Reconstruction of initial consonants in Proto-South Mande

1.1. In comparative Mande studies the Southern group is usually neglected. Unfortunately, this situation is only but natural, 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. Nevertheless, 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 The first one was undertaken by Konstantin Pozdniakov in his unpublished PhD thesis (1978). The second one belongs to Claire Grégoire (1988) and deals with labial consonants.

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 (SUBJ 062156.00), a team of Russian researchers and students accomplished four field trips to Côte d’Ivoire working on grammars and dictionaries of nearly all the languages of the South Mande group. Only a small 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.

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 (see the map). 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 manual of Mano: (deZeeuw, Peter & Kruah, Rexanna 1981) and (Neal et al. 1946), and 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. The Eastern Dan is based on the Gweetaa dialect. First phonological study of this dialect was performed by Th. Bearth and H. Zemp (1967), this job was continued by Margrit Bolli and Eva Flik; a grammatical description and dictionary work was begun by my student Alyona Tcherdynteva and continued by myself (unfortunately, only small part of the data collected has been handled). 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 a grammatical study of this dialect (unfortunately, the unpublished dissertation of Eva Flik remains unaccessible to us) and works 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 be also mentioned (Doneux 1968). The current name for the Liberian variants of Dan is Gio. They might be close enough to the Western Dan, but for the political reasons, a separate literary norm was elaborated for Gio by missionaries. There seems to be no dictionary or reference grammar for the Liberian Dan, for which reason 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 the local Dan do not consider themselves as «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.

So, 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 as a separate language, their number reaches four.

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

1.3.3. Tura is adjacent to Dan. Its dialects are not very divergent (at least, those whose data is available). Its grammatical description is represented in the works of Thomas Bearth (1971, 1986, and numerous articles) and by of student Dmitry Idiatov (most of them are not yet published) who also works on a Tura dictionary. At the current stage, the dictionary counts about 2500 well elaborated entries.

1.3.4. Guro is next to Dan in what concerns the number of speakers (more than 300 thousand). 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 (1969) and two medium-size dictionaries, (Benoist 1977) and (H.-C. Grégoire 1976). Unfortunately, the former makes no distinction between implosive $\ddot{b}$ and explosive $b$, and the latter marks this difference inconsistently and with errors; both do not distinguish between +ART and –ATR vowels. This flaw can be only partly amended by the data from the phonological study by Le Saout (1979) and from my own data. The phonology of Guro has been dealt with by H.-C. Grégoire (1976), Le Saout (1979) and myself (2003).

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 neighbour of Guro. Its phonological description was done by Le Saout (1973), this work contains at the same time a vocabulary of about 1000 units. This vocabulary was transformed into electronic form by my colleague Alexandre Zheltov, who, unfortunately, has completed it with only some single forms from his own data collected during two field trips.

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 Perekhvalskaya which counts presently 1000 entries.

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

2 A work on Guro lexicography was started by my student Irina Jouk, but her dictionary is not yet at the stage where it could be treated as a reliable source.
1.3.8. **Wan** is spoken by a small language community to the north of the Guro area. Its 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 1300 well elaborated entries (it also includes the data from the publications of predecessors); unfortunately, lots of further Wan data are not yet incorporated.

1.3.9. **Beng** is the easternmost language of the group, it is geographically isolated of the other South Mande languages and seems to have undergone the strongest in the SM group influence of Jula and Baoule. There is a Beng-English Dictionary (Gottlieb & Murphy 1995), which provides rich anthropological data, but contains very numerous errors in tonal notation. There is a phonological description by Wolfgang Paesler (1992), who also created an unpublished Beng dictionary in electronic form. My student Denis Paperno has transformed this dictionary into usable form, but has not yet completed it with his own field data collected in January-February 2004.

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

a) Level tones:

<table>
<thead>
<tr>
<th>Name of the tone</th>
<th>2-level systems (not represented in SM)</th>
<th>3-level systems (Guro, Dan-Blo, Wan, Mwan, Beng)</th>
<th>4-level systems (Gban, Yaure, Tura, probably Kla-Dan)</th>
<th>5-level systems (Dan-Gweeta)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrahigh</td>
<td></td>
<td></td>
<td>ê</td>
<td>ê</td>
</tr>
<tr>
<td>High</td>
<td>ê</td>
<td>ê</td>
<td>ê</td>
<td>ê</td>
</tr>
<tr>
<td>Middle</td>
<td>ê</td>
<td></td>
<td>ê</td>
<td>ê</td>
</tr>
<tr>
<td>Low</td>
<td>ê</td>
<td>ê</td>
<td>ê</td>
<td>ê</td>
</tr>
<tr>
<td>Extralow</td>
<td>ê</td>
<td></td>
<td>ê</td>
<td>ê</td>
</tr>
</tbody>
</table>

b) Contour tones:
ê – rising tone, ê – falling tone. In the languages where two rising tonemes are distinguished, ê is used for the mid-rising (MR) tone. In the languages distinguishing two falling tones, ê is used for the mid-falling (MF) tone.

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

1.5. The relevant rhythmic unit of South Mande languages is a foot, which can be monosyllabic. A foot is characterized by a high degree of internal cohesion; in some languages, its integrity is reinforced by a dynamic accent (like in Guro), in some others (like Tura), there seems to be no accent. The other factors of the integrity of the foot are: tonal harmony (number of tonal combinations within a foot is limited, in some languages, like Guro, a foot bears only one tone); vocalic harmony (only a limited of vocalic combination within a foot is possible); nasal harmony (the entire foot is either nasal or oral, with the exception of the final element ɣ which can belong to both nasal or oral foot); consonantal homoresonance (realisation 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 to the reduction of the internal structure of the foot: in some contexts, foot-internal
consonants are elided, in some others, inter-consonantal vowels drop. The inventory of foot-
internal consonants in South Mande is reduced (with some rare exceptions) to -l-, -w-, -y- and
their nasal allphones.
As it was demonstrated by Le Saout, nasal consonants in South Mande languages (with the
exception of Beng) have no phonological statut. They should be considered as allophones of
corresponding oral sonants or implosives in the nasal context (i.e., in a nasal foot): /b/ = [b, m]; /d/ = [d, n] or [l, n]; /n/ = [y, ñ, p]; /w/ = [w, ŋ, 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. So, only foot-initial
consonants will be the object of the current reconstruction.

2. Let us consider the phonological systems of each single language, then proceed to the
lexical correspondences.

2.1.1. Dan-Blo (Bolli, Flik 1973)
Consonants

<table>
<thead>
<tr>
<th>p</th>
<th>t</th>
<th>k</th>
<th>kw</th>
<th>kp</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>d</td>
<td>g</td>
<td>gw</td>
<td>gb</td>
</tr>
<tr>
<td>f</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v</td>
<td>z</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/m</td>
<td>d'/n</td>
<td>y/n</td>
<td>w/ǭ</td>
<td></td>
</tr>
<tr>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes

a) kw-, gw- go together with non-back vowels only (the only exception seems to be gwštš ‘taro, Colocasia exculenta’). It is highly probable that they come back to combinations of k- and g- with back vowels followed by non-back vowels (*guə > gwa, *gæ > gwe, etc.). Anyway, in the modern language their phonemic status seems to be firmly established, cf. kwlā ‘tendon of animal’ : klā ‘whip’, gwē ‘ceiba tree’ : gē ‘Guere language’, etc.

b) The foot-initial phoneme l- is firmly established. It goes together with nasal vowels (lā ‘sort of pepper’, ļa ‘sun’, lō ‘worm’), so that it falls apart from the row of the resonants where oral and nasal consonants constitute allophonic pairs.

Vowels

<table>
<thead>
<tr>
<th>Oral</th>
<th>Nasal</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>ũ</td>
</tr>
<tr>
<td>e</td>
<td>x</td>
</tr>
<tr>
<td>æ</td>
<td>a</td>
</tr>
<tr>
<td>ë</td>
<td>a</td>
</tr>
</tbody>
</table>

The “nasal semi-vowel” ũ appears only at the end of feet; the only exception is the 1sg. non-
subject pronoun. ũ 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 feet carries a tone of its own.

2.1.2. Dan-Gweetaa (Bearth, Zemp 1968)
Notes: The same comments as for Blo.

### Oral

<table>
<thead>
<tr>
<th>i</th>
<th>u</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>u</td>
<td>a</td>
</tr>
</tbody>
</table>

### Nasal

<table>
<thead>
<tr>
<th>i</th>
<th>u</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>u</td>
<td>a</td>
</tr>
</tbody>
</table>

**Tones**

Dan-Gweetaa has 5 level and two modulated tones, high-falling and mid-falling. It is extra-law ton Gweetaa that corresponds to the assimilated-falling tone of Blo.

2.1.3. Kla-Dan (my field data)\(^3\)

<table>
<thead>
<tr>
<th>p</th>
<th>t</th>
<th>c (?)</th>
<th>k</th>
<th>kw</th>
<th>kp</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>d</td>
<td>j (?)</td>
<td>g</td>
<td>gw</td>
<td>gb</td>
</tr>
<tr>
<td>f’</td>
<td>s</td>
<td>š (?)</td>
<td>s</td>
<td>š</td>
<td>š</td>
</tr>
<tr>
<td>(v)</td>
<td>z</td>
<td>ž (?)</td>
<td>ž</td>
<td>ž</td>
<td>ž</td>
</tr>
<tr>
<td>β/m</td>
<td>d’/n</td>
<td>y/n</td>
<td>w/Ŵ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l</td>
<td>l</td>
<td>l</td>
<td>l</td>
<td>l</td>
<td>l</td>
</tr>
</tbody>
</table>

### Notes

a) Status of kw-, gw- : most probably, like in Blo and Gweetaa.
b) There are two different realisations of l-, simple («weak»), [I], and geminated, [II]. Their phonological status in relation to each other is not yet clear.
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, vĕỹn’ ā ‘honey-producing midge’.

**Vowels:** Like in Dan-Blo.
**Tones:** Presumably, 4 level tones.

2.2. Tura (Bearth 1971)

**Consonants**

<table>
<thead>
<tr>
<th>p</th>
<th>t</th>
<th>k</th>
<th>kw</th>
<th>kp</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>d</td>
<td>g</td>
<td>gw</td>
<td>gb</td>
</tr>
<tr>
<td>f’</td>
<td>s</td>
<td>s</td>
<td>s</td>
<td>s</td>
</tr>
<tr>
<td>v</td>
<td>z</td>
<td>ž</td>
<td>ž</td>
<td>ž</td>
</tr>
<tr>
<td>β/m</td>
<td>d’ ~ l/n</td>
<td>y/n</td>
<td>w/Ŵ</td>
<td></td>
</tr>
</tbody>
</table>

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\(^3\) 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.
### Vowels

<table>
<thead>
<tr>
<th>Oral</th>
<th>Nasal</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>ů</td>
</tr>
<tr>
<td>u</td>
<td>ů</td>
</tr>
<tr>
<td>ŋ</td>
<td>ů</td>
</tr>
<tr>
<td>e</td>
<td>ĕ</td>
</tr>
<tr>
<td>œ</td>
<td>ĕ</td>
</tr>
<tr>
<td>a</td>
<td>ā</td>
</tr>
</tbody>
</table>

**Tones:** four level tones.

### 2.3. Mano (deZeeuw & Kruah 1981)

**Consonants**

<table>
<thead>
<tr>
<th>p</th>
<th>t</th>
<th>k</th>
<th>kp</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>d</td>
<td>g</td>
<td>gb</td>
</tr>
<tr>
<td>f</td>
<td>s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>v</td>
<td>z</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b/m</td>
<td>l/n</td>
<td>y/n</td>
<td>w/ tô</td>
</tr>
</tbody>
</table>

**Vowels**

<table>
<thead>
<tr>
<th>Oral</th>
<th>Nasal</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>ů</td>
</tr>
<tr>
<td>u</td>
<td>ů</td>
</tr>
<tr>
<td>ŋ</td>
<td>ů</td>
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<tr>
<td>e</td>
<td>ĕ</td>
</tr>
<tr>
<td>œ</td>
<td>ĕ</td>
</tr>
<tr>
<td>a</td>
<td>ā</td>
</tr>
</tbody>
</table>

Mano has 3 level tones.

### 2.4. Guro (Le Saout 1979)

**Consonants**

<table>
<thead>
<tr>
<th>p</th>
<th>t</th>
<th>c</th>
<th>k</th>
<th>kw</th>
<th>kp</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>d</td>
<td>j</td>
<td>g</td>
<td>gw</td>
<td>gb</td>
</tr>
<tr>
<td>f</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v</td>
<td>z</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b/m</td>
<td>d~ l/n</td>
<td>y/n</td>
<td>w/ tô</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vowels**

<table>
<thead>
<tr>
<th>Oral</th>
<th>–ATR series</th>
<th>Nasal series</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>ů</td>
<td>ů</td>
</tr>
<tr>
<td>u</td>
<td>ů</td>
<td>ů</td>
</tr>
<tr>
<td>ŋ</td>
<td>ů</td>
<td>ů</td>
</tr>
<tr>
<td>e</td>
<td>ĕ</td>
<td>ŕ</td>
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<tr>
<td>œ</td>
<td>ĕ</td>
<td>ŕ</td>
</tr>
<tr>
<td>a</td>
<td>ŕ</td>
<td>ŕ</td>
</tr>
</tbody>
</table>

Note: kw and gw appear only before non-back vowels.

