than 2900 entries.

1.4. *Some notes on the phonetic notation.* The available descriptions use different systems of tone marking. Maintaining all of them in one paper would make the understanding difficult. For this reason, the International Phonetic Alphabet marks will be used.

a) Level tones:

Name of the tone	2-level systems (not represented in SM)	3-level systems (Guro, Dan-Blo, Wan, Mwan, Beng)	4-level systems (Gban, Yaure, Tura, probably Kla-Dan)	5-level systems (Dan-Gweeta)
Extrahigh			é̃	é̃
High	é	é	é	é
Middle		ē		ē
Low	è	è	è	è
Extralow			è̃	è̃

b) Contour tones:

\acute{e} – rising tone, \grave{e} – falling tone. In the languages where two rising tonemes are distinguished, \acute{e} is used for the mid-rising (MR) tone. In the languages distinguishing two falling tones, \grave{e} is used for the mid-falling (MF) tone.

According to the predominant practice for African languages, j is used for the voiced palatal affricate tʃ ; c goes for the unvoiced palatal affricate tʃ ; y stands for the palatal resonant j . –ATR vowels in Guro and Yaure will be designated, following the established practice of the current orthography, with symbols for open vowels: ɤ for i , ɛ for e , ɔ for u , ɔ for o .

1.5. The relevant rhythmic unit of South Mande languages is a foot, which can be mono- or disyllabic. A foot is characterized by a high degree of internal cohesion. The factors of the integrity of the foot are: tonal harmony (number of tonal combinations within a foot is limited); vocalic harmony (in a broader sense: only a limited number of vocalic combinations within a foot is possible); nasal harmony (the entire foot is either nasal or oral, with the exception of the final element $-\eta$ which can belong to both nasal or oral foot); consonantal harmony (realization of the foot-internal alveolar consonant depends on the type of the foot-initial consonant).

In fact, foot is relevant in other Mande languages too, but in the Southern group the degree of its internal cohesion is much higher than elsewhere. One of the consequences is the strong tendency towards reduction of the internal structure of the foot: in some contexts, foot-internal consonants are elided, in some others, interconsonantal vowels are dropped. The inventory of foot-internal consonants in South Mande is reduced (with some rare exceptions) to $-l-$, $-w-$, $-y-$ and their nasal allophones.

As demonstrated by Le Saout, nasal consonants in South Mande languages (with the exception of Beng) have no phonological status. They should be considered allophones of corresponding oral resonants or implosives in the nasal context (i. e., in a nasal foot): $/b/ = [b, m]$; $/d/ = [d, n]$ or $[l, n]$; $/ɲ/ = [ɲ, ŋ, ɲ]$; $/w/ = [w, w̃, ɲ]$. Following the established practice, nasal allophones of $/b/$ and $/d/$ will be designated by m and n .

A drastic reduction of the foot-internal consonants started most probably at the Proto-South Mande stage. Their reconstruction goes together with the diachronic study of the evolution of the morphophonemics which is outside the scope of this paper. Thus, only foot-initial consonants will be the object of the current reconstruction.

2. Phonological systems of the South Mande languages

2.1.1. Dan-Blo [Bolli, Flik 1973].

Consonants:

p	t		k	kw	kp
b	d		g	gw	gb
f	s				
v	z				
b/m	d/n	y/n		w/w̃	
	l				

Notes:

a) *kw-*, *gw-* accompany exclusively non-back vowels (the only exception seems to be *gwââ* ~ *gwùâ* 'taro, Colocasia exculenta'). It is highly probable that they can be traced back to combinations of *k-* and *g-* with back vowels followed by non-back vowels (**gua* > *gwa*, **guε* > *gwε*, etc.). Anyway, in the modern language their phonemic status seems to be firmly established, cf. *kwââ* 'tendon of animal' : *klââ* 'whip', *gwê* 'ceiba tree' : *gê* 'Guere (language, people)', etc.

b) The foot-initial phoneme *l-* is established quite firmly. It accompanies nasal vowels (*lââ* 'sort of pepper', *lâ* 'sun', *lââ* 'worm') and therefore stands apart from the row of resonants where oral and nasal consonants constitute allophonic pairs.

Vowels:

	Oral				Nasal	
i	u	u	ŋ	ĩ	ũ	ũ
e	ɤ	o		ẽ	ã	õ
ε	ʌ	ɔ		æ̃	ã	ã
æ	a	ɑ				

The «nasal semi-vowel» *ŋ* appears only at the end of feet; there is one example of a foot represented by *ŋ* only, it is the 1sg. non-subject pronoun *ŋ̃*. *ŋ* carries a tone of its own.

Tones: Dan-Blo has 3 level and two modulated tones, mid-falling and assimilated-falling. Each vowel of a foot carries a tone of its own, but the number of combinations of tones within a foot is limited.

2.1.2. Dan-Gweetaa [Bearth, Zemp 1968; my field data].

The consonant system is identical to that of the Blo variant.

Vowels:

Oral			Nasal			
i	u	u	ŋ	ĩ	ũ	ũ
ɪa	ɥ	ʊ		(ĩã)	(ũ)	(ũ)
e	ɤ	o		ẽ	ã	õ
ɛ	ʌ	ɔ				
æ	a	ɑ:		ã	ã	ã

Phonemes ɥ , ĩ , ũ are not yet firmly established; they appear in limited contexts.

Tones: Dan-Gweetaa has 5 level and two modulated tones, high-falling and mid-falling³. The extra-low tone in Gweetaa corresponds to the assimilated-falling tone of Blo [Flik 1977].

2.1.3. Kla-Dan (my field data)⁴.

Consonants:

p	t	c (?)	k	kw	kp
b	d	j (?)	g	gw	gb
f	s	ʃ (?)			
(v)	z	ʒ (?)			
b/m	d/n	y/n		w/ũ	
	l				

Notes:

a) Status of *kw-*, *gw-* is most probably the same as in Blo and Gweetaa.

b) There are two different realizations of *l-*, simple («weak»), [l], and geminated, [ll]. Their phonological status in relation to each other is not yet clear.

³ I have found a rising tone on a single vowel in two words only.

⁴ Unfortunately, only a small portion of my data has been handled so far (my Kla dictionary counts just about 630 entries), for which reason these conclusions are preliminary.

c) The phonological status of palatal obstruents is doubtful. It is evident that they result from the combinations of the corresponding alveolar consonants with front vowels.

d) In my small dictionary *v-* is attested in only one word, *v̄v̄n̄í* 'honey-producing midge'.

Vowels: Like in Dan-Blo.

Tones: presumably 4 level tones.

2.2. Tura [Beirth 1971].

Consonants:

p	t		k	kw	kp
b	d		g	gw	gb
f	s				
v	z				
ɓ/m	ɗ ~ l/n	y/ɲ		w/ɰ	

Vowels:

	Oral			Nasal	
i		u	ɲ	ĩ	ũ
ɪaɪa		ʊʊ		ẽ	õ
e		o			
ɛ		ɔ			
	a			ã	

Tones: four level tones.

2.3. Mano [DeZeeuw & Kruah 1981].

Consonants:

p	t		k	kp
b	d		g	gb
f	s			
v	z			
ɓ/m	l/n	y/ɲ		w/ɰ

Vowels:

Oral			Nasal		
i		u	ŋ	ĩ	ũ
e		o			
ε		ɔ		ẽ	õ
	a			ã	

Mano has 3 level tones.

2.4. Guro [Le Saout 1979].

Consonants:

p	t	c	k	kw	kp
b	d	j	g	gw	gb
f	s				
v	z				
ɸ/m	ɖ ~ l/n	y/n		w/ũ	

Note: *kw* and *gw* appear only before non-back vowels. Synchronously they can be considered as combinations of *k* and *g* with upper back rounded vowels.

Vowels:

+ ATR series		-ATR series		Nasal series	
i	u	ĩ	ụ	ĩ	ũ
e	o	ɛ̣	ọ	ẽ	õ
	a		ɑ		ã

As mentioned above, for commodity reasons the -ATR vowels will be designated with characters for «open» vowels: ɿ for *ĩ*, ɛ̣ for *ɛ*, ʊ for *ụ*, ɔ̣ for *ọ*.

Guro has no semi-vowel *ŋ*.

Tones: Guro has 3 level and two modulated (rising and falling) tones⁵.

⁵ [Le Saout 1979] interprets the Guro tonal system as a 2-level one plus two

2.5. Yaure [Lautenschlager 1992].

Consonants:

p	t	c	k	kp
b	d	j	g	gb
f	s			
v	z			
ɸ/m	l/n	y/ɲ		w/ɰ

Note: ʃ is interpreted as a separate phoneme in [B. Hopkins 1987; E. Hopkins 1987], but Frank Lautenschlager [Lautenschlager 1992:13] argues that it should be considered as an allophone of /s/ in combination with high back vowels followed by front middle vowels: /sue/ = [sue] or [ʃe], /sue/ = [sue] or [ʃe].

Vowels: like in Guro.

Tones: 4 level tones.

2.6. Gban [Le Saout 1973].

Consonants:

	t	c	k	kw	kp
	d	j	g	gw	gb
ɸ	s				
β	z				
b/m	l/n	y/ɲ		w/ɰ	

Notes:

a) Le Saout mentions that [b] is sometimes realized as slightly ingressive; in my recordings, it is usually realized as implosive.

modulated tones, falling and rising. According to this author, the level tones are in complementary distribution: high tone does not accompany voiced initial consonants, while low tone does not appear with voiceless, sonorant and implosive consonants. My interpretation is different, because the complementary distribution of tones does not work (especially in the personal pronouns). For the discussion see [Vydrine 2003]; a more detailed study of the Guro phonology is being done by Olga Kuznetsova and Natalia Kuznetsova.

b) /c/ and /j/ are marginal phonemes which appear only in expressive words and loanwords.

c) Below the bilabial ϕ in Gban will be designated by *f* (in the absence of the phoneme /ff/, this will not lead to any confusion).

Vowels:

Oral			Nasal		
i		u	ĩ		ũ
e		o			
ɛ		ɔ	ẽ		õ
	a			ã	

There is no nasal semi-vowel.

Tones: 4 level and two modulated tones, rising and mid-rising.

2.7. Mwan [Bolli, Flik 1978].

Consonants:

p	t	c	k	kw	kp
b	d	j	g	gw	gb
f	s				
v	z				
ɸ/m	ɸ ~ l/n	y/n		w/ũ	

[ɸ] and [l] are allophones in a free distribution.

Vowels: Like in Gban, plus η .

Tones: three level and one modulated (falling) tones. Each vocalic element of a foot can carry a tone of its own.

2.8. Wan (field data of Tatiana Nikitina and my own).

Consonants:

p	t	c	k	kw	kp
b	d	j	g	gw	gb
f	s				
v	z				
ɸ/m	ɸ ~ l/n	y/n		w/ũ	
	ll (?)				

Note: The phonological status of *ll-* is yet to be confirmed.

Vowels: Like in Gban, plus η .

Tones: three level tones. Each vocalic element of a foot can carry a tone of its own.

2.9. Beng [Paesler 1992].

Consonants:

p	t	c	k	kp
b	d	j	g	gb
f	s			
v	z			
	l	y		w
m	n	ɲ	ŋ	ŋm

Notes:

a) According to Paesler, Beng seems to be the only South Mande language where the principle of nasal harmony is not valid. But even in Beng, oppositions $l : n$, $y : \eta$ are marginal, and forms contravening the nasal harmony are attested only in some single words, mainly grammatical ones ($y\bar{a}$ '3sg. pronoun' vs. $\eta\bar{a}$ 'to end'; $n\bar{e}$ 'therefore' vs. $l\bar{e}$ 'sp. of fruit'). It can be concluded that the emergence of these forms and the end of the nasal harmony rule must be a recent innovation.

b) ηm is a rare phoneme, it is attested in 6 words only.

Vowels: Like in Gban plus vocalic η . Each vocalic element of a foot can carry a tone of its own.

Tones: 3 level and 4 modulated tones: low-high, mid-high, high-low, mid-low.

3. Reconstruction of the initial consonants of the Proto-South Mande language.

At the moment, there are altogether 770 correspondence sets in my South Mande database, including dubious ones and those which are represented by pairs of lexical items from closely related languages (Dan – Tura, Dan – Mano, Dan – Tura – Mano, Guro – Yaure, Mwan – Wan; those

sets will not be given in this paper unless they represent some special interest). Let us consider correspondence series attested in South Mande.

In the following comparative sets, the semantics of the word in each single language is not indicated if it corresponds directly to the semantic key of the set (given at the beginning of each set; a number with a dash corresponds to the number of the root with the indicated semantics in my comparative database).

In the correspondence sets, sources of information are indicated with two-digit letter codes (cf. «Abbreviations» at the end of this paper). The symbol # signifies that the data stems from the unpublished dictionaries of my students, colleagues from St. Petersburg State University (mentioned in 1.3.) and myself. Names of the languages are given in bold. Translations of the words and comments are in italics. Forms whose belonging to the set is questionable are given with a question mark (?). Sometimes given forms (almost) certainly do not ascend to the proto-form but are nevertheless of some interest (e. g. loanwords from related languages); these forms are put in curly braces, {}. In nasal feet, nasality can be indicated in the consonant (*n-*, *m-*), in the vowel (with a tilde) or both. In other words, transcriptions *mó* and *mó̃*; *ȳēnē*, *ȳālā̃*, *ȳēnē* and *ȳānā̃* should be regarded as equivalent (except for Beng); their phonological transcription is /bó/ and /ȳālā̃/ respectively. *-r-* is always a combinatory variant of the phoneme /-l-/. In Mwan, for nouns and verbs whose lexical tones are replaced in some contexts with high tone, the modified forms are given after a slash.

Reconstructions for vowels, internal consonants and tones are tentative. I proceed from the hypothesis that the Proto-South Mande language had a vocalic system like the one found in modern Guro and Yaure (3 vocalic series: +ATR, -ATR and nasal), a nasal semi-vowel *ŋ* (like in Dan, Tura, Wan, Gban, Mwan), nasal and oral consonant harmony; it had 3 level tones, and each vocalic element of a foot could carry a tone of its own (for a partial substantiation of the phonological type of Proto-Mande, on the basis of the SM evidence, see [Vydrine 2001; Vydrine 2004]).

3.1. Unvoiced labials

3.1.1. There are two series of correspondences which can go back to Proto-SM **p*, series 1 and 2. The following reflexes in Mwan and Wan set them apart: *p-* in the first series, *f-* and sometimes *p-* in the second. The

question is: should we postulate two different proto-phonemes, or may these cases be in a complementary distribution?

The sets representing the first series are considerably more numerous: 13 against 5 (plus 8 sets where Mwan and Wan forms are missing: 'small-2', 'tale', 'tear', 'testicles', 'thing-3', 'twin', 'untie', 'winnow'). If we examine closely the sets of the series 2, it becomes evident that

- the structures of the Mwan and Wan forms are always *CV*, *CVV* or *CV η* , whereas the Proto-SM form should be reconstructed as **CVLV* or, rarely, as **CVyV*;
- the initial consonant in both languages is always followed by a front vowel.

In the meantime, among sets of series 1 this conditioning is not attested (with one exception: Mwan *pīī-bē* 'iron'). We can therefore postulate **p- > f-* in Mwan and Wan before a front vowel, accompanied by simplification of the foot structure: **pVLV > fE*, *fEE* or *fE η* , **pVyV > fE*. It is interesting to note that in the set «wash», where this simplification of foot structure occurred in Mwan, but not in Wan, **p- > f-* only in the former, which seems to confirm the link between the fricativization of the labial initial consonant and the elision of the internal consonant, connected with regressive vocalic assimilation.⁶

If so, both series 1 and 2 go back to Proto-SM **p-*.

Series 1:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
<i>*p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>p</i>	<i>p</i>	<i>p</i>

**p^{ɔ̄} dig-2 (to) > Dan (bl), Dan (gw) p^{ɔ̄} vt dig out; pierce, Tura # p^{ɔ̄} vt dig (soil; hole), Guro # f^{ɔ̄}, perf. f^{ɔ̄}ã vt pierce, Mwan # p^{ɔ̄} vt pierce, Wan # p^{ɔ̄} vt pierce, Beng p^{ɔ̄} vt pierce*

**pīlīn drum-3 > Guro VV fīnī, Mwan plī, plī η , Wan # plī η*

**pèlè *fall (to)-3 > Dan (bl) p^{ɛ̄}ɛ̄, Dan (gw) p^{ɛ̄}, Dan (kl) p^{ɛ̄} vi fall; (bl) make a mistake, Tura # pèlè, pèlè vi fall down; vt inflict (smb. – tã) with, Mano ZE, VV pèlè, Mwan p^{ɔ̄} (?) vt drop, cut down*

**p^{ɔ̄} fell (to) > Dan (bl, gw) p^{ɔ̄} vt knock down, Mwan # p^{ɔ̄}/p^{ɔ̄} vt drop; cut down*

⁶ I hope to find out at the stage of the reconstruction of Inlaut consonants and vowels why these changes took place in this word in Mwan, but not in Wan.

*pá fill (to) > **Dan (bl, gw, kl)** pā vt fill; ptp filled, **Tura** # pá vt fill; draw (water), **Mano NE** pā, **Guro** #, **BN, GR** fā vt fill, **Yaure HB** fà, **Mwan** # pá vt fill; pile, **Wan** # pá vt fill; adj full, **Beng** # pā vi be filled; vt fill

*pèlì iron > **Dan (gw)** pìṣ̄, **Dan (kl)** píȳṣ̄, **Dan (bl)** piâṣ̄, **Tura** # piè, **Mano VV** pē-kúlú, **Guro** #, **BN, GR** fōlī n smithery; anvil, # fōlī-éwéLé, fōlī-wéLé, **Gban ST** fè vt forge, **Mwan** pīi-bē, **Wan** # péli, **Beng** pēníj

*pānā lick-2 > **Dan (bl, gw)** pā vt lick, lap, suck; sting (of insect), **Tura** # pāa vt lick, lap, **Guro** # fānā, **Yaure HB** fāNā vt lap, **Gban ST** flà vt lick; carry food to the mouth, **Wan** # plā vt lap, lick

*pélé market-3 > **Guro** # félé n commerce; market; goods, **Yaure HO** félé, **Gban ST** fé n selling; exchange; embezzlement, **Mwan** # pléé, **Wan** # pléé n market; price; expenciveness, **Beng PA** plé-blē-lè vt sell

*pěé piece-1 > **Dan (bl)** pĕ, **Dan (gw)** pĕ rn loaf, piece, **Tura** # pĕĕ n piece; group (opposed to another group), **Guro** # fí rn piece (of orange, etc.); block, quarter (of town), **Mwan** péé

*púló untie > **Dan (bl)** pó, **Dan (gw)** pú, pú, **Dan (kl)** pú vt open; unwrap; undo, untie; vi open; stretch oneself, **Tura** # póló vt untie; unpick, unstitch, unwrap; open, **Guro** #, **BN, GR** fūō vt untie; open, **Yaure HB** fúlú, **Gban ST** fló, **Mwan** # plóó, **Wan** # pló vi, vt unwrap;, **Beng** pùū vt open; untie

*pē say-1 > **Dan (bl, gw)** pṣ̄, **Dan (kl)** pṣ̄, **Tura** # pé vt say, tell (smb. – nē, about – gā); ask for, **Guro** # fī, **Yaure HP** ví (or vī ?) (the irregular voiced consonant can be explained by a semi-grammatical character of this word), **Gban** # fè vt say (name), **Mwan** # pē/pé vi speak, say, **Wan** # pé vi talk; vt speak, **Beng PA** pē v talk

*pā thing-2 > **Dan (gw)** pā, **Dan (kl)** pā n thing; reason, **Mano NE, ZE** pē, **Guro** #, **BN** fē, **Yaure HP:93** fē n thing, vè rn property, part (the voiced consonant to be explained), **Mwan** # pē

*piì-lān two > **Dan (bl)** plè, pēedā, **Dan (gw)** plè, pēèdṣ̄, **Dan (kl)** plê, pēèdà, **Tura** # piilé num two, **Mano NE, ZE** pēèlē, **Mano ZE** pēètē, **Guro** # fié, **Yaure HP** flí, filí, **Gban ST** fēj, **Mwan** # plē, **Wan** pīlōj, **Beng GL, PA** plāj

*púLú white-2 > **Dan (bl)** púú, **Dan (gw, kl)** púú, **Tura** # púú adj white; clear, **Mano** púlú, **Guro** # fúú, **Yaure** fú-vú, **Gban ST** fó adj snow white, **Mwan** pú, **Wan** pú, **Beng Beng PA** púú

*pá touch (to)-2 > **Dan (bl, gw)** pá vi touch (sth. – ká); wake up (smb. – bâ), **Tura** # pǎ vt throw (at – bǎ); throw at (sth. – gǎ), **Mano ZE** pá, **Mwan** páás vt sting, **Beng** # pā vt hit, knock; sting

Series 2:

SMande Dan Tura Mano Guro Yaure Gban Mwan Wan Beng
 *p p p p f f f f~p f~p p

*péní fonio (*Digitaria exilis*) > **Dan (kl)** pɔ́ŋ, **Guro BN** fíní, **VV** fínì, **Mwan** # flì, **Wan** # fēŋ

*pélé house-3 > **Dan (bl)** pɔ̄, **Dan (gw)** pɔ̄, **Dan (kl)** pɔ̄ɔ̄ *n* village, **Tura** # pɛ́é *n* village, town, **Mano NE, ZE** pélé *n* village, town, **Guro** # fálá *n* village, **Yaure HP** flá, flà, **Yaure HO** fálá *n* village, **Mwan** # fé

*pēyì vomit-4 > **Dan (bl)** pɛ̄, **Dan (gw)** pɛ̄, p̄, **Dan (kl)** pɛ̄ *vi* vomit; *n* (bl) vomit, **Tura** # piè, p̄ *vi* vomit; blow (nose), **Guro** # **BN, GR** fēē, **Yaure HB** fèí, **Gban ST** f̄, **Mwan** píí vomit, **Wan** # féí *vi* vomit; *n* nausea, **Beng PA** p̄ *n* baby's vomit

*pólé wash-1 > **Mano NE, VV** pélé *vt* wash (clothes), **Guro** # **GR** fólí, **Yaure HP, HB** fóé, fwé, *perf.* fwéé *vt* clean; wash, **Mwan** # fé(?), **Wan** # pólì, **Beng** # pó *vt* wash (clothes); rub (hands)

Sets which may belong to both Series 1 or 2 (Mwan and Wan data missing):

*pū-né small-2 > **Tura** # p̄-né *adj* small, **Mano NE** péétí, **Mano ZE** pē, **Guro** # fūné *adj* small, narrow, **Beng** # p̄ *adj* very small

*pīyà tale > **Dan (bl)** p̄ *n* proverb, **Dan (gw)** p̄, p̄, **Dan (bh)** p̄, **Dan (kl)** p̄, **Tura** # p̄ *n* proverb; moral story, **Mano ZE, VV** p̄, p̄, **Mano VV** p̄ *n* story, **Guro** #, **BN, GR** f̄, **Gban ST** f̄ *n* tale, legend, **Beng** # p̄

*pīa tear > **Dan (bl)** p̄ *vt* tear; cut; split, **Dan (gw)** p̄ *vi* crack, chap; *vt* tear, **Tura** # p̄ *vt* tear; split; wound; *vi* split, separate, **Guro** #, **BN** f̄, **Beng** # p̄ *vi* burst; break; *vt* fire off; slap

*pànà testicles > **Dan (bl)** pl̄, **Guro** # f̄ *rn* penis

*pō thing-3 > **Tura** # p̄ *n* thing; spirit, ghost, demon; *morph. pej. agent* mark (merged with another morpheme?), **Wan** # p̄, **Beng** # p̄ *n* thing; something

*pílān twin > **Dan (bl)** fl̄, fl̄ (< *Manding?*), **Dan (gw)** p̄, **Tura** # p̄-né, **Guro BN** f̄-né, **GR** f̄-né, **Yaure HO** f̄L̄, **Beng** # p̄

*péyà blow > **Dan (kl)** píâ *v* blow (with mouth, fan), **Dan (bl)** piâ, **Dan (gw)** p̄ *vi* blow, **Tura** # piè *vt* blow (horn), **Mano VV** p̄yè, **Guro** #, **GR** fé *vt* whistle; blow (horn), **Gban ST** féá *vi* whistle, **Mwan** # p̄ *vi* whistle, **Wan** # fé, **Beng PA** pé *vi* blow; fan (fire)

*pìyè *winnow* > **Dan (bl)** piâŝ, **Dan (gw)** pǐŝ, **Dan (kl)** péè, **Tura #** piè *vt winnow; sort*, **Mano VV** piyè, **Guro GR, BN** fēē *vt winnow; blow (with mouth)*, **Gban #** fè, **ST** féá *vt winnow*

3.1.2. The third series is represented by two sets (see below), where Yaure, Mwan, and Wan forms are not attested. Its main characteristic feature is a voiced consonant in Gban and Beng. The sample is too narrow to provide any clue for «internal» interpretation of this Gban and Beng feature; an «external» explanation could be the presence of a nominal classificatory prefix *Ñ- (for argumentation in favour of the reconstruction of this prefix in Proto-Western Mande see [Pozdniakov & Vydrin 1987-1988; Vydrine 1989; Vydrine 1994]; in more detail, [Vydrine 2001]), which could, at the same time, explain occasional nasalization in some languages.

Series 3:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*Ñ-p	p	p	p	f	?	β	?	b	b, p

*Ñ-pōlì *frog-1* > **Dan (gw)** pō, **(bl)** pōō *n toad*, **Tura #** púò, **Guro #, BN** fólì *toad*, **Gban ST** βǒǔ, **Mwan** pōlì *toad*

*Ñ-píyè *trace-1* > **Dan (bl)** pí, **Dan (gw)** pííí *rn footprint; trace*, **Tura #** píé, **Mano VV** pè-píyè *trace; sign*, **Gban ST** βé, **Beng GL, PA** bē *n tracks, footprints; scab, wound (in Beng probably a convergence of two proto-stems, *Ñ-píyè 'a trace' and *bīlē 'a wound')*

Taking into account the sporadic character of the reflexes of the nasal prefix in modern languages, a similar interpretation can be proposed for another set:

*Ñ-pùlù *stomach, belly-5* > **Dan (gw, kl)** bù, **Dan (bl)** blû *rn navel*, **Tura #** bùlù *rn navel*, **Guro #** bǒ *rn belly; womb*, **Gban ST** βù *n navel*, **Wan #** blū *rn stomach*, **Beng PA** plù *n paunch*

3.1.3. There is only one set where Guro *p-* probably corresponds to *p-* in languages outside the Guro-Yaure subgroup. It is hardly enough to establish a separate series and may be just a shared coincidence, in which case the Guro form should be considered etymologically different from those in the other languages:

*páá *bowl-2* > **Dan (bl)** páá *n wooden or clay bowl*, [**Guro #, BN, GR** pālā *n wooden basin*] **Mwan #** páá *n calabash*

3.1.4. Series 4 and 5 differ only by the reflex in Beng, *f-* vs. *p-*. As there is only one set in my data for series 5, it would be precarious to venture hypotheses explaining the unusual *p-* in Beng: it could be coincidence or a borrowing from an unrelated language, a trace of a prefix morpheme... Until further examples are found, I have to reconstruct **f-* for both series.

Series 4:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
<i>*f</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>

fii ant-1* > **Guro #, **GR**, **ST** *fii*, **Gban** # *fii* *n black ant*
fii* *better* > **Tura # *fii*, **Beng** **PA** *fii*
fii* *boil-3* > **Dan (**gw**) *fluuu*, **Guro** #, **BN** *fii*, **Beng** # *fii*
fii* *breathe* > **Guro # **BN**, **GR** *fii*, **Wan** *fii*
fii* *cap-2* > **Dan (**gw**) *fii* *n headdress*, **Tura** # *fii*, **Mwan** **PM** *fii*, **Wan** # *fii*
sòò-fàlì donkey* (may be a loanword from Manding) > **Dan (**bl**) *sòò-fàlì*, **Tura** # *sùù-fàlì*, **Guro** # *sùù-fàlì n horse*, **Mwan** # *sòò-fàlì*, **Wan** **VV** *sòò-fàlì*
fii* *empty-2* > **Dan (**gw**) *fii*, **Dan** (**bl**) *fii*, **Dan** (**bh**) *fii*, **Dan** (**yi**) *fii*, **Tura** # *fii*, **Tura** (**w**) *fii*, **Mano** **VV** *fii*, **Mwan** **PM** *fii*
fii* *force-1* > **Dan (**bl**) *fii*, **Dan** (**gw**) *fii*, **Mwan** **AY** *fii*, **Wan** # *fii*, **Beng** # *fii*
fii* *force-3* > **Guro # *fii* *n richness; glory*, **Mwan** # *fii* *n force*, **Wan** # *fii*
fii* (-*fii*) *light (not heavy)* > **Dan (**bl**) *fii*, *fii*, **Dan** (**gw**) *fii*, **Dan** (**kl**) *fii*-*dâ*, **Dan** (**bh**) *fii*, **Dan** (**yi**) *fii* (tone?) *adj light (not heavy); weak*, **Dan** (**gw**) *fii*, *fii* *adv easily, without effort*, **Tura** # *fii*, *fii* *adj weak*, **Mano** **VV** *fii*, **Guro** **ST** *fii*, **Beng** # *fii*
fii* *powder-1*, **Guro #, **ST** *fii*, *fii* *n talc*, **Beng** **PA** *fii* *n powder*
fii* *sweat* > **Dan (**bl**) *fii*-*yí*, **Dan** (**gw**) *fii*-*yí*, **Dan** (**kl**) *fii*-*yí*, **Gban** **ST** *fii* *vi be hot*, **Mwan** # *fii*
fii* *sponge (zool.)* > **Dan (**bl**) *fii*, **Dan** (**gw**) *fii*, **Dan** (**kl**) *fii*, **Guro** **GR** *fii*
fii* *white metal* > **Dan (**bl**) *fii*, **Dan** (**gw**) *fii*, **Dan** (**kl**) *fii*, **Mwan** # *fii*.

Series 5:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*f	f	f	?	f	?	?	?	f	p

*fɛ́lǐŋ (*N̄-fɛ́lǐŋ ?) *dew* > **Dan (bl)** flǐ́ŋ, flǐ́, flííŋ, fléíŋ, fléŋ, **Dan (gw)** flǐ́ŋ, **Dan (kl)** fǐŋ, **Tura** # fǐní, **Guro** #, **GR, VV** fǐlí, **Wan** # flé, **Beng PA** plǐ́ŋ.

3.1.5. There is one correspondence set displaying variations among Dan dialects:

lungs-1 > **Dan (kl)** fǐḍ, **Dan (bl)** vǐḍ, **Tura** # fǐḍ, **Mano ZE** fàà, **Guro** # fǐḍ, **Yaure HO** fǐḍ', fǐḍ', **Beng** # fǐkó

A clue to this variation can probably be provided by reflexes of the same root in Mande languages outside the South Mande group:

Vai [Welmers & Kandakai] vǐḍvǐḍ *rn lungs*, **Maninka** fǐḍfǐḍ *rn lung*, **Bamana** fǐḍonfǐḍó *rn lung*, fǐḍonfǐḍó *vi be very light or porous; vt make pant (breathe hard and quickly)*, **Bozo-Hainyaxo** (E. Eberman's unpublished data) fǐḍonvǐḍon, **Bisa-Lebir** [Vanhoudt 1999] fǐḍfǐr, *pl. fǐḍfǐ:ró*, **Bisa-Barka** [Prost 1950/1968] fǐfo.