As it was mentioned above, for the commodity reasons the –ATR vowels will be designated with characters for “open” vowels: t for ů, e for ĕ, u for ũ, œ for ŕ.

Guro has no semi-vowel ŭ.

**Tones**
Guro has 3 level tones. The tone domain is a foot, i.e., a foot carries only one toneme.

2.5. Yaure (Lautenschlager 1992)

\[
\begin{array}{cccc}
\text{p} & \text{t} & \text{c} & \text{k} \\
\text{b} & \text{d} & \text{j} & \text{g} \\
\text{f} & \text{s} \\
\text{v} & \text{z} \\
\text{b/m} & \text{l/n} & \text{y/n} & \text{w/\~{v}} \\
\end{array}
\]

Note: ̃ is interpreted as a separate phoneme in (B. Hopkins 1987; E. Hopkins 1987), but Frank 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 [še], /sue/ = [sue] or [še].

Vowels: like in Guro.
Tones: 4 level tones.

2.6. Gban (Le Saout 1973)

\[
\begin{array}{cccc}
\text{t} & \text{c} & \text{k} & \text{kw} & \text{kp} \\
\text{d} & \text{j} & \text{g} & \text{gw} & \text{gb} \\
\phi & \text{s} \\
\beta & \text{z} \\
\text{b/m} & \text{l/n} & \text{y/n} & \text{w/\~{v}} \\
\end{array}
\]

Notes
a) Le Saout mentions that [b] is sometimes realized as slightly ingressive.
b) /c/ and /j/ are marginal phonemes which appear only in expressive words and loanwords.
c) In what follows, bilabial ̃ in Gban will be designated by /f/(in the absence of the phoneme /f/, this will not lead to a confusion).

Vowels

\[
\begin{array}{cccc}
\text{i} & \text{u} & \ddot{i} & \ddot{u} \\
\text{e} & \ddot{o} \\
\text{ε} & \ddot{e} & \ddot{e} & \ddot{e} \\
\text{a} & \ddot{a} \\
\end{array}
\]

There is no nasal semi-vowel.

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

2.7. Mwan (Bolli, Flik 1978)

\[
\begin{array}{cccc}
p & \text{t} & \text{c} & \text{k} & \text{kw} & \text{kp} \\
\end{array}
\]

\[^4\text{Le Saout (1979) interprets Guro tonal system as 2-level one plus two modulated tones, falling and rising. According to this author, the level tones are in complimentary distribution: high tone does not go together with voiced initial consonants, and low tone do not appear with voiceless, sonant and implosive consonants. My interpretation is different: first, the complementary distribution of tones does not work in the personal pronouns; second, Le Saout’s “modulated tones” can be reinterpreted: “falling tone” is the low tone for the feet with voiceless, sonant and implosive consonants, and “rising tone” is the high tone for the feet with voiced initial consonants. For the discussion see (Vydrine 2003).}\]
Vowels
Oral Nasal
\(i\) \(u\) \(\eta\) \(\ddot{i}\) \(\ddot{u}\)
\(e\) \(o\) \(\ddot{e}\) \(\ddot{\varepsilon}\)
\(a\) \(\ddot{a}\)

Nasal semi-vowel \(\eta\) is relatively rare.

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 of myself)
\(p\) \(t\) \(c\) \(k\) \(kw\) \(kp\)
\(b\) \(d\) \(j\) \(g\) \(gw\) \(gb\)
\(f\) \(s\)
\(v\) \(z\)
\(\delta/m\) \(\delta \sim l/n\) \(y/n\) \(w/\hat{w}\)
\(ll \ (?)\)

Note: The phonological status of \(ll\)- is yet to be confirmed.

Vowels
Oral Nasal
\(i\) \(u\) \(\eta\) \(\ddot{i}\) \(\ddot{u}\)
\(e\) \(o\) \(\ddot{e}\) \(\ddot{\varepsilon}\)
\(a\) \(\ddot{a}\)

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

2.9. Beng (Paesler 1992)
\(p\) \(t\) \(c\) \(k\) \(kp\)
\(b\) \(d\) \(j\) \(g\) \(gb\)
\(f\) \(s\)
\(v\) \(z\)
\(l\) \(y\) \(w\)
\(m\) \(n\) \(\eta\) \(\eta m\)

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 (\(\eta\ddot{a}\) ‘3sg. pronoun’, cf. \(\eta \ddot{n}\) ‘to end’; \(n\ddot{e}\) ‘therefore’, cf. \(l\ddot{e}\) ‘sp. of
fruit’). It can be concluded that the emergence of these forms, and the end of the nasal harmony rule must a recent innovation.

b) \( \eta m \) is a rare phoneme, it is attested in 6 words only.

Vowels

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<thead>
<tr>
<th>Oral</th>
<th>Nasal</th>
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<td>( i )</td>
<td>( \tilde{i} )</td>
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<td>( u )</td>
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<td>( \varepsilon )</td>
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<tr>
<td>( a )</td>
<td>( \tilde{a} )</td>
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</table>

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. At the moment, there are altogether 770 correspondence sets in my South Mande database, including doubtful 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, 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 semantic 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). \# signifies that the data stems from the unpublished dictionaries of my students, colleagues from St. Petersburg State University (mentioned in the division 1.3.) and myself; for Beng, it is the unpublished dictionary of Wolfgang Paesler. 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 question mark, (?). Sometimes, forms are given which are (almost) certainly do not ascend to the proto-form, but still represent some interest (i.e., loanwords from related languages); they are put in curly braces, \{\}. In nasal feet, nasality can be indicated in the consonant (\( n-, m- \)), in vowel (with a tilde) or both. In other words, transcriptions \( m\tilde{\sigma} \) and \( m\tilde{\jmath} \), \( \tilde{y\tilde{e}n\tilde{e}} \), \( \tilde{y\tilde{e}l\tilde{e}} \), \( \tilde{y\tilde{e}n\tilde{e}} \) and \( \tilde{y\tilde{e}n\tilde{e}} \) should be regarded as equivalent; their phonological transcription is \( /\tilde{b}\tilde{\jmath}\tilde{\jmath} / \) and \( /\tilde{y\tilde{e}l\tilde{e}}\tilde{\jmath} / \) respectively. \(-r-\) is always a combinatory variant of the phoneme \(-l-\).

Reconstructions for vowels, internal consonants and tones are tentative. I proceed from the hypothesis that the Proto-South Mande language had vocalic system like in modern Guro and Yaure (3 vocalic series: +ATR, –ATR and nasal), a nasal semi-vowel \( \eta \) (like in Dan, Tura, Wan, Gban, Wan, Mwan), nasal and oral homoresonance; 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, ms.; Vydrine 2001).

3.1. Unvoiced labials

3.1.1. There are two series of correspondences which can ascend to the Proto-SM *p, series 1 and 2. These are reflexes in Mwan and Wan that 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: 12 against 5 (plus 9 sets where Mwan and Wan forms are missing: ‘piece-1’, ‘small-2’, ‘tale’, ‘tare’, ‘testicles’, ‘thing-3’, ‘twin’, ‘untie’, ‘winnow’). If we examine closely the sets of the series 2, it becomes evident that

– the Mwan and the Wan forms have always structures CV, CVV or CVŋ, while 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 the sets of the series I this conditioning is not attested (with one exception: Mwan piĩ-bē ‘iron’). Therefore, we can postulate *p- > f- in Mwan and Wan before a front vowel which goes together with simplification of the foot structure: *pVVL > JE, JEE or JEG, *pVyV > JE. 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. If so, both series I and II ascend to the Proto-SM *p-.

**Series 1**

<table>
<thead>
<tr>
<th>Smande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
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<tbody>
<tr>
<td><em>p</em></td>
<td>p</td>
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<td>p</td>
<td>f</td>
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</table>

* *p*ό dig-2 (to) > Dan (bl) pó. Dan (gw) pǭ vt dig out, Tura # pǭ vt dig (soil; hole), Guro # fŋ, Mwan # pǭ vt pierce, Wan # pǭ vt pierce, Beng pǭ vt pierce
* *pi*iŋ drum-3 > Guro VV ñiĩ, Mwan plĩ, Wan # plĩ, plũŋ
* *p*eŋl *fall* (to)-3 > Dan (bl) puŋr, Dan (gw) pɤ, Dan (kl) pɤ vi fall; (bl) make a mistake, Tura # pɛlɛ, pɛlɛ vi fall down; vt inflict (smb. – fǎ) with, Mano ZE, VV pɛlɛ, Mwan pɔ (?) vt drop, cut down
* *p*a fill (to) > Dan (bl, gw, kl) pɛ vi fill; ptp filled, Tura # pā vt fill; draw (water), Mano NE pā, Guro BN, GR fā vt fill, Yaure HB fā, Mwan # pā vt fill; pile, Wan # pāa vt fill; adj full, Beng # pā vi be filled; vt fill
* *p*ólnŋ *iron* > Dan (gw) pǐŋ, Dan (kl) pǐŋr, Dan (bl) pǐŋ. Tura # pě-wě, pę-ēŋ, Mano VV pē-kũlũ, Guro BN, GR fōlĩ n smithery; anvil, fōlĩ-ěwēLũ, fōlũ-wēLũ, Gban ST fę vt forge, Mwan pũ-bě, Wan # plũŋ, Beng pěnŋũ
* *p*aŋa *lick-2* > Dan (bl, gw) pɑ vi lick, lap, suck; sting (of insect), Tura # pāa vt lick, lap, Guro # mā-fānã, Yaure HB fāNā vi lap, Gban ST fãa vt lick; carry food to the mouth, Wan # plãa vt lap, lick
* *p*eŋl market-3 > Guro # fělɛ n commerce; market; goods, Yaure HO fělɛ, Gban ST fę n selling; exchange; embezzlement, Mwan # plě, Wan # plɛ, plɛn market; price; expensiveness, Beng PA plě-blẽ-le vt sell
* *p*óło *open* > Dan (bl) pó, Dan (gw) pū, pū, Dan (kl) pū vi open; unwrap; undo, untie; vi open; stretch oneself, Tura # půlə vt open; unwrap; undo, untie, Wan # plɔvi unwrap; vt open, Beng pũvt open; untie
* *p*ę *say-1* > Dan (bl, gw) pǐ, Dan (kl) pỹ, Tura # pę (?) vt say, tell (smb. – ně, about – gā); ask for, Guro BN fě, Yaure HP vi (or vi ?) (the irregular voiced consonant can be explained by a semi-grammatical character of this word), Gban # fę vt say (name), Mwan # pę vi speak, say, Wan # pę, Beng PA pę v talk
* *p*ę *thing-2* > Dan (gw) pā. Dan (kl) pā vi n thing; reason, Tura # pą-, Mano NE, ZE pę. Guro # fę, BN fę, Yaure HP:93 fę n thing, vě n property, part (the voiced consonant to be explained), Mwan # pę
* *p*i*i-liŋ two > Dan (bl) plẽ, pléđa, Dan (gw) plẽ, Dan (kl) plẽ, plẽđa, Tura # pǐiɛ num two, Mano NE, ZE pɛlɛ, Mano ZE pɛtɛ, Guro fǐ, Yaure HP fĩ, filĩ, Gban ST fĩ, Mwan # plẽ, Wan pǐlũŋ, Beng GL, PA plũŋ
*pûLû white-2 > Dan (bl) pûû, Dan (gw, kl) pûû, Tura # pûû adj white; clear, Mano pûû, Guro fûû, Gban ST fô adj snow white, Mwan pû, Wan pû, Beng GL pû, Beng PA pûû
*pá touch (to)-2 > Dan (bl, gw) pâ vt touch (sth. – ká); wake up (smb. – bâ), Mano ZE pâ, Mwan pâa vt string, Beng # pa vt hit, knock; sting

Series 2

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
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</thead>
<tbody>
<tr>
<td>*pêyà blow &gt; Dan (kl) piô v blow (with mouth, fan), Mano VV piyè, Guro BN fé, GR fé vt whistle; blow (horn), Gban ST fêa vi whistle, Mwan # pê vi whistle, Wan # fé vt blow (an instrument); produce (cough), Beng GL pê, PA pê vi blow; fan (fire)</td>
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<td>*pêné fonio (Digitaria exilis) &gt; Dan (kl) pêñj, Guro BN fnî, VV fnî, Mwan # fîî, Wan # fêñj</td>
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<td>*põlé house-3 &gt; Dan (bl) pê, Dan (gw) pê, Dan (kl) pêç n village, Tura # pêç n village, town, Mano NE, ZE pêç n village, town, Guro fâlâ n village, Yaure HP flâ, flâ, Yaure HO fâlâ n village, Mwan # fê</td>
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<td>*pût vomit-4 &gt; Dan (bl) pê, Dan (gw) pê, pû, Dan (kl) pê vi vomit; n (bl) vomit, Tura # pê, pê vi vomit; blow (nose), Guro BN, GR fê, fê, Yaure HB fé, Gban ST fê, Wan # fé, fé vi vomit, vt make smb. vomit; n vomit, Beng PA pê n baby's vomit</td>
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<td>*põlé wash-1 &gt; Mano NE, VV pêle vt wash (clothes), Guro GR fôlî, BN fôlî. -ê, Yaure HP, HB fôê, fwê, perf. fwêè vt clean; wash, Mwan # fé(?), Wan # pôlî, Beng # pô vt wash (clothes); rub (hands)</td>
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Sets which may belong to both Series I or II (Mwan and Wan data missing):
*põé piece-1 > Dan (bl) pê, Dan (gw) pê rn loaf, piece, Tura # pêë n piece; group (opposed to another group), Guro BN fê rn piece (of orange, etc.); block, quarter (of town)
*pûû-ñé small-2 > Tura # pûû-ñé adj small, Mano NE pêêti, Mano ZE pêj adj small, Guro BN fêêni adj thin
*pôyà tale > Dan (bl) pêa n proverb, Dan (gw) pêä, pêä, Dan (bb) pê, Dan (kl) pê n tale, Mano ZE, VV pêä, pêä, Mano VV pôyà n story, Guro BN fîî n tale, Gban ST fîî n tale, legend, Beng pêñj
*pôa tear > Dan (bl) pêê vt tear; cut; split, Tura # pêê vt tear; split; wound; vi split, separate, Guro BN fiâ, GR fiâ, Beng # pêa vi burst; break; vt fire off; slap
*pânà testicles > Dan (bl) plâ, Guro BN fânà
*pô thing-3 > Tura # pôô n thing; spirit, ghost, demon; morph. pej. agent mark (merged with another morpheme?), Wan # pê, Beng # pô n thing; something
*pîlân twin > Dan (bl) fêëë, fêëë (< Manding?), Dan (gw) pêñj. Tura # pêê-ñé, Guro BN fêñ-ñé, GR fêë-ñé, Yaure HO fêñ-ñé, Beng plêñj
*pûló untie > Tura # pûlò vt untie; unpick, unstitch, Guro BN fôô vt untie; open, Yaure HB ûlû, Gban ST ûô
*pôyà winnow > Dan (bl) pêç, Dan (gw) pêç, Dan (kl) pêç, Mano VV pôyè, Guro GR, BN fêê vt winnow; ? blow (with mouth), Gban # fê, ST fêa 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 a presence of a nominal classificatory prefix *N- (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

<table>
<thead>
<tr>
<th>Smaande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
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<tbody>
<tr>
<td><em>N-pùòfrog-1 &gt; Dan (gw) pòō, bl) pòō n toad, Tura # pùò, Guro BN fòlı, GR fòlı toad, Gban ST βαû</em></td>
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<td>*N-pïyé trace-1 &gt; Dan (bl) pï rn footprint; trace, Tura # pïe, Mano VV pë-pïyé trace; sign, Gban ST bé, Beng GL, PA bë n tracks, footprints; scab, wound (probably, in Beng we have a convergence of two proto-stems, *N-pïyé 'a trace' and *bïlî 'a wound') Taking into account a sporadic character of the reflexes of the nasal prefix in modern languages, similar interpretation can be proposed for another set: *N-pùlû stomach, belly-5 &gt; Wan # blû rn stomach, Beng PA plù n paunch</td>
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<td>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; it may be a share coincidence, in which case the Guro form should be considered etymologically different from those in the other languages: *pâà bowl-2 &gt; Dan (bl) pâà n wooden or clay bowl, [Guro BN, GR pâLâ n wooden basin] Mwan # pâà n calabash</td>
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Series 4

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<th>Smaande</th>
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<th>Wan</th>
<th>Beng</th>
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<tr>
<td>*fû ant-1 &gt; Guro GR, ST fû, Gban # fû n black ant</td>
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<td>*fûlà better &gt; Tura # fûlà, Beng GL fûà, PA fûà</td>
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<td>*fûlí boîl-3 &gt; Guro BN fûlí, GR fûlí, Beng # fûlí</td>
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<td>*fûnî breathe &gt; Guro BN fûnî, Wan flë, flëë</td>
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<td>*fûgà cap-2 &gt; Tura # fûgà, Mwan PM fàá, Wan # fûgà, fûgà</td>
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<td>*sôô-fûlî donkey (may be a loanword from Manding) &gt; Dan (bl) sôô-fâŋ, Tura # sôô-fâï, Guro GR sôô-fâlî, Mwan # sôô-fâlî, Wan VV sôô-fâlî</td>
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<tr>
<td>*fûlêng empty-2 &gt; Dan (gw) fûlêng, Dan (bl) flêng, Dan (bh) fûû, Dan (yi) fûû, Dan (gw). Tura # fû, Tura (w) fûë, Mano VV fêë, Mwan PM flêj</td>
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<td>*fûgà force-1 &gt; Dan (bl) fûà, Dan (gw) fûà, Mwan ÂY fângà, Wan # fûgà, fûgà n force; adv strong, Beng # fàngà</td>
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<td>*fûâ force-3 &gt; Guro BN fûà n richness; glory, Mwan # fûà n force, Wan # fûá</td>
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<td>*fûû(-ù-fûô) light (not heavy) &gt; Dan (bl) fûû, Fêê, Fêê, Dan (gw) fûû, Dan (kl) fêñññ-ññ, Dan (bh) fûû, Dan (yi) fûû (tone?) adj light (not heavy); weak, Dan (gw) fûû, fûû adv easily, without effort, Tura # fûô, fûô fûô adj weak, Mano VV fûûûâ, Guro ST fûûûô, Beng # fôô</td>
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<td>*fûûyè powder-1, Guro ST fûë, BN fûûyè, Beng GL fûë n talc, talcum powder, PA fûë n powder</td>
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</table>
**fù ë sweat > Dan (bl) fë-yí, Dan (gw) fë-yí, Dan (kl) fë-yí, Gban ST fóa vi be hot, Mwan # fùù**

**fù ë sponge (zool.) > Dan (bl) fùù, Dan (gw) fùù, Dan (kl) fùú, Guro GR fùú**

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

{lungs-1 > Dan (kl) vëñ, Dan (bl) vëñ, Mano ZE fàà, Guro (nya) VV fùù, GR fùù, Yaure HO fùù, fùù, Beng GL fùù}

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

Vai vòövòö rn lungs, Maninka fògôrn rn lung, Bamana fògonfògô rn lung, fògonfògô vi be very light or porous; vt make pant (breathe hard and quickly), Soninke furugu (?), Bozo-Hainyaxo fɔɔɔnuɔɔɔɔn, Bisa-Lebir föfur, pl. fòfur, Bisa-Barka föô

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 (1994, 2001, etc.) I demonstrated a 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 sporadic character. I would propose to reconstruct for the Proto-SM a form with a nasal prefix, *N-fôGôy.

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

**N-fôlîn foam > Dan (gw) vuúú, Dan (bl) vuúú, Tura fùù, fùù, Beng flój**

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

{comb-1 Dan (bl) pôáú, Dan (gw) faà-gaà, Dan (ka) faàá, Dan (kl) pëë, Mano ZE yîlí-fà}

This stem is not represented in other Mande branches. It can be a loanword to the protolanguage 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 the Series 6, reconstruction of *b*- is self-evident. Spirantization *b*- > *v*- in the 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. *b*- and *m*- represent one phoneme, in oral and nasal contexts respectively. In Beng *b*- > *b*- which resulted in a merger of the reflexes of *b*- and *b*- This led to the phonologization of *m*. In Gban also *b*- > *b*-; but this change has not led to a merger of two phonemes, because *b*- > *b*- so that the phonological opposition has been maintained, it just modified its nature. Occasional lost of nasality in Wan (moon-2) should not astonish: in this language nasality of vowels is relatively weak and tends to disappear in the presence of the final -y. There is nothing unusual in the lost of nasality of the postposition ‘on’ in Dan and Tura: being a grammatical word, a postposition may undergo irregular phonetic transformations.
Series 6

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*b</td>
<td>b</td>
<td>b</td>
<td>b</td>
<td>v</td>
<td>f</td>
<td>β</td>
<td>b</td>
<td>b</td>
</tr>
</tbody>
</table>

*biűŋ bury > Dan (bl) biŋ hide, Tura # bĩ, Mwan # biŋ, Wan # blà (?). Beng # bĩ
*bũnũ crumb > Dan (gw) blũũ, Tura # bũnũ, bũnũbũnũ, Guro GR blũũ-vulu («bread-crumb»?)
*bàlã cut-2 (to) > Dan (bl) blàã vt cut in small pieces, pierce multiple holes, Gban ST blà vt cut (with a matchet)
*bīyé elephant-2 > Dan (bl, gw) bĩĩ, Dan (kl) bē, Tura # bĩĩĩ, bĩĩĩ, bĩĩĩ n pig, Mano VV bĩĩĩ, Guro VV vĩĩĩ, Yaure HO ūĩĩ, Gban ST bĩĩ, Mwan # bĩĩ, Wan AT bē, Wan # bê, Beng GL bĩĩ, PA bĩ
*bèbè much > Tura # bèũũ (? ) adj numerous, Mwan # bèbè adv much, adj numerous, Wan # bèbè, Beng bèbè adj big, large; old
*bōli mud-2 > Dan (bl) bũũũ, Dan (gw) bũũũ, bũũũ, bũũũ, Dan (kl) bũũũ, Dan (yi) bũũũ, Guro BN vôli
*bũũ navel > Dan (kl) bũũ, Dan (bl) blũũ, Tura # bũũũ, Gban ST bũũ
*bīe night-3 > Dan (bl) bĩĩĩ n night; shadow; image, photograph, picture, Mano ZE bĩĩĩ, Mwan PM bĩ, Wan # bĩ
*bĩũŋ past-2 > Dan (bl) bũũũ, Dan (gw) bũũũ, Dan (kl) bũũũ, Gban ST bũũ
*bĩĩĩ run-2 > Dan (gw) bĩĩĩ n running, Tura # bĩĩĩ n running, Mano NE, VV bĩĩĩ n running, Guro BN vålã, GR vånã n running, Wan # bĩĩĩ n run, Beng # bèbè
*bĩĩĩ throw-1 (to) > Tura # bĩĩĩ vi jump; vt throw; throw away, Guro GR vũlĩ, Guro BN, ST vũlĩ vt throw, fling, Gban ST bĩĩĩ, Mwan # bĩĩĩ

Series 7

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
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<tbody>
<tr>
<td></td>
<td>*b</td>
<td>b</td>
<td>b</td>
<td>b</td>
<td>b</td>
<td>b</td>
<td>b</td>
<td>b</td>
<td>b</td>
</tr>
</tbody>
</table>