We can see that the Vai form also has a voiced initial consonant. William Welmers suggested that such cases should be explained through reconstruction of a nasal classificatory prefix in the proto-language [Welmers 1975]. In my works [Vydrine 1994, 2001, etc.] I demonstrated the highly unstable character of the reflexes of this prefix in West Mande languages. The set in question seems to be a proof that its reflexes in SM also have a sporadic character. I would propose to reconstruct for Proto-SM a form with a nasal prefix, *N̄-fǐGǐŋ.

If we accept this explanation, it might be also valid for another set:

*N̄-fǐlǐŋ *foam* > **Dan (gw)** vǐúú, **Dan (bl)** vǐúú, **Tura** fǐḍ, fǐḍ, **Beng** flǐ́ŋ.

3.1.6. There is another set where Dan-Blo reveals an irregular reflex:

comb-1 **Dan (bl)** pǐá, **Dan (gw)** fǐáá-gǐ, **Dan (ka)** fǐá, **Dan (kl)** pǐé, **Mano ZE** yǐlí-fǐ.

This stem is not represented in other Mande branches. It can be a loanword into the proto-language of the Mano-Dan-Tura branch from a non-Mande language or languages, so that the set can be regarded as spurious.

3.2. Voiced and implosive labials

3.2.1. The first three series (6-8) do not arouse questions. For Series 6, reconstruction of *b- is self-evident. Spirantization *b- > *v- in Proto-Guro-Yaure follows the same pattern as the spirantization of the voiceless labial (*p- > f-); *v- > f- in Yaure is also a regular process. *θ- and *m- represent one phoneme, in oral and nasal contexts respectively. In Beng *θ- > b- which resulted in a merger of the reflexes of *θ- and *b-. This led to the phonologization of m-. In Gban also *θ- > b-, but this change has not led to a merger of two phonemes, because *b- > β-, so that the phonological opposition is maintained, having merely modified its nature. Occasional loss of nasality in Wan (*moon-2*) should not be surprising: in this language nasality of vowels is relatively weak and tends to disappear in the presence of the final -ŋ. There is nothing unusual in the loss of nasality in the postposition 'on' in Dan and Tura: being a grammatical word, a postposition may undergo irregular phonetic transformations.

Series 6:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*b	b	b	b	v	f	β	b	b	b

*bìlɪŋ *bury* > **Dan (bl)** bɪ̄ *hide*, **Tura** # bī, **Mwan** # bɪ̄ŋ, **Wan** # blà (?), **Beng** # blī

*bũnũ *crumb* > **Dan (gw)** bliũŋ, **Tura** # bũnũ, bũnũbũnũ, **Guro GR** bũlũ-vulu («*bread-crumbs*» ?)

*bàlā *cut-2 (to)* > **Dan (bl)** blɪ̄lɪ̄ *vt cut in small pieces, pierce multiple holes*, **Gban ST** βlɪ̄ *vt cut (with a matchet)*, **Mwan** blāā *peel* (?)

*biyá *elephant-2* > **Dan (bl, gw)** bīɔ̄, **Dan (kl)** bé, **Tura** # bīé̄, bīá̄, bīá̄, *arch. bīá-wii n pig*, **Mano VV** biyē, **Guro VV** vōi, # vūi, **Yaure HO** fīi, **Gban ST** bīé, **Mwan** # bīē, **Wan** # bè, **Beng** # bīé

*bèbè *much* > **Tura** # bɛ̄ɛ̄ (?) *adj numerous*, **Mwan** # bèbè *adv much, adj numerous*, **Wan** # bèbè, **Beng** bɛ̄bɛ̄ *adj big, large; old*

*bōlɪ̄ *mud-2* > **Dan (bl)** bɔ̄ú, **Dan (gw)** bɔ̄ɔ̄, bɔ̄ɔ̄, bɔ̄ɔ̄, bɔ̄ɔ̄, **Dan (kl)** bɔ̄ɔ̄, **Dan (yi)** bɔ̄ɔ̄, **Tura** # bùi (?) *n mud*, **Guro** # vōlɪ̄

*bīé̄ *night-3* > **Dan (bl)** bī, **Dan (gw)** bī *n night; shadow; image, photograph, picture*, **Mano ZE** bīé̄, **Mwan PM** bī

*bɔ̄lɔ̄ŋ *paste-2* > **Dan (bl)** búŋ, **Dan (gw)** bɔ̄ɔ̄, **Dan (kl)** bɔ̄ɔ̄, **Gban ST** βlɔ̄, **Mwan** blò *n kneading (dough), puddling (clay)*

*bìlàn run-2 > **Dan (gw)** bɛ̃ɲ ~ bɛ̃àɲ, **Dan (kl)** bɛ̃ɲ, **Dan (bl)** blà *n* running, **Tura** # bàlà *n* running, **Mano NE, VV** bàlà *n* running, **Guro** #, **GR** vànà *n* running, **Mwan** blā running, **Wan** # blè-kó *vi* run, **Beng** # bèē

*bīlīn throw-1 (to) > **Tura** # bilī *vi* jump; *vt* throw; throw away, **Guro** #, **BN, ST** vùlì *vt* throw, fling, **Gban ST** βì, **Mwan** # blīn/blín ~ blī/blí

Series 7:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*b̥	b̥	b̥	b̥	b̥	b̥	b	b̥	b̥	b

*bòlɔ bag-1 (< Manding?) > **Dan (bl)** b̥d̥ɔ *n* bag; wealth, **Dan (gw)** b̥d̥ɔ, **Dan (kl)** b̥d̥ɔ *n* large bag (for grain, etc.), **Tura** # b̥d̥l̥ɔ, **Mano ZE** b̥d̥ɔ, **Guro** # b̥d̥l̥ɔ, **Gban ST** bl̥ɔ *n* big bag, **Wan** # b̥d̥d̥ɔ, **Mwan** b̥t̥d̥ɔ sack

*b̥úà(-lá) bend-2 > **Tura** # b̥úà *vt* cover (with – t̥à), b̥úà-lá *vi* overturn, fall over; prostrate oneself (before – g̥ɛ̃ɛ̃ p̥ɛ̃); *vt* turn over; collapse, **Guro** # b̥úá *vi*, *vt* bend, **Wan** # b̥íá *vi* bend, *vt* bend, **Mwan** b̥ūlà *vi* bend down

*b̥ɛ̃lí dry up-1 > **Dan (bl)** b̥ɛ̃l̥i, b̥ɛ̃l̥i, **Dan (gw)** b̥ɛ̃l̥i, b̥ɛ̃l̥i, **Dan (kl)** b̥ɛ̃l̥i *vi*, **Tura** # b̥íí, **Guro** # b̥élí *vi*, *vt* dry up

*b̥ùlì eat (to)-2 > **Dan (bl)** b̥ɛ̃, **Dan (gw)** b̥ɛ̃, **Dan (dh, kl)** b̥ɛ̃, **Tura** # b̥èlè, **Mano NE** b̥èlè, **Guro** # b̥ūl̥i *vt* eat; have sex with, **Yaure HP** b̥l̥i, **Gban ST** b̥è *vt* eat; have sex with, **Mwan** # b̥l̥ē/b̥l̥é, **Beng GL** b̥l̥ē, **Beng PA** b̥l̥é

*b̥ō extract > **Dan (bl, gw)** b̥ō *vt* extract; pluck; harvest; weed (field); remove; send away, dismiss; bury, **Mano ZE** b̥ō *vt* pull out, pick; take off (clothes); weed (grass), **Wan** # b̥ō *vi* arrive, come; happen; **Beng GL, PA** b̥ō *vt* extract; unearth; tap (palm tree); flake off; remove; shave

*b̥āā fructify > **Dan (bl, gw)** b̥ā *vi* fructify in abundance, **Tura** # b̥á, **Guro** #, **ST, GR** b̥āā *vi* fructify in abundance, **Yaure HP** b̥à *vi* fructify in abundance, **Gban** # blà (?) *vi* fructify in abundance, **Wan** # b̥ā, **Mwan** b̥āā fruit, **Beng GL, PA** b̥ā *vi* bear fruit

*b̥ɛ̃ɛ̃n fruit > **Dan (bl, gw, kl)** b̥ɛ̃ *rn* fruit, **Mano ZE** b̥ɛ̃ɛ̃, **Guro BN** b̥ɛ̃ɛ̃ (= b̥ɛ̃ɛ̃ ?), **GR** b̥ɛ̃, **Beng GL, PA** b̥ɛ̃n

*b̥ɔ go out (to) > **Dan (bl, gw)** b̥ɔ *vi* grow, put forth (of plant, hair); (bl; gw rare) be born; enter (of spirit; smb. – d̥î); resemble (smb. – b̥à/b̥â); flow, ooze; (gw) leak (of roof, boat, vessel); exterminate (smb – b̥â); be about to (do smth. – b̥â); *vr* step back; *vt* (gw) make, fabricate, **Tura** # b̥ɔ *vi* be born; come (of time); be about to (do sth. – d̥ɛ̃ɛ̃ b̥â); appear (of plants, insects, etc.); be about to; resemble (smb. – b̥â); *vt* reach (some degree of maturity, etc.), **Mano NE, ZE** b̥ɔ *vi* arrive, reach; grow (of plant), **Guro** # b̥ɔ *vi* arrive; happen; surprise; germinate, sprout;

resemble (smb. – mā); help (smb. – vā); be able **Yaure HP** ɓɔ vi arrive, **Gban ST** b̀̀ vi leak (of water); come, arrive; sound, **Mwan #** ɓ̄/ɓ́ vi come (of time, season); help (smb. – bā) **Wan #** ɓ̄ vi outreach (sth. – l̀̀), **Beng PA** ɓ̄ vi leave, vt come from

*ɓ̀̀li goat-2 > **Dan (bl)** ɓ̀̀, **Dan (gw)** ɓ̀̀, **Dan (kl)** ɓ̀̀ (ɓ̀̀ð?), **Tura #** ɓ̀̀, **Mano NE, ZE, VV** ɓ̀̀, **Guro GR** ɓ̀̀li, **Yaure HP** ɓ̀̀, **Gban #** ɓ̀̀, **Mwan #** ɓ̀̀, **Wan #** ɓ̀̀li

*ɓ̀̀ali God-3 > **Guro #** ɓ̀̀ali, **Yaure HO** ɓ̀̀ali, **Wan #** ɓ̀̀ali, **Mwan** Wàà-ɓ̀̀a (?) God

*ɓ̀̀o head-2 > **Gban #** ɓ̀̀o rn head; v lead, **Wan #** ɓ̀̀o-ɲglò

*ɓ̀̀olu hippopotamus > **Guro #** ɓ̀̀olu, **Yaure HO** ɓ̀̀olu, **Mwan #** yibā-ɓ̀̀oru, **Wan #** ɓ̀̀olu

*ɓ̀̀ala leaves > **Dan (bl)** ɓ̀̀al, **Dan (gw, kl)** ɓ̀̀al n grass, plant; savannah, wilderness; litter, garbage, **Gban ST** ɓ̀̀a n grass; turf; savannah, **Beng #** ɓ̀̀a n garbage pile

*ɓ̀̀eli life (subsistence) > **Dan (bl)** ɓ̀̀e, ɓ̀̀e, **Dan (gw)** ɓ̀̀e adj alive, **Dan (kl)** ɓ̀̀e n remedy, medicine (medicinal and magic), **Guro #**, **GR** ɓ̀̀e vi heal oneself; get rid of trouble; vt heal; relieve, **Yaure HO** ɓ̀̀e, perf. ɓ̀̀e, impf. ɓ̀̀e vi heal; n healing, **Wan #** ɓ̀̀e vi heal oneself, **Mwan** ɓ̀̀e/ɓ̀̀e heal, **Beng #** ɓ̀̀e-lé

*ɓ̀̀ulu liver-2 > **Dan (bl)** ɓ̀̀u, **Dan (gw)** ɓ̀̀u, **Dan (kl)** ɓ̀̀u rn, **Tura #** ɓ̀̀u rn, **Mano ZE** ɓ̀̀u, **Guro BN, GR** ɓ̀̀u, **Beng #** ɓ̀̀u

*ɓ̀̀ubu mute-1 > **Dan (gw)** ɓ̀̀u, **Dan (kl)** ɓ̀̀u, **Tura #** ɓ̀̀u, **Guro #** ɓ̀̀u, ɓ̀̀u, ɓ̀̀u n mute; adj tasteless, **Wan #** ɓ̀̀u, **Mwan** ɓ̀̀u, **Beng #** ɓ̀̀u

*ɓ̀̀u neck-3 > **Dan (bl, gw)** ɓ̀̀u, **Dan (kl)** ɓ̀̀u, **Guro #** ɓ̀̀u

*ɓ̀̀a other-2 > **Dan (gw)** ɓ̀̀a, **Dan (yi)** ɓ̀̀a other; certain, **Tura #** *ɓ̀̀a-yè > ɓ̀̀e, ɓ̀̀e, **Mwan #** ɓ̀̀e-ké/ɓ̀̀e-ké

*ɓ̀̀a pangolin-1 > **Dan (bl)** ɓ̀̀a-d, **Dan (gw)** ɓ̀̀a-d n long-tailed pangolin, **Tura #** ɓ̀̀a-kia, **Guro #** ɓ̀̀a

*ɓ̀̀ulu press-2 (to) > **Dan (bl)** ɓ̀̀u, **Dan (gw)** # ɓ̀̀u, **Dan (kl)** ɓ̀̀u vt press, squeeze, **Mano ZE** ɓ̀̀u vt wring (clothes), **Guro #** ɓ̀̀u vt press; squeeze, **Yaure HB** ɓ̀̀u, impf. ɓ̀̀u, **Mwan #** yì-ɓ̀̀u vt wrinkle, **Beng #** ɓ̀̀u vt press, twist, wrinkle

*ɓ̀̀ala sheep-1 > **Dan (bl)** ɓ̀̀a, ɓ̀̀a, **Dan (gw)** ɓ̀̀a, **Dan (kl)** ɓ̀̀a, **Tura #** ɓ̀̀a, **Mano NE, ZE, VV** ɓ̀̀a, **Guro #**, **ST** ɓ̀̀a, **Yaure HB** ɓ̀̀a, **Gban ST** ɓ̀̀a, ɓ̀̀a, ɓ̀̀a, ɓ̀̀a, **Mwan #** ɓ̀̀a, **Wan #** ɓ̀̀a, **Beng #** ɓ̀̀a

*ɓ̀̀e termite (flying, ephemera)-1 > **Dan (bl)** ɓ̀̀e, **Dan (gw)** ɓ̀̀e, **Dan (bh, yi)** ɓ̀̀e, **Dan (kl)** ɓ̀̀e, **Tura #** ɓ̀̀e, **Guro GR, BN** ɓ̀̀e, **Guro (Yasua) VV** ɓ̀̀e, **Mwan #** ɓ̀̀e n termite, **Wan #** ɓ̀̀e

*bē this-4 > **Guro** # bē pron. *this, that*, **Gban ST** bē pron. *that*, **Mwan CF** bē pron. *this, that*, **Wan** # bē pron. *that*, **Beng** # bē

*bāā venom > **Dan (gw)** bāā, **Dan (kl)** bāā, **Guro** # bāā vi aggress (*smb. – tà*), jump (*on smb. – tà*), **Mwan** # bāá, **Beng** # bāá

*bīlē wound (a)-2 > **Dan (bl)** bīlē, bīlē, **Dan (gw)** bīlā, **Dan (kl)** bīlā, **Tura** # bē, **Mano ZE, VV** bā, **Gban** # biè, **Mwan PM** bē, **Wan AT** bē, **Beng GL, PA** bē n tracks, footprints; scab, wound (in Beng probably a convergence of two proto-stems, *N-piyé 'a trace' and *bīlē 'a wound')

*bēé yams (wild) > **Dan (gw)** bēé, **Tura** # bēé, **Gban ST** bē

Series 8:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
	*/b/ [m]	*/b/ [m]	*/b/ [m]	*/b/ [m]	*/b/ [m]	*/b/ [m]	*/b/ [m]	*/b/ [m]	*m
		[m]	[m]	[m]	[m]	[m]	[m]	[m], b	

*māā bird-2 > **Dan (bl)** mā, **Dan (gw)** māā, **Dan (kl)** māā, **Tura** # māā, **Mano NE** mōd, **Guro** # māā-né n chicken, **Yaure HP** mēl (< *māā-né, -né is a diminutive suffix(?)) n chicken, **Yaure HO** mā-nē n rooster, **Gban ST** mō n chicken, **Mwan** # māā n chicken, **Beng** # mlēé (-lé is a diminutive suffix) n chicken

*māā broom-2 > **Dan (bl)** māā n broom to sweep in the house; fly swatter, **Tura** # mā-wēé n nervure of a raffia frond; twig of a broom, **Mwan** # māā, **Beng PA** mēé

*mēné cowrie-1 > **Guro** # mūnū (?), **Gban ST** mlē, **Wan** # mlē-nì

*mīnì drink (to) (cf. *swallow-2) > **Dan (bl, gw)** mī vt drink, swallow, **Dan (kl)** mī vt drink, suck; swallow, **Tura** # mī vt drink; suck, **Mano NE** mī, **Guro GR** mīnì (pfv), mīnì (prf), **Yaure HB** mīnì, impf. mīnīá vt drink; smoke, **Mwan** mī

*mā hear (to) > **Dan (bl, gw)** mā vt hear; understand, **Tura** # má, **Mano ZE** mā vt hear; understand, **Guro** # má, hab. māā, **Yaure HO** mā vt understand, **Gban MB** ma, **Mwan** # mā/má, **Wan** # mō vt understand; hear, **Beng GL, PA** mā

*māē human > **Dan (bl, gw, kl)** mē, **Tura** # mēé n person, human; someone, mō n human (in compound words), **Mano NK, VV, ZE** mī, pl. mīā, **Guro** #, **BN** mī, pl. mūnū, **Yaure HP** mī, **Gban ST** mū, **Mwan** # mēē, **Wan** # mī

*mō last (to) > **Tura** # mō vi last long, **Guro** #, **GR** mō vi, **Yaure HP** mō, **Gban ST** mō vi last long, **Mwan** # mō vi, **Wan** # mō vi last long; adv long time

*mā́gólón *mango* > **Dan (bl)** májlo, māḡḡ, **Dan (gw)** májglō, **Dan (kl)** màgl̄, **Tura** # májgólò, **Mwan** # māgrōḡ ~ māgròò, **Wan** # māglò (*an errant word, may have been borrowed independently to all the languages of the group*)

*mā̀nèḡ *moon-2* > **Tura** # méè *n moon; month*, **Mano ZE, VV** mēnē, mlé *n moon; month*, **Guro** #, **ST, GR** mōnē *n moon; month*, **Yaure MB** mēne, **Gban ST** mé, **Mwan** # mlēē, **Wan** # bōlēḡ *n moon; month*, **Beng GL, PA** mō *n moon; month*

*mṑ mouse-1 > **Dan (bl)** mō, **Dan (gw)** mṑ, **Tura** # mṑ, **Guro** # mṑ-
né, **Yaure HP** mṑ, **Mwan** # mṑ

*mā̀ on (*postposition*) > **Dan (bl)** bá, **Dan (gw)** bá *pp by side of; on the slope of*, **Tura** # bá *n surface; bottom, lower part; pp on, upon; into; to (meaning of possession in a locative construction); for*, **Mano ZE** mṑ, **Guro** # mā ~ mà *rn surface (of body); pp on, upon; for (cause); about*, **Yaure HP** mà *rn body; pp on; at; during*, **Mwan** # mā *pp on*, **Beng** # mà *pp on; toward*

*mā̀núḡ *rice-1* > **Dan (bl)** mlú, **Dan (gw)** mlú, **Dan (kl)** ml̄ḡ *n uncooked rice*, **Tura** # míní, **Mwan** # mlò, **Wan** # màḡ, **Beng PA** mā̀núḡ

*mā̀ ripen (*to*) > **Dan (bl)** mā, mṑ *vi ripen*, **Dan (gw)** mā *vt cook*, **Tura** # má *vi become ready (of food)*, **Mano MB** ma, **Guro** #, **DI** mā *vt cook*, **Yaure MB** ma, **Gban** # mà *vt cook; n food*, **Mwan MB** ma, **Beng** # mā *vt cook*

*mḕnā *snake-2* > **Dan (bl)** mḕ, **Dan (gw)** mlḕ, **Dan (kl)** mḕ, **Dan (wa)** mḕḡ, **Tura** # mḕ, **Mano NE, VV** mḕnē, **Guro** # mḕnē, **Yaure** mlḕ, **Gban ST** mḕ, **Mwan** # mlē, **Wan** # blè, **VV** mlḕē, **Beng** # mlā

*mā̀ strike-2 > **Dan (bl)** mâ, **Dan (dh)** mà, **Dan (gw)** mà, **Tura** # màà *vt strike, beat; vi bump (into – bā); fall (upon – tã, of a bird of prey)*, **Mano MB** mē, **Gban ST** mē, **Beng** # mā

*mā̀ní *swallow-2 (to)* (*cf. *drink*), **Dan (gw)** m̄líḡ *vt swallow (sth. non-liquid)*, **Tura** # m̄lí, **Mano ZE, VV** mā̀ní, **Guro** #, **GR, ST** míní, **Gban ST** mlé, **Mwan** m̄lí, **Beng PA** m̄líḡ

*mámá *thank* > **Mano ZE** mámá, **Guro** # mâ *please*

*mḕā *what?* > **Dan (gw)** mé, mḕ *where?* **Dan (ka)** m̄, **Tura** # mḕ, **Mano ZE** mḕē *what? which?* **Guro** # mḕ, **Mwan** # mḕ, **Wan** mā

3.2.2. Series 9 is of special interest, in particular because it made Konstantin Pozdniakov [Pozdniakov 1978] and Claire Grégoire [Grégoire 1988] postulate separate Proto-Mande phonemes: *b- («a weak b») by Pozdniakov, *v- by Claire Grégoire. Taking into account the general trends in the evolution of phonological systems of Mande languages, a transformation

like $*v > b$ seems rather unusual, while $*b > v$ looks much more natural. Let us examine the sets of correspondences.

It is easy to notice that

a) all 7 stems are of the types *CV*, *CVV* or *CVŋ*; in other words, there is no single example of the type *CVIV*;

b) all these stems have a labial vowel following the initial consonant.

In the meantime, there is not a single set in the Series 6 which would fulfill these conditions. Therefore, *b-* and *v-* in Mano and Beng, and to some extent in Wan and Mwan, are in complimentary distribution. There is no reason to reconstruct for the Series 9 an initial consonant other than $*b-$.

In fact, in Mwan, Wan and Beng the conditions of the diachronic transformation $*b- > v-$ must be more complex than those formulated above, so that we find some forms having *b-*: Mwan 'grave-2', 'send-2'; Wan 'send-2', Beng 'ten-2'. The initial *b-* in Mwan *bíá-gā* 'wake up' can be explained by the change of the subsequent vowel $*u > i$, which prevented the initial consonant from the transformation.

Series 9:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
$*b$	<i>b</i>	<i>b</i>	<i>v</i>	<i>v</i>	<i>f</i>	β	<i>b, v</i>	<i>b, v</i>	<i>b, v</i>

$*b\ddot{u}\ddot{ŋ}$ *grave-2* > **Dan (gw)** *bũ*, **Dan (kl)** *bũ*, **Tura** # *bú* *n* *grave; mound*, **Guro** #, **GR**, **VV** *vũ* *n* *grave; mound*, **Yaure** **HP** *fú* *n* *mound*, **Gban** **ST** $\beta\grave{o}$, **Mwan** **PM** *bū*, **Wan** # *vǎŋ* (< $*v\grave{o}\ddot{ŋ}$?) *n* *mound*; **Beng** # *v\ddot{o}\ddot{ŋ}* *n* *mound*

$*b\grave{u}\grave{u}$ *harmattan* > **Dan (bl)** *búú*, **Dan (gw)** *bùù*, **Tura** # *bùù*, **Guro** # *fūù* (?), **Gban** **ST** *fùfù* (?), **Mwan** # *v\ddot{o}*

$*b\acute{s}$ *rot-2* > **Dan (bl)** *bú*, **Dan (gw)** *bú* *vi*, **Tura** # *búú* *vi*, **Mano** **ZE** *vúú* *adj, vi* *rot*, **Guro** # *v\ddot{s}*, *hab. v\ddot{o}*, **Gban** **ST** $\beta\grave{l}\grave{s}$ (?) *vi* *rot, spoil*, **Mwan** *b\ddot{o}*, **Beng** **PA** *v\ddot{o}* *vi* *rot; be ugly*

$*b\bar{o}$ *send-2* > **Dan (bl, gw)** *b\bar{o}* *vi* *pass; cross (river, road); overcome; vt* *send; sow (rice); produce (sound); fell (tree); add, mix (with – pís); till, cultivate*, **Dan (kl)** *b\bar{o}* *vt* *cultivate*, **Tura** # *b\acute{o}* *vt* *send; sow (rice); produce (sound)*, **Mano** **ZE** *v\bar{o}* *vt* *send; fell (tree)*, **Guro** #, **BN** *v\bar{o}*, *hab. v\bar{o}\bar{a}* *vt* *rise; enter; fell (tree); send; sow; mount; speak (language); say (proverb); put, throw*, **Yaure** **HB** *f\bar{o}* *vt* *sow*, **Mwan** # *b\bar{o}* *vt* *put inside*, **Wan** # *b\bar{o}* *vi* *pass; happen; vt* *make pass*

$*b\bar{u}$ *ten-2* > **Tura** # *bùù*, **Mano** **NE** *vũ*, **Guro** **GR** *vū*, **Gban** **ST** $\beta\grave{u}$, **Mwan** # *vū*, **Beng** **GL**, **PA** *bū*

*bùò *wake up-2* > **Dan (bl)** búô vi, **Mano ZE** vùò, **Guro** # vùò *vi wake up; vt wake smb. up*, **Yaure HB** fùò, *impf. fù-á vi wake up; vt wake smb. up*, **Gban ST** òò, **Wan** # bíá-gā, **Mwan** bwè.

To this series can also be attributed two other sets where Mano forms (Mano is the only language where the transformation *b- > v- under the conditions in question seems to be regular) are absent:

*bũ *carry* > **Dan (bl)** bũ *vt carry; support*, **Dan (gw)** bũ *vt accomodate (guest)*, **Tura** # bú *vt suport (physically, e. g. an old person when walking)*, **Gban ST** òò, **Beng** # bũ *vt carry; bring up, educate*

*bũ *end-2* > **Dan (bl, gw)** bō *vi stop; finish, terminate (sth. – ká); deliver oneself of (excrement); get better; vt cure*, **Tura** # bó *vi finish, terminate (sth. – bā, -á-gerund)*, **Guro** # vǔ, *hab. vō vi remain; vt leave*, **Yaure HB** fũ *vi remain*, **Gban ST** òò *vt finish*, **Wan** # bō *vi remain; finish; vt leave*, **Mwan** bō *leave*.

It is highly probable that the set 'flower' also belongs to this series:

*bũí *flower* > **Dan (bl)** bí, **Dan (gw)** bí, **Dan (kl)** bíñ *rn flower; vi blossom*, **Tura** # bí, **Mano ZE** bíí, **Guro** # vūí *n flower; eyelash; ear (of corn, etc.); animal's tail*, **Yaure MB** fi, **Mwan** bí, **Beng** # vúí

b- in the Mano form can be explained by the loss of -u- in the position after the consonant, which prevented the latter from the change *b- > v-. In Beng the vowel was retained and the consonantal change took place.

There is one set which contradicts the established rules: we have v- in Wan, although it is not followed by a labial vowel, and the foot structure of the proto-stem is CVIV. In the meantime, there is no change *b- > v- in Beng:

*bùlín (?) porcupine-3 **Dan (bl)** blúúú, blúúú, blúú, **Dan (gw)** blúú *n porcupine; (bl) African brush-tailed porcupine*, **Mano MB** vulu, **Guro** # vùlú, **Yaure MB** furu, **Gban ST** òò, **Wan** # vli, **Mwan** vli *rat (?)*, **Beng** blí *n big porcupine*

This probably means that the rule of change should be modified in Wan, or that the Wan form has undergone some intermediate stages (*bùlín > *vùlín > vli).

Finally, the same pattern partially agrees with yet another set:

*bò *plural marker-2* > **Dan** bō *fossilized plural marker in several words*, **Tura** # bō, **Mano VV** vò, **Mwan** # mū *plural marker*, mú *they*, **Wan** # mu

The nasalization in Mwan and Wan which also led to the irregular change *b- > m- should be attributed to the grammatical character of the lexeme.

3.2.3. All of this brings us to the reconstruction of but two proto-phonemes, *b̥- and *b-. However, the situation is seriously complicated by the presence of numerous sets where would-be reflexes of *b̥- and *b- are «mixed» unpredictably (in the data presented below, the names of the languages where the form is irregular are underlined).

3.2.3.1. In some sets («Irregularities b̥ ~ (b)»), reflexes of what looks like *b̥- predominate, with one exception in each set. Most often (5 cases out of 9) the «irregular» form with b- belongs to Wan, sometimes (3 cases) to Mano; Dan (b-) and Guro (v-) count one case each.

Some of these irregularities can be explained through borrowing ('eagle-1'); some may arise through erroneous transcription of the forms in the sources; non-cognate forms may also appear. However it may be, we have to postulate, at least in some cases, an unexplainable change *b̥- > b-.⁷

For all these cases I will reconstruct *b̥- with a question mark.

Irregularities b̥ ~ (b):

? *b̥i alive-2 > **Dan (bl)** béê, **Dan (gw)** b̥i, **Tura** # b̥i-ǎ ptp healthy, **Mano** béê, bé

? *b̥i be-1 > **Tura** # bé (?) adv ? there is, **Wan** # b̥i

? *b̥è bunch > **Dan (gw)** bè, **Dan (bl)** bê n bunch, bundle, **Mano ZE** b̥è

? *b̥ibi eagle-1 > **Guro ST** b̥ibi (< Jula?), **Mwan** b̥ibi n Nubian vulture; eagle, **Wan** b̥ibi n vulture (< Jula?)

? *b̥ilij garbage-3 > **Guro** # b̥ili n garbage; garbage heap, **Yaure HB** b̥ili n garbage heap, **Wan** # bl̥ij, **Mwan** bl̥i ~ bl̥ij garbage heap

? *b̥èli horn-1 > **Mano ZE** bé, **Guro VV** b̥éi ~ b̥éli, **Gban ST** b̥i n horn; whistle; trumpet, **Wan** # b̥òli n horn; trumpet, **Beng** # b̥éj n horn; trumpet

? *m̥umú powder-2 > **Guro** #, **BN, GR** v̥ùù n dust, sowdust; sugar or salt powder, **Gban** # b̥úbú, b̥úú n dust, **Wan** # b̥ú, **Beng** # b̥ùbù n dust

? *b̥àli rope > **Dan (gw)** b̥iǎǎ, ~-gā, **Dan (bl)** b̥uǎ n rope; (bl) liana; intestinal worm, **Tura** # b̥èè n rope; thread; line, queue (of people), **Mano NE, ZE, VV** b̥èlè n rope; liana, **Guro** #, **ST** b̥ālī n rope; liana, **Yaure HO** b̥àà, **Gban ST** b̥à n rope; thread; liana, **Mwan** # b̥l̥ē, **Wan** # b̥àlè n rope, liane; trap, **Beng GL, PA** b̥āj (?)

⁷ One could try to postulate a phonetic conditioning: position before vowel -i in Wan (3 out of 5 cases), before -i or -e in Dan and Mano, but the data are too slim to establish a reliable rule.