*bũũũ bag-1 (< Manding? >) > Dan (bl) bũũũ n bag; wealth, Dan (gw) bũũũ, Dan (kl) bũũũ n large bag (for grain, etc.), Tura # bũũũ, Mano ZE bũũũ, Guro BN bũũũ (bũũũ ?), Gban ST bũũũ n big bag
*bũũũ-lã bend-2 > Tura # bũũũ vt cover (with – tã), bũũũ-lã vi overturn, fall over; prostrate oneself (before – gũũ.pipeline); vt turn over; collapse, Guro # bũũ vi, vt bend, Wan # bĩĩĩ, bĩĩĩ vi bent, vt bend
*bũũũ dry up-1 > Dan (bl) bũũũ, bũũũ, Dan (gw) bũũũ, bũũũ, Dan (kl) bũũũ vi, Guro BN, # bũũũ (= bũũũ vi) vt, vi dry up
*bũũũ eat (to)-2 > Dan (bl) bũũũ, Dan (gw) bũũũ, Dan (dh, kl) bũũũ, Tura # bũũũ, Mano NE bũũũ, Guro # bũũũ, Yaure HP bũũũ, Gban ST bũũũ vt eat; have sex with, Mwan # bũũũ, Beng GL bũũũ, PA bũũũ
*bũũũ extract > Dan (bl, gw) bũũũ vt extract; pluck; harvest; weed (field); remove; send away, dismiss; bury, Mano ZE bũũũ vt pull out, pick; take off (clothes); weed (grass), Wan # bũũ urine arrive, come; happen; ooze; sound, Beng GL, PA bũũũ vt extract; unearth; tap (palm tree); flake off; remove; shave
*bũũũ fructify > Dan (bl, gw) bũũũ vi fructify in abundance, Tura # bĩĩĩ, Guro BN bũũũ, ST, GR bũũũ vi fructify in abundance, Yaure HP bũũũ vi fructify in abundance, Gban # blà (?) vi fructify in abundance, Wan # bũũũ, Beng GL, PA bũũũ vi bear fruit
*bũũũ fruit > Dan (bl, gw, kl) bũũũ run fruit, Mano ZE bũũũ, Guro BN bũũũ (= bũũũ ?), GR bũũũ, Beng GL, PA bũũũ
*go out (to) > Dan (bl, gw) bɔɔ vi grow, put forth (of plant, hair); (bl; gw rare) be born; enter (of spirit; smb. – dɔ); resemble (smb. – bɔɔ/bɔɔ); flow, ooze; (gw) leak (of roof, boat, vessel); exterminate (smb. – bɔɔ); be about to (do smth. – bɔɔ); vt step back; vt (gw) make, fabricate, Tura # bɔɔ vi come (of time); be about to (do sth. – dɛɛ bɔɔ); appear (of plants, insects, etc.); be about to; resemble (smb. – bɔɔ); vt reach (some degree of maturity, etc.), Mano NE, ZE bɔɔ vi arrive, reach; grow (of plant), Guro BN, GR bɔɔ (= bɔɔ?) vi arrive; resemble (smb. – mɔ); help (smb. – vɔ); be able Yaure HP bɔɔ vi arrive, Gban ST bɔɔ vi leak (of water); come, arrive; sound, Mwan # bɔɔ vi come (of time, season); help (smb. – bɔɔ) Wan # bɔɔ vi outreach (sth. – lɛɡ), Beng bɔɔ, Beng PA bɔɔ vi leave, vt come from
*go-2 > Dan (bl) bɔɔ, Dan (gw) bɔɔ, Dan (kl) bɔɔ (bɔɔ?), Tura # bɔɔ (?), Mano NE, ZE, VV bɔɔ, Guro BN bɔɔ, GR bɔɔ, Yaure HP bɔɔ, Gban # bɔɔ, Mwan # bɔɔ, Wan # bɔɔ
*be-3 > Guro # bɔɔlì, Yaure HO bɔɔlì, Wan # bɔɔlì
*be head-2 Gban # bɔɔ rn head; v lead, Wan # bɔɔ-ŋglò
*be hippopotamus > Tura # bɔɔlì, Guro # bɔɔlù, BN bɔɔlù, GR bɔɔlù, Yaure HO bɔɔlù, Mwan # yibɔ-boɔrù, Wan # bɔɔlù
*be- leaves > Dan (bl) bìlɔɔ, Dan (gw, kl) bìlɔɔ n grass, plant; savannah, wilderness; litter, garbage. Gban ST blá n grass; turf; savannah
*be- life (subsistence) > Dan (kl) bɛlì n remedy, medicine (medical and magic), Guro GR bɛlì vi heal oneself; get rid of trouble; vt heal; relieve, Yaure HO bɛlì, perf. bɛlì, impf. bɛlìɔɔ vt heal; n healing, Wan # bɛlì, bɛlì vi live, be alive; vt heal; n life
*bùlù liver-2 > Dan (bl) bùlù, Dan (gw) bùlù, Dan (kl) bùlù rn, Tura # bùlù rn, Mano ZE bùlù, Guro BN, GR bùlù, Beng GL bùlù
*bùlù mute-1 > Dan (gw) bùlù, Dan (kl) bùlù, Guro GR, BN bɔɔbù, GR bɔɔbù (= bɔɔbù, bɔɔbù ?) n mute; adj tasteless, Wan # bɔɔbù
*bùlù- neck-3 >Dan (bl, gw) bù, Dan (kl) bù, Guro # bùlù
*bàá other-2 > Dan (yi) bàá, Tura # *bàá-yè > bèlì, bèlì, Mwan # bèlì-kè
*bàá- pangolin-1 > Dan (bl) bàá-dàá, Dan (gw) bàá-dàá n long-tailed pangolin, Tura # bàá-kìáine. Guro BN bàáse, GR bàáse (= bàáse ?)
*bùlù press-2 (to) > Dan (bl) bìlù, Dan (gw) # bìlù, Dan (kl) bìlù vt press, squeeze, Mano ZE bìlù vt wring (clothes), Guro VV bìlù, GR bìlù vt press; squeeze, Yaure HB bìlù, impf. bèlù, Beng # bèlò vt press, twist, wringle
*bèlì respect-2 > Tura # bèlì, Guro VV bèlì n gift (meaning to honour smb.)
*bàáá sheep-1 > Dan (bl) bìá, bìlá, Dan (gw) bìlá, Dan (kl) bìlá, Tura # bìáá, Mano NE, ZE, VV bìáá, Guro ST bìláá, Yaure HB bìláá, Gban ST bìláá, bááá, blábláá, bááá, Mwan # bìláá, Wan # bìláá
*bèlén termite (flying, ephemera-1) > Dan (bl) bìlá, (gw) bìlá, Dan (bh, yi) bìlé, Dan (kl) bìì, Tura # bèlì, Guro GR, BN bèlì, Guro (Yasua) VV bèlì, Mwan # bèlì n termite, Wan # bèlì
*bèlì this-4 > Dan (bl, kl) báá pron. that; (bl) there, Guro BN bè (~ bè ?) pron. this, that, Gban ST bè pron. that, Mwan CF bè pron. this, that, Wan # bè pron. this, that
*bàáá venom > Dan (kl) bàáá vt venom (of snake, etc.), Guro VV bàávt aggress (smb. – tâ), jump (on smb. – tâ)
*bìlé wound (a)-2 > Dan (gw) bìláá, Dan (kl) bìlé, Dan (bl) bìlé, bìlé, Tura # bè, Mano ZE, VV bìáá, Gban # bè, Mwan PM bè, Wan AT bè, Beng GL, PA bè n tracks, footprints; scab, wound (probably, in Beng we have convergence of two proto-stems, *N-ːpìyɛ́ ‘a trace’ and *bìlì ‘a wound’)
*bèlè yams (wild) > Dan (gw) bỳ, Tura # bèlè, Gban ST bè

Series 8
SMande Dan Tura Mano Guro Yaure Gban Mwan Wan Beng
*màà bird-2 > Dan (bl) màà, Dan (gw) màà, Dan (kl) màà, Tura # màà, Mano NE mòò, Guro GR màà-nè n chicken, Yaure HP méè (< *màà-nè?) n chicken, Yaure HO màà n rooster, Gban ST màà n chicken, Mwan # màà n chicken, Beng GR mèè n chicken
*màà broom-2 Dan (bl) màà n broom to sweep in the house; fly swatter, Mwan # màà, Beng PA mèè
*mèè cowrie-1 > Guro # mèènú (?), Gban ST mlèè, Wan # mlèèn-ṣọ, mlèèn-ṣọ
*mìì drink (to) (cf. *swallow-2) > Dan (bl, gw) mìì vt drink, swallow, Dan (kl) mìì vt drink, suck; swallow, Tura # mì vi vt drink; suck, Mano NE mìì, Guro GR mìì vt drink, Yaure HB mìnì, impf. mìnìà vt drink; smoke, Wan # mì-plà vt suck, Beng PA mìì vt swallow
*màà hear (to) > Dan (bl, gw) màà vt hear; understand, Tura # màà, Mano ZE màà vt hear; understand, Guro GR màà, Guro BN màà, hab. màà, Yaure HO màà vt understand, Gban MB màà, Mwan # màà, Wan # màà, màà vt learn, Beng GL, PA màà
*mèè human > Dan (bl, gw, kl) mèè, Tura # mèè, arch. màè n person, human; someone, màà n human (in compound words), Mano NK, VV, ZE màà, pl. màà, Guro BN màà, pl. mùnù, Yaure HP màà, Gban ST múù, Mwan # mèè, Wan # màà
*màà last (to) > Tura # màà vi vt last long; adv long time, Guro GR màà vi, Yaure HP màà, Gban ST màà vi last long, Mwan # màà vì, Wan # màà vi vt last long; adv long time
*mààgàlòñ mango > Dan (bl) mààjlo, mààgnà, Dan (gw) mààgnàòò, Dan (kl) mààglàà, Mwan # mààgò̀ñ, Wan # mààgò̀ñ
*mèè moon-2 > Tura # mèè n moon; month, Mano ZE, VV mèè, mlèè n moon; month, Guro GR mèè n moon; month, Yaure MB mèè, Gban ST mèè, Mwan # mlèè-klèè-ne n star, Wan # bììléé n moon; month, Beng GL, PA màà n moon; month
*màà mouse-1 > Dan (bl) màà, Dan (gw) màà, Tura # màà, Guro # màà-nè, Yaure HP màà, Mwan # màà màà
*màà on (postposition) > Dan (bl) bàà, Dan (gw) bàà pp by side of; on the slope of, Tura # bàà n surface; bottom, lower part; pp on, upon; into; to (meaning of possession in a locative construction); for, Mano ZE màà, Guro BN màà nn surface (of body); pp on, upon; for (cause); about, Yaure HP màà nn body; pp on; at; during, Mwan CF:34 màà pp on
*màànmùù rice-1 > Dan (bl) mlùù, Dan (gw) mlùù, Dan (kl) mààj n uncooked rice, Tura # mààìì, Mwan # mlàà, Wan # mààìì, Beng GA mààìì, Beng PA mààìì
*màà ripen (to) > Dan (bl) màà, màà vi ripen, Dan (gw) màà vt cook, Tura MB màà, Mano MB màà, Guro # màà vt cook, Yaure MB màà, Gban # màà vt cook; n food, Mwan MB màà, Wan MB màà, Beng # màà vt cook
*mèè snake-2 > Dan (bl) màèè, Dan (gw) mlèè, Dan (kl) màèè, Dan (wa) màèè, Tura # màèè, Mano NE, VV mèè, Guro # màèè, Yaure mlèè, Gban ST mlèè, Mwan # mlèè, Wan # 6lèè, VV mlèè, Beng GL mlèè, Guro GR mlèè
*màà strike-2 > Dan (bl) màà, Dan (dh) màà, Dan (gw) màà, Tura # màà vt strike, beat; vi bump (into – làà); fall (upon – làà, of a bird of prey), Mano MB màà, Gban ST màà, Beng GL màà
*mààni swallow-2 (to) (cf. *drink), Dan (gw) màà vt swallow (sth. non-liquid), Mano ZE, VV mààìì, Guro GR, ST mààìì, Gban ST mlèè vt swallow
*mààmà thank > Mano ZE mààìì, Guro BN màà (?) please
3.2.2. The series 9 is of special interest, in particular because it made Konstantin Pozdniakov (1978) and Claire Grégoire (1988) postulate separate Proto-Mande phonemes: *b- (“a weak b”) by Pozdniakov, *v- be Claire Grégoire. Taking into account general trends in evolution of phonological systems of Mande languages, transformation *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 diacronic 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 bīā-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

<table>
<thead>
<tr>
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<tbody>
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<td>*b</td>
<td>b</td>
<td>b</td>
<td>v</td>
<td>v</td>
<td>f</td>
<td>β</td>
<td>b</td>
<td>v</td>
<td>b</td>
</tr>
</tbody>
</table>

*buŋ grave-2 > Dan (gw) bū, Dan (kl) bǔ, Tura # bú n grave; mound, Guro GR, VV vū, Yaure HP fū n mound, Gban ST bó, Mwan PM bū, Wan # váŋ, váŋ (< *vųŋ ?) n mound; vi trip (over – mį), Beng # vṆinya n mound

*buù harmattan > Dan (bl) bǔu, Dan (gw) bǔu, Tura # bǔu, Guro GR fǔu (?), Gban ST fǔfǔ (?), Mwan # vṆinya

*bʒ rot-2 > Dan (bl) bǔ, Dan (gw) bǔ vi, Tura # bǔ vi, Mano ZE vū adji, vi rot, Guro BN vš, hab. vš, Gban ST bǐš (?) vi rot, spoil, Beng GL vō, Beng PA vš vi rot; be ugly

*bʒ send-2 > Dan (bl, gw) bʒ vi pass; cross (river, road); overcome; vt send; sow (rice); produce (sound); fell (tree); add, mix (with – pįš); till, cultivate, Dan (kl) bʒ vt cultivate, Tura # bʒ vt send; sow (rice); produce (sound), Mano ZE vš vt send; fell (tree), Guro vš, hab. všā vt rise; enter; fell (tree); send; sow; mount; speak (language); say (proverb); fell; put, throw, Yaure HB fš vt sow, Mwan # bʒ vt put, Wan # bʒ, bɔ vi pass; vt touch; allow; mix

*bŋ ten-2 > Tura # bǔu, Mano NE vù, Guro GR vù, Gban ST bǔ, Mwan # vù, Beng GL, PA bǔ

*buù wake up-2 > Dan (bl) bǔù vi, Mano ZE võo, Guro BN, ST võo, Yaure HB fǔù, impf. fǔ-á vi wake up; vt wake smb. up, Gban ST bò, Wan # bǐá-gā

To this series can be also attributed two other sets where Mano forms (which is the only language where the transformation *b- > v- in the conditions in question seems to be regular) are absent, and among Mwan, Wan and Beng, only one Wan form is available:

*buŋ carry > Dan (bl) bǔ vt carry; support, Dan (gw) bǔ vt accommodate (guest), Tura # bǔ vt support (physically, ex. an old person when walking), Gban ST bǔ

*bŋ end-2 > Dan (bl, gw) bŋ vi stop; finish, terminate (sth. – kā); deliver oneself of (excrement); get better; vt cure, Tura # bŋ vi? vr? finish, terminate (sth. – bā, -ā-gerund), Guro BN, GR vō, perf. vō, hab. vō vi remain; vt leave, Yaure HB fō vi remain, Gban ST bō v finish, Wan # bō vi remain; finish (sth. – yā)
It is highly probable that the set ‘flower’ also belongs to this series:

*бу́ё flower > Dan (bl) бё, Dan (gw) бё, Dan (kl) бён \*<н flower; vi blossom, Tura # бё .
Mano ZE бё, Guro MB вуи, vi, Guro GR ви (\*<вуё) n flower; ear (of corn, etc.);
animal's tail, Yaure MB би, Beng # вуй

3- 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 *b3- > 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 of the proto-stem is CVIV. In the meantime, there is no change *b3- > v- in Beng:

*бу́ё (?) porcupine-3 Dan (bl) блюуúй, блюуüй, блючй, Dan (gw) блю- n porcupine; (bl) African brush-tailed porcupine, Guro BN влю, Gban ST влю, Wan # вли, Beng бли- 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.