? *b̄élé respect-2 > **Dan (bl)** ɓlɔ, **Dan (gw)** ɓlɔɔ *rn respect; gift (meaning to honour smb.)*, **Tura** # ɓèè, ɓèɲ, **Guro** # ɓèlɛ *n gift (meaning to honour smb.)*

? *b̄ílí shine > **Dan (kl)** ɓlɔ̄, **Dan (bl)** ɓúú *vi shine*, **Dan (kl)** ɓlúú (?) *n light*, **Tura** # ɓí, **Mano ZE** ɓí, **Guro** #, **BN, GR** ɓí *vi shine; burn; blossom; vt ignite; light up*, **Wan** # ɓlī *n light; vi shine*, **Mwan** ɓì/ɓí *catch fire*, **Beng** # ɓí *vi shine, be lit, be illuminated; vt ignite, set fire on, vi shine; vt lighten*

3.2.3.2. In other cases («Irregularities b ~ (b)») the situation is inverse: the majority of the languages in the set display reflexes of *b-, while one language has a form which looks like a reflex of *b̄-. This time, among the languages displaying irregularities we find Mwan, Dan (2 cases each) and Gban (1 case).

All the reservations expressed in the previous paragraph can be repeated here. The sets are too few for establishing any diachronic phonological rule. For a while, *b- with a question mark will be given as a reconstruction for these sets.

Irregularities b ~ (b̄):

? *b̄èlè dry season > **Dan (bl)** ɓlââ, ɓlââ-yīl̄, **Dan (gw)** ɓl̄ɛ̄-yī, **Dan (kl)** ɓlèè-l̄ɛ̄, **Dan (dh)** ɓlɔ̄l̄, ~yīl̄, **Tura** # ɓàl̄à-l̄ɛ̄, **Gban ST** ɓl̄ɛ̄ *adj dry*, **Wan** # ɓlè-yà *n harmattan*, **Beng** # ɓàāɲ (?)

? *b̄elē lie (untruth) > **Tura** # ɓèlè, **Guro** #, **BN** viè, **Mwan** # ɓlā

? *bà by (a postposition) **Dan (bl, gw)** ɓàà *pp in (water), near (water)*, **Mano ZE** ɓà *pp in (water)*, **Guro** #, **BN** vā *pp by, at (smb's place); in, among*, **Yaure HP** vā *pp with (the retention of the voiced initial can probably be explained by the grammatical character of the word)*, **Mwan** # ɓā *pp in (water); at (smb.'s place)*

? *bàá mush-1 > **Dan (bl)** ɓáá, ɓáá, **Dan (gw, kl)** ɓáá *n cooked rice*, **Guro** # ɓāá *n rice mush*, **Mwan** # ɓàá *n cooked rice*

? *báòɲ squirrel-5 > **Dan (bl)** ɓááɲ, ɓáúɲ, **Dan (gw)** ɓááɲ *n striped ground squirrel*, **Tura** # ɓóò-n̄ɛ̄ *n striped ground squirrel*, **Gban ST** ɓà *n Beecroft's anomalure*

3.2.3.3. There is another series where Guro and Yaure display initial b- instead of the expected b̄-. In all cases the initial consonant is followed by a front vowel, and in 4 sets out of 5, this vowel is -ɛ. It could be interpreted as the phonetic condition of the change *b̄- > b- in Guro and Yaure, but there are counterexamples where *b̄- > b- in the same context (*b̄ɛ̄ɲ fruit, *b̄élɛ̄ respect-2, *b̄élɛ̄ɲ termite (flying, ephemera)-1 in Series 7),

unless there is a supplementary, more subtle conditioning. I reconstruct for this series *b, but mark it with a question.

? *bēlē antelope-2 > **Tura** # bēè *n bush duiker*, **Guro** #, **GR** bēlē *n red bushbock*, **Gban** # bēè *n antelope (sp.)*, **Beng** # blē *n yellow-backed duiker*

? *bèlé big-1 > **Mano ZE** bēlé *n human fat*, **Guro** # bènè *adj big, large; important*, **Gban ST** blē, **Wan** # bálè

? *bēè friend-3 > **Mano NE**, **ZE** bēē, *pl. -nī*, **Guro** # bēè, **Yaure HP** bēè, bēè, **Gban** # bēè *n friend; friendship*, **Mwan** # bē

? *bé here-1 > **Dan (bl, kl)** bā *pron. that; (bl) there*, **Dan (gw)** bā, **Tura** # bē *adv here (nearby)*, **Guro VV** bē *adv here (in a distance, but within visibility)*, **Mwan** bē *here, there*

? *bēlí viper > **Dan (bl)** b̄s̄û, b̄s̄û, b̄s̄û, **Dan (gw)** b̄ȳȳ, b̄s̄s̄, b̄s̄s̄, b̄lū, **Dan (kl)** b̄lūù, **Dan (yi)** b̄lū, **Tura** # b̄èì, **Mano VV** b̄lì, **Guro** #, **BN**, **GR** b̄lī *n naja, cobra*, **Yaure HO** b̄lì, **Mwan** # b̄lū

One set seems to combine «irregular» changes in Guro (analyzed in the current paragraph) and in Wan (see 3.2.3.1.):

? *bèj granary-3 > **Guro** # b̄èè *n granary; hayloft*, **Wan** # bēñ, **Beng** # b̄èj *n granary (for corn or rice)*

3.2.3.4. There are several sets where initial *p*- emerges in some single languages, while other languages have regular reflexes of **b*-. So far, I have no reasonable explanation for these irregularities; it is more appropriate to consider them as unrelated forms:

*b̄j̄è powder-4 > **Dan (gw)** b̄j̄, **Dan (bl)** biâ *n powder; flour*, **Tura** bī *n powder; flour*, **Mano ZE** bī, **Gban** # bī *n ash; powder; flour*, {**Mwan PM** pī}

*b̄ù grass-1 > **Tura (n)** b̄ù, **Tura (w)** béi, {**Beng PA** pīj̄ *n grasses; weeds*}

*b̄ā rain (to) > **Dan (bl)** b̄ā, **Dan (kl)** b̄áj̄ *vi rain*, **Tura** # b̄á *vi fall here and there; rain; pour; fall together; place oneself; vt make fall here and there; pour; put*, **Mano ZE** b̄ā *vi rain*, **Mwan CF** b̄ā, {**Wan** # p̄ā } **Beng** b̄á

3.2.4. It is interesting to compare the results of my reconstruction with the data of Claire Grégoire [Grégoire 1988]. In her work, South Mande was just one among many Mande branches to be compared, but she has affirmed repeatedly that the East Mande data may be decisive for the reconstruction of the proto-language of the entire family.

Claire Grégoire singled out 8 labial «types», for each of which she reconstructed a Proto-Mande phoneme. Let us examine each of them.

Type I: **m*. This series rises no questions; it should just be noted that in Proto-South Mande it is not a separate phoneme, but a nasal allophone of **/b/*.

Type II: **mb*. Two of Claire's sets, 'to go out' and 'dumb', in my Proto-SM reconstruction have initial **b̥-* ('go out (to)' and 'mute-1', cf. 3.2.1.) rather than **b-*. Her Guro forms *b̄* 'to look like' and *b̄ō(b)ō* 'dumb' are most probably taken from the dissertation of H.-Cl. Grégoire (unfortunately, Claire does not provide the list of her data sources).⁸ As for the Yaure form *bura*, it is certainly not genetically identical to the other forms for 'go out'; there is another form in this language, *bɔ*, which fits the set very well, especially if we take into account the polysemy of this verb in the languages of the group (and of other Mande languages as well).

The third set, 'to cover', is represented in my data as **b̄l̄iŋ bury* > **Dan (bl)** *b̄l̄* *hide*, **Tura** # *bī*, **Mwan** # *b̄iŋ*, **Wan** # *blà* (?), **Beng** # *bl̄i*, which corresponds more or less to Claire's data for South Mande. At the same time, this set raises two serious problems.

First, my Proto-SM form has **b-*, unlike those for 'go out' and 'dumb', which is incompatible with their being put together in one «type».

Second, I disagree with Claire as to the links of the stems in other Mande groups. For me, this stem corresponds to **Soso** *b̄r̄i vt bury* (*animal, object*), **Mogofin** *biri vt bury*, **Nyokolo Maninka** and **Xasonka** *b̄ruu vt bury*, **Kankan Maninka** *b̄r̄i vt bury*, **Soninke** *bulu/bullu vt bury, dig in*. As for the forms for Manding and many other West Mande languages provided by Claire, I consider them as a different stem 'bend-1', whose reflexes are as follows:

Vai *b̄īi vi stumble; get caught (as in a trap)*

P.Manding **b̄īDi(n)*, **Mandinka** *b̄iti vt shut, close; cover; finalize marriage with*, **Nyokolo Maninka** *bidi vt cover*, **Xasonka** *b̄uti vt cover with sth. (sth. – k̄inna); vr bend down, curve; hide oneself*, **Kagoro** **VV** *b̄iti vi overturn, come down; vt bend; turn over (vessel); cover with sth. (sth. – na); vr bend down, curve*, **Maninka** *b̄id̄i, b̄ir̄i, b̄idi vi fall prone; vt bend (one's back, head), curve, stoop; cover with sth. (sth. – lá, k̄ã); sit on (eggs); vr bend down, stoop; lie face down, fall prone; n ambush*, **Bamana** *b̄iri vi fall prone; overturn, come down (upon – k̄ã); vt bend (one's back, head), curve, stoop; turn over (vessel); cover with sth. (sth. – lá, k̄ã); vr bend down, stoop; conceal oneself, skulk, lurk; lie face down, fall prone; lean back*

Bobo *p̄il̄e/p̄ōl̄e vi bend (of a vessel)*

⁸ As was mentioned above, in this dissertation *b* and *b̄* are often not distinguished.

Guro # $\bar{b}i\bar{l}i$ *vi bend; rise; swell*

Thus, finally, the stem 'cover' is represented in SM, although in a different form.

Type III: **mp*. It consists of only one set, 'to sting'. Unfortunately, among the SM forms provided by Claire, only one (that of Dan) belongs to the stem in question, and even that one is given in a form that is impossible in Dan, $\bar{b}\bar{o}$ (as it was mentioned, in the nasal context only $m\bar{o}$ is possible, rather than $\bar{b}\bar{o}$); in my data, the Dan-Gweetaa form is $\bar{b}\bar{o}$ 'to sting (of insect)'. As for the other SM forms given by Claire, some of them (Yaure $p\bar{o}$, Mwan $f\bar{o}$) are absent in my data (and to me seem rather doubtful), others belong to a quite different stem:

**p^s dig-2 (to) > Dan (bl, gw) p^s vt dig out, Tura # p^s vt dig (soil; hole), Guro # f^s vt pierce, Mwan # p^s vt pierce, Wan # p^s vt pierce, Beng p^s vt pierce*
(After some hesitation, I checked out the Mano form $f\bar{o}\bar{o}$ 'to dig'; otherwise, it should be considered as irregular.)

Therefore, the reasoning based on the presumption of existence of Type III cannot be considered as valid.

Type IV: **b*. Both sets, 'stomach, belly' and 'white', seem to be valid, but there is one detail to add: in Wan, the reflex of the stem for 'stomach, belly' is $bl\bar{u}$, which makes me reconstruct Proto-SM form $*\bar{N}$ - $p\bar{u}l\bar{u}$ (see 3.1.2.).

Type V: **v*. As has been mentioned in 3.2.2., *v*- in Mano, Mwan, Wan and Beng can be explained through diachronic change of **b*- before back labial vowels in certain contexts. This makes it unnecessary to differentiate between Claire's types IV and V.

As for Claire's stem 'to throw', she has fused two different SM stems, my $*\bar{b}i\bar{l}i\eta$ *throw-1 (to)* and $*b\bar{o}$ *send-2* (see 3.2.1.), both well represented in the languages of the group.

Type VI: **p*. Claire's sets seem to be valid, I disagree on just one point concerning her set 'to tear, to split': I consider the Wan form $pl\acute{a}$ as belonging to a stem different from all others (see $*\bar{p}i\acute{a}$ *tear* in 3.1.1.), which is yet to be confirmed.

Type VII: **f*. This type rises no questions; on the reconstruction of a nasal prefix in the stem $*\bar{N}$ - $f\bar{G}\bar{o}\eta$ 'lungs' see 3.1.5.

Type VIII: **b*. Claire's sets are valid, there are just minor corrections to be done:

1) 'liver, heart': the Wan form $(ka)bl\acute{u}$ 'belly' given by Claire is in fact $k\acute{a}bl\bar{u}$, I mentioned the second component of this form when discussing the type IV. I do not think that it belongs to the type VIII;

2) for the same stem, the Mano form given by ZE is *būlū* (rather than *bulu*);

3) 'antelope, goat': the Mano form is *bò* (rather than *gbó, bú, bó*).

These criticisms are not, by any means, intended to belittle Claire's work, which was an important contribution to the development of Mande comparative studies. It is simply meant to demonstrate the progress made in the Mande studies during the last 15-20 years which allows a comparativist to work with much more precise data as well as continue our discussion on the importance of internal sub-group reconstructions — which, according to Claire, «seem to be doomed to failure» [Grégoire 1988:104].

3.3. Alveolars and palatals.

3.3.1. In a great majority of cases, the proto-phoneme **t-* is reflected in modern SM languages without any change (Series 10).

Series 10:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
<i>*t</i>	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>

tīī* black-2 > **Dan (bl, gw, ka) *tīī*, **Dan (kl)** *tī* *adj* black; dark; (bl) unknown; (bl, ka) dirty, **Tura** # *tīī*, **Mano** NE, VV, ZE *tīī*, **Guro** #, **BN, GR, ST** *tī*, **Gban** ST *tīé* *vi* be black, **Mwan** # *tī*, **Wan** AT *tī*, **Beng** # *tīī*

túnē* charcoal-2 **Tura # *tūé*, **Mano** ZE *tūē*, **Guro** #, **GR** *tāē*, **Gban** ST *túé*, **Beng** # *tānīn* (?)

tā* close-2 (to), shut (to) > **Dan (bl) *tā* *vt* close; bar, **Tura** # *dě-tā* *vi* close; *vt* close, **Mano** ZE *lé-tāā*, **Guro** # *lé-tā* *vt*, **Wan** # *lé-tā* *vt* close, shut; bar; damn, **Beng** GA, PA *tā* *vt* close; stick, clue

tēlē* darkness-2 > **Dan (gw) *trēṣ*, **Dan (kl)** *trū* *vi* grow dark; *n* darkness; *adj* dirty, **Tura** # *tàlà* *vi* blacken, darken, **Wan** # *trē* *n* night, **Beng** # *trī* *vt* blacken, darken

tōŋ* draw (to; water)-2 > **Dan (bl, gw) *tó*, **Guro** #, **BN** *tó*, *hab.* *tāā*, **Yaure** HO *tó*, **Mwan** # *tó*, **Wan** # *tūn*, **Beng** # *tó* *vt* draw (water); pick up

tūū* drop-2, point > **Guro # *tūú*, *progr.* *tūū* *vt* drip, *vi* drop, seep, **Gban** ST *tō* *n* drop, **Beng** # *tót* *vi* leak water, *tō-lá* *vt* pour by drops

*tɔ́lé earth-4 > **Mano ZE** táá (?) *n earth; pp down*, **Guro** # tɛ́lé, **Yaure HP** trè, **Gban ST** tóá (?), **Mwan** # tré, **Wan** # trɔ́ɔ *n earth; soil*, **Beng GL** tló *n bottom; adv low*

*tɔ́lɔ́n ear > **Dan (bl)** tó, **Dan (gw)** tǔ, **Dan (kl)** tó, **Tura** # tóló *rn*, **Mano ZE, VV** tóó, **Guro ST** t̄-nē, **Yaure HP** t̄rē, **Gban ST** tó, **Mwan** # trɔ́, **Beng** # tróń

*tɔ́ fart > **Dan (gw)** t̄, **Tura** # tɔ́n, **Guro BN** tɔ́, **Beng** # tɔ́

*tí father-3 > **Guro** tí *rn father; adult male*, **Yaure HP** tǐ, **Yaure HO** tǐ *rn father*, **Yaure HO** tí *n Mister*, **Mwan** # tí *n uncle (mother's brother)*

*táá go (to)-1 > **Dan (bl, gw)** tá, **Dan (kl)** tǎ *n walking; travel; step*, **Tura** # tǎá *n walking; travel*, **Mano NE** tàá *n walking*, **Guro** # táá *n walking; travel*, **Yaure HP** tá *vi*, **Gban ST** tǎ, **Mwan** # táá *n walk*, **Wan** tá *n walk*, **Beng PA** tá

*tɔ́ɔ hill-1 > **Dan (gw)** t̄, **Dan (bl)** t̄, **Dan (kl)** t̄ *n mountain*, **Tura** # t̄ɔ́ *n mountain*, **Mano ZE** t̄ɔ́ *n hill*, **Beng** t̄ɔ́ *n termite hill*

*tɔ́n law > **Dan (bl)** t̄n, **Dan (gw)** t̄n *n law; taboo; (bl) advice*, **Tura** # t̄n *n law*, **Mano VV** t̄, **Mwan PM** t̄n, **Wan** # t̄n *n arrangement, compromise solution*

*tōkō mongoose > **Mwan** # tōkō *n mongoose; civette*, **Wan** # tōgō *n long-snouted mongoose*

*tóó mush-2 > **Dan (gw)** tòò *n sticky cassava or millet mush*, **Tura** # tòò *n maize mush*, **Guro** # tōɔ *n cassava mush*, **Gban ST** tó *n maize*, **Mwan** # tòò *n paste*

*tólú mushroom-2 > **Dan (bl)** tó-dé, **Dan (gw)** t̄l̄l̄(dé), **Tura** # tóló *n edible mushroom (sp.)*, **Guro** # tólú, **Gban ST** tó, **Wan** # tólí, **Mwan** tló, **Beng** # tróń

*tɔ́ name-1 > **Dan (bl, gw, kl)** tɔ́ *rn*, **Tura** # tɔ́ *rn name; reputation*, **Mano NE, ZE** tɔ́ *rn*, **Guro** # tɔ́, **Yaure HP** tɔ́ *rn*, **Gban ST** t̄, **Mwan** # tɔ́, **Wan** # tɔ́, **Beng PA** tɔ́

*tí orphan-2 > **Dan (bl)** t̄-ná, **Dan (gw)** t̄-ná, **Dan (kl)** t̄è-ná, **Tura** # t̄n-né, **Mano VV** t̄í, **Mwan** # t̄ē-nè/túé-nè

*tɛ́lí porcupine-4 > **Dan (bl)** té, **Dan (gw)** tǐ, **Dan (kl)** t̄ *n small porcupine (Atherurus africanus)*, **Tura** # t̄l̄ *n white-bellied African hedgehog (Atelerix albiventris)*, **Mano VV** tē, **Guro** #, **BN** tɛ́lí *n small porcupine (Atherurus africanus)*

*t̄n̄ profit-2 > **Dan (bl)** tr̄l̄, **Dan (kl)** tr̄ò, **Dan (gw)** tr̄ò, **Tura** t̄l̄ *n profit; reward*, **Mano VV** t̄n̄, **Guro** # t̄n̄, **Mwan** # tr̄ò, **Beng** # tr̄ò/tr̄ò (<Jula?)

*tḗḗ red-1 > **Dan (bh, yi)** tḗḗ, **Dan (kl)** tá, pl. tḗḗ-nù, adj red, **Dan (gw)** tḗḗj adj (rare, obs.) bright red, **Tura** # tḗḗ, **Guro** tḗḗ adj (pej.) red, **Gban ST, VV** tḗḗ adj reddish, **Mwan** # tḗ, **Wan** # tḗ, **Beng GL, PA** tḗḗ

*tānā red-2 > **Dan (gw)** tā vi redden, **Dan (kl)** tnā vi ripen, **Tura** # tāā vi redden; ripen, **Mano ZE** tāā, tāā adj ? ripe, **Guro** # tānā adj ripe and red; vi ripen (of fruits which become red, yellow, orange...); redden; vt paint in red, make red, **Gban ST** tá vi ripen, **Mwan** # tlá ripen, **Wan** # tlḗḗ adj ripe; vi ripen, **Beng** # tlā vi ripen, vt make red

*tó remain-1 > **Dan (bl, gw)** tó vi remain; vt leave, abandon, **Tura** # tó vi remain; continue; be (sth. – gá); become (sth. – gá); vt leave, let remain; make, transform (into – gá), **Mano ZE** tō, **Yaure HB** tóí, impf. tóé vt leave, **Gban ST** tó vt leave; forget, **Mwan PM** tó vt leave; let, **Beng** # túà vi leave; vt abandon, leave; divorce; make, compell

*tóló spoon-3 > **Tura** # tóló, **Mwan** # tó

*tálinj stranger-2 > **Tura** # tḗḗ, tḗḗ, **Wan** # tālí n stranger, foreigner; adj foreign, **Beng** # téníj

*tV then > **Mano ZE** tó, tō, tōó conj then (in this case), **Guro** #, **BN** té, **Yaure HB** tē conj as, as far as; when; if

*tḗḗ time-4 > **Dan (gw)** tḗḗ, **Dan (kl)** tḗḗ, **Dan (bl)** tḗḗ n time; (kl) weather, **Tura** # tḗḗ gí at the moment (of), **Guro** # tḗ n time; day, **Yaure HP** tḗ

*tḗḗ tomorrow > **Tura** # tḗḗ, **Mano NE, ZE, VV** tḗḗ, **Guro** # tḗḗ, **Yaure HP** tré, **Mwan** # tḗḗ (?), **Wan** # tḗḗ

*tā weave (to) > **Guro** # tā, Imp., Perf. tā vt plait, tress, **Gban** tā (?) vt produce, make, or, **Gban ST** tḗ vt weave, **Mwan** # tā, **Wan** # tā, **Beng PA** túá vt weave; plait

*tḗḗ yet > **Dan (gw)** tḗḗ, **Tura** # tḗḗ part still, **Guro BN** tāā part (not) yet.

There is one set in which irregular forms (*d-* in Tura, *d-* in Yaure) can be most probably explained by the grammatical function of the words (postpositions; cf. an irregular voiced consonant in the reflex of the postposition *bà in Yaure, section 3.2.3.2.):

*tā surface > **Dan (bl)** tā, **Dan (gw)** tā, **Dan (kl)** tā pp on, upon; rn surface, **Tura** # tā, dā rn surface; hundred (?); pp on, upon, **Guro** #, **BN** tā pp on, **Yaure HO** dà pp on, **Mwan** # tā pp on; in, **Wan** # tā pp on, upon; rn surface.

3.3.2. In monosyllabic oral feet *t- > c- in Guro before -ε.

Series 11:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*t	t	t	t	c	?	t	t	t	?

*té *fire-1* > **Tura** # tẽ-ĩ *n sweat*, **Mano** **NE, ZE, VV** tíé *n fire; light*, **Guro** #, **GR, ST** cé *n fire; heat; light; electricity*, **Gban** **ST** tẽ *n heat*, **Mwan** # té *fire*, **Wan** # té.

There is another example where *t > c in Guro in a different context, but I am not sure that the Guro form (as well as Wan and Mwan) represents the same stem as in Dan-Gweetaa, Kla-Dan and Mano:

*tísé *sneeze-1* > **Dan** (**kl**) tísē, **Dan** (**gw**) tísíʒʒ, **Mano** **ZE** tísèè, **Guro** **GR** cí (?), **Wan** # tĩa (?)

3.3.3. There are four sets where *d-* in Beng corresponds to *t-* in all the other languages of the group. It is tempting to reconstruct *t- for these cases, too, but there seems to be no common phonetic or morphophonemic conditioning for the change *t- > d- in Beng (we can just mention that this change was accompanied with lowering of tone). For the time being, I will reconstruct for these sets *t- with a question mark. It is also possible that the Beng forms do not belong to the same sets (in this case, the set 'dance' can be merged with the set 'to weave').

Series 12:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*?t	t	t	t	t	t	t	t	t	d

? *tá *dance* > **Dan** (**gw**) tã, **Dan** (**bl**) tã *n dance; music; song*, **Tura** # tãã *n dance; music; song*, **Mano** **NE** tã *n dance*, **Yaure** **HP** tã *vt dance sth.*, **Mwan** # tã *vt dance sth., vi tread (on – tã)*, **Wan** tã *vt dance sth.*, **Beng** # dà *vt sing*

? *túlú *oil-1* > **Dan** (**bl**) túε-yʒ (?), **Guro** **GR** tūlū *n shea tree butter*, **Gban** **ST** tlú *n shea tree, shea butter*, **Beng** **GL** drū-ii, **PA** dlù-í

? *túb *sauce-4* > **Dan** (**gw**) túb, **Beng** # dõ

? *tã *sow (to)-1* > **Dan** (**bl, gw**) tã *vt plant, sow; cultivate*, **Tura** # tá *vt plant, sow; cork, fill*, **Mano** **ZE** tãã *vt sow (seeds)*, **Yaure** **HP** tã *vt plant*, **Gban** **ST** tà, **Mwan** **CF:40** tã, **Wan** # tá *vt plant, sow, seed*, **Beng** **GL** dà, **PA** dâ

To the same series may belong the set *chest-2*, if we assume a subsequent change *d > z in Beng in the position before a back upper vowel:

? *tòŋ chest-2 > **Dan (gw, kl)** # tòŋ, **Wan** # t̄́, **Beng** # zū.⁹

3.3.4. In two other sets, *d-* in Guro corresponds to *t-* in the other languages. These irregularities may have different grounds. The first lexeme belongs to the semantic group «names of elder relatives». Nouns of this group in many West Mande languages display traces of a prefixal morpheme that I reconstruct as *N̄- (Vydrine 1994, 2001). According to this hypothesis, the Proto-SM form for this word could be reconstructed as *N̄-tén̄ē.

As for the other set, I do not see any reasonable explanation; the Guro form *d̄i* may be just unrelated to the forms of the other languages.

*N̄-tén̄ē *paternal aunt* > **Tura** # t̄é, **Guro BN** d̄ni

*t̄iŋ *heap* > **Tura** # t̄iŋ, t̄iŋ *adj numerous, in a great number; n pile, heap; scrap-heap*, [**Guro** # d̄i *adv much; very; adj numerous, in a great number*] **Gban ST** t̄i, **Wan** # t̄i *adv much*, **Beng GL** t̄iŋ *n heap, pile*, # t̄iŋ *vi gather together, vt gather*

3.3.5. Series 13 (*t-* in Yaure, *d-* elsewhere) undoubtedly corresponds to Proto-SM **d-*.

Series 13:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
* <i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>t</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>

*dōnā *ant-3* > **Dan (bl)** drūā *n small black ants (sp.)*, **Guro** # dōnē *n small red ants*

*dòlŋ *beer* (< **Jula** d̄l̄, d̄r̄; *the word may have also been borrowed independently into each SM language*) > **Dan (bl)** dl̄ŋ, **Dan (gw)** dl̄ŋ *n red wine (imported)*, **Tura** # d̄l̄ŋ *n red wine (imported)*, **Guro BN** dl̄ *n red wine*, **Gban ST** dl̄, **Mwan** dl̄ *red wine*, **Wan** # dl̄ *n wine*

*dōn̄ *borrow* > **Guro** #, **BN** dōn̄ *n debt, credit*, **Gban** # d̄ŋ (?) *n debt, credit*, **Mwan** # dr̄ *n debt*

*dōn̄ *cook (to)-4* > **Guro** # dōn̄ *vt*, **Yaure HP** tw̄ē, t̄ē *vt*, **Wan** # dr̄ *vt*

*d̄d̄l̄ *cold-2* > **Mano ZE, VV** d̄d̄l̄ *adj cold; slow*, **Guro** # d̄l̄ *adj calm; peaceful*, **Mwan** # d̄d̄ *adj fresh; wet*, **Wan** # d̄l̄ *adj cold, cool; slow*

*d̄ŋ *deep-1* > **Mwan** # d̄ŋ *adj deep*, **Wan** # d̄ŋ *n deepness*

⁹ Another option is to include this Beng form into the set **heart* (series 20).

*dìlá fall (to)-2 > **Guro** # dīá vi fall, vt drop, **Yaure** tìlà, **Beng** # drǎ vi fall; die at the delivery

*dā female-1 > **Tura** # dá adj female, **Guro** #, **BN**, **GR** dā, **Gban ST** dà, **Mwan PM** dā

*dà hibiscus > **Gban** # dǎ n shrub (sp.); sauce of leaves of this shrub, **Mwan** # dà

*dūlēŋ hook-1 (fishing) > **Guro** #, **BN** dūlē n fishing rod, **Mwan** # dúléŋ

*dāwílí means (< **Manding** dābári < **Ar.** dabbara take measures; machinate; independent borrowing into single SM languages is also possible) > **Tura** # dǎbílí n miracle, **Guro BN** (north), # dābílí, (south) dāwli n deception, **Yaure HB** dāwǐlí n trick, ruse, **Mwan** # dāwǐlí, **Mwan** # dāwli n secret; trick, ruse, **Wan** # dāwǐlí

*dā measure (to)-2 > **Dan** (**bl**, **gw**) dǎ vt measure, weigh; taste, **Tura** # dá, **Mano ZE** dǎ vt taste; learn; take; see, **Guro** # dǎ vt measure, weigh; taste, **Mwan** dǎ vt measure; taste, **Beng** # dǎ vt taste; lick

*dīŋ noise-3 > **Dan** (**bl**) dīŋ, **Gban** # dī

*dū one-1 > **Dan** (**bl**, **gw**) dō, **Dan** (**kl**) dō, **Tura** # dó num one; adv immediately, instantly, **Mano NE, ZE, VV** dōó num one, dō pron. some; other, **Guro GR** dū, **Yaure HP:94,95** tú ~ tū ~ tù, **Gban ST** dō num one; adv once upon a time, **Mwan** # dō, **Wan** # dō, **Beng GL, PA** dō

*dùgón ostrich > **Tura** # dùgǒŋ, **Guro GR** dùò

*dòkó pot-1 > **Guro GR** dòò n big pot for sauce, **Gban ST** dǒkǒ, dǒǒ (?), **Beng GL, PA** dǎ (?) n large ceramic water pot

*dí spear-2 > **Dan** (**gw**) dú(-gā), **Dan** (**kl**) dú-nā, **Dan** (**bl**) dú n spear, javelin (in **Bl.** – arch.), **Tura** # dí, **Guro** #, **BN**, **GR**, **ST** dí n spear; arrow, **Gban ST** dí n arrow, bow, **Mwan** # dī n spear, arrow, **Wan VV** dī

*dǎā-né spider-1 > **Dan** (**bl**, **gw**) dǎā, **Tura** # dǎ-í n spider (generic name), **Guro** # dǎānī n tarantula, **Gban ST** díé-glò, díé-ò n spider (sp.), **Mwan** dǎā-nī venomous spider

*dō stand (to) > **Dan** (**gw**) # dó, dō (?), **Dan** (**bl**, **kl**) dō vi stop (to wait); vt put; build; give (to – gô); charge; accompany; accuse; be suitable for; n building (process), **Tura** # dó vi stand up; be standing; stop; wait (for – gǒ); live (in – gí); vt build; put, place; wait for (?); rn wall; bone, **Mano NE, ZE** dō vi stand, stand up; stop; vt build; dam, **Guro** dō, hab. -ā vi stop; stand up; vt build, erect, **Yaure HB** tō vi stop; vt build; stop, **Gban ST** dō vt put, install, **Mwan** # dō vt put; build; vi grow (of plant), **Beng** # dō vt stop; stand sth. up; erect, construct (house)

*dānā teach (to) > **Dan** (**bl**) dāā, dǎā, **Dan** (**gw**) # drāā vt teach smb.; learn sth., **Tura** # dǒò vt teach smb.; learn sth., **Guro** #, **GR** dānāā vt learn,

Yaure tǎrà-lá *vt learn*, **Mwan AY** dǎā, **Wan** # dìnà, **Beng** # dódò *vt learn sth.*

*dògō *termite (flying, ephemera)-2* > **Dan (gw)** dṵṵ *n flying termite (appears in February, after the first rain)*, **Tura** # dṵṵ *n night termite*, **Guro GR** dṵṵ *n flying termite (appears at the time when corn is ripening)*, **Yaure HO** tṵṵ, tṵṵ *n termite (sp.)*, **Wan** # dṵṵ *n termite*

*dṵṵ *that (conjunctive)-2* > **Mwan** # dṵṵ *object clause conjunctive*, **Wan** # dṵṵ *marker of reported speech*

*dṵṵṵ-dṵṵṵ *wasp* > **Guro** # dṵṵṵ-nṵṵ *n mason wasp*, **Mwan** # dṵṵṵṵṵ

*dṵṵṵṵ *web (of spider)* > **Dan (bl)** dróṵ, drṵ, **Tura** # dṵṵ, **Guro** #, **BN** dṵṵ, **Beng** # drá

*dē *who?* > **Dan (bl)** dṵ, **Dan (gw)** # dṵ, dē, **Gban** # dē, **Mwan** # dē, **Wan** # dē, dṵṵ *pron who? what kind of?* **Beng** # dé

3.3.6. The next series is characterized by the appearance of *z-* in Beng and sporadically in Guro ('axe-1'), Mano ('buffalo'; [j-] in my field data is most probably a contextual realization of /z-/) and Wan ('buffalo', 'deep').

Analysis of the data demonstrates that what we have here is a contextual change **d* > *z* before a labial vowel, which is more or less consequent depending on language. It is undoubtedly the same process of spirantization of voiced occlusives before back labial vowels as attested in the change **b* > *v* in the same SM languages.

Series 14:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
* <i>d</i>	<i>d</i>	<i>d</i>	<i>d, z</i>	<i>d, z</i>	<i>t</i>	<i>d</i>	<i>d</i>	<i>j, z, d</i>	<i>z</i>

*dṵṵṵ *axe-1* > **Dan (bl, gw)** dṵṵ, **Dan (kl)** dṵṵ, **Tura** # dṵṵ, **Guro** # zàá, **Beng GL, PA** zṵṵ

*dṵṵṵ *bud* > **Tura** # dṵṵṵ *n bud; rice basket; vi bud*, **Mano ZE** dṵṵṵ?, **Gban** # dṵṵ, **Beng** # zṵṵ

*dṵṵṵ *buffalo* > **Dan (gw)** dṵṵ, **Dan (kl)** dṵṵ, **Dan (bl)** dṵṵ, dṵṵ, **Tura** # dṵṵ, **Mano VV** jṵṵ, **Guro** #, **BN, GR** dṵṵ, **Gban ST** dṵṵ, **Mwan** # dṵṵ, **Wan** # jṵṵ

*dṵṵṵ *cow, cattle-2* > **Dan (bl)** dṵṵ, **Dan (gw)** dṵṵ, **Dan (kl)** dṵṵ, **Tura** # dṵṵ, **Mano ZE** dṵṵ, **Guro** #, **GR** dṵṵ, **Yaure HO** tṵṵ, **Gban ST** dṵṵ, dṵṵ, **Mwan** # dṵṵ, **Wan** # dṵṵ, **Beng PA** zṵṵ

*dṵṵ *deep* > **Mwan** # dṵṵ, **Wan** # dṵṵ, zṵṵ *deepness*

*dũē *hang* > **Dan (bl, gw)** dũ, **Tura** # dú *vi*, **Guro** # dũ *vt*, **Mwan** # dùù *vt hang*, **Wan** # dùngē, **Beng PA** zē *vi hang down; lean; slip down*

3.3.7. The specific character of Series 15, in comparison with Series 13, is in the Wan reflex, *t-*. In one case ('cough'), *t-* appears also in Gban.

In 4 cases out of 5, the initial consonant in Wan is followed by a back labial vowel, which can be a phonetic condition for the change **d-* > *t-*. The counterarguments against this interpretation are:

a) in the set 'lie down-1', this condition is not observed;

b) the same phonetic condition is established in 3.3.6. for the change **d* > *z* in a number of languages, including Wan.

I can suggest only tentative answers:

a) the Wan form *tá* in the set 'lie down-1' is probably irregular and could be result of a merger of **da* with a different verb (cf. *tá* 'to plant, to seed');

b) the phonetic conditioning for both series 14 and 15 can be subtler and include such factors as tones and ±ATR harmony, which cannot be established in this first approach.

For the time being, I shall reconstruct for these sets **d-* with a question mark.

Another option would be to reconstruct a separate phoneme, for example, **t*.

Series 15:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
?* <i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>t</i>	<i>d, t</i>	<i>d</i>	<i>t</i>	<i>d</i>

? *d̄snũ *cough* > **Dan (bl, gw)** d̄s̄, **Dan (kl)** d̄s̄ *n*, **Tura** # d̄s̄̄̄ *n*, **Mano** **ZE** d̄s̄, d̄s̄ú, **Gban ST** t̄l̄s̄ *vi*, **Wan** # t̄ñī, **Beng** # dr̄s̄ *n*

? *d̄v̄ *francolin* > **Tura** # d̄v̄ú, **Guro** # d̄v̄v̄ *n harlequin quail (Coturnix delegorguei)*, **Yaure HO** t̄v̄ó, **Wan** # t̄v̄ *n Francolinus albogularis*

? *d̄s̄ *know (to)* > **Dan (bl, gw)** d̄s̄, **Dan (kl)** d̄s̄ *vi know; (rare) speak (a language)*, **Tura** # d̄s̄ *vt know; understand; speak (a language)*, **Mano NE** yí-d̄s̄ *vt know, understand*, **Mano ZE** d̄s̄ *vt know*, **Guro** #, **GR** d̄s̄, **Gban ST** d̄s̄, **Mwan CF** d̄s̄ *vt know; make (smb. – bā) know sth.*, **Wan** # t̄s̄ *vt know; recognize, identify*, **Beng PA** d̄s̄

? *d̄à *lie down-1* > **Dan (bl)** d̄à *vi come; enter; shoot, sprout; rise, ascend; join (smb. – píś); commit adultery (with a woman – dē píś); vt put; add (to – tâ);*

throw; store; wear, **Dan (gw)** dà vi rise; land; vt lift; attach; wear (clothes); draw alongside (boat); (gw) helve; create; rear (poultry, livestock); name smb. (as – d̄ē), **Dan (kl)** dà vi walk; vt kindle (fire), **Tura #** dàà vi lie down; enter (in – ḡí), come, accede, arrive; fall; appear, happen; go up; occur; come to existence; result (in – ḡí); vt put (on – t̄à); name smb. (as – n̄ē); make enter; add (to – l̄é, t̄à); drop; apply; create (of God); reveal, make public; baptize smb. (with the name of – n̄ē); rear, keep (cattle, birds), **Mano ZE, VV** dà vi fall; vt drop; put (clothes; on – m̄ò), **Guro** dā, hab. dāã vi come; pour (of rain), **Yaure HB** tá vi come, **Gban ST** dà vt put, place, **Mwan CF:40** dā vi come, [**Wan #** tá put] **Beng #** dà vi come; lay (egg); sing (song)

? *d̄ōl̄è new-2 > **Dan (bl)** d̄ôú, d̄l̄ú, **Dan (gw)** d̄óó, **Dan (kl)** d̄ēē, **Dan (bh, yi)** d̄ēē, **Tura #** d̄éé, **Mano VV, ZE** d̄ēē adj new; young, **Guro #, ST, BN, GR** d̄ēē, **Gban ST** dòà, **Mwan #** dr̄ē, **Wan #** t̄l̄é, **Beng #** dà-dr̄ē.

3.3.8. There is one set which differs from Series 13 only in the Tura form, where *n-* appears instead of *d-*. As it is a name of an elder kin, I can suggest the same explanation as for the set 'paternal aunt' in 3.3.4.: the nasalization of the initial consonant may be a trace of the archaic prefix *N̄-, a noun classifier.

Series 15a:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*N̄-d	d	n	d	d	t	d	d	d	d

*N̄-d̄ēē father-2 > **Dan (bl)** d̄ā, **Dan (gw)** d̄ā, **Dan (kl)** d̄á rn father, paternal uncle, **Tura #** n̄é rn father, paternal uncle, **Mano NE, ZE, VV** dàā, pl. -n̄ī, **Gban ST** d̄é, **Mwan #** d̄ē, **Wan #** d̄èè, **Beng GL** dé, **Beng PA** d̄ē.

3.3.9. In one more set, the Guro form with an initial *t-* stands out. For the time being I do not have a reasonable explanation for this irregularity; it is possible that the Guro form is simply unrelated to the forms in other languages.

*d̄ūn̄ī snail-2 > **Dan (bl)** dr̄úŋ, dr̄úú, dr̄ú, **Dan (gw) #** dr̄úŋ, **Dan (kl)** dr̄x, **Mano ZE** d̄é, {**Guro #** t̄óúú,} **Gban ST** d̄ī n snail (sp.)

3.3.10. Series 16 and 17 represent reflexes of the proto-SM implosive *d̄- in oral and nasal contexts respectively. There are some sets (given after the Series 17) where in some SM languages we have *n-*, in others *l-* or *d-*. This fact does not represent a problem for the reconstruction of initial con-

sonants, because it depends on the nasality/orality of the foot, which lies outside the scope of this paper. As it was already mentioned, among the languages of the SM group, *n-* and *l-* are opposed only in Beng, and even in this language that opposition is recent.

A real problem which I am not yet ready to handle constitutes the status of the oppositions *l-* : *ll-* in Kla-Dan and in Wan, as well as the distribution of *l-* and *ɫ-* in Kla-Dan. It is hardly possible to produce any statement about their history before a thorough synchronic description is done. In other Dan variants (Blo, Gweetaa), *l-* and *ɫ-* are distinct phonemes, but it is *ɫ-* that reflects the proto-phoneme **ɫ-*, while *l-* is an innovation resulting from monosyllabification of former disyllabic feet, cf. 3.5.4., 3.5.9. In other languages *l-* and *ɫ-* are in free variation (Tura, Guro, Mwan, Wan), or only *l-* is attested (Mano, Yaure, Gban, Beng).

Series 16:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
<i>*ɫ</i>	<i>ɫ</i>	<i>ɫ~l</i>	<i>l</i>	<i>ɫ~l</i>	<i>ɫ~l</i>	<i>l</i>	<i>ɫ~l</i>	<i>ɫ~l</i>	<i>l</i>

ɫìò advice* > **Dan (gw) *ɫìò*, **Dan (bl)** *ɫiâô*, **Dan (kl)** *lùwèè* (?), **Tura** # *ɫiè*, **Mano** **VV** *lùò-wē*, **Mwan** *lià vi give advice*, **Wan** # *liā vi give advice*

ɫó buy-2* > **Dan (bl, gw) *ɫó*, **Dan (kl)** *ló vt buy sth. (from – gô)*, **Tura** # *ɫó*, **Mano** **NE, ZE** *ló*, **Guro** #, **GR, BN** *ló*, **Yaure** **HP** *lɔ vt buy (from – lɔ)*, **Mwan** # *lò/ló*, **Wan** # *lū*, **Beng** **GL, PA** *lú vt buy (for – nī)*

ɫèè call-3* > **Dan (gw) *ɫè*, **Dan (kl)** *ɫè*, **Dan (bl)** *ɫê vt call; call, name*, **Tura** # *ɫèè vt call; call, name*, **Guro** # *lāá*, **Yaure** **HP** *làá-bò vt call, name*

ɫɔɔ desire-2* > **Dan (bl) *ɫɔ*, **Dan (gw)** *ɫɔ rn love for; desire for*, **Tura** # *-ɫɔɔ n love for*, **Guro** # *lɔlɔ n hunger*, **Mwan** *lrò desire*, **Wan** # *lū rn desire for; intention*

ɫíé front* > **Dan (gw) *ɫíŋ pp before, in front of*, **Tura** # *ɫíé-lé, ɫé-lé adj first; pp before*, **Guro** **GR** *lé n front; pp in front of, before*, **Mwan** *léé pp in front of*

ɫùù hare-2* > **Tura # *ɫùù-ì-né, ɫù-ì-né*, **Mwan** # *lóó-nē*, **CF** *lōō-nè*, **Wan** # *lòṛ*

ɫééŋ leaf-3* > **Dan (gw) *ɫé*, **Dan (kl)** *ɫē*, **Dan (bl)** *ɫé rn*, **Tura** # *ɫé-kwé*, **Mano** **ZE** *léé*, **Guro** #, **BN** *láá*, **Yaure** **HP** *lá n leaf; hand (in relation to arm, pé); peace (of cloth)*, **Gban** **ST** *lá n leaf; plate*, **Mwan** # *làà*, **Wan** # *lāŋ*, **Beng** # *láná*

*dó leave (go away)-1 > **Dan (bl, gw)** dó, **Dan (kl)** ló vi go; leave; (kl) auxiliary for future tense, **Dan (bl)** dʂ auxiliary for future tense, **Tura** # dʒó vi go; leave; bring away (sth./smb. – nà ... gǎ); continue (to – -ǎ-gerund); vt make leave; n going, **Mano NE, ZE** ló, **Wan** # ló vt take away

*dɔmɪa (?) lemon (a loanword from European languages?) > **Dan (gw)** dɔŋ ~ dʂŋ, **Dan (kl)** llʂŋ (llʂŋ?) n lemon, mandarin, **Guro** # lɔwô n lemon, mandarin, orange, **Mwan** # lòmliŋ n orange, **Beng** # lòmle n orange

*lé lip-1 > **Gban** # lé, líé, **Mwan** # lè rn lip; edge

*dóó (< Manding *dógó ?) market-1 > **Dan (bl)** dʒó, **Dan (gw)** dʒó, **Tura** # dʒó n market; date, **Mano NE, ZE** lóó n market; week, **Beng GL, PA** lóó

*dā (postposition) at > **Mano ZE** là pp on, at, in, **Mwan** # là/lâ pp in, at; under

*dā rain-2 > **Dan (bl, gw)** dā, **Dan (kl)** là, **Tura** # dá n rain; storm, tempest, **Guro** #, **GR** lā n sky, **Mwan** # lā, **Beng GL, PA** lā

*dīdī round-1 > **Dan (bl)** dʂúú dʂúú, dʂʂ dʂʂ, **Dan (gw, gp, sa)** dʂʂ dʂʂ, **Dan (gn, sl, pl)** dʂʂ dʂʂ, **Dan (gb)** dʂʂ dʂʂ, **Dan (te)** dʂʂ dʂʂ, **Guro** #, **GR** līlī vt make circular; turn around

*dèè sky-4 > **Tura** # dè-í n air, atmosphere, **Mano ZE** lēí, lēí n sky; top, upper part, lē-yí, lēē-yí n rain, **Guro** #, **GR** lēé n rain; year; age, **Yaure HP** lè n year, **Mwan** # lēē n year

*dīáj speak-2 **Dan (gw)** dīāŋ, **Dan (kl)** dīáj n speech, discourse, **Tura** # dīáj n discourse, **Mwan** # jǎ n speech

*dùùlé thorn-3 > **Tura** # dùùlèè n thorn; acne, furuncle, **Guro ST** lèlì, **Gban ST** lè n thorn; fishbone

*dī woman-3 > **Dan (bl)** dē-bɔ̄, pl. dōōnù, **Dan (gw)** dē-bɔ̄, pl. dē-bɔ̄-nù, dōōnù, **Dan (yi)** dē-bɔ̄, pl. dōō, dōō-nù, dē-bɔ̄-nù, **Dan (bln)** dē-bɔ̄, pl. dē-bōñù, dōō-nù, **Dan (kl)** dè, pl. dē-bɔ̄-nù n woman; wife, **Tura** # dé n woman; wife; son's wife (for a man), **Mano NE, ZE** lēē, pl. lōà, VV lūá-vò, **Guro** # lī, pl. lī-nù, lō-mù, lō-ù, **Yaure HP** lī-mò, **Gban ST** lè, pl. nùè, **Mwan** # lē, **Wan** lē, **Beng PA** lēŋ n woman; female

Series 17:

SMande Dan Tura Mano Guro Yaure Gban Mwan Wan Beng
 */d/ [n] [n] [n] [n] [n] [n] [n] [n] [n] n

*nū come-3 > **Dan (bl, gw)** nū, **Dan (kl)** nù vi come; bring (sth. – ká), send (smb. – ká), **Tura** # nú vi come; bring (sth. – nà...gǎ), **Mano** # nū/nú vi

come; bring (sth. – ká); future time marker, **Gban ST** nù *vi come*, nù *nearest future marker*, **Mwan** # nú, **PM** nū, **Beng GL, PA** nū-lè *vi come; return*

*nàà *fasten* > **Dan (bl)** nàà, nàà *vi stick, adhere; get stuck, jam; get into trouble; vt stick, glue*, **Tura** # nàà *vi stick, adhere; vt stick, glue*, **Beng** # nàà *vt stick, glue*

*nō *give (to)-4* > **Dan (bl, gw)** nū, **Dan (kl)** nù *vt give sth. (to – dē/dē)*, **Tura** # nú *vt give sth. (to – nē)*, **Mano NE, VV, ZE** nō *vt give*, **Guro** # nō, *hab. nō vt give (to – lē)*, **Yaure HP** nō *vt give (to – lè)*, **Gban ST** nō *vt give*, **Mwan** # nā/ná *vt give sth. (smb. – nī)*

*nāā *grandmother-2* > **Dan (bl)** ná, **Dan (gw, kl)** ná *rn grandmother, grand-grand-mother; elder paternal aunt; father's or mother's elder brother's wife; mather's elder co-wife; mother-in-law (for a man)*, **Tura** # nāā *rn grandmother; elder paternal aunt; father's or mother's elder brother's wife; elder sister-in-law; mother-in-law, grand-mother-in-law*, **Guro** # nāá, **Yaure HO** nāā *rn*, **Mwan** # nàà-lē *n mother-in-law (for a woman)*, **Wan** # nà *rn mother*, **Beng** # nà *rn mother*

*nónó *milk (< Manding nónó, or independent borrowings to the single SM languages)* > **Dan (bl, kl)** nónó, **Dan (gw)** nōnō, nūnū, **Tura** # nōnō, nōnō, **Guro** # nōnō *n milk in powder*, **Mwan** # nónó, nró, **Beng** # nónó

*nù *plural marker-3* > **Dan (bl)** nū, **Dan (gw)** nù, **Tura** nù *associative plural mark, àj (< *à-nù) 3pl. object pronoun*, **Mano ZE** nū *plural marker of "conjoined subject" pronouns*, **Guro** nù, nū, **Yaure HP** nù, **Gban** # nù, **Beng** # nùj

*nēné *taste* > **Dan (gw)** nēnē, **Dan (kl)** nēnē *adj testy, sweet (sugary)*, **Tura** # nēnē *adj pleasant*, **Mano ZE** néinēī, **Guro** # néné *adj tasty; sweet; pleasant; true (of words); n good taste; adv tastiness; sweetness*, **Mwan** # nrāā *v be sweet*, **Beng** # néné *adj sweet; good*

*nā *wife* > **Tura** # nāj *n wife; married woman*, **Mano ZE, VV** nā, *pl. nānī rn*, **Guro** # nā, **Yaure HO** nà *rn*, **Gban ST** nà, **Mwan** # nā/ná, **Wan** # nò

Mixed sets *d'~n*:

*dōj dōj *count-2* > **Dan (bl)** dōj, **Dan (gw)** dōj, **Dan (kl)** llój, **Tura** # nūnū *vt count, calculate*, **Mano VV** lùnì, **Guro** # nōnō, **Yaure HB** yōnō (?), **Mwan** nòò *vt count*, **Wan** # lrò

*dú *daughter* > **Dan (bl, gw)** dú *rn daughter; brother's daughter (for a man); sister's daughter (for a woman)*, **Tura** # dú *rn daughter (including brother's daughters); female paternal cross-cousin (for a woman)*, **Mano ZE** lú, lí *rn*, **Guro** #, **BN, GR** lú *daughter; nephew (sister's and brother's daughter); daughter-in-law*, **Yaure HP** lú *rn daughter*, **Mwan** # lù/lú, **Wan** # nùj

*dɛŋ place-3 > **Dan (bl)** dɛ, **Dan (gw)** # dɛ n place, **Dan (kl)** dɛ n soil, ground, **Tura** # dɛɛ, **Mano ZE** lɛ n place; farm, field; yard, **Guro** #, **BN** nà rn place; pred. marker of the progressive, **Yaure HO, HP** nà rn place; pred. marker of the progressive, **Wan** # nè

*dɛŋ postposition-for-2 > **Dan (bl)** dɛ, **Dan (gw)** dɛ pp for, marker of the addressee, **Tura** nè pp for; as, like; for the reason of, **Mano NE** lɛɛ, **Guro** # lɛ pp for; marker of purpose; marker of negation in Perfect, **Yaure HP** lɛ pp for; marker of purpose; marker of negation in Perfect, **Mwan** # lɛ pp before; marker of «irrealis» (negation, Future), **Wan** # lɛɛ

*dɛŋ sky-3 > **Dan (bl)** dɛŋ, **Dan (gw)** dɛŋ, **Dan (kl)** dɛŋ-gɛ, **Tura** # dɛŋ-wɛɛ n air, atmosphere, **Mwan** # lɛɛ-nimɛ pp upwards, **Wan** # nɛŋ-gbani n sky; above (cf. Rain-2)

*dɛŋ slave > **Dan (bl)** nɛ-mɛ, **Dan (gw)** # dɛŋ, **Dan (kl)** dɛŋ, **Tura** # nɛ, **Guro** # lɛ, **BN, GR** lɛ n slave; child given as surety, **Yaure HO** nɛ, **Gban ST** nɛ, **Mwan PM** lɛ, **Beng** # lɛ n slave; vi work as a slave

*dɛ turn > **Dan (bl)** dɛ, **Dan (kl)** dɛ vi turn; change, transform (in – ká); vt mix; translate; misinterpret, **Mano VV** nɛ, **Guro** # lɛ vt turn; twirl; encircle, **Gban ST** lɛ, **Wan** # nrɛ (?) vi weave, **Beng** # lɛ

Mixed sets *n ~ d*:

*nɛ bat-4 > **Dan (bl)** nɛ n n straw-coloured fruit bat; flying calf, **Dan (gw)** nɛ n bat, **Tura** # nɛ, **Gban ST** lɛ

*nɛ child > **Dan (bl, gw, kl)** nɛ n child; brother's child; young sister's child, **Tura** # nɛ, pl. nɛɛ, nɛɛɛ rn (one's) child (both for humans and animals), **Mano NE, ZE** nɛ, pl. nɛɛ; nɛ-fú, pl. nɛɛ-bɛ; **VV** pl. nɛɛ, nɛɛ-vɛ rn, **Guro** nɛ, pl. nɛnɛ, nɛ-nɛ n child; baby, **Yaure HO** nɛ n child, **Gban ST** nɛ, **Mwan** # nɛ/nɛ, **Wan** nɛ, **Beng** # lɛ n child; offspring

*nɛ cold-1 > **Dan (bl)** nɛnɛ, **Dan (gw, kl)** nɛnɛ, **Dan (gw)** nɛnɛ n cold; fever, **Tura** # nɛnɛ n cold; fever, **Mano NE, ZE, VV** nɛnɛ n cold, **Mwan** # nɛnɛ n cold, **Wan** # lɛlɛ, lrɛ, **Beng PA** nɛnɛ

*nɛ life (spirit) > **Dan (bl)** nɛ, **Dan (gw)** nɛ, **Dan (kl)** nɛ rn soul, spirit; character, **Tura** # nɛ soul, spirit, **Mano MB** nɛ, **Mwan** # lɛ n shadow; soul; spirit, **Wan** nɛ spirit of an alive person, **Beng** # nɛ n soul, spirit

*nɛ shadow-1 > **Mano VV** nɛnɛ, **Guro** # lɛlɛ rn shadow; soul (of a living being), ghost (of a dead), **Wan** # lɛŋ-lɛli, **RV** lɛŋ-lɛli n shade, **Beng GL** nɛnɛ n shadow; spirit; soul (of a living person)

*nɛ tongue > **Dan (gw)** nɛ(-gɛ), **Dan (bl)** nɛ(-gɛ), **Tura** # nɛ-ɛɛ, **Mano ZE** nɛnɛ, **Guro** # nɛnɛ, **Yaure HO** nɛnɛ, **Gban ST** nɛ, **Mwan** # nɛnɛ ~ nrɛ, **Wan** # lɛnɛ, **Beng** # nɛnɛ

3.3.11. In monosyllabic words of the type CV *d- > y- in Beng before front vowels.

Series 18:

*dé *mouth* > **Dan (bl)** dí, **Dan (gw)** dí, **Dan (kl)** lí *rn mouth; orifice, opening*, **Tura** # dé; díé (arch.) *rn extremity, border; surface; pp on, upon*, **Mano ZE** lé *rn mouth; door; edge*, **Guro** # lēé, **Yaure AT** lē-bò, **Gban ST** lí *rn mouth; pp in; between; on the brink of*, **Mwan** # lé, **Mwan** # lí *rn mouth; pp on; in*, **Wan AT** lā-gá *rn mouth*, **Wan** # lé *rn border, edge*, **Beng GL, PA** yé *n mouth; edge, end; pp on, in*

*dī *hunger-2* > {**Dan (bl)** dīñ, **Dan (bl, gw)** dī, **Dan (kl)** dīñ *n hunger; rn (bl. gw) taste*,} **Tura** # dí *rn taste*, **Beng** # yī

Dan forms in the latter set may belong to different roots (on the irregular correspondences d- ~ d- see 3.3.12.).

3.3.12. Irregularities: d ~ (d)

In some sets we find irregular correspondences: d- in Beng, Mwan, Wan, Tura or Guro may correspond to d- ~ l- ~ n- in other languages. In some cases, this irregularity may be explained through independent borrowing from Manding languages: Wan, Beng and Guro tend to maintain d- in loanwords, while in Dan, Tura, Mano these words acquire initial d- ~ l- ~ n-.

(**Maninka** dánka, **Bamana** dānga, **Mau** dāá') *damn, curse* > **Dan (bl)** dāngá, **Dan (gw)** dāñ, **Dan (kl)** llāñ *n damnation*, **Tura** # dāñgá, dāñá *n damnation*, **Mano VV** nāñá *n damnation*, **Guro BN** dāká *n misfortune*, **Wan** # dāñã *n curse; misfortune*

(**Maninka**, **Bamana** dōnsó, **Mau** lōnzò) *hunter* > **Tura** # dōñyó *n hunter; leopard*, **Mwan** dōsò, **Wan** # dōñzò

(**Maninka** dúpa, **Jula** dúnupa < Ar. dunyaa) *world* > **Dan (gw)** # dīlñ, **Dan (kl)** dūlñ, **Tura** # dūyáá *n long life*, **Beng PA** dlúyá

Two other sets where irregularities of this kind occur are names of elder relatives which can probably be explained through the presence in the proto-language of a trace of the archaic prefix *N-:

*N-dòò *elder brother* > **Dan (bl, gw)** dōò, **Dan (kl)** lōò *rn elder brother; elder ortho-cousin*, **Tura** # dōó *rn elder brother; elder ortho-cousin*, **Mwan** # dōò-lē *rn elder sister*

*N-dēā *mother-4* > **Dan (bl)** dē, **Dan (gw)** dē (cf. *woman-3) *rn mother; mother's younger sister; younger paternal uncle's wife; mother's co-wife*, **Dan (kl)** dēé *rn mother*, **Tura** # dāà *rn mother; mother's younger sister; paternal*

uncle's wife, **Mano ZE** lèē, **Mwan** # nēē *rn* mother; elder female relative, **Wan** # nà *rn*, **Beng GL, PA** dā.

In another case I see no reasonable explanation for the irregular *d-*. It is probable that the form with *d-* does not belong to this set:

*dólú *fog-2* > **Dan (gw)** dǔú, **Dan (kl)** dǔlú, **Dan (bl)** dǔú *n fog (at the rainy season)*, **Tura** # dǒó *n rainy clouds*, **Mano ZE** lúélúé (?) *n clouds*, **Guro** # lólú ~ lólū *n cloud; fog*, **Yaure HO** lólú, **Gban ST** lǒ, {**Beng** # dónó}

3.3.13. There is one set where all the languages of the Western branch of SM produce forms with initial *d-* ~ *l-*, while in the other languages *t-* appears. We are probably dealing with two different roots:

*dùlǐ *dirt-1* > **Dan (bl)** díâiâ, dǔû, **Dan (bh, bn, gw)** dǐi, **Dan (kl)** llùii, **Tura** # dǐi, **Mano ZE** líi

*tǐlǐ *dirt-2* > **Guro** # tǐlí *n dirt; adj dirty*, **Yaure HP** tǐrí *adj dirty*, **Mwan** # trǐj, **Wan** # AT trǐj *n dirt; traditional medicament*.

3.3.14. Proto-SM *s- has not undergone any change in the modern languages.

Series 19:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*s	s	s	s	s	s	s	s	s	s

*sí(-lá) *arrive-1* > **Tura** # sé *n force*, **Guro BN** sí *vi come from, leave*, **Yaure HB** sí-ǎ *vi come*, **Wan** # sí, sǐ *vi approach (sth., smb. – dǐj)*; *vt approach (to – dǐj)*, **Beng** # sé *n power, force; richness (cf. 'take-2')*

*sǔèj *beautiful* > **Dan (bl)** sêê-bô, **Dan (gw)** # sèj-gbò, **Tura** # sè *adj good; beautiful*, **Guro** # sêê, sôwê *adj beautiful*, **Yaure HP** suèi

*sǎǎ *bow (weapon)-2* > **Dan (bl)** séé *n bow, arrow*, **Dan (gw)** sàà *n bow, sàà-gā n arrow*, **Dan (kl)** súá *n bow*, **Tura** # sǎǎ *n bow, sǎǎ-wéé n arrow*, **Mano VV** sǎǎ *n arrow*, **Guro BN** sǎǎ *n bow, sǎǎ-wólé n arrow*, **Yaure HO** sǎ, sé *n arrow*, **Mwan** # sǎ-bē *n arrow*

*síi *call-2* > **Mwan** # síi, **Beng** # sí

*sésé-né *cat-3* > **Guro** # sêêné, **Mwan** # sêêné, **Wan** # séséni

*sǔgǔ *chew-2* > **Guro** # sǔǔ, **Wan** # sǔgǔ, **Beng** # só

*sǒ *cloth* > **Dan (bl, gw, kl)** sǒ *n cloth; skirt; clothers; (bl) shell membrane of an egg*, **Mano NE, ZE** sǒ, **Guro** #, **BN, GR** sǒ *n cloth; skirt; clothes*, **Yaure**

HP, HO sò *n cloth, skirt*, **Gban ST** sù *n shirt*, **Mwan** # s̄ *n loincloth; cloth*, **Wan** # só *n skirt*

*sààkàà *comb-2* > **Guro** # sâkâ, **Mwan CF** sààkàà

*sōṅ *corner (external)* > **Tura** # sò, **Guro BN** sũ *n board, edge; corner*, **Wan** # sōṅ *n corner*

*sódú-tà-yààkâ¹⁰ *eight* > **Dan (gw)** sâà-gâ, **Dan (kl)** súàà, **Dan (bl)** sléé-gâ, **Tura** # sâà-ká, **Mano NE** sálààkâ, **Guro** # sũlâá, **Mwan** # srwâá, **Wan** # sé-yâ, **Beng** # só-wà

*súnj *fast* (< Manding sú < Arab. ṣawm) > **Tura** súṅ, **Mwan** # súnj, **Beng** # súṅ (*independent borrowing from Manding to the modern languages is also probable*)

*sí *fire-3* > **Dan (bl)** síʒ, **Dan (gw)** síʒ, **Dan (gb)** šīš, **Dan (kl)** sé, **Tura** # (dial.) síé, **Gban ST** sé, **Beng PA, GR** síé

*sódú *five* > **Dan (bl)** sódú, **Dan (gw)** sódú, **Dan (kl)** sódú, **Tura** # sólú, sólú, sólú, **Mano NE, VV, ZE** sólí, **Guro** # sólú, **Gban ST** súú, **Mwan** # sóó, **Wan** sòlú, **Beng** #, **GR** sódú

*sògō *horse-1* > **Dan (bl, gw)** sòò *n horse; (bl) donkey*, **Tura** # sùv, **Mano ZE** sòò, **Guro** #, **DI** sũv *n bicycle*, **Gban ST** sò *n horse, donkey*, **Mwan PM** sòò *n horse; bicycle*, **Wan** # sógò *n horse; bicycle*

*sǎnǎ *insult-2* > **Tura** # sòṅ *n insult*, **Guro** # sǎnǎ, **BN** sǎnǎ *vt insult; n insult*, **Yaure HP** sǎnǎ, **Wan** # sró

*sí *insult-3* > **Dang (gw)** sí, **Beng** # sí-sè, sé-sè

*sǎnǎ *knife-5* > **Guro** # sǎnǎ, **Wan** # séḡḡ?