Finally, the same pattern partly follows yet another set:

*бё plural marker-2 > Dan бё fossilized plural marker in several words, Tura # бё, Mano VV вё, Mwan # murderous plural marker, тё they, Wan # мё

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. This brings us to the reconstruction of only two proto-phonemes, *б- and *b-. However, the situation is seriously complicated by the presence of numerous sets where would-be reflexes of *б- 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 б ~ (b)»), reflexes of what looks like *б- predominate, with one exception in each set. Most often (5 cases out of 9) the «irregular» form, b-, belongs to Wan, sometimes (3 cases) in 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;\(^5\) non-cognate forms may also appear. However may it be, we have to postulate, at least in some cases, an unexplainable change *б- > b-.

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

**Irregularities б ~ (b):**

*буё alive-2 > Dan (bl) бёё, Dan (gw) бёё, Mano бёё, бёё
*био be-l > Tura # бёё exist, Wan # биё in possession of – го); be (in the course of doing sth. – лё); vi have
*бёё bunch > Dan (gw) бёё, Dan (bl) бёё n bunch, bundle, Mano ZE бёё
*биёё eagle-l > Guro ST бёё (Jula?), Wan бёё n vulture (Jula?)
*биёё garbage-3 > Guro BN бёёё n garbage; garbage heap, Yaure HB бёёё n garbage heap, Wan # бёёё, бёёё

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\(^5\) So, I have used a preliminary version of Tatiana Nikitina’s Wan dictionary, before she imputed her more reliable data collected in January 2004.

\(^6\) One could try to establish 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.
3.2.3.2. In other cases («Irregularities b ~ (6))», 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 *h-. 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 diacronic phonological rule. For a while, *b- with a question mark will be given as a reconstruction for these sets.

Irregularities b ~ (6):

*béle dry season > Dan (gw) blée-yī, Dan (kl) blée-lē, Dan (bl) bláá, -yīá, Dan (dh) bláá, -yīá, Tura # bāl̥-lē, Gban ST blè adj dry, Wan # blè-yā n harmattan

*béle lie (untruth) > Tura # bélë, Guro BN viè, ST viè, Mwan # blà

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

*bàà mush-l > Dan (bl) báá, báá, Dan (gw, kl) bāá n cooked rice, Guro BN bāá (= bāá?) n rice mush, Mwan # bāá n cooked rice

*béōn squirrel-5 > Dan (bl) bōōn, bōōn, Dan (gw) bōōn n striped ground squirrel, Tura # bōō-nē n striped ground squirrel, Gban ST bā n Beecroft's anomalous

3.2.3.3. There is another series where Guro and Yaure display initial b- instead of the expected *h-. In all the cases the initial consonant is followed by a front vowel, and in 4 sets out of 5, this vowel is -e. It could be interpreted as the phonetic condition of the change *h- > b- in Guro and Yaure, but there are counterexamples where *h- > b- in the same context (*bëéŋ fruit, *bélë respect-2, *bélëŋ termite (flying, ephemera)-l in the Series 7), unless there is a supplementary, more subtle conditioning. I reconstruct for this series *b, but mark it with a question.

*béle antelope-2 > Guro GR bélë n red bushbock, Gban # bè n antelope (sp.)

*béle big-l > Mano ZE bélë n human fat, Guro # bènè adj big, large; important, Gban ST blè, Wan # bălé

*béë friend-3 > Mano NE, ZE bèèe, pl. -nèi, Guro # bèèè, Yaure HP bèèè, bèèèè, Gban # bè n friend; friendship, Mwan # bèè

*béè here-1 Tura # bèè adv here (nearby), Guro VV bèè adv here (in a distance, but within visibility)

*béli viper Dan (bl) bèùù, bèùù, bèùù, Dan (gw) bèyè, bèyè, bèyè, bèùù, Dan (kl) bèùùù, Dan (yi) bèùùù, Tura # bèèi, Mano VV bëli, Guro ST bîlî, BN, GR bëli n naja, cobra, Yaure HO bëli, Mwan # bùù
One set seems to combine «irregular» changes in Guro (analyzed in the current paragraph) and in Wan (see 3.2.3.1):

\[
\text{Guro BN } b\ddot{e}\ddot{j} n \text{ granary; hayloft, } \text{Wan } b\ddot{e}\ddot{n}, \text{ Beng GL, PA } b\ddot{e}\ddot{n}, b\ddot{e}\ddot{j} n \text{ granary (for corn or rice)}
\]

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:

\[
\begin{align*}
&*b\ddot{e} \text{ powder-4 } > \text{Dan (gw)} b\ddot{i}, \text{ Dan (bl)} b\ddot{n} \text{ powder; flour, Tura } b\ddot{i} \text{ n powder; flour, Mano ZE } b\ddot{i}, \text{ Gban } b\ddot{e} \text{ n ash; powder; flour, } \{\text{Mwan PM } p\ddot{i}\}\} \\
&*b\ddot{i} \text{ grass-1 } > \text{Tura (n) } b\ddot{i}, \text{ Tura (w) } b\ddot{e}, \{\text{Beng PA } p\ddot{e} \text{ n grasses; weeds}\} \\
&*b\ddot{a} \text{ rain (to) } > \text{Dan (bl) } b\ddot{a}, \text{ Dan (kl) } b\ddot{a} \text{ vi rain, Tura } b\ddot{a} \text{ vi rain; place oneself; vt make rain; pour; put, Mano ZE } b\ddot{a} \text{ vi rain, Mwan CF } b\ddot{a}, \{\text{Wan } p\ddot{a}\} \text{ Beng } b\ddot{a}
\end{align*}
\]

3.2.4. It is interesting to compare results of my reconstruction with the data of Claire Grégoire (1988). South Mande was in her work just one among many Mande branches to be compared, but she 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 them she reconstructed a Proto-Mande phoneme. Let us examine each of them.

Type I: \(*m\). This series rises no questions, it should be just 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’, have in my Proto-SM reconstruction initial \(*b\)– (‘go out (to)’ and ‘mute-1’, cf. 3.2.1.), rather than \(*b\). Her Guro forms, \(b\ddot{a}\) ‘to look like’ and \(b\ddot{o}(b)\ddot{o}\) ‘dumb’ are most probably taken from the dissertation of H.-Cl. Grégoire (unfortunately, Claire does not provide the list of her sources of data).\(^7\) As for the Yaure form \(b\ddot{u}\ddot{a}\), it is certainly not genetically identical to the other forms for ‘go out’; there is another form in this language, \(b\ddot{a}\), 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 too).

The third set, ‘to cover’, is represented in my data as \(*b\ddot{i}\ddot{n} \text{ bury } > \text{Dan (bl) } b\ddot{i} \text{ hide, Tura } b\ddot{i}, \text{ Mwan } b\ddot{i}, \text{ Wan } b\ddot{a} \text{ (?)}, \text{ Beng } b\ddot{i}, \text{ which corresponds more or less to Claire’s data for South Mande. At the same time, this set rises two serious problems. First, my Proto-SM form has } *b\ddot{a}, \text{ unlike those for ‘go out’ and ‘dumb’, which is incompatible with their putting together into one “type”}.\)

Second, I disagree with Claire in what concerns the links of the stems in other Mande groups. For me, this stem corresponds to \(Soso \text{ biri vt bury (animal, object), Mogofin } \text{ biri vt bury, Nyokolo Maninka } \text{ and Xasonka } \text{ büruu vt bury, Kankan Maninka } \text{ biri vt bury, Soninke } \text{ bulu/bullu vt bury, dig in. As for the forms for the Manding and many other West Mande languages provided by Claire, I consider them as a different stem ‘bend-1’, whose reflexes follow:}

\[
\text{Vai } b\ddot{i} \ddot{i} \text{ vi stumble; get caught (as in a trap)}
\]

\[
\text{P.Manding } *b\ddot{i}Di(n), \text{ Mandinka } \text{ bitti vt shut, close; cover; finalize marriage with, Nyokolo Maninka } \text{ bidi vt cover, Xasonka } \text{ bûti vt cover with sth. (sth. – kûnna); vt bend down, curve; hide oneself, Kagoro VV } \text{ bitti vi overturn, come down; vt bend; turn over (vessel); cover with sth. (sth. – na); vt bend down, curve, Maninka } \text{ bîtì, bìrì, bìdì vi fall}
\]

\(^7\) As it was mentioned above, in this dissertation \(b\) and \(\ddot{b}\) are often not distinguished.
prone; vt bend (one’s back, head), curve, stoop; cover with sth. (sth. – lá, kā); sit on (eggs); vr bend down, stoop; lie face down, fall prone; n ambush, Bamana bíri vi fall prone; overturn, come down (upon – kā); vt bend (one’s back, head), curve, stoop; turn over (vessel); cover with sth. (sth. – lá, kā); vr bend down, stoop; conceal oneself, skulk, lurk; lie face down, fall prone; lean back

Bobo pîlê/pîlê vi bend (of a vessel)
Guro BN blî (= 6lí ?) vi bend; rise; swell

So, 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, bō (as it was mentioned, in the nasal context only mō is possible, rather than bō); in my data, the Dan-Gweetaa form is bō ‘to sting (of insect)’. As for the other SM forms given by Claire, some of them (Yaure pô, Mwan fō) are absent in my data (and seem to me doubtful), others belong to a quite different stem:

*pɔ dig-2 (to) > Dan (bl) pɔ, Dan (gw) pɔ vt dig out, Tura # pɔ vt dig (soil; hole). Guro # fɔ, Mwan # pɔ vt pierce, Wan # pɔ vt pierce, Beng pɔ vt pierce

(After some hesitation, I checked out the Mano form fōō ‘to dig’; otherwise, it should be considered as irregular.)

Therefore, all reasoning based on the presumption of existence of the 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 blū, which makes me reconstruct Proto-SM form *N-pūlù (see 3.1.2.).

Type V: *v. As it was said 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 unnecessary differentiating of Claire’s types IV and V.

As for Claire’s stem ‘to throw’, she fused two different SM stems, my *bîlîŋ throw-1 (to) and *bɔ 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 in just one point concerning her set ‘to tear, to split’: I consider the Wan form plā or plâ Â as belonging to a stem different from all others (see *piâ tear in 3.1.1.), which is yet to be confirmed.

Type VII: *f. This type rises no questions; about the reconstruction of a nasal prefix in the stem *N-fɔGɔy ‘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)blû ‘belly’ given by Claire is in fact kā-blû. 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 bûlû (rather than bulu);
3) ‘antelope, goat’: the Mano form is bô (rather than gbô, bu, bo).

By this criticism I do not want, by no means, to belittle Claire’s work which was an important input to the development of the Mande comparative studies. It is just meant to demonstrate the progress made in the Mande studies during last 15-20 years which allows a comparatist to work with much preciser data, and also to continue our discussion about 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 the great majority of cases, the proto-phoneme *t- is reflected in modern SM languages without any change (Series 10).

<table>
<thead>
<tr>
<th>Series 10</th>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td>*t̪i̯i̯</td>
<td>black-2</td>
<td>&gt; Dan (bl, gw, ka) t̪i̯i̯, Dan (kl) t̪idi</td>
<td>adj black; dark; (bl) unknown; (bl, ka) dirty, Tura # t̪i̯i̯, Mano NE, VV, ZE t̪i̯i̯, Guro BN, GR, ST t̪i̯i̯, Gban ST t̪e̯vi be black, Mwan # t̪i̯i̯, Wan AT t̪i̯i̯, Beng # t̪i̯i̯</td>
<td>*tūnē</td>
<td>charcoal-2</td>
<td>Tura # tūnē, Guro GR tūnē, Gban ST tūnē, Beng # tānūnē (?)</td>
<td>*tōñ</td>
<td>chest-2</td>
<td>&gt; Dan (gw, kl) # tōñ, Wan # tōñ</td>
<td>*tā́</td>
</tr>
</tbody>
</table>
*tēē red-1 > Dan (bh, yi) tēē, Dan (kl) tā, pl. tēē-nū, adj red, Dan (gw) tēē adj (rare, obsc.) bright red, Tura # tēē, Guro té adj (pej.) red, Gban ST, VV té adj reddish, Mwan # tē, Wan # tē, Beng GL, PA tēē
*tānā red-2 > Dan (kl) tānā vi ripen, Tura # tānā vi redden; ripen, Mano ZE tāā, tāā adj? ripe, Guro # tāā adj ripe and red; vi ripen (of fruits which become red, yellow, orange...); redden; vt paint in red, make red, Gban ST tā vi ripen, Mwan PM tāā-lē adj ripe, Wan # tāā adj ripe and red; vi ripen (of fruits which become red, yellow, orange...), Beng # tā vi ripen, vt make red
*tō remain-1 > Dan (bl, gw) tō vi remain; vt leave, abandon, Tura # tô vi remain; continue; be (sth. – gā); become (sth. – gā); vt leave, let remain; make, transform (into – gā), Mano ZE tô, Yaure HB tô, impf. tôē vt leave, Gban ST tô vt leave; forget, Mwan PM tô vt leave; let, Beng GL twā, Beng PA tūā vi leave
*tōlō spoon-1 > Tura # tōlō, Mwan # tōlō, Mwan PM # tōlō.
tālīŋ stranger-2 > Tura # tōlā, tōū, Wan # tālī n stranger, foreigner; adj foreign, Beng # tēnjī
*tō then > Mano ZE tô, tô, tôō conj. then (in this case), Guro BN tô, Yaure HB tô conj as, as far as; when; if
*tōŋ time-4 > Dan (gw) tōŋ, Dan (kl) tōŋ, Dan (bl) tōŋ n time; (kl) weather, Guro BN tô, GR tô (≠ tô?) n day and night, Yaure HP tô
*tōlē tomorrow > Tura # tôlē, Mano NE, ZE, VV tôō. Guro # tôlē, Guro BN tôlē, Yaure HP tôē, Mwan # tôō (?), Wan # tôlē
*tō weave (to) > Guro # tô, tô vt weave; plait, tress, play (cards); do (sorcery); put together (fetishes), Gban tō (? ) vt produce, make, or, Gban ST tô vt weave, Mwan # tô, Wan # tô vt weave, plait, Beng GL twōō, PA tôē vt weave; plait
*tōā yet Tura # tôā part still, Guro BN tôā part (not) yet

There is one set whose 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 *bā in Yaure, section 3.2.3.2.):
tō surface > Dan (bl) tō, Dan (gw) tō, Dan (kl) tô pp on, upon; rn surface, Tura # tō, dā rn surface; hundred (?); pp on, upon, Guro (Sinfra) BN tô pp on, Yaure HO dā pp on, Mwan # tô pp on; in, Wan # tô pp on, upon; rn surface.