*sī *life (timespan)-1* > **Tura** # sī, **Wan** # sī *rn*

*sāé *mat-2* > **Dan (bl)** sèè, sèè, **Dan (gw)** sèè, **Dan (kl)** sèè, **Tura** # sùà, **Mano ZE** sàà, **Guro** # sǎǎ, **Yaure HO** sǎǎ, **Mwan** # sàà

*sǎnǎ *nail* > **Dan (gw)** sũlǎ, **Dan (kl)** súʒ, **Dan (bl)** sòò *rn nail, claw*, **Tura** # sùè, **Guro** # sǎnǎ *rn nail, claw; hoof*, **Mwan** srò *rn nail, claw*, **Wan** # sróṅ *rn nail, claw*

*sǎ-nǎ *near* > **Dan (bl)** sódú, **Dan (gw)** sódú *pp near, nearby; around; (bl) adj close*, **Guro** # sǎnǎ *pp near, beside*

*sódú-tà-yiisiiyá *nine* > **Dan (bl)** séisil, **Dan (gw)** séisil, **Dan (kl)** séisil, **Tura** # sǎisè, sǎisè, **Mano NE** séisil, **Guro** # sũ-là-zìé, **Yaure HB** sǎisè, **Mwan** # srwáyizie, **Wan** # sǎlâ-siyá, **Beng** # sísí

¹⁰ The reconstruction of *-tà- (originally, postposition 'on') as a connective element in the numbers from 6 to 9 was proposed by Dmitry Idiatov (personal communication).

*sī oilpalm grain-2 > **Dan (bl)** s̄ n oil palm, **Dan (gw)** s̄ n oil palm nut (before shelling), **Tura** # sé n oilpalm nut, **Guro** # sī, **Yaure** # s̄, **Gban ST** sú-wí, sú-ì, **Mwan** # sē, **Wan** # sí, **Beng** # s̄ n oil palm

*sàlà pay (to) (< **Manding** sàrà ? independent borrowing from Manding into modern languages is also probable) > **Dan (bl)** sàā, sàā, **Dan (gw)** sàā n salary; gift, **Tura** # sàā n salary, **Gban ST** slá

*súlè pepper-1 > **Dan (gw)** slàà, **Tura** # sùé, **Mano NE, ZE, VV** sùò n hot pepper, **Mwan** srē ginger (?), **Wan** # sré

*súā pig-4 > **Guro** # s̄ n red river hog (*Potamochoerus porcus*), **Gban ST** súé, **Mwan** # súà, **Wan** # súā

*só please (to) > **Guro** #, **BN** só, perf. só, impf. s̄ā vi please (smb. – lē); suffice, be sufficient (for – mā); can, be able (to – inf. or mā), **Yaure HP** só, **Mwan** # só vi please (smb. – nī), **Wan** # s̄ vi please (smb. – lē)

*séli pray (to) (< **Maninka** sáli, **Baman** séli < Arab. ṣalla) > **Dan (bl)** sálâ, **Dan (gw)** sálà, **Dan (kl)** sèè n Muslim prayer, **Tura** # sée n Muslim prayer, **Mano ZE** sáli n Muslim prayer, **Mwan** séli n prayer, **Wan** # seli n (independent borrowing from Manding to the modern languages is also probable)

*s̄é rib > **Dan (bl)** s̄é, **Dan (gw)** s̄é{-gā}, **Dan (kl)** s̄é-gā, **Tura** # s̄ā-wéé, **Guro** # s̄é, **Wan** # s̄é

*sáká rice-3 > **Guro** # sáá, **Yaure HP** sáá, **Gban ST** sáká, sáá

*sē-nī root-1 > **Tura** # s̄, **Guro** # s̄-nī, **Yaure HO** s̄, **Mwan** # sé-né ~ s̄é-né, **Wan** # s̄-nī

*sálákà sacrifice, alm (< **Manding** sáráká < Arab. ṣaḍaqa) > **Dan (bl)** slà, **Dan (gw)** sàā n sacrifice for ancestors, **Tura** # sàā n sacrifice, **Mano ZE** sálā, **Guro** # sálákà, **Mwan** sráká, **Wan** # srágà, **Beng** # srákà n sacrifice (not for Earth spirits) (independent borrowing from Manding to the modern languages is also probable)

*sódú-tà-piilā(η) seven > **Dan (bl)** sláplè, **Dan (gw)** s̄à-plè, **Dan (kl)** súá-plè, **Tura** # sàā-piilé, **Mano NE** sálá-pèlè, **Guro** # s̄-là-yié, s̄-là-íé, **Yaure HP** s̄rà-flí, **Mwan** # srwá-plè, **Wan** # siā-á, **Beng** só-plā

*sódú-tà-dū six > **Dan (bl)** slá-dō, **Dan (gw)** s̄à-dō, **Dan (kl)** súá-dō, **Tura** # sàā-dó num six, **Mano NE, ZE, VV** sáláádō num six, **Guro** # s̄-dū, s̄-lū, **Yaure HP** své-dū, **Mwan** # srwá-dō, **Beng** # só-dō

*sèè small-4 > **Dan (bl)** s̄é, s̄é, pl. s̄é nū, s̄é nū, **Dan (gw)** s̄é-ná, **Gban ST** s̄é adv little, few

*sābālā shoe (< **Manding** sàbára, sànbára < Ar. sabbaat or Portugese sapata) > **Dan (bl)** sàkpà, **Dan (kl)** sàmā, **Dan (gw)** sàbá (?), **Tura** # sàbá, sàkpá, **Guro** # sàwàlà, **BN** sàwòlà, **GR** sàólá, **Mwan** sàwà, **Wan** # sàblà

*sìlè *spoil* > **Dan (bl)** siṣ̄, **Dan (gw)** sēè, sàḷ, **Dan (kl)** kpé-sèià *vi spoil; adj (gw) spoilt, rotten*, **Tura** # siè *vi, vt*, **Mano VV** siyé, **Guro** # sēlē, *hab. sālā vi, vt*, **Yaure HB** sèLè, **Gban ST** siè *vi be spoiled*, **Mwan** # siè, **Wan** # sé *vi, vt*, **Beng** # sàṛ *adj spoilt*

*sí(-lá) *take-2* > **Dan (bl, gw)** sú, **Dan (kl)** sú, **Tura** # sí, **Mano NE** sí *vt take; carry, transport; sharpen (edge)*, **Guro** sí *vt take; steal*, **Yaure** sí, síá, **Mwan** # sí *vi fly; vt take; carry*, **Beng** # sí (cf. 'arrive-1')

*sū-*lá tear off* > **Guro** # sūlā, sūlá *vi fall apart; vt tear off, dig out*, **Gban ST** slū

*sēē *tiredness-2* > **Dan (bl)** sālā, **Dan (kl)** sēē, **Yaure HP** sè *n suffering*

*sṣ́é *tooth-2* > **Dan (bl)** sṣ́, **Dan (gw)** sṣ́, **Dan (kl)** sṣ́ *rn tooth; tusk (of elephant)*, **Tura** # sṣ́, **Mano ZE** sṣ́, **Guro** # sṣ́, **Yaure** sṣ́, **Gban ST** sṣ́ *rn tooth; tusk (of elephant)*, **Mwan** # sṣ́, **Wan** # sṣ́, **Beng** # sṣ́

*sṣ́-ná *torch-2* > **Dan (gw)** sṣ́, **Dan (kl)** sṣ́, **Tura** # sṣ́, **Guro GR** sṣ́-ná, **Guro** # sṣ́-ná, **Gban** # sṣ́

*sṣ́-né *totem-2* > **Tura** # sṣ́-gí (?) *n holy place*, **Guro BN** sṣ́-né *n totem, taboo*, **Yaure HB** sṣ́-né *n totem, taboo*, **Mwan** # sṣ́, **Beng** # sṣ́ *v prohibit*

*sú *village-1* > **Gban ST** sṣ́ *n compound*, **Beng** # sú *n house; room*

*sébē *write* (< **Manding** sébe < **Arab.** ṣafha) > **Dan (kl)** sṣ́ (?) *n mark, sign*, **Tura** # sṣ́-kwé *n paper; book*, **Guro** # sébē ~ sébê *n book, paper, letter*, **Mwan** # séwè, **Wan** # séwé *n book; reading, writings*, **Beng** # séwèè *n paper (independent borrowing from Manding to the modern languages is also probable)*.

In the set 'four-2', the initial *s- of the second component changed to z- in Guro, Gban and Mwan as a result of fusion with the initial component *yii- (which was subsequently elided in Guro and Gban):

*yii-siyyá *four-2* > **Dan (bl)** yiisīā, **Dan (gw)** yiisīā, **Dan (kl)** yiisē, **Tura** # yisé, **Mano NE** yiisē, **Guro** #, **BN, ST** zié, **Gban ST** zié, **Mwan** # yizie, **Wan** # siyyá, **Beng** # siérj.

Guro, Mwan and Wan forms in the set 'gold' may be borrowed from neighbouring Manding variants, cf. Koyaga sɔ́ [Creissels 1988]:

*sā́ *gold* > **Dan (gw)** sālǎ, **Dan (kl)** sǎ, **Dan (bl)** sǎ, **Guro** # cā, **Mwan** # cā, **Wan** # cā

3.3.15. In most cases, Proto-SM *z- > z- in all modern languages, except for Yaure, where it underwent devoicing according to the general rule: *z- > s-.

Series 20:

SMande Dan Tura Mano Guro Yaure Gban Mwan Wan Beng
 *z z z z z s z z z z

*zāà *affair, matter-3* > **Dan (bl, gw)** zā *n trial, judgement; reason; accusation, Tura # zāà n quarrel, conflict, Guro BN zā n discussion; competition, contest, Yaure HO sǎ, Mwan # zà n affair, matter, Wan # zà n matter; action, Beng # zá n problem, difficulty; dispute, matter; history, story*

*zīŋ *again* > **Dan (bl, gw)** zú, **Tura # zǐ, Mano ZE zēí** *adv again; also, Mwan # é-zìŋ again*

*zōŋ *agama lizard* > **Dan (bl, gw)** zō, **Tura # zòŋ, Guro VV zōŋ, Yaure HP sù, Gban ST zòè, Mwan PM zō, Wan # zò**

*-zà *agent suffix* > **Tura # -zàà rare proprietor, Guro # -zà, Mwan PM zǎ** *n proprietor*

*zòlò *antelope bushbock* > **Dan (bl)** zòlò, **Dan (gw)** zòlò, **Tura # zòlò, Mano ZE zòlò n "red deer", Guro # zòlò, Gban ST zò n antelope (sp.), Mwan # zró medium size antelope, Wan # zró**

*zōlō *bee-1* > **Dan (bl)** zó *n bee; gad, prick, Dan (gw, kl) zǒ(-gā), Tura # zǒǒ, Mano VV zō, Guro # zòlò, Gban ST zǒ, Mwan PM zò, Wan # zró (cf. *tip)*

*zē *borassus palm* > **Guro BN zē, Yaure HO sè, Mwan PM zē, Wan # zè, Beng # zàŋ (?)**

*zèkèlè *caterpillar* > **Tura # zèkèlè, Gban ST zèklè, Mwan zèklè** *caterpillar (edible)*

*zì-lá *descend-1* > **Tura # zǐ-ná** *vi descend; fall (of rain), Guro # zù vi descend, vt spin, Gban ST zǐ, Mwan # zǐ-nà, Wan # zì-à vi descend; vt put*

*zìlè *grandfather* > **Dan (bl)** zǐŋ, **Dan (gw)** zǐŋ, zǐŋ, **Dan (kl)** zǐé *rn grandfather, grand-grandfather, etc.; step-father; elder step-brother, Dan (kl) zǐéè rn grandfather, Beng GL, PA zǐ n grandfather; grandparent's brother; grandparent's sister's husband; great uncle*

*zà *hatred* > **Guro BN zà n hatred, resentment, Gban ST zà n resentment**

*zōlōŋ *heart* > **Dan (bl)** zòŋ, **Dan (kl, gw)** zōŋ *rn heart (organ), Dan (gw) zò rn heart (location of emotions), Tura # zòŋ rn heart; soul; mentality; thought, Mano NE zò, Mano ZE zò, Guro BN, GR zòlò, Gban ST zò n soul, Mwan # zró liver (location of emotions), Wan # zòŋ, Beng zō (?) n chest, breast (the latter form may also belong to the set *chest-2, Series 12)*

*zōná *husband* > **Guro # zǎná husband; son of husband's sister; father's sister's husband, Yaure HP sárǎ, Wan # zró, Beng # zǐá**

*zùú *magician-2* > **Dan (kl)** d̄l-zùú *rn operator of circumcision (unmarried), zóómī, pl. zóóbōnù n healer, Dan (bl) zóó *n perceptive; specialist, Tura # zùú- n possessor of a mistic knowledge, Mano ZE* zóó *n wise man, Guro # zòó n sorcery (black magic)**

*zō pound-2 (to) > **Dan (bl, gw)** zō *vt pound; beat, Tura # zō, Mano ZE, VV zō, Guro #, BN zō, perf. zō, hab. zō, Yaure HB sō vt pound, beat, Gban ST zō, Mwan # zō vt pound; beat, strike, Beng # zō vt pound; beat, strike*

*zīlán¹¹ *road-1* > **Dan (bl, gw)** zīā, **Dan (kl)** žiāŋ-gá (žìàŋ-gà?), **Dan (yi)** žāā, **Dan (bh)** zāā, **Tura #** zāà *n road; way, Mano NE, ZE zī, Mano VV zīlēē n road, path, Guro #, BN, ST zī, Yaure HO sī, Mwan # zī, Wan zī, Beng # zlēē*

*zīā sauce-3 > **Tura #** zē, **Guro #, ST zīā, Yaure HP:93** sī ~ sí, **Mwan #** zīē

*zēŋ- *scorpion-3 (black, Pandinus gambiensis)* > **Tura #** zēŋwèlè, **Mano VV** zēŋgbé-kàà, **Guro BN** zēnēà, **(s)** zēnēgà

*zōō *tip* > **Dan (bl)** zó, **Dan (gw)** zó *n tip; sting; edge, border, Tura # zōō, Guro # zō n extremity, tip, Mwan # zō n mattock (cf. *bee)*

*zūlū *wash-2* > **Dan (bl)** zlú, **Dan (gw)** zú, **Dan (kl)** zú *vr wash oneself; vt wash, Tura # zúlú vi, vr wash oneself; vt wash, Mano ZE, VV zúlú vt wash (body), Guro # zùlù, Yaure HP srū, Gban ST zó, Beng # zló*

3.3.16. There are two sets where *z-* and *y-* appear. In the first case, 'pierce-4', the Beng form (if it belongs to the same root) may be the result of the change **z-* > *y-* before *-u*.

Series 21:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*z	z	z	z	z	s	z	z	z	y

*zūā *pierce-4* > **Dan (gw)** zūā *vi leak, have a hole, Tura # zùà vt pierce, Beng # yù.*

In the other case, the heterogeneity of reflexes may be explained by the grammatical character of the lexeme:

¹¹ The word for 'road' in Gban, *dí*, is phonetically close to the words of this set. However, there are no other correspondence sets where *d-* in Gban would correspond to *z-* in other SM languages, therefore this form should be considered as non-cognate.

*zèè *here-2* > **Dan (bl)** z̄, **Dan (gw)** ȳ, **Dan (kl)** yē, **Tura** # zé, **Mano NE, VV, ZE** zèè, **Gban ST** yè, yè, **Mwan CF** yē *there*, **Wan** # yā

3.3.17. In several sets Gban, Wan and Beng languages have initial *s*- corresponding to *z*- in other SM languages. This correspondence is not very regular. It may be phonetically conditioned: in all these cases, *s*- is followed by -ɔ (oral or nasal). Another explanation could be a presence of the archaic noun class prefix *Ñ- (this could be valid for the first three sets):

Series 22:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*z	z	z	z	z	?	s	z	z, s	z, s

*zūlūŋ (? *Ñ-sūlūŋ) *ant-2* > **Dan (bl)** zlū, **Dan (gw)** zlūū, **Dan (lo, ku)** zlū *n driver ant*, **Tura** # zúlú *n driver ant*, **Mano ZE** zūlū *n driver ants*, **Wan** # sr̄ŋ (?) *n small ant; insect*, **Beng** # zūmlūŋ (?) *n driver ant*

*z̄lè (? *Ñ-s̄lè) *bean* > **Dan (bl, gw, kl)** zē, **Tura** # zû, **Mano ZE** zē, **Guro** # z̄l̄é, **BN** z̄l̄ē, **Mwan** # z̄l̄è ~ zr̄è, **Wan** # zr̄èŋ, **Beng** # s̄

*z̄é (? *Ñ-s̄é) *mosquito-1* > **Dan (bl)** z̄ā-p̄, **Dan (gw)** z̄éŋ, **Dan (kl)** z̄éŋ, **Tura** # z̄é, **Mano VV** z̄éé-z̄àà (?), **Mwan** # zw̄è, **Wan** # s̄ŋ, **Beng** # z̄z̄

*z̄ today-2 > **Gban ST** s̄ä, **Mwan** # z̄, z̄, z̄, **Wan** # z̄

On the other hand, a unique Wan form with prenasalization was collected by myself, which can also be explained as a trace of the archaic nasal prefix:

*Ñ-z̄ pangolin-2 > **Dan (bl)** z̄ *n giant pangolin (Smutsia gigantea); ground pangolin (Smutsia temminckii)*, **Tura** # z̄ *n giant pangolin*, **Guro** # z̄ *n giant pangolin*, **Mwan PM** z̄ *n giant pangolin (Smutsia gigantea)*, **Wan** # z̄, ŋz̄ *n giant pangolin*.

Presence of the same archaic prefix can most probably explain the irregular reflexes in the set 'copper' (confirmed by the reflexes of that root in Manding languages: **Proto-Manding** *Ñ-s̄IRá > **Kagoro** ñs̄itá, s̄itá, s̄ulá, **Maninka** s̄ulá, **Maninka (Manding)** ñs̄urá *n copper, brass*, **Bamana** ñs̄irá).

*Ñ-s̄inã *copper* > **Dan (bl)** z̄, **Dan (kl)** s̄iāŋ, **Guro BN** z̄ēé.

There is one set where this phonetical condition is missing, but in this case the irregular forms may be borrowed into SM languages from Manding:

? *zālā *tobacco-1* > **Dan (bl)** záj (?), **Guro** # zālā, **Yaure HO** zàlà, **Gban** # slà, **Beng** # sràà (cf. Bamana *síra*, Maninka *sára*, Odienne Jula *sàra*)

Very unusual is the Yaure form (one would expect *sàlà as a regular reflex of the protoform), which may also result from a recent borrowing (from Guro?).

It is more difficult to suggest an explanation for the initial *s-* in Guro in the following set (unless it is a fossilized trace of the consonantal alternation in adjectives, described in [Le Saout 1971] for the southern dialects of Guro and not attested in the Zuénoula dialect):

*zónṣ̄ *red-3* > **Dan (bl)** zââ-dṣ̄, **Dan (gw)** zââ-dē, **Tura** # zóló *adj hot*, **Mano NE** zóló, **Guro BN, GR** sṣ̄ṣ̄ *n, adj bright red*

3.3.18. *z > j in Guro before vowel combinations -*UO*, -*UE* («upper back vowel + middle vowel»), the characteristics of ATR being irrelevant):

Series 23:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*z	z	z	?	j	?	z	?	?	z

*zùō *bottom-1* > **Dan (gw)** zū *rn bottom*, **Dan (kl)** zṣ̄-gbṣ̄, **Dan (bl)** zū *rn behind*, **Dan (kl)** zṣ̄ *rn hip*; *pp* (in some verbal constructions), **Guro ST** jūō, #, **BN, GR** zūō *pp behind*; *after*, **Gban ST** zṣ̄ *rn lower part of buttocks*, **Mwan** zī *buttocks*, *pp behind*

*zōlè *monitor lizard* > **Dan (bl)** zlūêî, zlwêî, **Dan (gw)** zūèè, **Dan (kl)** zūwàè, **Dan (bn)** zlūèè, **Tura** # zúè, zúè, **Guro** # yūéí, **GR** jūéí *n long-snout crocodile*, **Beng** # zlèṣ̄

A similar change occurred in Wan in the position before *-e* or *-ie*; unfortunately, I have only one example:

*zīī *old-3* > **Dan (bl, gw, kl)** zīī, **Tura** # zīī, **Mano ZE, VV** zīī, **Wan** # jéí.

3.3.19. Correspondence sets in Series 24 are perplexing. Heterogeneity of reflexes is rather unusual for SM languages, but similar models of evolution of polysemy and existence of reflexes of the same root outside the SM group (cf. **Boko dé** 'to kill') are convincing enough to believe in the reliability of at least the set 'kill-2' (the other set looks rather spurious). For the time being I shall reconstruct for this correspondence the phoneme *c-.

Series 24:

SMande Dan Tura Mano Guro Yaure Gban Mwan Wan Beng

*c? z z z j t z d t d

*cē kill-2 > **Dan (bl, gw)** zāl, **Dan (kl)** zè vt kill; strike, beat; play (drum); throw; pronounce (speech), **Tura** # zé vt kill; treat (wound); effectuate (sleep; speech); pawn; hunt (animals, insects), **Mano NE** zē, **Guro** # jē vt kill; cut, reap, mow, **Yaure HP** tē vt kill; perform, **Gban ST** zè, **Mwan** # dē, **Wan** # té vt kill; beat, strike, **Beng** # dē vt kill; perform

*cīnā middle-2 > **Dan (bl)** zīā, **Dan (gw)** zīh-gú, **Dan (kl)** zēh, zīh-nē, **Gban ST** zā, **Mwan** # drē, **Wan** # trāgá

3.3.20. There remain certain sets which display particularly unusual correspondences of initial consonants. For now, it is difficult to conclude whether the forms in these sets are related or not. I will simply present them without any interpretation:

throw-2 (to) > **Dan (gw)** # zùṣ, zùṣ, **Dan (kl)** zṣ, **Dan (bl)** # zòh vt throw; n spear, **Mano VV** dyūò, **Mano ZE** dūō, **Guro** #, **BN** dùṣ vt strike, beat; shoot (gun); put (curse; on – lē), **Yaure HP** tùú, **Beng GL, PA** zū vi balance; vt throw

pass-2 > **Dan (bl, gw)** zīṣ vi pass, pass by; pass; flow (of water); surpass, excel (by – tā); be too great, too much (for – tā); go away; follow; vt pass, make pass; carry by, **Tura** # giè vi pass, pass by; flow (of water); surpass, excel (by – tà); predominate, be abundant (in – gḍ); vt pass, make pass; show (to – nē), **Mano ZE** diè, **Guro** # jìè, **ST** jīē, vi pass; surpass (smb. – tā), **Yaure HB** cì, impf. cì-á, **Gban HW** giè vi become, **Beng** # jě vi pass by; stir; blow (of wind); go fast, speed

show > **Dan (bl)** zḥ vt show sth. (to – dâ); teach (smb – dâ); compare (with – ká), **Dan (gw)** zḥ vt show; teach, **Mano NE, ZE** zḥḥ vt teach; show sth. (to – lèē); point with (to – mḍ), **Guro** #, **ST** gḥḥ, vt show sth. (to – lē), **Yaure HP** kḥḥ vt show sth. (to – lè), **Mwan** # zrḥḥ

3.4. Velars.

3.4.1. Proto-SM *k- does not generally change in modern languages.

Series 25:

SMande Dan Tura Mano Guro Yaure Gban Mwan Wan Beng

*k k k k k k k k k k

*kōlī back-4 > **Guro** # kōlī *rn loins, kidney*, **Yaure HO** kò-dà (?), **Gban ST** kwí (?) *n central part of back*, **Wan** # kōlī, **Beng GL, PA** kō (?)

*kōlē bark (of tree)-2 > **Dan (gw)** kǎǎ, **Dan (kl)** kǎ, **Dan (bl)** kiā *rn bark of tree, scale of fish, shell of turtle*; (*gw*) *yellow fever*, **Tura** # kélé *n bark; scale (of fish)*, **Mano ZE** kēlē *n bark (of tree); unmilled seed*, **Guro** #, **BN** kōlē *n bark (of tree); envelope; scale of fish*, **Mwan** klōō *rn bark of tree, scale of fish, shell of turtle, of egg*, **Wan** # klōŋ (*in Tura, Mano, Guro, has merged with *shell (of snail) ?*), **Beng** # kóŋ *rn bark; skull; nail*

*kūlā bend > **Mwan** # kūlā, **Wan** # klā *vi arrive; fall; vt win, overcome (smb. -- gó); vt turn over; put; pour; frighten*, **Beng** # klúá *vi, vt bend; turn over*

*kón boat-3 > **Dan (kl)** kú, **Mwan** # kón *n dugout canoe*, **Wan** # kōŋ

*kūgū breast-4 > **Dan (gw)** kūū, **Yaure HO** kùgù

*kōè calabash-3 > **Dan (bl)** kôô, **Dan (gw)** kôô *n calabash (generic)*, **Dan (kl)** kôô *n calabash made of a half of gourd*, **Tura** # kwèè, **Mano NE, VV** kōè *n bowl (made of gourd)*, **Guro** # kūò *n calabash made of entire gourd*

*kú catch-3 > **Dan (bl, gw, kl)** kú *vt catch, get hold of; bite, sting; vt burn (of fire)*, **Tura** # kú *vt catch, get hold of; mount (a mountain)*, **Guro** #, **GR** kú, **Yaure HB** kú, **Gban** # kú, **Mwan** # kú, **Wan** # kú, **Beng GL, PA** kú *vt catch; hold; infect; photograph; treat well*

*kōñé chameleon > **Guro** #, **GR** kǎná, **Yaure HO** kōñé, **Mwan** # kwlā, **Wan** # klá-yùgù-kpēlē

*kónóní cotton (< Manding kótóndí < Arab. qutn-un) > **Guro** #, **GR** kūnūnú, **Mwan** # kwléé, **Wan** # klōŋ (*independent borrowing from Manding into modern languages is also probable*)

*kélé country > **Mwan** # klé, **Beng** # klê *n country, region*

*kālōŋ crab > **Dan (bl)** kââ, **Dan (gw)** kâ, **Dan (kl)** kâŋ-kyâ (?), **Tura** # kââ, **Mano NE, ZE** kââ, **Gban ST** klá, **Mwan** kààlōŋ, **Wan** # kālōŋ

*kūlī dig-3 > **Guro** #, **BN, GR** kūlī, **Mwan** # kwléé/kwléé, **Beng** # klū

*kēlē do-1 > **Dan (bl, gw)** kā *vt do; chase away; hunt (in bush); pred. past mark*, **Dan (kl)** ká *vt do*, **Tura** # kēè *vt do, accomplish; work on; chase away*, **Mano NE, ZE** kē *vt do; affect (smb. – of feeling, state); make; pred. past mark*, **Guro ST, GR** kēlē *vi become, vt do*, **Gban** # ké *vi happen, occur*, **Mwan** # klē *vi become; vt do, make*, **Wan** # klé *vt chase*

*kēñé healthy-1 > **Tura** # kēñé-kēñé *adj healthy*, **Beng** # kéné-lé *n health*

*kōkō hammer-2 > **Guro ST** kōkō, # kóó, **Yaure HO** kōgō, **Wan** # kōkō

*káé hoe-2 > **Dan (bl)** káá, **Dan (gw)** kǎǎ, **Dan (kl)** kà, **Gban ST** ké

*kǎ́ house-1 > **Dan (bl, gw, kl)** kó, **Tura** # kwíí (?), **Mano NE** ká, **Guro** kǎ́, > -kǎ́ (in some compound words), **Yaure HP** kǎ́, **Wan** kú

*kǎ́nǎ́ hump-3 > **Dan (bl)** klǎ́, **Guro** #, **BN** kǎ́nǎ́, **Gban ST** kò, **Mwan** kǎ́nǎ́ (?)

*kǎ́mǎ́ hundred (< Manding kǎ́mǎ́) > **Dan (bl)** klǎ́, klǎ́, **Dan (gw)** klǎ́, **Dan (kl)** klǎ́, klǎ́, **Dan (yi)** kǎ́nǎ́, **Tura** # kǎ́, **Mwan** # kǎ́mǎ́, **Wan** kǎ́mǎ́ (independent borrowing from Manding into modern languages is also probable)

*kǎ́nǎ́ initiation > **Mwan** # klǎ́ n female initiation, **Wan** # klǎ́ n female initiation, **Beng** # klǎ́klǎ́ n circumcision or excision

*kǎ́nǎ́ load-2 > **Dan (gw)** kwǎ́, **Dan (kl)** kwǎ́, **Tura** # kwǎ́, **Guro** # kǎ́nǎ́, **Mwan** kwǎ́ load

*kǎ́lǎ́ mat-3 > **Gban ST** klǎ́, **Wan** # klǎ́

*kǎ́nǎ́ mosquito-2 > **Guro** #, **BN**, **GR** kǎ́nǎ́nǎ́, **Gban ST** klǎ́

*ká negative copula-4 > **Dan (bl)** ká, **Guro** ká, **Yaure HP** ká

*kǎ́lǎ́ penis-2 > **Dan (bl)** kǎ́, **Tura** # kwǎ́, **Guro** #, **ST** kǎ́lǎ́, {**Wan** # sólǎ́ (?) (probably a loan from Manding, cf. Mandinka sólǎ́)}

*kǎ́lǎ́ piece-2 > **Dan (bl)** klǎ́, **Guro** # kǎ́lǎ́

*ká sate > **Dan (bl)** kǎ́, **Dan (gw)** kǎ́ vi sate oneself; vt sate, **Tura** # kǎ́, **Guro GR** kǎ́ vt sate, vi be replete with; be overtaken (by events), **Gban ST** kǎ́ vi sate oneself, **Beng PA** kǎ́ vi be sate

*kǎ́gǎ́ scratch > **Dan (bl)** kǎ́, kǎ́, **Dan (gw, gb, gp)** kǎ́, **Dan (kl)** kǎ́, **Dan (bh)** kwǎ́, **Tura** # kǎ́, **Mano VV** kǎ́nǎ́ vt scratch (soil), **Guro GR** kǎ́, #, **ST** kǎ́ vt scratch; hoe, **Gban ST** kǎ́ vt scratch; remove by scratching, **Wan** # kǎ́gǎ́, **Beng** # kǎ́kǎ́

*kǎ́lǎ́ shell (of snail) > **Dan (bl)** klǎ́ n shell (of snail; of egg), **Tura** # kǎ́lǎ́ n bark; scale (of fish), **Mano ZE** kǎ́lǎ́ n shell; scale; bark, **Guro GR** kǎ́lǎ́ n shell; scale, **Gban ST** klǎ́, **Mwan** klǎ́ n bark of tree, scale of fish, shell of turtle, of egg (in Tura, Mano, Guro, Mwan has merged with *bark (of tree)-2 ?)