3.3.2. In monosyllabic oral feets *t- > c- in Guro before –e.
Series II

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td>*t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>c</td>
<td>?</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>?</td>
</tr>
</tbody>
</table>

*tēē fire-1 > Tura # tēē n sweat, Mano NE, ZE, VV tēē n fire; light, Guro GR, ST cé n fire; heat; light; electricity, Gban ST tēē n heat, Mwan # yērē-tēē n sun, Wan # tēē.

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) represents the same stem as in Kla-Dan and Mano:
*tīsē sneeze-1 > Dan (kl) tīsē, Mano ZE tīsē, Guro GR cī (?), Wan # tīā (?)

3.3.3. There are three sets where d- in Beng corresponds to t- in all 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 fors do not belong to the same sets (in this case, the set ‘dance’ can be merged with the set ‘to weave’).
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 display in many West Mande languages traces of a prefixe morpheme that I reconstruct as *N-. (Vydrine 1994, 2001). According to this hypothesis, the Proto-SM form for this word could be reconstructed as *N-ténë. As for the other set, I do not see any reasonable explanation; the Guro form *dù may be just non-cognate with the forms of the other languages.

*N-ténë paternal aunt > Tura # téë, Guro BN dñi
*tíŋg heap > Tura # tíŋg adj numerous, in a great number; n pile, heap; scrap-heap, [Guro # dí adv much; very; adj numerous, in a great number] Gban ST tù, Wan # tí adv much, Beng GL tíŋn heap, pile, # tíŋg vi gather together, vt gather

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

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Series 12

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td>*?t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>d</td>
<td>d</td>
</tr>
</tbody>
</table>

*dà dance > Dan (gw) tà. Dan (bl) tà n dance; *di°l a ÉÉ hum; *jslow ruse, *njdeception, *da Øw l ið É É du ßl e ß É É da ØÉ humid; *jcalm; *jpeaceful, *jgood, *j*dý Øý Øl ý ÞÉ dý Øl ý Øl ý ÞÉ dý Ë Ðný Ë ± É 

débt (imported) language
*dý Øl ý Øl ý ÞÉ dý Øl ý Øl ý ÞÉ dý Ë Ðný Ë ± É

dय Ë Ðnय Ë Ð
dेय उँ य उँ

Series 13

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
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<th>Beng</th>
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<tbody>
<tr>
<td>*d</td>
<td>d</td>
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<td>d</td>
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</tr>
</tbody>
</table>

*dònë ant-3 > Dan (bl) drùë n small black ants (sp.), Guro # dònë n small red ants
*dòlëŋg beer (< Jula dòlëŋg, dòrëŋg; the word may also be borrowed independently to each SM language) > Dan (bl) dòlëŋg, Dan (gw) dòlëŋg n red wine (imported), Tura # dòlëŋg n red wine (imported), Guro BN dìlë n red wine, Gban ST dìlë, Wan # dìlë n wine
*dònë borrow > Guro BN dënë n debt, credit, Gban # dë (? ) n debt, credit, Mwan # drò n debt
*dònë cook (to)-4 > Guro # dënë vt, Yaure HP twëë, tëë vt, Wan drò
*dòlëŋ cold-2 > Mano ZE, VV dòlëŋg adj cold; slow, Guro BN dìlëŋg, GR dìlëŋg adj fresh; humid; calm; peaceful, good, Mwan # dòlëŋ adj fresh; wet, Wan # dìlëŋ adj cold, cool; soft; humid; slow
*dìlá fall (to)-2 > Guro # diá vt fall, vt drop, Yaure ūfà, Beng # drå
*dà female-1 > Tura # dà adj female, Guro BN, GR dà, Gban ST dà, Mwan PM dà
*dà hibiscus > Gban # dà n shrub (sp.); sauce of leaves of this shrub, Mwan # dà
*dùleŋ hook-1 (fishing) > Guro BN dùle n fishing rod, Mwan # dùleŋ
*dàwilí means (< Manding dàbârì < Ar. dabbāra take measures; machinate; independent borrowing to single SM languages is also possible) > Guro BN (north) dàbłî, (south) dàwilí n deception, Yaure HB dàwilí n trick, ruse, Mwan # dàwilí, Mwan # dàwilí n secret; trick, ruse, Wan # dàuírí

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*dá measure (to)-2 > Dan (bl, gw) dá vt measure, weigh; taste, Tura # dá n attempt, Mano ZE dá vt taste; learn; take; see, Guro BN dá, hab. dá vt measure, weigh; taste, Mwan dá vt taste
*diŋ noise-3 > Dan (bl) diŋ. Gban # diŋ
*dó one-1 > Dan (bl, gw) dó, Dan (kl) dó, Tura # dó num one; adv immediately, instantly, Mano NE, ZE, VV dó dó num one, dó pron. some; other, Guro GR dó, Yaure HP:94,95 tô ~ tô, Gban ST dó num one; adv once upon a time, Mwan # dó, Wan # dó, Beng GL, PA dó
*duŋŋ ostrich > Tura # duŋŋ. Guro GR dó
*dék pot-1 > Guro GR dëk n big pot for sauce, Gban ST dëk5, dëk (?)—Beng GL, PA dá (?) n large ceramic water pot
*dì spear-2 > Dan (gw) dì-(gá), Dan (kl) dì-ná, Dan (bl) dì n spear, javelin (in Bl. – arch.), Tura # dì. Guro BN, GR, ST dì n spear; arrow, Gban ST dì n arrow, bow, Mwan # dì n spear, arrow, Wan VV dì n spear, arrow
*dënë spider-1 > Dan (bl, gw) dën, Tura # dën n spider (generic name), Guro BN duën, GR dwënë, Gban ST dië-glë, dië-o n spider (sp.)
*dë stand (to) > Dan (gw) # dë, dë (?), Dan (bl, kl) dë vi stop (to wait): vt put; build; give (to – gë); charge; accompany; accuse; be suitable for; n building (process), Tura # dë vi stand up; be standing; stop; wait (for – gë); live (in - gi); vt build; put, place; wait for (?); rn wall; bone, Mano NE, ZE dë vi stand, stand up; stop; vt build; dam, Guro dë, hab. -a vi stop; stand up; vt build, erect, Yaure HB ðë vi stop; vt build; stop, Gban ST dë vt put, install, Mwan CF:76 dë vt put; say (name); build; vi grow (of plant), Beng GA dë, PA dó vt stop; stand sth. up; erect, construct (house)
*dänë teach > Dan (bl) dâ, dâ, Dan (gw) # dâ vt teach smb.; learn sth., Tura # dën vt teach smb.; learn sth., Guro BN dlâ, GR dänë vt learn, Yaure târâ-lá vt learn, Mwan AY dâ, Beng # dânë vt learn sth.
*dëgë termite (flying, ephemera)-2 > Dan (gw) dëgë n flying termite (appears in February, after the first rain), Tura # dëgë n night termite, Guro GR dëgë n flying termite (appears at the time when corn is ripening), Yaure HO ðë, ðë n termite (sp.), Wan # dëgë (?) n termite
*dëgë that (conjunctive)-2 > Mwan # dëgë object clause conjunctive, Wan # dëgë object clause conjunctive
*dënë-dënë wasp > Guro ST, GR dënëdënë, dënënë, GR dlënë n mason wasp, Mwan # dënënë
*dùlâ web (of spider) > Dan (bl) drôlë, dr, Tura # du, Guro BN dû
*dë who? > Dan (bl) dë, Dan (gw) # dë, dë, Gban # dê, Mwan CF dë-lë, Wan # dê, dë pron who? what kind of?

3.3.6. The next series is characterized by appearance of z- in Beng, sometimes in Wan (where it appears sometimes in free variation with d-, see ‘deep-1’; in one case, j- is attested) and sporadically in Guro (‘axe-1’) and Mano (‘buffalo’; [j-] in my field data is most probably a contextual realization of /z-/).
Analysis of the data demonstrates that we have here 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 spiranization of voiced occlusives before back labial vowels as attested in the change *b > v in the same SM languages.

Series 14

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td>*d</td>
<td>d</td>
<td>d</td>
<td>d, z</td>
<td>d, z</td>
<td>t</td>
<td>d</td>
<td>d</td>
<td>z, d</td>
<td>z</td>
</tr>
</tbody>
</table>
*důu axe-1 > Dan (bl, gw) důu, Dan (kl) důu, Tura # důu, Guro BN zāa, GR zăă, Beng GL, PA ză
*důu bud > Tura # důu n bud; rice basket; vi bud, Mano ZE dē̂ ?, Gban # dů, Wan # zŏuū, Beng # zō̆
*důu buffalo > Dan (gw) dū, Dan (kl) dū, Dan (bl) dū, dū, Tura # dū, Mano VV jūō, Guro BN, GR dū, Gban ST dū, Mwan # dū, Wan # jō
*důlí cow, cattle-2 > Dan (bl) dū, Dan (gw) dū, Dan (kl) dū, Tura # díli, Mano ZE dī, Guro GR dū,Li, Yaure HO tiri, Gban ST dōdō, dōdō, Mwan # dī, Wan # dī, Beng GL zō, Beng PA zō
*důu deep-1 > Mwan # dū adj deep, dūu n deep part of water, Wan # zūn, dūn n depthness
*důū hang-1 > Dan (bl, gw) dūu, Tura # dū vī, Guro BN, LS, GR dū, hab. -wō, Guro VV dūu vī, Mwan # dūu vī hang, Beng GL zē, PA zē vī hang down; lean; slip down

3.3.7. The specificity of the Series 15, in comparison with the Series 13, is in the Wan reflexe, 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, it 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.

Series 15

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td>?*d</td>
<td>d</td>
<td>d</td>
<td>d</td>
<td>d</td>
<td>t</td>
<td>d</td>
<td>t</td>
<td>t</td>
<td>d</td>
</tr>
</tbody>
</table>

?*dů́u cough > Dan (bl, gw) dů́, Dan (kl) dů́ n, Tura # dů́ n, Mano ZE dů́, dů́, Gban ST tlō vī, Wan # tōnw, tōn n cough, cold (illness), Beng # dő́ n
?*dūu francolin > Tura # dū, Guro BN, GR dū n harlequin quail (Coturnix delegorguei), Yaure HO tūō, Wan # tū n Francolinus albogularis
?*dū know (to) > Dan (bl, gw) dū, Dan (kl) dū vi know; (rare) speak (a language), Tura # dū vt know; understand; speak (a language), Mano NE yī-dū vt know, understand, Mano ZE dū vt know, Guro GR dū, Guro BN dū, hab. -ā, Gban ST dū, Mwan CF dū vt know; make (smb. – bă) know sth., Wan # tū, tū vt know; recognize, identify, Beng GL dū, Beng PA dū
?*dā lie down-1 > Dan (bl) dā vī come; enter; shoot, sprout; rise; ascend; join (smb. – pīy); commit adultery (with a woman – dē pīy); vt put; add (to – tā); throw; store; wear, Dan (gw) dā vī rise; land; vt lūf; attach; wear (clothes); draw alongside (boat); (gw) helve; create; rear (poultry, livestock); name smb. (as – dē), Dan (kl) dā vī walk; vt kindle (fire), Tura # dā vī lie down; enter (in – gī), come, accede, arrive; fall; appear; happen; go up; occur; come to existence; result (in – gī); vt put (on – tā); name smb. (as – nē); make enter; add (to – lē, tā); drop; apply; create (of God); reveal, make public; baptize smb. (with the name of – nē); rear, keep (cattle, birds), Mano ZE, VV dā vī fall; vt drop; put (clothes; on – mā), Guro dā, hab. dā vī come; pour (of rain), Yaure HB tā vī come, Gban ST dā vī put, place, Mwan CF:40 dā vī come, [Wan # tā put; wear; tell (story); vi happen, take place; throw oneself; start, begin (sth. – le),] Beng # dā vī come; lay (egg); sing (song)
3.3.8. There is one set which differs from the 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 *
N-, a noun classifier.