*kǎ́lǎ́ spoon-2 > **Dan (bl)** klǎ́, **Dan (gw)** klǎ́ n ladle, **Guro** # kǎ́lǎ́ n ladle, **Gban ST** klǎ́, **Beng** # klǎ́ n ladle

*ké that (conjunctive)-1 > **Dan (bl)** kǎ́, **Tura** ké, **Mwan CF** ké conj and; if, when

*kǎ́lǎ́ tie-1 > **Dan (bl)** klǎ́, **Dan (gw)** kǎ́lǎ́ (< *kǎ́lǎ́) vt tie; sharpen; vi coagulate, **Tura** kǎ́lǎ́ vt tie with (sth. – bǎ́), **Wan** # klǎ́-dǎ́

*kǎ́lǎ́ useless-2 > **Gban ST** klǎ́ adj broken, in bad state, **Mwan AY** klǎ́ adj stupid

*kǎ́lǎ́ well (water hole) (< Manding?) > **Dan (bl)** klǎ́, **Dan (gw)** klǎ́, **Dan (kl)** klǎ́, **Tura** # kǎ́lǎ́, **Mwan PM** klǎ́, **Wan** # klǎ́.

3.4.2. In Guro, Mwan, Beng *k- > c- in feet of the types CV and CVV if followed by a front vowel. In Yaure, *k- > c- optionally before front vowel in any type of foot.

Series 26:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*k	k	k	k	c	c	k	c, k	k	c

*kī *certain* > **Tura** # ké *pron. certain; some, a little*, **Guro** # cī *pron. some, certain*, **Mwan** # kè *pron. other*, **Wan GR** ké *pron. this*

*kěś cut-1 (to) > **Dan (bl)** ká, **Dan (gw)** kǎ *vt cut (grass, lianes, wood); cross (river); tie (skirt); stop doing*, **Tura** # kǎǎ *vi tear; separate; vt cut; stop, finish; spend (time); tell (proverb); stop doing*, **Mano NE** ká, **Yaure HB** cě *vt cut; dig*, **Mwan PM** ká *vi pass; vt cross (river)*, **Wan** # kó *vt cut, slice; cross*, **Beng PA** có (< *céó ?)

*kíní cut-3 > **Guro** #, **BN, GR** kíní *vt cut; separate; change*, **Gban ST** kí *vt cut; cut up*, **Beng** # cǐ *vt cut; cross, go across*

*kùèŋ *hair-2* > **Dan (bl)** kǎâ, **Dan (gw)** kǎà, **Dan (kl)** kǎà *rn hair (other than that of head; of animals); feather, quill*, **Tura** # kúà *rn hair (other than that of head; of animals)*, **Guro** #, **GR, BN** cēē *rn hair (other than that of head; of animals); feather*, **Yaure HP:75** jě, **Yaure HO** cě *rn hair (of head, of body), feathers*, **Mwan** # cíē *n hair (of body), fur*, **Wan** # kǎñ *rn hair; feather*, **Beng** # céŋ *n hair; fur; feathers*

*kèlí *pepper-2* > **Guro** # kēlê, **GR** kēlè, **Yaure HO** kēlī, cèlí, **Gban ST** kǐǎ (?), **Mwan** klèklè *pepper*, **Wan** # klè-gè

*kùòŋ *reciprocal pronoun-2* > **Dan (bl, gw, kl)** kó, **Tura** # ké *each other; together*, **Guro** # cī, **Guro (nya)** VV kī, **Yaure HP** cǐ, kǐ, **Gban ST** kè, **Mwan** # é-kē, **Beng** # cēŋ

*kōlé *skin* > **Dan (bl, gw)** kwī, **Dan (kl)** kpí *n hide, leather; rn (kl) body*, **Tura** # kwīi *n hide, leather*, **Mano NE, ZE** kīi *rn skin; fn book; grade, year (in school)*, **Guro ST** kòlé, #, **BN, GR** kólé, **Guro GR** kwéLé *n body; skin, leather; shoe*, **Wan** klé *rn skin; leather*, **Beng GL** cǐ, **PA** cī *n hide, skin (of animal); paper, book*

*kùná *theft* > **Dan (gw, kl)** kwǎǎ, **Dan (bl)** kwǎà *vt steal, n theft*, **Tura** # kùà *vt steal, n theft*, **Mano ZE** kǎǎ *n stealing*, **Guro** # cǎě *n theft; secret*, **Yaure HO** kǎǎ ? *n laziness*, **Gban ST** kǎǎ, **Beng** # klúá

In the 'skin' set, the Kla-Dan form *kpi* < **kwi*. *j*- in the Yaure form *jé* 'hair' is probably an erroneous transcription in [E. Hopkins 1987]; in her husband's publication the same word is given with the voiceless consonant.

3.4.3. Series 27 is represented by one single correspondence set. **k*- > *w*- in Beng before -*ɔ* is supposedly a part of the same process as **b*- > *v*- and **d*- > *z*-. In Wan, **k*- > *w*- > *ø*-, like in Series 46 (cf. 3.5.8.). It is yet to be explained why this change did not occur in this language in the word *kó* 'cut, slice; cross, go through' (series 'cut-3').

Series 27:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
* <i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>ø</i>	<i>w</i>

kō* *hand, arm-3* > **Dan (bl) *kô*, **Dan (gw)** *kò rn hand (up to the elbow); front leg; branch, Tura # kòò rn hand, arm; property; way (of doing); ten (in compound numbers), Mano NE, ZE, VV kò rn hand, arm, Gban ST kwà n arm; branch, k'ò rn hand, Mwan # k'óó n hand, Wan # ɔ̄ n arm, Beng GL, PA wɔ̄ n hand, arm*

3.4.4. Both cases of *g*- in Gban corresponding to *k*- in all other languages of the group can be easily explained by the presence of the noun class prefix **Ñ*-. At least for the second set, this reconstruction is confirmed by the external evidence (Bamana *nkàrangá* 'body louse').

Series 28:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
* <i>Ñ-k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>g</i>	<i>k</i>	<i>k</i>	<i>k</i>

Ñ-kàlàn*-*gbá louse-4* > **Dan (gw) *kèfá*, **Dan (kl)** *kààngbā n body louse, Tura # kààbá, Gban ST glàgbá, glàá, gbá n louse; bug; flea, Mwan # klàfà n body louse*

Ñ-kúlè* *turtle-1* > **Tura # gbàà-kùlù-b'è (?), **Mano ZE, VV kúò**, **Guro # kúlí**, **Yaure HO kúlú**, **Gban ST glà**, **Mwan # kúlè n terrestrial turtle, Wan AT kòtà**, **Beng GL k'ò**, **PA k'òú n turtle Eretmochelys imbicata; Kinixys beliana**

3.4.5. *k- > g-, ɸ- in one single correspondence set in Tura can be explained by the grammatical function of the word (a postposition).

*ká with > **Dan** # ká pp with; by, **Tura** # gǎ (after V-monosyllables), ǎ (everywhere else) pp with (means or instrument); of (material); during, for; in the quality of (equivalence, identity meaning), **Mano NE** ká pp with; by; as; for.

3.4.6. Generally *g- > k- in Yaure, > g- in all other languages.
Series 29:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*g	g	g	g	g	k	g	g	g	g

*gùŋ beard-3 > **Guro** #, **BN** gù, **Wan** # gùŋ-gǎŋ

*gǎǎŋ-gǎǎŋ bell-2 > **Dan (bl)** gǎǎŋgǎǎŋ, **Dan (gw)** gǎǎŋgǎǎŋ n gong (long piece of iron that one strikes with a stick), **Tura** # gǎŋgǎŋ, gǎǎŋgǎǎŋ, **Guro ST** gǎǎŋgǎǎŋ, **Wan** # gǎŋgǎŋ n gong (long piece of iron that one strikes with a stick)

*gǎǎŋ bord > **Dan (gw)** gǎǎŋ, **Guro BN** gǎǎŋ n border; fold; wrinkle, **Gban ST** gǎǎŋ

*gǎǎŋ chest-3 > **Dan (bl)** gǎǎŋ, **Guro** #, **BN, GR** gǎǎŋ n chest, torso, **Wan** # gǎǎŋ

*gǎǎŋ cockroach-2 > **Dan (bl)** gǎǎŋ, **Dan (gw)** gǎǎŋ, **Tura** # gǎǎŋ, **Mwan** # gǎǎŋ-ló

*gǎǎŋ crocodile-4 > **Dan (gw)** gǎǎŋ, **Mwan** # gǎǎŋ, **Wan** # gǎǎŋ

*gǎǎŋ deep-2 > **Dan (bl)** gǎǎŋzǎ, **Guro** # gǎǎŋ, **Mwan** # gǎǎŋ-gǎǎŋ adj very deep, **Wan** # gǎǎŋ, **Beng** # gǎǎŋ (in Wan a merger with *hole-1 is probable)

*gǎǎŋ do-4 > **Dan (gw)** gǎǎŋ vt make (war), **Tura** # gǎǎŋ vi go on (of war, etc.); vt conduct (war, fight); put into action (forces, means), **Gban ST** gǎǎŋ v try, **Wan** # gǎǎŋ vt be engaged in (war, fight)

*gǎǎŋ fence-2 > **Dan (bl)** gǎǎŋ, **Dan (gw)** gǎǎŋ, **Guro** #, **BN** gǎǎŋ, **Gban ST** gǎǎŋ

*gǎǎŋ go away (to) > **Dan (bl, gw)** gǎǎŋ, **Dan (kl)** gǎǎŋ vi leave, go out; come from; vt sell, have on sale, **Tura** # gǎǎŋ vi leave, go away; flow (of water); make leave; take away, extract; separate; give, produce; prepare, cook, **Mano NE** gǎǎŋ vi come from, **Guro** #, **GR, ST** gǎǎŋ vi go; evade, flee, **Yaure HB** kú vi go, **Mwan PM** gǎǎŋ, **Wan** # gǎǎŋ vi leave; vt take off, **Beng** # gǎǎŋ vi disappear

*gǎǎŋ grasshopper > **Guro** # gǎǎŋ, **BN** gǎǎŋ, gǎǎŋ, **Mwan** gǎǎŋ mǎǎŋè (?) tsetse fly, **Wan** # gǎǎŋ, **Beng** # gǎǎŋ

*gǎǎŋ hearth > **Guro** #, **BN** gǎǎŋ, **GR** gǎǎŋ, **Gban ST** gǎǎŋ

*gòŋ hill-2 > **Dan (bl)** gōō, **Tura** # gòŋ, **Guro** #, **BN, GR, VV** gò, **Mwan** # gòŋ *n mountain*, **Wan AT** gòŋ

*gúáj hoe-3 (mattock) > **Dan (gw)** gáj, **Tura** # gáj, gájlàà, **Guro** # gùà-né, **GR** gwà-nē, **Mwan** # gwè-nè *n small hoe*

*gāló hyena-5 > **Guro** # gālú, **Mwan** # glāò

*gālā indigo > **Dan (gw)** glà, **Mano ZE** gālā-yí-zē *adj blue*, **Guro** # gālá, **Gban ST** glā *n indigo (plant and paint)*, **Mwan AY** glà *n dye*

*gòò maize, corn-3 > **Guro** #, **GR** gòò, **Mwan** # gòò

*gòŋ measure (to) > **Dan (bl)** gòŋ *vt estimate*, **Tura** # gòŋ *vt measure*; slander, **Gban ST** gòŋ *v try; exercise*, **Beng** # gòŋ

*gòē play-2 > **Guro** # gwèè (?) *n game (kind of)*, **Gban ST** gè *n play; amusement*

*gānā pull (to)-2 > **Dan (bl)** gā, **Dan (gw, kl)** gā *vt pull, draw; attract (to - pié)*, **Mano VV** gāà, **Guro BN, ST** gānā, # gānāà, **Gban ST** gēá (?), **Beng** # glā-lá

*gòŋŋ quarter (of a village) > **Dan (bl)** gúú, gú, gùŋ, gù *n quarter (of a village); family*, **Guro** #, **BN** gòŋŋ *n quarter (of a village); family; group; time*

*gòlò rest > **Dan (bl, gw)** glòò *n rest; vi rest*, **Tura** # gòlò *vi rest; stay, remain; continue*, **Gban ST** gwłě

*gìŋì search-3 > **Guro** #, **BN, GR** gìŋì *vt look for; look; make love (with a woman)*, **Mwan** # glì *vt look for; look*

*gò sell-2 > **Dan (gw)** gó (?), **Mwan** # gò, **Wan** # gò

*gō stomach, belly-1 > **Dan (bl, gw, kl)** gú, **Gban ST** gò *n stomach*, gòò *n belly, rumen*, gò pp *in*, **Wan** gó rn *inner part; pp inside, in*

*gìŋé thorn-2 > **Dan (bl)** gèé, **Dan (gw)** glě, **Dan (kl)** gyě, **Dan (wa)** gléé, **Tura** # già, **Guro GR** gwóó (?) *n thorn (sp.)*

*gānā{-de} widow > **Dan (bl)** già, gāà, **Dan (gw)** gāā, **Dan (kl)** gyāà-lè, **Tura** # gèè *widow; widowhood*, **Mano VV** gānā-léé, **Mwan** # glāā-lé

3.4.7. In feet of types CVV and CV *g- > j- before front vowels in Guro (optionally) and in Beng. Unfortunately, the Yaure form is absent in my data; in this language one would expect c-.

Series 30:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*g	g	g	?	g~j	(c?)	g	g	g	j

*gǎē Guinea fowl (*Numida mileagris*) > **Dan (bl)** gǎ, **Dan (gw)** gǎǎ, **Tura** # gǎǎ, **Guro** # gǎǎ, jǎǎ, **Gban ST** gǎ *n wild Guinea fowl*, **Mwan** # gǎ-grē, **Wan** # gǎṅ-gè *n partridge*, **Beng** # jǎ

Other examples of palatalisation of velars before front vowels appear in subsequent series.

3.4.8. In Dan-Gweetaa and Beng, *g- is reflected as gb-, and in Gban, sometimes in Mwan and Tura, as gw- in one particular context: the first vowel of a proto-stem of the types *gUUV, *gUV (where -U- stands for a rounded vowel) is reduced to an approximant -w-: *gUUV > gwUV, *gUV > gwV, which brings us to the Gban form. In Dan-Gweetaa and Beng this phonetic complex undergoes further change: *gwUV > gblV (cf. a similar change *kwUV > kplV in Dan-Gweetaa for *tie-1). In some words in Gban -l- is subsequently elided: *gwUV > gwV.

Series 31:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*g	g, gw, gb	g, gw	g, gw	g, gw	k, kw	gw	gw	g	gb

*gùlù *hole-1* > **Dan (gw)** gblù-gā, **Dan (bl)** glù, **Dan (bh)** gwlu-gā, **Dan (kl)** glù *n pit, cavity*, **Tura** # gùlù *n hole, cavity*; *rn (smb.'s) place*, **Mano** **ZE, VV** gùlù, **Guro** #, **BN, ST, GR** gūLū *n hole, cavity*, **Yaure** **HP** klú, **Gban** **ST** gwǐ (?), **Mwan** # glù, **Wan** # glù

*gùlì *divide* > **Dan (bl)** glù, **Dan (gw)** gblù *vt divide, distribute*, **Tura** # gùlú *vt distribute*, **Guro** #, **GR** gùlì *vt divide, distribute (among – mā)*, **Gban** **ST** gwǐ *vt divide, distribute*, **Wan** # glù *n piece*, **Beng** # gblí *vt divide, distribute (among – yé)*

*gǔlélé *leopard* > **Dan (gw)** gwēē, **Dan (kl)** gǔ, **Dan (bl)** gǔ, **Tura** # gǔ (< *Dan?*), **Mano** **NE, VV** gǔ, **Mano** **NE, ZE** gǔ, **Guro** **BN** gǔlí, **Gban** **ST** gwǎ

*gǔē *peanut-2 (Arachis hypogaea)* > **Dan (bl)** kǎē (?), **Dan (gw)** gwǎǎ, **Dan (kl)** gwǎǎ, **Tura** # gwǎǎ, **Mano** **ZE** gūó

*gòlò *sweep-3* > **Dan (bl)** gò, **Dan (gw)** gblò, **Mano** **ZE** gòlò, **Guro** **BN** gòlò *vt clean; rub*, **Mwan** # glò *vt rub, polish, scratch*, **Wan** # golo *clean (field)*

*gǔlǎ *wall-2* > **Guro** #, **BN** gùlù, **Gban** **ST** gwǎlí, **Mwan** # gwǎ

*gùlì *war* > **Dan (gw)** gblù, **Dan (bh, yi)** gwlu, **Dan (gp, kl)** glù, **Dan (bl)** glù, **Tura** # gwǐlì *n war*; {kǎlǎ *n trouble* (< *Jula kǎlǎ*)} **Mano** **VV** gèlè, **Guro** #, **BN, ST, GR** gǔlì *n war*, **BN** gùlì *n quarrel*, **Gban** **ST** gwǎ, **Mwan** **PM** gwǎ, **Wan** **AT** glè, **Beng** # gòlí *n quarrel*

(For further examples cf. series 29: 'crocodile-4', 'hearth', 'rest', 'hoe-3').

There are some other sets where Gban or Beng *gb-* presumably corresponds to *g-* of other languages in feet of the type CV. It is difficult to say whether we should postulate here a diachronic process similar to the one mentioned above, or consider these forms unrelated:

*gḡḡḡ *boat-5* > **Dan (gw)** gḡ *n dugout canoe; car*, **Tura** # gḡḡ *n vehicle (boat, car, plane)*, **Mano ZE** gḡḡ, {**Gban ST** gbḡ ?} **Mwan AY** gḡḡ *n car*, **Wan AT** gḡḡ *n vehicle*

*gāḡḡ *bone-2* > **Dan (bl, gw)** gā, **Dan (kl)** gā *rn bone; seed, grain; piece (of sth. hard); unit (counting word in compound numbers)*, **Guro** # gḡḡ ? *n seed, stem, sprout*, {**Gban ST** gbḡ ?}

*gḡḡḡ *jackal* > **Tura** # gwè, **Guro** # gḡḡ *n civet* {**Gban ST** gbèà}

*gḡḡḡ *rub (to)* > **Dan (gw)** gḡḡ *vi rub oneself (against – ḡḡ); vr rub oneself (with – ká)*, **Guro GR** jíē-á-mà (?) *v rub; massage, rub down*, {**Beng GL** gbḡḡḡ, gbḡḡḡḡ, **PA** gbḡ ?}.

3.4.9. Irregular reflexes in the following set can be easily explained by the grammatical character of this word:

*gḡḡḡ *postposition in-3* > **Tura** # gḡḡ *rn inner part; pp in, inside; for; because of*, **Mano NE**, **ZE** yí *pp in, inside*, **Guro BN** gḡḡ, **Guro** #, **GR** jḡḡ *rn interior; thought; pp in, inside*, **Yaure HO**, **HP** kḡḡ, jḡḡ, yí *pp in, to*, **Mwan** # yḡḡ/yí *pp in, inside*.

3.4.10. There is a dozen of correlative sets where *k-* (or *c-* before front vowels) appears in Gban, Wan and Beng, corresponding to *g-* (*j-*) of Dan, Tura, Mano, Guro and Mwan (Yaure data are irrelevant here, because this language has *k-* in both cases). Sporadically, *k-* appears also in Dan dialects, Mano and Guro. Analysis of the sets provides no clues for establishing any phonological conditioning which would explain the difference of these series from Series 29 and 30, on one hand, and from Series 25-28, on the other one. Therefore, I have to postulate a velar proto-phoneme that would be different from both **k-* and **g-*. According to the logics of the system, it may be an implosive phoneme **k̄-*.

Even in Gban, Wan and Beng, reflexes of **k̄-* follow rather irregular patterns; they seem to be conditioned differently in each of these languages.

Series 32:

SMande Dan Tura Mano Guro Yaure Gban Mwan Wan Beng
 *ƙ g g g g k k, g g k, g k, g

*kōlō banana-3 > **Dan (bl, kl)** glō, **Dan (gw)** glō, klō, **Gban ST** klō-klī, klō-í, kwlā-klī, kwlā-í

*kōlō boat-1 **Tura** # gōlō (?), **Guro** # gōlō *n arch. boat; shuttle; car*, **Gban ST** klū *n transport, vehicle*, **Beng GL, PA** glō

*kīlī burn-3 > **Dan (bl)** gū, **Dan (bh, bn, gw, yi)** gū, **Dan (gb)** gū, **Dan (kl)** gū *vi, vt burn*, **Mano NE, VV** gélé, **ZE** gēlē, **Gban ST** kē

*kōlī cola nut > **Dan (gw)** gō, **Dan (kl)** gō, **Dan (bl)** gō, **Tura** # gō, **Mano ZE** gō gō, **Guro** #, **BN, ST, GR** gōlī, **Gban ST** gwé, **Mwan** # gō, **Wan** # kōlī

*kā die-1 > **Dan (bl, gw, kl)** gā *vi die; n death; end (of month, etc.)*, **Tura** # gā *vi die; disappear, heal (of wound); vt kill*, **Mano ZE** gā *vi die; get ripe*, **Guro** #, **BN, GR** gā, *hab. gā vi die; dry up; ripen; n death*, **BN** jē *n illness; burial*, **Yaure HP** kà *adj dry*, **Gban** # gā *vi die; n supernatural force; disease, mutilation*, **Mwan** # gā *vi die; dry; adj dead; n sickness*, **Wan** # ká, **Beng** # gā *n death; adj dead; vi die*

*kānè foot, leg > **Dan (bl)** gē, **Dan (gw)** gē, **Dan (kl)** jā *rn foot, leg; handle (of recipient)*, **Tura** # gē *rn foot, leg*, gē-yā *n time (when counting)*, **Mano NE, ZE** gā *rn foot, leg*, **Guro** #, **BN** gānè *rn leg*, **Yaure HO** cē, kē, **Gban ST** gē, **Mwan** # gā, **Wan** # cé *rn*, **Beng GL, PA** gā *n leg and foot; wheel*

*kōnè male, man-1 > **Dan (bl)** gō, **Dan (gw)** gō *n man, (bl) husband*, **Dan (gw)** gō *n husband*, **Dan (bl)** gō, **Dan (kl)** gō *rn husband*, **Tura** # gō *n husband*, gō *n male; man*, **Mano NE, ZE, VV** gō, *pl. gō*, **Guro** # gōnē, **GR** gwā-nē, **Yaure HP** kwlō-mō *n man*, **Gban ST** kō *n male*, **Mwan** # gwē *n man, male*, **Wan** kō-lé *n man, male*, **Beng** # gō

*kē pumpkin > **Dan (gw)** gā *n pumpkin (sp.)*, **Mano ZE** gā, **Guro** # gā, **BN** jē, **Gban** # gī *n pumpkin; water-melon*, **Mwan** # gā *n melon*, **Wan** # cī

*kūā river-2 > **Dan (gw)** gwā *n big river*, **Dan (bh)** gwā *n sea*, **Dan (bl)** gwā-gā, **Dan (gb, gp)** gwā *n Sassandra river*, **Dan (kl)** gwā *n river*, **Tura** # gwā *n big river*, **Wan** # kā

? *kōnāṅ proverb-2 > **Dan (gw)** gwā, **Tura** # gē *n story*, **Guro GR** gwānā, **Mwan** # gō, **Wan** # glō (?), **Beng** # kà (?)

? *kēā look-2 (to) > **Dan (bl)** gā, **Dan (gw)** gā *vt look at*, **Tura** # gā *vt look at*, **Wan** # lé-gē (?) *vt look at*, **Beng** # cá

? *kùlí round-2 > **Dan (bn)** glúúù, **Dan (bl)** klóóklô, **Dan (kl)** glýýglý, **Mano VV** kélékèlè, **Guro** # kèlèè *adj*, **Gban** # gùù, gbùù, **Wan** # glúú *n* round; *adj* round; *adv* in round, **Beng** # klìlì

In fact, *k- may be also reconstructed for some sets included into series 29-31 where Gban, Wan and Beng forms are missing.

3.4.11. *kp- is reflected as p- in Guro and Yaure, and as kp- elsewhere.
Series 33:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*kp	kp	kp	kp	p	p	kp	kp	kp	kp

*kp̄n̄ bend-1 > **Tura** # kp̄ù *vi* bend oneself backwards; *vt* bend backwards, **Guro** #, **ST** p̄m̄ *vi* bend down; *vt* fold, ply

*kpé all-3 > **Dan (bl)** kpé-kpê, **Yaure HP** pè-ró ?, **Mwan** # kpé, **Beng** # kpà (?)

*kpā centipede > **Dan (bl)** kpā-klù, **Tura** # kpā-ì *n* centipede; scolopen-drid, **Gban ST** kpà *n* centipede (sp.), **Mwan** kplō (?)

*kpé chair > **Tura** # kpéñ *n* earthen bed, **Mwan** # kpē, **Wan** # kpē *n* chair, stool

*kpòñ cowrie-2 > **Dan (bl)** kplōō, **Tura** # kpèéé (< *kpòò-wéé), **Mwan** kpòò

*kpálá dry-2 > **Dan (bl)** kpáéé, **Dan (bn)** kpéé, **Dan (gp)** kpíá, **Dan (gw)** kpéé, **Dan (kl)** kpáá, **Dan (gw, yi)** kpééé *adj* dry; thin (human), **Tura** # kpéé *adj*, **Mano VV** kpálá-kwà *adj* dry, dead (tree, etc.), **Mwan** # kpàà *adj* dry, **Wan** # kpàlà *vt* make dry; roast; *vi* heat oneself

*kpō fish (water dweller)-2 > **Dan (kl)** kpò-ná, **Mano NE, ZE, VV** kpàá, **Guro** #, **BN, GR** pō, **Yaure HB** pò, **Wan** # kpó

*kpíōñ knee-2 > **Dan (bl)** kpōgō, **Dan (gw)** kpīōgō, **Dan (kl)** kpīōgō, **Dan (bh)** kplóó, **Tura** # kpóñ *rn*, **Mano ZE, VV** kpūò, **Guro BN, GR** pó, **Yaure HO** pó, **Gban ST** kpó, **Mwan PM** kpó, **Wan** # kpóñ-gbōlí, **Beng GL, PA** kpó

*kpā put-2 > **Dan (bl, gw)** kpā *vi* lean (on – b̄â); *vt* cover with (sth. – t̄à), **Tura** # kpáá *vi* lie down; *vt* put; make lie down; bend, **Guro** # pá *vt* put; bury; follow (smb. – zūō); *vi* help (smb. – t̄ā, v̄à), **Yaure HP** pá *vi* help (smb. – v̄á); *vt* do, **Yaure HB** pá-lá *vt* put over, **Mwan** # kpá

*kpālēñ shin > **Dan (gw)** kplàà-gā (?), **Mwan** kpáá, **Wan** # kplén, **Beng** # kpló-yónó

*kpētē-kpē short-2 > **Mwan** # kpētēkpē, **Wan** kpētēkpē, kpété-kpé

*kpōtī *stone-2* > **Mwan** # kpōtī, **Wan** kpótī
 *kpōlēn *unripe* > **Dan (kl)** kpō, **Tura** # kpòlò, **Mano ZE** kpōlò, **Guro** #
 pēé-né (?) *n young man; youth*, **Wan** # kpónūn

3.4.12. There are several irregular sets with predominant *kp-*. Some of them can be explained through borrowing from other languages:

'*coco nut*' > **Tura** # kpákù, **Guro** # kpáô, **GR** kpàò, **Mwan** # kpákō, **Wan** # kpákò, **Beng** # kpákò (a wandering word in Côte d'Ivoire, cf. **Bete** kpākò, **Baule** kpākō, kpákō)

We have some other sporadic irregularities as well, and it is difficult to judge so far whether they reflect some phonological or morphological features of the proto-language (such as the archaic class prefix *N̄-) or if the irregular forms simply do not belong to the comparative sets:

? *N̄-kpīnī *cheek-1* > **Dan (bl)** kpéń, **Dan (gw)** kpíńń, **Dan (kl)** kpéń, **Tura** # kpíńń, **Guro** #, **ST, GR, BN** bīnī (a voiced initial consonant in Guro, one would expect *p-)

? *N̄-kpōlū *hump-2* > **Dan (bl, gw, kl)** kpū *fn hump (on body); hump; callus*, **Tura** # kpú rn *hump; bump*, **Mano ZE** gbú (?) *n bump (on the skin)*, **Guro BN, GR** pólú *n BN knot, GR bump, # pōlū n knot, or GR pō n fist*, **Yaure HO** póú ? *n hump, bump*, **Gban ST** kpù *n hump; fist*, **Wan** # kpò, **Beng PA** pūń (?) *n hump PA; knot (in wood) GL* (a voiced initial consonant in Mano; p- instead of kp- in Beng)

? *kpōīn̄ *road-2* > **Dan (bl)** kpēń, **Dan (gw)** kpīńń, **Tura** # gbéń-lè, **Guro (nya) VV** gbāń, #, **BN** gbōń, **Yaure** kpò, **Wan** # kpò (one would expect kp- in Tura, p- in Guro)

3.4.13. Generally Proto-SM *gb- > b- in Guro, > p- in Yaure. In the rest of the languages it remained unchanged.

Series 34:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*gb	gb	gb	gb	b	p	gb	gb	gb	gb

*gbēn *arm* > **Dan (gw)** gbēń, **Dan (bh, yi)** gbiè, **Dan (bl)** gbiâs, **Dan (dh)** gbiè, **Dan (kl)** gbê rn *arm*, {cf. **Dan (gw)** # gbēń *n branch (of river), brook*,} **Tura** # gbá rn, **Guro BN, GR, VV** bē rn *arm*, {cf. bē *n branch*}, **Yaure HP:73,75,77** pé ~ pē rn *arm*, **Mwan** # gbē rn *arm; foreleg; side*

*gbòṅ baboon (*Papio cynocephalus*) > **Dan (bl)** gbòṅ, gbòṅ, **Guro** # bàà, **Beng** # gbòì) *n chimpanzee*

*gbìā bachelor > **Dan (gw)** # gbáá, {**Dan (kl)** cè-gbā (< *Jula*)} **Tura** # nń́ gbáláń́ *n sterile woman*, **Guro** # bià, **Mwan** gbà-kóó *n bachelor* {**Beng** # cègbá *n bachelor; spinster* (< *Jula*)}

*gbāṅ bamboo-2 > **Dan (bl)** gbòṅgbó *n bamboo*, **Dan (gw)** gbā, **Dan (kl)** gbáń *n bamboo* *Bambusa vulgaris*, gbóń *n West African bamboo* *Oxytenanthera abyssnica*, **Tura** # gbàṅ-wàà *n raphia*, **Guro** #, **GR** bàō, **Wan** # gbōō-pō (?)