Series 13a

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td>*N-dëë father-2</td>
<td>Dan (bl) dā, Dan (gw) dā, Dan (kl) dā * ( \text{father, paternal uncle} ), Tura # në ( \text{father, paternal uncle} ), Mano NE, ZE, VV dāā, pl. -nī, Gban ST dē, Mwan # dē, Wan # dēë, Beng GL déë, Beng PA dē.</td>
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</table>

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

*duñń snail-2 > Dan (bl) drūñń, drūñń, Dan (gw) # drūñń, Dan (kl) dī, Mano ZE
dēj, \{Guro GR túLūū,\} Gban ST dī n snail (sp.).

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

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

Series 16

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td>*d̋ advicë &gt; Dan (gw) dëō, Dan (bl) dëō, Dan (kl) lùwë (?), Tura # dëë, Mano VV lùwë-wë, Wan # lìā</td>
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<tr>
<td>*dō buy-2 &gt; Dan (bl, gw) dō, Dan (kl) ló vt buy sth. (from – gō), Tura # dō, Mano NE, ZE lō, Guro GR, BN lō, Yaure HP 1ō vt buy (from – lō), Mwan # lō, Wan # lū, Beng GL, PA lū vt buy (for – nō)</td>
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<tr>
<td>*deë call-3 &gt; Dan (gw) dē, Dan (kl) dē, Dan (bl) dē vt call; call, name, Tura # dëë vt call; call, name, Guro BN lāā, GR lāā, Yaure HP lāā-bō vt call, name</td>
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<tr>
<td>*dōs desire-2 &gt; Dan (bl) dō, Dan (gw) dōs nn love for; desire for, Tura # -dōs n love for, Guro ST lōLō, Guro GR lōLō v ST desire; n GR thirst, Wan # lū nn desire for; intention</td>
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</tbody>
</table>
*dīč front > Dan dīč pp before, in front of; Tura # dīč-lē, dīč-lē adj first; pp before, Guro GR lē n front; pp in front of, before
*dūbī hare-2 > Tura # dūbī-nē, dūbī-nē, Mwan # lōdī-nē, CF lōdī-nē, Wan # lōj
*dēēp leaf-3 > Dan (gw) dē, Dan (kl) dē, Dan (bl) dē ūn, Tura # dē-kwē, Mano ZE lēē, Guro BN lāâte, Yaure HP lā n leaf; hand (in relation to arm, pē); peace (of cloth), Gban ST lā n leaf; plate, Mwan # lāâte, Wan # lāţi (?), Beng # lā
*dō leave (go away)-1 > Dan (bl, gw) dō, Dan (kl) lō vi go; leave; (kl) auxiliary for future tense, Dan (bl) dō auxiliary for future tense, Tura # dō vi go; leave; bring away (sth./smb. – nā ... gā); continue (to – ā-gerund); vt make leave; n going, Mano NE, ZE lō, Wan # lō ? vt take away
*dōm (?!) lemon (a loanword from European languages?) > Dan (gw) dōm – dōm, Dan (kl) līvē (līvē?) n lemon, mandarin, Guro # lōwō, Mwan CF:6ō lēmīnī ? n orange
*lē lip-1 > Gban # lē, lī, Mwan # lē rn lip; edge
*dōs ( < Manding *dōgō ?!) market-1 Dan (bl) dōs, Dan (gw) dōs, Tura # dōs, Mano NE, ZE lōs n market; week, Beng GL, PA lōs
*dā (postposition) at > Mano ZE lá pp on, at, in, Mwan # lā pp in, at; under
*dā rain-2 > Dan (bl, gw) dā, Dan (kl) lá, Tura # dā n rain; storm, tempest, Guro GR lá n sky, Mwan # lá, Beng PA lá, GR lá
*dītī round-1 > Dan (bl) dītī-dvē, dītī-dvē, Dan (gw, gp, sa) dītī-dvē-dvē, Dan (gn, sl, pl) dītī-dvē, Dan (gb) dītī-dvē-dvē, Dan (te) dītī-dvē; Guro GR lí-li vt make circular
*dīāŋ speak-2 Dan (gw) dīāŋ, Dan (kl) dīāŋ n speech, discourse, Tura # dīāŋ n discourse, Mwan # jā n speech
*dūlūlē thorn-3 > Tura # dūlūlē n thorn; acne, furuncle, Guro ST lēūlī, Gban ST lē n thorn; fishbone
*dī woman-3 > Dan (bl) dī-bō, pl. dōōnū, Dan (gw) dī-bō, pl. dī-bō-nū, dōōnū, Dan (yi) dī-bō, pl. dōōnū, dōōnū, Dan (bln) dī-bō, pl. dī-bō-nū, dōō-nū, Dan (kl) dī, pl. dī-bō-nū n woman; wife, Tura # dē n woman; wife; son's wife (for a man), Mano NE, ZE lēē, pl. lōā, VV lā-vō, Guro BN lē, pl. luū, # dī, pl. domu, dūū, Yaure HP līmā, Gban ST lē, pl. nuē, Mwan # lē, Wan lē, lē (?) Beng GL lēn, Beng PA lēn n woman; female

Series 17

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td>*dī/ [n]</td>
<td>[n]</td>
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<td>[n]</td>
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</tr>
</tbody>
</table>

*nū come-3 > Dan (bl, gw) nū, Dan (kl) nū vi come; bring (sth. – kā), send (smb. – kā), Tura # nū vi come; bring (sth. – nā...gā), Mano NE, VV, ZE nū vi come; bring (sth. – kā); future time marker, Gban ST nū vi come, nū nearest future marker, Mwan # nū, PM nū, Beng GL, PA nū-lē vi come; return
*nēgē deceive > Mano ZE nē n lie, Wan # lēgē
*nāā fasten > Dan (bl) nāā, nāā vi stick, adhere; get stuck, jam; get into trouble; vt stick, glue, Tura # nāā (?) vi stick, adhere; vt stick, glue, Beng # nā vi stick, glue
*nō give (to)-4 > Dan (bl, gw) nō, Dan (kl) nō vt give sth. (to – dē/dē), Tura # nō vt give sth. (to – nē), Mano NE, VV, ZE nō vt give, Guro ST nō vt give (to – lē), Yaure HP nō vt give (to – lē), Gban ST nō vt give, Mwan CF nō vt give sth. (smb. – nī)
*nāā grandmother-2 > Dan (bl) nāā, Dan (gw, kl) nāā nn grandmother; grand-grand-mother; elder paternal aunt; father's or mother's elder brother's wife; mother's elder co-wife; mother-in-law (for a man), Tura # nāā nn 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 nāā,
Yaure HO nàà rn, Mwan # nàà-lè n mother-in-law (for a woman), Wan # nà, nàà rn mother, Beng # nà rn mother

*nàà milk (< Manding nàà, or independent borrowings to the single SM languages) > Dan (bl, kl) nàà. Guro # nàà n milk in powder, Mwan # nàà, Beng # nàà

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

*nàà taste > Dan (gw) nàà-nàà, Dan (kl) nàà-nàà adj testy, sweet (sugary), Tura # nàà-nàà adj pleasant, Mano ZE nàà-nàà. Guro # nàà-nàà adj tasty; sweet; pleasant; true (of words); n good taste; adv tastiness; sweetness, Mwan # nràà adj sweet, Beng # nàà-nàà adj sweet; good

*nàà wife > Mano ZE, VV nà, pl. nààò nl, Guro # nà, Yaure HO nà nl, Gban ST nà, Mwan # nà, hà, Wan # nà

Mixed sets d' ~ n:
*nàà postposition-for-2 > Dan (bl) dàà, Dan (gw) dàà pp for, marker of the addressee, Tura nè pp for; as, like; for the reason of, Mano NE lèèèè, Guro dè pp for; marker of purpose; marker of negation in Perfect, Yaure HP lè pp for; marker of purpose; marker of negation in Perfect, Mwan lè pp before; marker of "irrealis" (negation, Future), Wan lè

*dàà šky-3 > Dan (bl) dàà, Dan (gw) dàà. Dan (kl) dàà-gàà, Mano ZE lèè, lèè n šky, top, upper part, lèè-yì, lèè-yì n rain, Guro # lèè, GR lèè. BN lèè n rain; year; age, Yaure HP lèè n year, Mwan # lèè n year, Wan AT nàà-gbàni, nàà-gbàli n šky; above (cf. Rain-2)

*dàà slave > Dan (bl) nàà-mèè, Dan (gw) # dàà-àà, Dan (kl) dàà-àà, Tura # nàà, Guro BN, GR lèè n slave; child given as surety, Yaure HO nàà, Gban ST nàà, Mwan PM lùù, Beng GL lù, PA lù n slave; vii work as a slave

*dàà place-3 > Dan (bl) dèè, Dan (gw) # dèè n place, Dan (kl) dèè n soil, ground. Tura # dèè, Mano ZE lè n place; farm, field; yard, Guro BN nà ~ nà n place; pred. marker of the progressive, Yaure HO, HP nà nl place; pred. marker of the progressive, Wan # nè n place; time (in counting); pp in

Mixed sets n ~ d:
*nèè bat-4 > Dan (bl) nèè n n straw-coloured fruit bat; flying calf. Dan (gw) nèè n bat, Tura # nàà, Gban ST fè

*nèè child > Dan (bl, gw, kl) nàà n child; brother's child; young sister's child, Tura # nèè, pl. nàà, nààòò rn (one's) child (both for humans and animals), Mano NE, ZE nèè, pl. nàà-sì; nèè-fù, pl. nààò-bèè; VV pl. nàà-sì, nààòò fn. Guro nèè, pl. nààò BN n child; baby, Yaure HO nèè n child, Gban ST nìì, Mwan # nèè, Wan nèè, Beng GL lèàà, Beng PA lèàà n child; offspring

*nèè cold-1 > Dan (bl) nèèèè, Dan (gw, kl) nèèèè n cold; fever, Tura # nìì n cold; fever, Mano NE, ZE, VV nèèèè n cold, Mwan # nììèè n cold, Wan # lèèèè, lèèèè, lèèèè, dààèè. Beng GL nèèèè, Beng PA nèèèè

*nìì life (spirit) > Dan (bl) nìì, Dan (gw) nìì, Dan (kl) nìì n soul, spirit; character, Tura # nìì soul, spirit, Mano MB nìì. Mwan # lìì n shadow; soul; spirit
*nënë shadow-1 > Mano VV nënë, Guro LS, VV dëli n shadow; soul (of a living being), ghost (of a dead), Wan # lëŋ-lëlë, RV lëŋ-lëlë n shade, Beng GL nënë n shadow; spirit; soul (of a living person)
*nënë tongue > Dan (gw) nèë(-gà), Dan (bl) nèë(-gà), Tura # nè-ëë, Mano ZE nànà, Guro # nënë, Y Aure HO nënë, Gban ST në, Mwan PM néné, Wan # lëñj, Beng # nànäj

3.3.11. In monosyllabic words of the type CV, in Beng *d- > y- before front vowels:
Series IX
*dë mouth > Dan (bl) dë, Dan (gw) AT dë, Dan (kl) lëli n mouth; orifice, opening. Tura # dë; dë (arch.) rn extremity, border; surface; pp on, upon, Mano ZE lë n mouth; door; edge, Guro AT, ST lëè, Y Aure AT lë-bô, Gban ST lù n mouth; pp in; between; on the brink of, Mwan # lëè, Mwan # lù n mouth; pp on; in, Wan AT là-gà n mouth, Wan # lë n border, edge, Beng GL, PA yè n mouth; edge, end; pp on, in
*dë hunger-2 > {Dan (bl) dë, Dan (bl, gw) dë, Dan (kl) dë n hunger; rn (bl, gw) taste,} Tura # dë n taste, {Guro BN, GR dëLô n hunger; appetite, desire; love} Wan # lû n hunger; desire; intention, Beng # yì

Dan and Guro forms in the latter set may belong to different roots (about 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- of 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 dànka, Bamañà dànqa, Mau dàá\') damn, curse > Dan (bl) dànghà, Dan (gw) dànñj, Dan (kl) lànì n damnation, Tura # dànghà, dànà n damnation, Mano VV nànà n damnation, Guro BN dákà n misfortune, Wan # dàgàñj, dàgà n curse; misfortune
(Maninka, Bamañà dönсонó, Mau lönzò) hunter > Tura # dönñyô n hunter; leopard, Wan # dönzò

(Maninka duña, Jula dönúçà < Ar. dunyaa) world > Dan (gw) # dönñj, Dan (kl) dürëj, Tura # dönñyàà n long life, Wan # düryà, Beng PA dllýà

Two other sets where irregularities of this kind occur are names of elder relatives and can be probably explained through the presence in the proto-language of a trace of the archaic prefix *N-:
*N-đòò elder brother > Dan (bl, gw) đòò, Dan (kl) lòò n elder brother; elder ortho-
cousin, Tura # đòò n elder brother; elder ortho-cousin, Mwan # đòò-lë n elder sister
*N-dëë mother-4 > Dan (bl) dë, Dan (gw) dë (cf. *woman-3) rn mother; mother's younger sister; younger paternal uncle's wife; mother's co-wife. Dan (kl) dë n mother, Tura # đàà n mother; mother's younger sister; paternal uncle's wife, Mano ZE lëè, Mwan # nëë, nè n mother; elder female relative, Wan # nàà n; Beng GL, PA dà.