*gbāā bat-4 > **Tura** # gbáá (?) *n squirrel (sp.)*, **Guro** #, **BN** bā *n flying fox*, **Mwan** # gbā-nē, **Wan** # gbā

*gbēṅ branch-2 > **Dan (gw)** gbèṅ *n branch (except that of a palm)*, **Tura** # gbāā *n branch (except that of a palm)*, **Mano ZE** gbāā, **Guro BN, GR, VV** bē *rn*, **Mwan** # gbē, **Wan** # gbē

*gbń́gbń́ bucket > **Dan (bl)** gbń́gbó, gbógbó, **Dan (gw)** gbń́gbú, **Tura** # gbúgbúń, **Wan** # gbōṅgbōṅ (?) *n basket*

*gbì chase (to) > **Guro** # bǐ, **BN** bí, bíē *vt chase away*, **Yaure HB** pǐ, **Mwan** # gbì

*gbāṅ cry-2 > **Dan (gw)** gbàṅ *n noise (of a croud)*, **Tura** # gbáá *n noise*, **Guro** # bāā *vi shout*, (**si**) **BN** bā *vi cry (of animal)*, **Mwan** # gbè, **Wan** # gbè-kó *vi shout, cry*, **Beng** # gbá *vi shout; cry out, scream*

*gbā drive in > **Dan (bl)** gbâ, **Dan (gw)** gbà *vi go in; take place; hit (sth. – bā); beg (smb. – bā); vt drive in, fix; organize*, **Tura** # gbāā *vt drive in, fix; lay foundation of (house); vi start (+ ger.)*, **Mwan** # gbāā *vt put in, set (trap)*, **Wan** # gbà (?) *vt sting; pierce*

*gbā give (to)-2 > **Dan (gw)** gbā, **Dan (bl)** gbāā, **Dan (kl)** gbà *vt give smb. (sth. – ká)*, **Tura** # gbá *vt give smb. (sth. – gá); n gift*, **Mano ZE** gbā *vt give smb. (sth. – ká)*, **Guro** #, **BN** bā *vt sacrifice (sth. -- yā) to; honour smb., give a honourable gift*, **Yaure HO** pā *vt offer sacrifice to, consult (fetish)*, **Gban ST** gbà *n gift; dowry (paid by bridegroom)*, **Mwan** # gbā *vt worship (fetish)*, **Beng GL, PA** gbā *vt give smb.; sacrifice*

*gbá granary-4 > **Dan (gw)** gbà *n granary in the house*, **Gban ST** gbá

*gbíń́ heavy-2 > **Dan (bl)** gbíń, gbíń, gbíń, gbígbí, **Dan (gw)** gbíń, gbíń, **Dan (kl)** gbíń *adj hard, difficult; thick (cloth); vigorous*, **Mano ZE** gbíń, gbíń, **Guro** # bēē, **Wan** # gbèṅ, **Beng** # gbíá *adj heavy; weighty*

*gbónń intestine-2 > **Dan (bl)** gbáln, gbáln, gbáln, **Dan (gw)** gblú, **Dan (kl)** gblú (?), **Tura** # gbónó, **Guro** # būā, **Gban** # gbù, **Mwan** gbó, **Wan** # gbòṅ

*gbēlēŋ *long-2* > **Dan (bl)** gbēē, gbēēŋ, gbī, gbēiŋ, **Dan (gw)** gblēē *adj long, high, profound; remote; adv far away*, **Mano ZE, VV** gbāī *adv far away*, **Yaure HO** pōlū ? *adj long*, **Mwan** gbōō, **Beng** # gblēēŋ

*gbēlī *night-2* > **Dan (bl, gw, kl)** gbēŋ, **Tura** # gbēi, **Guro** #, **ST** bēlī, **Guro (yasua)** bēyī

*gbō *pot-2* > **Dan (bl, gw, kl)** gbō, **Tura** # gbó *n pot; hive*, **Mano NE, ZE** gbōō, **Guro** #, **BN, VV** bō, **Yaure HP, HO** pō, **Mwan** # gbō, **Wan** gbō, **Beng** # gbó *n bowl*

*gbà *roof-2* > **Dan (bl)** gbà, gbā, gbâ, **Dan (gw)** gbà, **Mano ZE** gbāā (?) *n roof; ceiling; kitchen*, **Wan** # gbà *vt roof*

*gbī *son* > **Dan (bl, gw)** gbī *rn son; brother's son (for a man); elder sister's son (for a woman)*, **Dan (kl)** gbì *rn son; brother's or sister's son (for both man and woman)*, **Tura** # gbé *rn son*, **Mano ZE** gbē *rn*, **Guro ST** bī, **Yaure HP** pí *rn son*, **Mwan PM** gbē, **Wan** # gbè *rn son; elder brother's son*

*gbānā *thigh* > **Dan (gw)** gbá-blá, **Dan (bl, kl)** gbá, **Tura** # gbāā, gbā, **Guro** # bōlò (?), **Gban ST** gbó, **Mwan** gblò, **Wan** # gblà (?), **Beng** #, **GL** gbá

*gbálàŋ *thunder (to)* > **Dan (kl)** gblá, **Tura** # gbálá, **Mano ZE** gbánà *n thunder, lightning*, **Mwan** gblàŋ *n thunder*, **Wan** # gblàŋ

*gbélé *tick* > **Dan (gw)** gbəllə *n tick of dog*, **Tura** # gbéè, **Mano ZE** gbōè, **Guro GR** béléè-né

*gbòsró *tobacco-1* > **Mwan** # gbòsró, **Wan** # gbòsró (*cf. Odienne Jula gbósòrò, Baule gbòsrò, gbòsró*)

*gbē *wait-2* > **Guro ST, BN, VV** bē, **Wan** # gbē

In the following set *t-* in Guro may be an erroneous transcription (it was already mentioned that in H.-Cl. Grégoire's data *t* and *b* are not very well distinguished):

*kānē-gbō *calf (anat.)* > **Dan (gw)** gē-gbō, **Guro GR** gānā-bō (= gānā-bō?)

Most probably the element *gbō* in Dan, *bō* in Guro is the same as in the lexeme 'pot'.

3.4.14. In yet another correspondence, Guro and (presumably) Yaure have *gb-*, exactly like the rest of the languages of the SM group. There seems to be no reason, however, to reconstruct a special proto-phoneme: in all probability, these sets are spurious, resulting from independent recent borrowing from Manding or Baule.

Series 35:

SMande Dan Tura Mano Guro Yaure Gban Mwan Wan Beng
 *gb gb gb ? gb gb gb ? gb ?
 albino-2 – **Dan (gw)** gbàṅbē, gbàṅ *n light-skinned albino*, **Dan (kl)** kpàflèè *n albino*, **Tura #** gbàṅ, **Guro #** gbàbèlè, gbàbèlè, **Wan #** gbààblèè *n redhead, red-skinned albino* (cf. *Odienne Jula gbònbèrè, gbònbèlè 'light-skinned albino'*)
 box – **Guro BN** gbò *n box, case; suitcase; coffin*, **Yaure HO** gbògbò, **Beng #** gbògbò *n basket* (cf. *Jula gbóngó, Baule gbògbò, gbògbò 'basket'*)
 cannon – **Guro GR** gbèlé *n bomb*, **Gban ST** gblé *n bomb; burst* (< *Jula gbèlé*)
 'kitchen' > **Dan (gw)** gbàúù (< *Jula gbà-bugu*), **Tura #** gbà-kwíí (< *Jula gbà?*), **Mano NE** kpàà *n kitchen hut; rice storage hut (and the surrounding area)*, **Guro #** gbàbù, gbàù (< *Jula gbà-búgu*), **Mwan** gbàbú (< *Jula gbà-bugu*), **Wan #** gbà *n extended family (including collaterals)* (< *Jula gbà?*)
 hyena-4 – **Yaure #** gbógbóló, **Wan #** gbógló (cf. *Baule gbówóló*)
 padlock – **Tura #** gbúlú, **Guro #** gbòkòlò (cf. *Maninka gbóoro, Bamana gógoro, Baule gbòkló, gbókló*)

3.4.15. Before upper vowels, *gb- > b- in Wan:

Series 36:

SMande Dan Tura Mano Guro Yaure Gban Mwan Wan Beng
 *gb gb gb gb b p gb gb b gb
 *gbū excrement-1 > **Dan (bl, gw)** gbō, **Dan (kl)** gbò *rn excrement*, gbōō *vr defecate*, **Tura #** gbó, **Mano NE, ZE** gbō, **Guro ST** bū, **Guro #** bū (?), **Yaure HB** pù, **Mwan #** gbō *n excrement; waste*, **Wan AT** bù, **Beng GL, PA** gbō
 *gbìlā pull (to)-3 > **Dan (gw, gp)** gbìr̀̀̀, **Dan (bh, bn)** gblū́, **Dan (bl)** gbl̩l̩, **Dan (kl)** gbíêê, **Tura #** gbíè *vt fix; drag*, gbíè-lá *vt carry away*, **Gban ST** gbíé *vt drag; sing in chorus*, **Wan #** bilà *vt pull; draw*
 *gbílón trace-2 > **Dan (bl)** gbló, **(gw)** gblú́, glú́ *rn*, **Tura #** gbóló, **Wan** blī̄

3.4.16. It seems that in Beng *gb- > b- before -ε.

Series 37:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*gb	gb	gb	?	b	?	?	gb	gb	b

*gbē(-tē) *big-3* > **Dan (gw)** # gbé *adv? many, much; several*, **Tura** # gbēē *adj large, wide*, **Mwan** # gbēnē, gbētē, **Wan** # gbētē (?), **Beng** # bēē

*gbēlān *shoulder-2* > **Dan (bl, gw, kl)** gbā *rn shoulder, wing*, **Tura** # gbá, **Guro** **BN** bēā-pá, **Mwan** gbē-lōn *n wing*, **Wan** # gblēn *rn wing; shoulder*, **Beng** # bàñ-céñ (< gbēàñ-céñ ?) *n wing* («*shoulder-feathers*»?)

3.4.17. As usual, there are leftover sets where some languages display irregular forms that are difficult to interpret because of their isolated character. They may be displaying some non-trivial morphological or phonological features of the proto-language or simply be unrelated:

*gbālē *difficult* > **Dan (bl)** gbéê, **Dan (gw)** # gbàà (?), **Dan (kl)** gbúúù (gbúúù?) *adj difficult; (bl) hard, solid; strong; (bl) vt compel*, {**Wan** # kpálé, kpálè *adj difficult; hard, solid*} {**Beng** **GL** gōlī *adj difficult*}

*gbáñ *shed-2* > **Dan (gw)** gbá *n shelter*, **Dan (gw)** gbáñ *n drier* (for coffee, cacao), **Tura** # gbáá *n scaffolding* (to chase birds); *drier*, gbáñ *n drier* for coffee, vessels; *pallet* (poor bed), **Guro** #, **BN** bǎ *n shed* (for cooking, for rest); *enclosure; palaver house* {**Mwan** # kpáá}

*gbèlén *squirrel-3* > **Dan (bl)** gbêñ, **Dan (dh, ka)** gbêî, **Dan (gw)** gbłñ, **Tura** # gbñ, **Guro** # bōō (?), **Yaure** **HO** pǎá, {**Gban** **ST** kpǎ *n squirrel* (sp.)} **Mwan** **PM** gbè, **Wan** # gbè *n western palm squirrel*, **Beng** # gblēē

*? *parrot* > **Tura** # gbààgbàà, **Mwan** # gǎàgǎà

*gbāñí *smoke-2* > **Dan (kl)** sé-gbē, **Tura** # gbēē, **Mano** **ZE** gbāī, {**Guro** # gōí *n smoke; smell* (unpleasant), **GR** cé-gwēí *smoke*} {**Gban** **ST** gímí} **Wan** # gbāñí, **Beng** # gbíá

*gbēñà *dog-2* > **Dan (bl)** gbē, **Dan (gw)** gbê, **Tura** # gbēē, **Mano** **NE**, **ZE** gbá, **Guro** # bānā, **Yaure** **HP** plē, **Mwan** # gbàà, **Mwan** **PM** gbàā, **Wan** # gbā-nē, {**Beng** **GL** jēñ, **Beng** **PA** jēñ *n dog; tetanus-like disease believed to result from beating a dog to death or seeng a dead dog*}

*gbālīñ *bug-2* > **Dan (bl)** gbālū, **Dan (gw)** gblūñ, **Tura** # gbāñ *n flea*, **Guro** **GR** bālī, **Gban** **ST** gbǎ (?) *n bedbug, flea, louse*, **Mwan** # gbè, **Beng** # kpláj (?)

3.4.18. Reconstruction of *kw- in Proto-SM is problematic. As we can see from sets given in divisions 3.4.1.–3.4.3., kw- often emerges in Tura, Mwan, Gban, and sometimes in other languages, too, from combinations

of the types **kUIE*, **kUIA*, **kUE*, **kUA* through reduction of the first vowel. There are several sets where *kw-* is present in (nearly) all the languages of the group, but it is still not quite clear,

- whether it has monophonemic status in all the modern languages;
- whether it was **kw-* or **kU-* in the proto-language;
- if it was **kw-*, whether it was one phoneme or a biphonemic complex.

Let us consider these sets one by one. The set 'white man' can hardly be traced back to Proto-SM, taking into account its semantics:

white man – **Dan (bl, gw)** kwí *n European, white man; city dweller, europeanized man*, **Tura** # kwí *n European, white man; colonizer*, **Mano NE** kúí, **Gban ST** gbì (?) *n foreigners*.

This root is also represented in South-West Mande, but it is most probably a migrant word.

For three other sets, a biphonemic cluster can be reconstructed (according to the above-mentioned model of vowel reduction):

kōlē nest-3* > **Tura # kwéè, **Gban ST** kwlě

kūè year-2* > **Dan (gw) kwè, **Dan (kl)** kwē, **Dan (kl, bl)** kwê, **Tura** # kwèè *n year; day*, **Mano ZE** kēè, **Gban ST** kwé, **Beng PA** kùé;

kólè loom* > **Dan (gw) kwēē, **Guro VV** kúlè, **BN** kólē.

As for the last set, 'door', the Tura and Mwan forms testify for the reconstruction of **k-* rather than **kw-*. *kp-* in Mano and Beng is yet to be explained, as well as the «resonant + vowel» clusters in Dan dialects:

kōj door* > **Dan (bn, gw, kl) kwěé, **Dan (bh, yi)** kwěé, **Dan (bl)** kwéí, **Tura** # kóh, **Mano VV** kpóh, **Mwan PM** kóh, **Beng** # kpìh (?)

So far, these sets can be interpreted more or less satisfactorily without postulation of **kw-* in Proto-SM.

3.4.19. Reconstruction of **gw-* encounters problems similar to those with **kw-*. In section 3.4.8. (Series 31) the process of emergence of *gw-* in some modern languages through reduction of a labial vowel after **g-* was considered. There is still another series (although scarcely represented) that probably reflects **gw-*. Its main features are *v-* in Mwan and *g-* (instead of *gb-*) in Beng.

Series 38:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
? <i>*gw</i>	g	g, gw	g	g	k, c	?	v	gw	g

? *gwēlè iroko tree > **Dan (bl)** gòŕ, **Dan (gw)** gòŕ, **Tura** # géli, **Guro** # gòdòwélé, **Mwan** # vè-yri, **Wan** # gwè, **Beng** # gùèè

? *gwí stomach, belly-4 > **Dan (gw)** gwí, gwú, gú rn stomach; inner side, **Dan (bl)** gú, **Dan (gw)** gú, gù pp in, inside; n (bl) inner side, **Tura** # gwí rn stomach, gí rn inner side; character; moment; pp in, inside; for, **Mano ZE** gí rn outside of belly, **Yaure HP** cì, cì rn inside; stomach, **Mwan** # vī.

3.4.20. The principal difference of the next series from the preceding one is in the Wan reflex: *kw-* or *k-*, instead of *gw-*. By analogy with the reflexes of *k (cf. 3.4.10.), I reconstruct an implosive labialized velar consonant *kw-:

Series 39:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
?*kw	g, gw	gw	g	g, gw	k	gw	v	k, kw	g

? *kwā̀ ceiba tree (*Ceiba pentandra*)-2 > **Dan (bl)** gwēl-lú, **Dan (gw, kl)** gwē, **Tura** # gwèè, **Guro** # gòèè, **Gban ST** gwè, **Mwan** # gwà or vè, **Wan** # kwē

? *kwēlē stone-1 > **Dan (gw)** gwā̀, gùŕ, **Dan (kl)** gùŕ, **Dan (bl)** gùŕ, **Tura** # gwèè n stone; rock, **Mano ZE, VV** gèlè, **Guro** #, **BN** gōlē, **GR** gwēlē, **Guro (Yasua) VV** gùlè, **Yaure HO** kōlè, **Gban ST** gwà n stone; rock, **Mwan** # vlé n stone; rock, **Wan** # klé, **Beng** # glē

3.5. Resonants

3.5.1. Generally *y- > y- in all modern languages. Two main allophones of this phoneme can be reconstructed, [y] in the oral context and [ȳ] before a nasal vowel.

Series 40:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*y	y	y	y	y	y	y	y	y	y

*yā̀ bear, give birth-3 > **Guro BN** yā̀ vt, **Yaure HP** ya, **Mwan** # yā/yá, **Beng** # yī

*yōnā bitter-2 > **Mano ZE** yóó (?), **Guro BN** yānānā, **Mwan** # yīā (?)

*yṓj *breast-3* > **Dan (bl, gw, kl)** yó, **Tura** # yǒ, **Mano ZE** yó, **Guro BN** yó *rn breast; nipple*, **Yaure HO** yó, **Gban ST** yí, **Mwan** # yò, **Wan AT** yṓj, **Beng GL** yō, **Beng PA** yó

*yògò́mḗ *camel* (< Manding ɲògò́mḗ) > **Tura** # yòḿíá, **Mwan** yóó́mā, **Wan** # yógò́mḗ, **Beng** # yómḗ

*yànà *cane rat* > **Tura** # yànà, **Guro BN** yā, **Wan** # yòlè (?)

*yáná *carve (to)* > **Dan (bl)** yá, **Dan (gw)** yá, **Tura** # yǎ, **Mano ZE** yā, **Guro** # yāā, **Gban ST** ylá, **Mwan** # yáá

*yī *day-2* > **Dan (bl, gw)** yī, **Tura** # yì *n day (in some names of holidays)*, **Guro ST, BN** yī, **Yaure HP** yì, **Gban ST** yì, **Mwan** # yī

*yī-è *dream-2* (*sleep + ?) > **Dan (bl)** yīl, **Dan (gw)** yéè, **Guro** #, **ST** yāè, **Gban ST** yà, **Beng** # yó

*yáó *evil* > **Dan (bl)** yā, yāā, **Dan (gw)** yāā *adj bad; ugly; evil; unpalatable*, **Tura** # yóó *adj bad*, **Mano ZE, VV** yóó *adj bad; ugly*, **Guro** #, **BN** yāā *vi be bad; ache*, yānḗ *adj bad, evil*, **Gban ST** yá *n evilness; egotism*, **Mwan** # yóó *adj bad*

*yōlū *flow (to)* > **Guro** # yōlū, **Gban GR** yo

*yíe *good-3* > **Mano ZE** yíe *adj good*, **Yaure HO** yí *adj good; n goodness*

*yáé *grass-3* > **Dan (bl)** yáá *n wild sugar cane*, **Dan (gw)** yé *n thatching grass*, **Tura** # yéé, **Gban ST** yé, **Wan** # yēé

*yū *fetish, idol* > **Tura** # yó, **Guro VV** yū, (**BN** jò *n mask of fabric* (< *Jula*)), **Yaure HB** yù, **Mwan PM** yō, **Wan** # yò *n fetish; mask*

*yī-nà *lie down-2* (*sleep + ?) > **Guro** # yīá *vi go to bed*, **Yaure** yīrà, **Mwan** # yīlā

*yūā *nose* > **Dan (bl, gw)** yū *rn nose*, **Dan (kl)** yù (?) *rn snot, nasal mucus*, **Tura** # yūú, **Mano ZE** yū, **Guro** # yā, **Gban ST** yí, **Mwan** # yī, **Wan** # yé, **Beng** # yíé

*yèlè *pit-2* > **Dan (gw)** yè-gā, **Dan (kl)** yè, **Tura** # yèè, **Guro** #, **BN, GR** yēlè *n hole (of animal), burrow*, **Beng** # yrē

*yā *postposition with-2* > **Guro** # yā, **Gban ST** yé *pp with; by*, **Wan** yā

*yōnù *push* > **Dan (gw)** yòò *vi push (sth. – bā); vt gather (together – kwáà)*, **Tura** # yó *vi push (sth. – tà); vt pile*, **Guro BN, GR** yōnù *vt push; press*

*yà(-na) *sit (to)-2* > **Dan (bl)** yā, **Dan (gw)** yà *vi sit down; live; seize; begin (do smth – bā) vt make sit down; put, install; wear (hat); cultivate; write*, **Dan (bl)** yāānū, yāānū, **Dan (kl)** yá-ānū *vi sit down*, **Tura** # yāà *vi sit down; live; marry (of woman; with – gō)*; *be vigilant (against – gē)*; *vt make sit down; put, locate; install; give for marriage*, **Mano NE, ZE** yà *vi sit down, vt*

set, **Guro** # yāná, **Yaure HB** yǎ-nǎ *vi sit down*, **Gban ST** yè *vi sit down; vt seat down; install, put, yà vt put, install*, **Mwan** # yā-là, **Wan** yá, **Beng GL** ya

*yī *sleep* > **Dan (gw, bl)** yī, **Dan (kl)** yī *n sleep*, **Tura** # yí *n sleep*, **Mano NE, ZE** yī, yí *n sleep*, **Guro BN** yī *n sleep*, **Yaure HO** yì *n sleep*, **Gban ST** yì *n sleep*, **Mwan** # yī-dɛ *vi sleep*, **Wan** # yí *vi sleep*, **Beng** # yī *vi sleep; vt sleep with, have sex with; n sleeping*

*yānǎ *sufferance-1* > **Guro** # yáné, **Mwan** yrǎ *n anger, ferocity*, **Wan** # yrǎ

*yéñǎ *sun-2* > **Dan (bn)** yǎǎ, **Dan (gw)** yǎǎ, **Dan (kl)** yǎǎ, **Tura** # yǎǎ, **Mano ZE, VV** yéñǎ, ɲlé *n sun; day*, **Guro BN, GR** yíí, **Yaure HO** yì-dé, **Gban ST** yè-vé, yè-é, **Mwan** # yērē-té, **Wan** # yē-té *n sun; or éli n day*, **Beng** # yīgbié (?)

*yáō *trade* > **Guro BN** yáā, **GR** yāà, **Wan** # yāō

*yí *water* > **Dan (bl)** yí, **Dan (gw)** yí, **Tura** # yí, **Mano NE, ZE** yíí *n water; river, lake, pond*, **Guro** #, **ST** yí, **Yaure HO** yí, **Gban ST** yí, **Mwan** # yì, **Wan** # yí, **Beng GL, PA** yí

*yéñǎ *work* > **Dan (bl)** yūɔ, **Dan (gw)** yǎ, **Dan (kl)** yè (yè?) *n work; (bl) vi work, vt make; fix, mend*, **Mano NE** yéñǎ *n farm; agriculture work, or, Mano ZE* yá-bó, yé-bó *n work*, **Guro ST** yánǎ, **Yaure HP** yná-mà, **Mwan PM** yē, **Wan** # yrē, **VV** yērē *n agriculture work; work*

*yáǎ *yam (Dioscorea gen.)-3* > **Dan (gw)** yǎ *n yam*, **Dan (kl)** yǎ *n staple food*, **Tura** # yǎǎ, **Guro** #, **BN** yá, **Yaure HP, HO** yáá, **Gban ST** yò *n soft yam*, **Mwan** # yǎǎ, **Beng** # yǎǎ

3.5.2. There is a limited number of sets where *w-* in Gban, sometimes in Wan or Beng corresponds to *y-* in other languages. *w-* can be interpreted as the result of a contextually conditioned change from **y-*, the conditions being different in each of the languages.

In Gban, the change **y- > w-* took place in disyllabic words where the consonant had preceded a labial nasal vowel ('oil palm' being the only exception from this rule; the Gban form *wò* 'big oil palm' can be, in fact, unrelated to the other forms in this set). In Beng ('yesterday-1', 'laugh (to)') the change occurred in disyllabic feet before front vowels (cf., however, 'three-2' in 3.5.3., where *ɲ-* < **w-* before a nasal vowel, **w-* < **y-* before *-a*). As for Wan, there is only one example available ('sand'), which is insufficient to establish any rule.

Series 41:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*y	y	y	y	y	y	y, w	y	y, w	y, w

*yùá *eye* > **Dan (gw)** yǎ-gā, **Dan (bl, kl)** yá(-gā) *rn eye; colour*, **Tura** # yǎ *rn*, **Mano ZE** yīé *rn eye*, yǐā *rn colour*, **Guro ST** yíé, **Guro (nya) VV** yùé, **Yaure HO** yùé, **Gban ST** wǎ, **Beng** # yō-wlé

*yūnó *oil-2* > **Dan (bl)** yó, **Dan (gw, kl)** yó, **Tura** # yóó, **Mano NE, ZE** yónó, **Guro** #, **BN** yónó *n oil; fat*, **Gban ST** wú *n oil, fat*, **Mwan** # yrò, **Wan** # yèí *n oil; fat*, **Beng** # yró *n oil; fat*

*yò *oil palm* > **Dan (bl, gw)** yō *n oil palm wine; alcoholic drink*, **Tura** # yó *n oil palm; plantation of oil palms; oil palm wine*, **Mano ZE** yō *n wine*, **Guro** #, **BN** yō, **Gban ST** wò *n big oil palm*, **Mwan PM** yō

? *yónā *yesterday-1* > **Dan (bl)** yīā, yāā, yēē, **Dan (gw)** yāā, yīā, **Tura** # yāā, **Mano NE, ZE** yālá, yōlá, **Guro** # yī, **Gban ST** wíè (?), **Mwan** # yāà, **Beng** # yé-nó *n evening*

*yòmū *blood-1* > **Dan (bl, gw, kl)** yòó, **Tura** yùè, **Guro BN**, yēā, **GR** yāē, **Yaure HP** yè, **Gban ST** wò, **Mwan** yēē, **Wan** # yémī, **Beng** # wàì

*yéí *break (to)-3* > **Dan (bl)** yé, **Dan (gw)** yé *vi spoil, break; vt break; cut; ply*, **Tura** # yéé, **Mano ZE** yé *vt break; ply (clothes)*, **Guro** #, **ST** yéí, **Yaure HP** yee, **Gban ST** ylè, **Wan** # àí *vt break; cut*, **Beng** # wǎ

*yéí *laugh (to)* > **Dan (bh, gw, yi)** yī, **Dan (bl)** yéí, **Dan (kl)** yī, **Mano ZE, VV** yéí *vi laugh (at - m)*, **Guro BN, GR** yéí *n laughter; smile*, **Gban ST** yè, **Gban (bk) VV** yèré *n laugh*, **Beng** # wlā

*yéñè *sand* > **Dan (bl)** yáí, yáí, **Dan (gw, kl)** yéé, {**Tura** # kèè (< Manding? cf. Maninka kǐpé, Mau cè)} **Mano VV** yāē-sélé, **Guro** # yāñè, **ST** yénè, **Gban ST** yè, **Mwan** # yrè, **Wan VV** wéí

3.5.3. The only special feature of Series 42 is *y- > ø- in Wan. There seems to be no evident phonetic conditioning of this elision at the segmental level. As for the suprasegmental conditioning, the tonal system of Wan is still insufficiently clear; still, we can notice that among the Wan forms in the Series 42, words with high and rising tones (if we take a foot as a single unity) predominate, middle tone is rare, and low tone of the entire foot is not attested, which is in striking contrast to the Wan forms of Series 40 and 41. It seems appropriate to hypothesize that the elision of the initial y- in Wan is conditioned at the suprasegmental level. Verification of this hypothesis depends on the progress in the description of Wan and in the reconstruction of the suprasegmental level of Proto-SM.

Series 42:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*y	y	y	y	y	y	y	y	ø	y

*yúbí *ashes-2* > **Dan (bl)** yóó, **Dan (gw)** yúú, **Dan (kl)** yóó, **Tura** # yúè, **Mano ZE** yúé, **Mano VV** yúbé, **Guro** yúí, yíbí, **Wan** # úú, **Beng** # yépe

*yélí *break (to)-3* > **Dan (bl)** yé, **Dan (gw)** yé vi *spoil, break; vt break; cut; ply*, **Tura** # yéé, **Mano ZE** yé vt *break; ply (clothes)*, **Guro ST** yélí, **Guro BN** yélí, *hab. yéliè*, **Yaure HP** yee, **Gban ST** ylè, **Wan** # àí vt *break; cut*, **Beng** # wǎ

*yōnā *egg-3* > **Dan (gw)** yāā, **Dan (kl)** yā, **Dan (bl)** yā, yāā, **Tura** # yāā, **Mano ZE** yāā, **Guro** # yènè, **Gban ST** yā, **Mwan** # yrē, **Wan** ðŋ *n egg; grain*

*yīé *end-3* > **Dan (bl)** yīā, **Dan (gw)** yā vi *finish (sth. – bá)*, **Tura** # yé vi *stop, cease*, **Mano ZE** yā vi *finish (sth. – m)*, **Guro** # yāā vi *end, vt finish*, **Yaure HB** yā, **Gban ST** yè vt *stop, cease*, **Mwan** # yā/yá vi *finish (sth. – lé)*, **Wan** ʒ (?) vi *finish; vt finish*, **Beng** # yā vi *be finished with; be healed; vt finish*

*yōlí *hide* > **Guro** # yōú, **Yaure HP** yòó vi *hide oneself; vt hide*, **Wan** # òlí

*yūá *illness-2* > **Dan (gw)** yāā, **Dan (bl)** yúá (*yūā in composita*), **Dan (kl)** yúá, **Tura** # yúá, **Mano ZE** yāā, yōā, **Mano VV** yāà, **Wan** # á vi *ache*

*yī see (to) > **Dan (bl, gw)** yī, **Dan (kl)** yè vt *see; find*, **Tura** # yé, **Guro** #, **ST** yī, *Prf. yé*, **Yaure HP** yì, **Gban ST** yè vt *find; gain; vi exist; n riches*, **Mwan** # yē/yé, **Wan** # é vt *see; find*, **Beng GL, PA** yē, **PA** yè vt *see; find*

*yélá *shame-3* > **Dan (gw)** yíyè, yíyè, **Dan (kl)** yéè, **Dan (bl)** lā, **Dan (bn)** lálā, **Tura** # yéé, **Mano ZE, VV** yéle, **Guro GR** yēlá, **Mwan** # yrà-lā, **Wan** # élí, **Beng** # yē-yré

*yààkā *three-2* > **Dan (bl)** yāāgā, **Dan (kl)** yāàgà, **Dan (gw)** yāàgā *num three*, **Tura** # yà-ká *num three*, **Mano NE, ZE** yààkā, **Guro BN** yāā, #, **GR** yāá, **Yaure HP** yààgá, **Gban ST** yā, **Mwan** # yāgā, **Wan** á, **Beng** # ŋāŋ

3.5.4. In Series 43 we observe elision of the first vowel in disyllabic forms (*yEIV > IV) in Dan, while the final vowel becomes a back unrounded one (other examples are in the set 'lion', see Series 44, and 'shame-3', see Series 42). This process is certainly recent, and its progress is unequal in different dialects (for more on this problem see [Bearth & Zemp 1967: 27-8]); Kla-Dan seems to be among the least advanced. Of special interest is the form for 'tree' in Dan-Gweetaa and Dan-Kla, for which a following

process may be reconstructed: *yílí > *ylí > *lú > dúú. I. e., unlike in other words of this series, and unlike in Dan-Blo, the resulting *l- was identified with an original initial consonant, which is *d*-.

Taking into account the weak representation of this series, it is difficult to formulate its conditioning with certainty, but it is still possible to advance some hypotheses. The elimination of the first syllable beginning with *y- in Dan dialects occurs when the vowel of that syllable can be reconstructed as oral, and the vowel of the second syllable of the proto-form cannot be more closed than the first one, which is probably a condition for the stress on the second syllable, cf. the situation in modern Guro [Vydrine 2003].

Series 43:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*y	ø	y	y	y	y	y	y	y, ø	y

*yḁḁ descend-2 > **Dan (bl)** yḁḁ *vi descend; vt swallow*, **Dan (gw)** lḁḁ, **Tura** # yḁḁ

*yìlì tie-1, bind > **Dan (bl)** lḁ, **Dan (gw, bn)** lḁ *vt truss; (bl) tie; catch; steal*, **Dan (kl)** yìlḁ *vt tie, fasten; truss*, **Tura** # yèlè, **Mano ZE, VV** yèlè, **Guro** # yìlì, **Yaure HB** yìLì *vt tie; plait*, **Gban ST** yè *vt attach*, **Mwan** # yrè/yré, **Beng** # yrē

*yílí tree > **Dan (gw, kl)** dúú, **Dan (bl)** lú, **Tura** # yílí, **Mano NE, ZE, VV** yílí *n tree; stalk, stem, trunk; wood*, **Guro** #, **ST** yílí, **Mwan** # yìlì/yílí, **Wan** # ylēé, **Beng** # yí *n tree; wood; gun*

3.5.5. In Series 44 we regularly find *j*- in Beng, Yaure and Guro (in the latter, in one case, we find *z*-). Wan, Mwan and Gban are less systematic, but the scarce representation of the series provides insufficient data to establish rules. The proto-phoneme that can be reconstructed for this series is *j-.

Series 44:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*j	y	y	y	j, z	j	j, y	j, y	j, y	j

*jàùmā (or Ñ-jàùmā?) *cat-1* > **Dan (bl)** yàǎ, **Dan (gw)** yūmāà-ná, yūǎ, yǎǎ, **Dan (kl)** yààmò-nā, **Tura** # yàmǎ, **Guro** # zàwò-né, **GR** zàò, **Gban ST** yǎǎ, **Beng** # ɲǎǎ, jǎmǎ; jàkúmā (< *Jula?*)

*jǎlǎ *chain* > **Dan (bl)** yòò, **Tura** # yǎǎ-bèè, **Mano ZE** yòò *n chain; necklace*, **Mwan** # yrǎ, **Beng** # jrǎ

? *jásá *fence* (< *Jula jása* ?) > **Dan (bl)** yásá *n fence; yard*, **Mwan** # jǎsǎ, **Wan** # jǎsǎ

*jàlā *lion* > **Dan (bl)** làā, **Dan (gw)** làà, **Dan (kl)** yìrā, **Tura** # yàà, **Guro** #, **BN** jèlā, **Yaure HO** jàLà, **Mwan** # jrà, jàrà, **Wan** # jàrà, **Beng GL** jātá *n leopard* (< *Jula?*), jrà *n lion*

*jàbā *onion* > **Dan (kl)** yàbá, **Tura** # yàbà, **Mano ZE** yàbā, **Guro BN** jàbā, gàbā, #, **GR** jàbá, **Yaure HO** jàbà, **Gban ST** jàbá, jàá, **Beng GL** jàflá, **PA** jàflá

? *júfá *pocket* (< *Manding júfá* < *Arab. jawf cavity, hollow* ?) **Dan (bl)** yúŕ, **Dan (gw)** yǎǎ, **Dan (kl)** yèè, **Mano ZE** yúfà, **Mano VV** yífà, **Beng GL** jùfáū, **Beng PA** júfá (*independent borrowing into single languages is also probable*)

In the following sets, forms with *j-* may be borrowed from *Manding*, so that reconstruction of **j-* remains tentative:

? *jésé *thread-1* > **Dan (gw, gp)** yéé, **Dan (bl)** yèè, yēè, yèè, **Dan (kl)** yèè *n cotton*, **Tura** # yèí, **Mano VV** yéé, **Beng** # jèsé *n thread; cotton* (< *Manding jèsé?*)

? *jǎlǎ *net* > **Dan (kl)** yòò *n fishing net; hammock*, **Mwan** # yrǎ *n net, hammock*, {**Beng GL** jǎ, **PA** jǎ, jǎ *n hammock*, **GL** jǎ *n fishing net* (< *Jula jǎ*)}

3.5.7. Proto-SM **w-* > *w-* generally in all the daughter languages.

Series 45:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
* <i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>

*wí *affair, matter-2* > **Dan (bl)** wú, **Dan (gw)** wǎ, **Dan (kl)** wǎ (wǎ?), **Tura** # wú, **Mano NE, VV** wǎ *n deed, matter*, **Guro** # wí, **Yaure HO, HP:85** wí, wí

*wū *break (to)-2* > **Dan (bl, gw)** wú *vt break; vi break; be ill (of head)*, **Dan (kl)** wù, **Tura** # wí, **Mano ZE** wí *vt break, shatter*, **Guro** # wí, **Gban ST** wí, **Mwan** # wí/wí *vt break, destroy*, **Beng** # wí *vt break; interrupt*

*wūō cry-1 > **Guro ST** wū, **Guro BN** wú *n cry*, **Yaure HB** wūō, *perf.*
wūō *v cry*, **Gban ST** wò *v cry*, **Mwan AY** wī *n weeping*

*wō do-5 > **Dan (bl, gw)** wō, **Tura** # wó, **Guro** # wú, *hab.* wō, **Gban ST**
wò, **Mwan** wō/wó, **Wan** # wò *vt perform, accomplish*, **Beng** # wō

*wōlā enter-3 > **Guro** #, **BN** wōlā, **Mwan** # wlā/wlá *vi enter, vt let in*,
Wan # wīá, wīá *vi enter; vt put on*

*wēlē face-2 > **Dan (bl)** wē, wē-ḥ-dē, wēū-dē, **Dan (gw)** wālá, **Dan**
(kl) wē-ḥ-lē, **Tura** # wéé, **Mano NE** wèlè, **Mano ZE** wēlē, **Gban ST** wà *rn*
face; appearance; aspect, **Mwan** wlē *rn*

*wálá knife-6 > **Tura** # wālá, **Mwan PM** wlā

*wō lie down-3 > **Dan (bl)** wō, **Dan (gw)** wō *vi lie down; spend a night*;
live; vt put (on - ká), **Mano ZE** wō, **Gban ST** wò *vt put*

*wī meat, animal-2 > **Dan (bl, gw)** wū, **Dan (kl)** wù, **Tura** # wī, **Mano**
NE, ZE wī, **Guro** # wī, **Yaure HP** wī, **Gban ST** wè, **Mwan** # wī, **Wan** # wī

*wēnī monkey-3 > **Dan (bl)** wòḍ, **Dan (gw)** wòḍ, **Dan (ka)** wòù, **Tura** #
wè, **Mano NE** wēí, **Yaure HO** wèné, **Gban ST** wī (?), *n monkey (sp.)*,
Mwan # wòḍ, **Wan VV** wéí *n monkey (any sp., except for chimpanzee)*

*wā negative copula-5 > **Mano** wa, **Beng** # wā

*wōnē oilpalm grain > **Dan (bl, gw)** wā, **Dan (kl)** wè, **Tura** # wé, **Guro**
wōnā *n kernel of oilpalm grain*

*wēnī pestle > **Dan (bl)** wēnī, **Dan (gw)** wēnī, **Tura** # wē, **Guro** # wūnī,
Mwan # wī

*wēnī pour-3 (to) > **Dan (gw)** wēnī, **Dan (kl)** wēnī *vt pour away, throw*
away; sow (by throwing), **Tura** # wē, **Guro** # wāē *vt pour, spill*

*wèè search-2 > **Guro** # wèè *vt search, look for; have sex with (woman)*,
Yaure HB wèè, **Mwan** # wèè/wéé *vt desire; make love with (woman)*

*wānī tail-1 > **Dan (bl)** wāē, **Dan (bl, gw, kl)** wēnī, **Tura** # wī, **Mano**
VV wōù, **Guro** # wōlī, **Gban ST** wī *rn tail; end; backside*, **Mwan** # wēē, **Wan**
VV wēnī

*wágá thousand-2 > **Dan (kl)** wáá, **Tura** # wáá, **Mano VV** wáá, **Mwan**
wáá, **Wan** wāgá

*wáátí time-3 (< Arab. waqt) > **Tura** # wáátí, **Mwan** # wáátí
(independent borrowing into single languages is also probable)

*wū voice > **Dan (bl)** wō, **Dan (gw)** wū, **Dan (kl)** wò *n voice; speech*;
language, **Tura** # wù, **Mano VV** wú

In Kla-Dan, the resonant is palatalized before -i, *wi > yi:

*wí speak-3 > **Dan (bl)** wé, **Dan (gw)** wí *vi speak; shout; cry (of animal)*;
sound (of musical instrument); accept (sth. -- bā); n sound, **Dan (kl)** yí *vi*, **Tura**

wíí vi speak; cry (of birds); greet (smb. – b̂à); n talk, chat, **Mano ZE, VV** wéé n word, speech, **Guro #, DI** wí, hab. wē vi speak, produce a sound, **Yaure HB** wí, impf. wé vi speak, **Yaure HP** wèi n language, **Mwan** wè/wé vi speak; cry (of animal), **Wan #** wēi, **Beng #** wē vi agree; answer, wēñ n voice; language

3.5.8. In Wan *w- > ø- in the same suprasegmental context as the one mentioned above (cf. 3.5.3.) *y - > ø- (see also the sets 'urine' and 'salt' below). A side effect is the labialization of the remaining vowel (*wE > U):

Series 46:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*w	w	w	w	w	w	w	w	ø	w

*wóné bone-1 > **Tura #** wéé n bone; nucleus; pit (of fruit); grain; essential part; thread; unit, **Mano NE, ZE** wélé n bone; nut, kernel; seed, **Guro #, BN** wólé n grain; bone, **Yaure HO** wélé n grain, **Gban ST** wlí, wlí n grain; seed; stone (of fruit), **Wan #** ðñ, **Beng #** wlé n grain; bone

*wóń firewood-3 > **Dan (bl)** wó, **Dan (gw)** wó, **Tura #** wóó, **Wan #** ðń

*wéńí mortar-3 > **Dan (bl)** lś, **Dan (gw)** wlý, **Dan (kl)** llú-kú (?), **Tura #** wúú, **Mano ZE, VV** wéí, **Guro BN** wólí, **GR** wōlí, **Yaure HO** wéí, **Wan #** ólí

*wèā wine > **Dan (gw)** wē n alcoholic drink, **Tura #** wû, **Guro #** wā, **Yaure HB** wè, **Gban ST** wí, **Mwan #** wèè, **Wan** ú.

3.5.9. In Dan-Blo and, occasionally, in other dialects, *wVIV > IV, much in the same way as it happened with the elision of the initial syllable *yE- (cf. 3.5.4.). Until a reconstruction of Proto-SM vocalism is performed, it is difficult to formulate the conditions in which this change took place; let us just assume that the main factor was of a prosodic character.

Series 47 (see also the set 'mortar-3' in the division 3.5.8.):

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*w	ø	w	w	w	w	w	w	w	w

*wèli louse-3 > **Dan (bl)** lśś, **Dan (bh)** wlś, **Dan (gw, kl)** wèè n body louse, **Mano VV** wèè n headlouse, **Guro #** wèi ~ wōi n body louse, **Wan** wèñ

*wōlō pick up > **Dan (bl)** lōō vt pick up (leaves), **Dan (gw)** wl̩̄, **Tura** # wóó, **Gban ST** wl̩̄ vt pick up one by one, **Beng** # wē

*wèlè rise (to)-2 > **Dan (bl)** lùù, **Dan (gw, kl)** wlūú, **Mano ZE, VV** wēlē, wélé vi rise; get up (out of bed); fly, **Mwan** wl̩̄ vi rise

*wùlè under-2 > **Dan (bl)** l̩̄, **Dan (gw)** wl̩̄ pp under, below; toward, **Tura** # wàlà (?) pp under, below, **Mano ZE** wii n bottom, lower part; floor; pp under, below, **Guro** # wú, **ST** wùò pp under

*wóné worm-2 > **Dan (bl)** l̩̄, **Dan (kl)** w̩̄ n dew-worm, **Tura** # w̩̄-né n dew-worm, **Mano NE, ZE** wéné, **Gban ST** wl̩̄, **Beng** # ɲl̩̄-léɲ.

3.5.10. In Gban *w- > m- in nasal feet before a back rounded vowel; the only Beng form in this series, 'urine', has ηm-. The conditioning of this change is yet to be further elaborated in order to explain why in some cases the change does not take place (cf. 'worm-2' in 3.5.9.); for the time being, the sets representing this correspondence are not very numerous, and our understanding of the evolution of the SM feet structure is not yet advanced enough.

Series 48:

SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
*w	w	w	w	w	w	m	w	w, ø	ηm

*wóná gray hair > **Dan (bl)** wláá, **Dan (gw, kl)** wlá n gray hair; (bl) mane (of donkey, horse), **Tura** # wáá, **Guro** #, **BN** wóná, **Gban ST** m̩̄

*wūnī hair-3 > **Dan (bl, gw)** wū, **Mano ZE** w̩̄, {w̩̄-}wú, **Guro ST** wū, #, **BN, GR** w̩̄ n hair; pp on, on the top, **Gban ST** ml̩̄, **Mwan** # w̩̄/w̩̄

*wū urine > **Dan (bl)** wē-ī, wē-ē, **Dan (gw)** # wē-ī, **Dan (kl)** wī-ī, **Tura** # wī-ī, wé-ī, **Mano ZE** wēī, wēí, **Mano VV** wē-yii, **Guro** # wū, **Gban ST** m̩̄, **Wan** # ó, **Beng** # ηm̩̄ (?)

3.5.11. There is about a half dozen sets where g- appears sporadically in Mwan, Wan, Guro, Beng and corresponds to w- in the other languages:

money > **Dan (bl)** wáú(-gā), **Dan (gw)** wá, **Dan (kl)** wá, **Tura** # wéí n silver, **Mano (Nzerekore) VV** wáeyí, **Mano (Lola) VV** wálé, **Guro** # gōlī, gōlī, gōlī, gōlī, **VV** gwéí n silver? money?, **Mwan** # gòlī, **Wan** # gòlī, **Beng** # wálí

thousand-1 > **Dan (gw)** # gbl̩̄ (< *gólú ?), **Guro** # wúlù, **BN** wūlū **BN** two hundred (Zuénoula), two thousand (si), **Gban ST** wl̩̄

salt > **Dan (gw)** wèè, **Dan (kl)** wēē, **Dan (bl)** kwēē (?), **Tura** # wù, **Mano ZE, VV** wēĩ *n salt; soap (potash?)*, **Guro BN** wē, **Gban ST** gè, **Mwan CF:56** wē, **Wan** # ʒ

fly, spring (to)-3 > **Dan (gw, kl)** wl̩, **Dan (bl)** l̩, **Wan** # gl̩

Reconstruction of the protoforms represents a difficult task — on one hand, because of the irregular character of the correspondence, on the other, because some of these words ('money', 'thousand-1', 'salt') are most probably «migrants» and are easily borrowed because of their great importance in the long-range commerce of West Africa. We find the same roots in West Mande languages, and even there, forms with initial *w-* and *g-* are mixed and represent a difficult task for the reconstruction:

money – **Jeri** wéri/ɔ, wári, wéri, **Mandinka** kódi *n silver; money*, **Jaxanka** kod-o, **Xasonka** gódi *n bracelet*, **Kagoro** wóri, **Maninka** wádi, wódi, wóri *n silver; money*, **Bamana** wári *n silver; money; price*, **Marka-Dafin VV** wari, **Kong Jula** wári, **Soninke** godo/e, *pl. -o n metal; monetary unit; five francs coin; gold decoration*

thousand – **Loko** wulu, **Soso** wúlù, **Mandinka** wúli, **Odiene Jula** wúlú, **Bozo-Tieyaxo** gulu

A special problem is represented by the set 'head-1'.

head-1 – **Dan (gw)** g̩, **Dan (bl, kl)** g̩ *rn head; edge; handle (of instrument); theme*, **Tura** # wú *rn*, **Mano ZE** wú-kēlē, **Guro** #, **BN, ST** wūō, **Yaure HO** wùlò *rn*, **Mwan** # ńgblò, ńgblō, **Wan** # bó-ńgblò, **Beng GL** ńlū, **Beng PA** wl̩

The set is very irregular, it suffices to say that it is the only word in Mwan with a prenasalized consonant.¹² It looks as if some languages (Mwan, Wan, Beng; probably Dan) have preserved a trace of some unproductive prefix *ń-* that prevented the initial consonant of the stem from the weakening. Anyway, this problem needs further consideration.

One of the solutions would be to consider forms beginning with *g-* unrelated to forms in other languages.¹³ Another solution is to reconstruct a separate velar proto-phoneme, e. g. **x-*, which would be supported by the West Mande evidence (cf. in the Xasonka language belonging to the Manding branch: *xùŋ* 'head', *xòxo* 'salt').

¹² This fact has created a special problem for the practical orthography of Mwan.

¹³ There is also a probability that all forms with internal *-l-* result from borrowing from East Kru languages, cf. Bete *wúlú*, Godie *wúlú*, Dida *wlú*. However, even if these forms are borrowed, the problem of the irregular correspondence *g-* - *w-* still remains.

4. The reconstructed proto-SM system of initial consonants is as follows:

*p	*t	*c (?)	*k		*kp
*b	*d	*j	*g	*gʷ (?)	*gb
*f	*s		*x (?)		
	*z				
*b/m	*d/n	*y/ɲ	*k̄	*kʷ (?)	*w/ɰ̄

Appendix: Correspondences of initial consonants in South Mande languages

Series	SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
1	*p	p	p	p	f	f	f	p	p	p
2	*p	p	p	p	f	f	f	f~p	f~p	p
3	*Ñ-p	p	p	p	f	?	β-	?	b	b, p
4	*f	f	f	f	f	f	f	f	f	f
5	*f	f	f	f	f	f	f	f	f	p
6	*b	b	b	b	v	f	β	b	b	b
7	*b	b	b	b	b	b	b	b	b	b
8	*/b/, [m]	/b/, [m]	/b/, [m]	/b/, [m]	/b/, [m]	/b/, [m]	/b/, [m]	/b/, [m]	/b/, [m]	m
9	*b	b	b	v	v	f	β	b,v,m	b,m	v
10	*t	t	t	t	t	t	t	t	t	t
11	*t	t	t	t	c	t	t	t	t	t
12	?*t	t	t	t	t	t	t	t	t	d
13	*d	d	d	d	d	t	d	d	d	d
14	*d	d	d	d, z	d, z	t	d	d	j, d	z
15	?*d	d	d	d	d	t	d, t	d	t	d
13a	*Ñ-d	d	d	d	n	d	d	d	d	d
16	*d̄	d̄	d̄~l	l	d̄~l	d̄~l	l	d̄~l	d̄~l	l
17	*d̄ [̄n]	n /d̄/	n /d̄/	n //	n /d̄/	n //	n //	n /d̄/	n /d̄/	n
18	*d̄	d̄	d̄~l	l	d̄~l	d̄~l	l	d̄~l	d̄~l	y
19	*s	s	s	s	s	s	s	s	s	s
20	*z	z	z	z	z	s	z	z	z	z
21	*z	z	z	z	z	s	z	z	z	y

Series	SMande	Dan	Tura	Mano	Guro	Yaure	Gban	Mwan	Wan	Beng
22	*z	z	z	z	z	?	s	z	z, s	s
23	*z	z	z	?	j	?	z	?	?	z
24	*c?	z	z	z	j	t	z	d	t	d
25	*k	k	k	k	k	k	k	k	k	k
26	*k	k	k	k	c	c	k	k, c	k	c
27	*k	k	k	k	k	k	k	k	∅	w
28	*N̄-k	k	k	k	k	k	g	k	k	k
29	*g	g	g	g	g	k	g	g	g	g
30	*g	g	g	?	g ~ j	(c ?)	g	g	g	j
31	*g	g, gw, gb	g, gw	g, gw	g, gw	k, kw	gw	gw	g	gb
32	*k	g	g	g	g	k	k, g	g	k, g	g, k
33	*kp	kp	kp	kp	p	p	kp	kp	kp	kp
34	*gb	gb	gb	gb	b	p	gb	gb	gb	gb
35	*gb	gb	gb	?	gb	gb	gb	gb	gb	?
36	*gb	gb	gb	gb	b	p	gb	gb	b	gb
37	*gb	gb	gb	?	b	?	?	gb	gb	b
38	*gw	g	gw, g	g	g	k, c	?	v	gw	g
39	*kw	g, gw	gw	g	g, gw	k	gw	v	k, kw	g
40	*y	y	y	y	y	y	y	y	y	y
41	*y	y	y	y	y	y	y, w	y	y, w	y, w
42	*y	y	y	y	y	y	y	y	∅	y
43	*y	∅	y	y	y	y	y	y	y, ∅	y
44	*j	y	y	y	j, z	j	j, y	j, y	j, y	j
45	*w	w	w	w	w	w	w	w	w	w
46	*w	w	w	w	w	w	w	w	∅	w
47	*w	∅	w	w	w	w	w	w	∅	w
48	*w	w	w	w	w	w	m	w	w, ∅	ηm

Abbreviations

adj – adjective
adv – adverb
AT – Halaoui et al. 1983
bh – Bhlɛwo dialect (Dan)
bl – Blo dialect (Dan)
BN – Benoist 1977
CF – Fleming 1995
CL – Claire Grégoire 1988
GL – Gottlieb & Murphy 1995
GR – H.-C. Grégoire 1976; H.-C. Grégoire 1990
dh – Dhoowo dialect (Dan)
gb – Gbaaple dialect (Dan)
gp – Gbapenwo dialect (Dan)
gw – Gweetaa dialect (Dan)
hab. – habitual form
HB – B. Hopkins 1987
HO – B. Hopkins 1982
HP – E. Hopkins 1987
ka – Ka dialect (Dan)
kl – Kla dialect (Dan)
MB – Prost 1953
n – Nao dialect (Tura)
NE – Neal et al. 1946
PA – Paesler 1992
RV – Ravenhill 1982
perf. – perfect
ptp – participle
rn – relative noun
SM – South Mande
ST – Le Saout 1973; Le Saout 1979
vi – intransitive verb
vt – transitive verb
VV – my unpublished data
w – Waalu dialect (Tura)
yi – Yiiwo dialect (Dan)
ZE – DeZeeuw & Kruah 1981

Literature

- Bearth 1971 Bearth, Thomas. *L'énoncé toura*. Norman (Oklahoma): S.I.L., 1971, 481 p.
- Bearth 1986 Bearth, Thomas. *L'articulation du temps et de l'aspect dans le discours toura*. Berne: Peter Lang.
- Bearth & Zemp 1967 Bearth, Thomas & Zemp, Hugo. The phonology of Dan (Santa). *Journal of African Languages*, vol. 6, part 1, pp. 9-29.
- Becker-Donner 1965 Becker-Donner, Etta. *Die sprache der Mano*. Graz-Wien-Köln, 215 S.
- Benoist 1969 Benoist, Jean-Paul. *Grammaire gouro (groupe mandé – Côte d'Ivoire)*. Lyon, "Afrique et Langage", No 3, 101 p.
- Benoist 1977 Benoist, Jean-Paul. *Dictionnaire gouro-français*. Zuénoula, 120 p.
- Bolli 1976 Bolli, Margrit. *Etude prosodique du Dan (Blossé)*. S.I.L. // I.L.A., No. 1, Abidjan 1976, 48 p.
- Bolli & Flik 1973 Bolli, Margrit; Flik, Eva. *Phonological statement: Dan (Blossé)*. Abidjan: S.I.L., 1973, 64 p.
- Bolli & Flik 1978 Bolli, Margrit; Flik, Eva. La phonologie du Muan. *Annales de l'Université d'Abidjan. Sér. H. T. XI*, Fasc. 1.
- Creissels 1988 Creissels, Denis. Éléments de phonologie du Koyaga de Mankono (Côte d'Ivoire). *Mandenkan*, 16. 159 p.
- DeZeeuw & Kruah 1981 DeZeeuw, Peter & Kruah, Rexanna. *A Learner Directed Approach to Mano : A handbook on communication and culture with dialogs, texts, cultural notes, exercises, drills and instructions*. East Lansing : Michigan State University, 298 p.
- Doneux 1968 Doneux, Jean. *Esquisse grammaticale du Dan*. Documents linguistiques No. 15, Université de Dakar.
- Fleming 1995 Fleming, Carolina B. *An introduction to Mona grammar*. M.A. Thesis, Univ. of Texas, Arlington, 159 p.

- Flik 1977 Flik, Eva. Tone glides and registers in five Dan dialects. *Linguistics*, No. 201, La Haye: Mouton, 1977, pp. 5-59.
- Gottlieb & Murphy 1995 Gottlieb, Alma & Murphy, M. Lynne. *Beng-English Dictionary*. Bloomington: Indiana University Linguistics Club Publications, 116 p.
- Grégoire 1988 Grégoire, Claire. An Attempt to Reconstruct Labial Consonants in Mande. *Phonological reconstruction, problems and methods*. Marc Dominicy and Juliette Dor (eds.). *Belgian Journal of Linguistics*, 3, pp. 101-155. Bruxelles: Editions de l'Université de Bruxelles.
- Grégoire 1976 Grégoire, Henri-Claude. *Étude de la langue gouro (Côte-d'Ivoire). Phonétique – Phonologie – Enquête lexicale*. Université Paris III, Thèse de IIIe cycle. 521 + 221 p.
- Grégoire 1990 Grégoire, Henri-Claude. *Tonétique et tonologie d'une groupe de langues mandé. Etude théorique et expérimentale*. Thèse pour le Doctorat d'Etat, Paris III, 465 p.
- Halaoui et al. 1983 Halaoui, Nazam & Téra, Kalilou & Trabi, Monique. *Atlas des langues mandé-sud de Côte-d'Ivoire*. Abidjan: I.L.A.
- Hopkins 1982 Hopkins, Bradley. Etude tonologique du yaouré. // *Cahiers ivoiriens de recherches linguistiques*, 11. Abidjan.
- Hopkins 1987 Hopkins, Bradley. Le système aspecto-modal du yaouré. Abidjan: S.I.L.-I.L.A., No. 7.
- Hopkins 1987 Hopkins, Elizabeth. *Aperçu sur le système pronominal du yaouré*. Abidjan: S.I.L.-I.L.A., No. 8.
- Idiatov 2003 Idiatov, Dmitry. *Verb structure in the Tura language (West Africa): The element |-LAá|*. M.A. Thesis. St. Petersburg State University [Дмитрий Идиатов. Структура глагола в языке тура (Западная Африка, семья манде): элемент |-LAá|. Магистерская квалификационная работа. СПб: СПбГУ, 2003].
- Lautenschlager 1992 Lautenschlager, Frank. Esquisse phonologique du Yaouré, parler de Zégata (sous-préfecture de

- Bouaflé) (Côte-d'Ivoire). // In: Inge Egner (éd.). *Esquisses phonologiques de trois langues ivoiriennes : beng, dida, yaouré. Esquisses linguistiques ivoiriennes, 1.* Abidjan: Institut de Linguistique Appliquée – ACCT, 41 p.
- Le Saout 1971 Le Saout, Joseph. Alternance consonantique et vocalique en gbā, guro et nwā. *Annales de l'Université d'Abidjan. Sér. H*, vol. 4, f. 1, pp. 73-88.
- Le Saout 1976 Le Saout, Joseph. *Etude descriptive du Gban : phonétique et phonologie.* Paris : LACITO.
- Le Saout 1979 Le Saout, Joseph. *Notes sur la phonologie du Gouro (zone de Zuénoula).* Nice : C.E.P.L.A.N. 76 p.
- Neal et al. 1946 Neal, Vern C.; Sinclair, William C.; Finn, Bartholomew J.; Compton, Marilyn. 1946. *Beginning Mano. A course for Speakers of English.* San Francisco. Ms.
- Paesler 1992 Paesler, Wolfgang. Esquisse phonologique du Beng, parler de Ouassadoukou (sous-préfecture de M'Bahiakro) (Côte-d'Ivoire). // In: Inge Egner (éd.). *Esquisses phonologiques de trois langues ivoiriennes : beng, dida, yaouré. Esquisses linguistiques ivoiriennes, 1.* Abidjan: Institut de Linguistique Appliquée – ACCT, 47 p.
- Pozdniakov 1978 Pozdniakov, Konstantin. *Mande Languages: A historical comparative analysis.* A PhD Thesis. Moscow: Institute of Linguistics, 149 + 210 p. [К. И. Поздняков. Языки манде: Сравнительно-исторический анализ. Кандидатская диссертация. М.: Институт языкознания АН СССР, 149 + 210 с.].
- Pozdniakov & Vydrin 1986-88 Pozdniakov, Konstantin & Vydrin, Valentin. Die Entwicklung des phonetischen Systems des Prämanden. – Nasalität und Entwicklung des phonologischen Systems der Mandensprachen // *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschungen*, Bd. 39, H. 5, SS. 549-561; Rekonstruktion des phonologischen Systems des Prämanden. *Zeitschrift für Phonetik, Sprach-*

- wissenschaft und Kommunikationsforschungen*, Bd. 41, H. 3, SS. 353-371.
- Prost 1950/1968 Prost, André. *La langue bisa : grammaire et dictionnaire*. Ouagadougou : Centre IFAN, 1953. (Second edition : Farnborough: Gregg press, 1968).
- Prost 1953 Prost, André. *Les langues mandé-sud du groupe mana-busa*. Mémoires de l'Institut français d'Afrique Noire, Dakar, 182 p.
- Prost Ms. Prost, André. *Des mots d'emprunt dans les langues ouest-africains*. Ms.
- Ravenhill 1982 Ravenhill, Philip. The Wan language. *Mandenkan* 4, pp. 57-69.
- Tymian & Kouadio N'Guessan 2003 Tymian, Judith & Kouadio N'Guessan, Jérémie & Loucou, Jean-Noël. *Dictionnaire baoulé-français*. Abidjan: NEI, 610 p.
- Vanhoudt 1999 Vanhoudt, Bettie. *Lexique bisa-français*. *Mandenkan*, 34, 113 p.
- Vydrine 1989 Vydrine, Valentin. Reflection of the nominal classification in Manden and South-Western Mande languages: the connection category. *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschungen* (Berlin), Bd. 42, H. 1, SS. 91-101.
- Vydrin 1994 Vydrin, Valentin. Traces of nominal classification in the Mande languages: the Soninke evidence. *St. Petersburg Journal of African Studies*, 3, pp. 63-93.
- Vydrine 2001 Vydrine, Valentin. *The phonological type and the noun morphology of the Proto-Mande*. Habil. Dr. Thesis. St. Petersburg State University, Oriental Department, 219 p. [В. Ф. Выдрин. Фонологический тип и именная морфология пра-манде. Диссертация на соискание учёной степени д. филол. н. СПб: СПбГУ, Восточный факультет, 219 с.]
- Vydrine 2003 Vydrine, Valentin. La phonologie gouro : deux décennies après Le Saout. *Mandenkan*, 38 (Paris), pp. 89-113.
- Vydrine 2004 Vydrine, Valentin. Areal and Genetic Features in West Mande and South Mande Phonology: In

- what sense did Mande languages evolve? // *Journal of West African Languages*, vol. XXX, # 2, 2004, pp. 113-125.
- Welmers & Kandakai William E. Welmers, C. K. Kandakai. *A Vai-English Dictionary (Preliminary Draft)*. Monrovia: The Institute for Liberian Languages, 1974, 118 p.
- Welmers 1975 Welmers, William E. Historical Implications of the Vai Consonant System // *Patterns in Language, Culture, and Society: Sub-Saharan Africa. Proceedings of the Symposium on African Language, Culture, and Society, Ohio State University, Columbus, April 11, 1975*. Working Papers in Linguistics, 19, September 1975, pp. 174-184.