In two other cases, I see no reasonable explanation of the irregular d-. It is probable that the forms with d- do not belong to these sets:
*dùli fog-2 > Dan (gw) dúù, Dan (kl) dúli, Dan (bl) dúù n fog (at the rainy season), Mano ZE lùélùé (?) n clouds, Guro ST, GR lòlù, Guro # lóùù n cloud; fog, Y aure HO lòlù, Gban ST ì, Wan # lònlù, lùù, {Beng # dönù}
*dìà turn > Dan (bl) dìì, Dan (kl) dìì vi turn; change, transform (in – kä); vt mix; translate; misinterpret, Mano VV ngà, {Guro BN, GR dìì vt turn; twirl; encircle,} Gban ST ì, Wan # nìì (?) vi circulate; vt turn; plate, weave, Beng # ì
3.3.12. 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 have probably two different roots:
*呋losure *dirt-1 > Dan (bl) _Password, _Password, Dan (bh, bn, gw) _Password, Dan (kl) _password, Tura # _Password. Mano ZE _password

*(instance) *dirt-2 > Guro BN _password, GR _password _password: adj dirty, Yaure HP _password adj dirty, Mwan # _password, Wan # _password, AT _password _password: adj dirty, Mwan # _password, AT _password _password: adj dirty, Mwan # _password.

3.3.13. The Proto-SM *s- has not undergone any change in the modern languages. Series 19

<table>
<thead>
<tr>
<th>SM</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
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*sí(-lá) arrive-1 > Guro BN _password vi come from, leave, Yaure HB _password vi come, Wan # _password, seri vi come (sth., smb. – díj): vi approach (to – díj) (cf. ‘take-2’)

*síí beautiful > Dan (bl) _password, Dan (gw) _password, Tura # _password adj: beautiful, Guro GR _password, swíí adj beautiful, Yaure HP suíí

*síí bow (weapon)-2 > Dan (bl) _password n bow, arrow, Dan (gw) _password n bow, arrow, Dan (kl) _password n bow, Tura # _password n bow, Sáíí n bow, Guro BN _password n bow, bow: Sáíí n bow, Yaure HO _password, sáíí n bow, Mwan # _password bëí n bow

*síí call-2 > Mwan # _password, Beng # _password

*síí-ní cat-3 > Guro BN _passwordééné, Mwan # _passwordééné, {sróoně ?} Wan # _passwordééné

*síígú chew-2 > Guro # _password, Wan # _password, Beng # _password, sóí

*síí cloth > Dan (bl, gw, kl) _password n cloth; skirt; clothes; (bl) shell membrane of an egg, Mano NE, ZE _password, Guro BN, GR _password n cloth; skirt; clothes; Yaure HP, HO _password n cloth, skirt, Gban ST _password n skirt, Mwan # _password n loincloth; cloth, Wan # _password n skirt

Sáííkáa comb-2 > Guro # _password, Mwan CF Sáííkáa

*síí corner (external) > Guro BN _password n board, edge; corner, Wan # _password n corner

*síí-tuí-yáííkáa eight > Dan (gw) _password-gáíí, Dan (kl) _password, Dan (bl) _password-gáíí, Tura # _password-káíí, Mano NE Sáííkáa, Guro GR _passwordáíí, Mwan # _passwordáíí, Wan # _password-yáíí, Beng # _password-wáíí

*síí fast (< Manding sóí < Arab. _passwordw}) > Tura _passwordúí, Mwan # _passwordúí, Beng # _passwordúí (independent borrowing from Manding to the modern languages is also probable)

*síí fire-3 > Dan (bl) _password, Dan (gw) _password, Dan (gb) _password, Dan (kl) _password, Gban ST _password, Beng GL _password, PA, GR _password

*síí-súí five > Dan (bl) _passworddíí, Dan (gw) _passworddíí, Dan (kl) _passworddíí, Tura # _passwordlíí, sóíílíí, sóíílíí, Mano NE, ZE _passworddíí, Guro sóíí, Gban ST _passworduí, Mwan # _passwordóí, Wan sóíílíí, Beng GR _passwordíí

*síí force-2 > Tura # _password, Beng # _password n force, power

*síí-goí horse-1 > Dan (bl, gw) _password n horse; (bl) donkey, Tura # _password, Mano ZE _password, Guro GR _password n bycycle, Gban ST _password n horse, donkey, Mwan PM _password n hand, bycycle, Wan # _password n hand, bycycle

*síí insult-2 > Guro BN _passwordvt insult; n insult, Yaure HP _password, Wan # _password, sóíí

*síí knife-5 > Guro BN, GR, # _passwordné, Wan # _password? sëíí

*síí life (timespan)-1 > Tura # _password n life, Wan # _password n life, age

*síí mat-2 > Dan (bl) _password, Dan (gw) _password, Dan (kl) _password, Tura # _password, Mano ZE _password, Guro # _password, Yaure HO _password, Mwan # _password

*síí nail > Dan (gw) _password, Dan (kl) _password, Dan (bl) _password n nail, claw, Guro # _password n nail, claw; hoof, Wan # _password n nail, claw

*síí-ní near > Dan (bl) _password, Dan (gw) _passwordpp near, nearby; around; (bl) adj close, Guro BN _passwordpp near, beside
*sō-nē totem.2 > Guro BN sō-nē n totem, taboo, Yaure HB sō-nē n totem, taboo, Mwan # sō, Beng # sō v prohibit
*sō village.1 > Gban ST sō n compound, Beng GL sū, # sū n house; room
*sēbē write (< Manding sēbe < Arab. safha) > Dan (kl) sēbē (?) n mark, sign, Guro BN sēbē n book, paper, letter, Mwan # sēwē, Wan # sēwē n book; reading, writings, Beng # sēwē 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 the fusion with the initial component *yiî- (which was subsequently elided in Guro and Gban):
*yiî-sïiyá four.2 > Dan (bl) yiîsī, Dan (gw) yiîsī, Dan (kl) yiîsē, Tura # yiîsē, Mano NE yiîsē, Guro ST žij, Gban ST žič, Mwan # yiîzie, Wan # siîyà, Beng # siëj, GR siëj.

Guro, Mwan and Wan forms in the set ‘gold’ may be borrowed from the neighbouring Manding variants, cf. Koyaga sỳân (Creissels 1988):
*sāŋ gold > Dan (gw) sāŋ, Dan (kl) sāŋ, Dan (bl) sāŋ. Guro cā, Mwan # cā, Wan # cā

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

Series 20

<table>
<thead>
<tr>
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<th>Mano</th>
<th>Guro</th>
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*zāà affair, matter.3 > Dan (bl, gw) zā n trial, judgement; reason; accusation, Tura # zāa n quarrel, conflict, Guro BN zā n discussion; competition, contest, Yaure HO sā, Mwan # zāa n affair, matter, Wan # zāa n matter; action, Beng # zāa n problem, difficulty; dispute, matter; history, story
*zīj again > Dan (bl, gw) zú, Tura # zī, Mano ZE zēj adv again; also, Mwan # é-zīj again
*zūu agama lizard > Dan (bl, gw) zū, Tura # zū, Guro VV zū; Yaure HP sū, Gban ST zū, Mwan PM zū, Wan # zū
*zā agent suffix > Guro # -zā, Mwan PM zā n proprietor
*zōlō antelope bushbock > Dan (bl) zōlō, Dan (gw) zōlō, zōlō, Tura # zōlō, Mano ZE zōlō n "red deer", Guro BN zōlō, Gban ST zō n antelope (sp.), Mwan # zrō medium size antelope, Wan # zrō
*zūlō bee.1 > Dan (bl) zū n bee; gad, prick, Dan (gw, kl) zū (-gā), Tura # zū, Mano VV zū, Guro # zū, Gban ST zū, Mwan PM zū, Wan # zū (cf. *tip)
*zē borassus palm > Guro BN zē, Yaure HO sē, Mwan PM zē, Wan # zē
*zēkèlè caterpillar > Tura # zëkèlè, Gban ST zëkèlè
*zë-lá descend.1 > Tura # zë-lá vi descend; fall (of rain), Guro BN zë, hab. -wō, Gban ST ži, Mwan # zë-nā, Wan # zë-á vi descend; stay (of visitor; with -plā); vt put
*zëlē grandfather > Dan (bl) zëj, Dan (gw) zëj, zëj, Dan (kl) zëj n grandfather, grand-grandfather, etc.; step-father; elder step-brother, Dan (kl) zëj n grandfather, Beng GL, PA zëj n grandfather; grandparent's brother; grandparent's sister's husband; great uncle
*zà hatred > Guro BN zà n hatred, recentment, Gban ST zà n recentment
*zūlō heart > Dan (bl) zū, Dan (kl, gw) zū n heart (organ), Dan (gw) zō n heart (location of emotions), Tura # zvō n heart; soul; mentality; thought, Mano NE zō, Mano ZE zō, Guro BN, GR zōlū, Gban ST zō n soul, Mwan # zrō (?), Wan # zōj
beDaDpresenceDofDtheDarchaicDnounDclassDprefixDstrike
beDconsideredDasDnon7cognate.D

*yz ÿ Þ÷ o É
scorpion33j(black,jPandinusjgambiensis)
correspondenceDsetsDwhereD

*z ÿ Ë Ö÷ í
*z iæl a É÷
Guro BN
husband
*z û Øû ÉÉ
*z ý Ë ÖÉ
*zm zm zm zm zm ?m sm zm z,msm sm
 Series 21

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

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

*züä pierce-4 > Dan (gw) züä vi leak, have a hole, Tura # züä vt pierce, Mwan CF züä (?), Beng # yü.
In the other case, the heterogeneity of reflexes may be explained by the grammatical character of the lexeme:
*zèē here-2 > Dan (bl) zèē, Dan (gw) yèē, Dan (kl) yèē. Mano NE, VV, ZE zèē, Gban ST yèē, yèē, Mwan CF yèē there, Wan # yā here; thus

3.3.16. 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 -o (oral or nasal). Another explanation could be a presence of the archaic noun class prefix *N- (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

*zulūn (?*N-sūlūn) ant-2 > Dan (bl) zulū, Dan (lo, ku) zulū n driver ant, Tura # zulū n driver ant, Mano ZE zulū n driver ants, Wan # sṛṇ, sṛṇ (?) n small ant; insect
*zülē (?*N-sulē) bean > Dan (bl, gw, kl) zē, Tura # zū, Mano ZE zē, Guro # zólē, BN zōlē, Mwan PM zōlē, Wan # zṛṇ, Beng GR sō (?)

8 Word for ‘road’ in Gban, dī, 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.
3.3.18. *z > j in Guro before vowel combinations -UO, -UE («upper back vowel + middle vowel», the characteristics of ATR being irrelevant):

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<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
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<td>*z</td>
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<td>z</td>
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<td>z</td>
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</tbody>
</table>

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

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

3.3.18. Correspondence sets of the Series 24 are perplexing. The heterogeneity of the reflexes is rather unusual for the SM languages, but the similar models of evolution of the polysemy and existence of reflexes of the same root outside the SM group (cf. Boko de ‘to kill’) convinces in reality of at least the set ‘kill-2’ (the other set looks rather spurious). For a while, I shall reconstruct for this correspondence phoneme *ê-.

Series XV

*êe kill-2 > Dan (bl, gw) zê, Dan (kl) zê vt kill; strike, beat; play (drum); throw; pronounce (speech), Tura # zê vt kill; treat (wound); effectuate (sleep; speech); pawn; hunt (animals,
insects), Mano NE zë, Guro # jë vt kill; cut, reap, mow, Yaure HP ŋe vt kill; perform, Gban ST zë, Mwan # dë, Wan # té, të vt kill; beat, strike; play (musical instrument); perform, Beng GL dë, PA dë

*cíná middle-2 > Dan (bl) zįţi, Dan (gw) ŋoŋ-g gü, Dan (kl) zěţi, ŋiŋ-nń, Tura # zùù-lë, zú–ë rn middle; adv in the middle; pp in the middle; Mano ZE zòé, Gban ST zà, Mwan # drë, Wan # trágà, trágà

3.3.19. There remain some sets which display unusual correspondences of initial consonants. For a while, it is difficult to conclude whether these forms in these sets are cognate or not. I will just give them without interpretation:
throw-2 (to) > Dan (gw) # zǔỳ, zǔỳ, Dan (kl) zű, Dan (bl) # zòŋ vt throw; n spear, Mano VV dyùo, Mano ZE dûù vt strike; shoot (gun); put (curse; on – lè), Yaure HP tùù, Beng GL, PA zù vi balance; vt throw
pass-2 > Dan (bl, gw) zǐţi vi pass, pass by; pass by; flow (of water); surpass, excel (by – tã); be too great, too much (for – tã); go away; follow; vt pass, make pass; carry by, Tura # gië vi pass, pass by; flow (of water); surpass, excel (by – tã); predominate, be abundant (in – gçois); vt pass, make pass; show (to - nê), Mano ZE dië, Guro BN jë, perf. jà, ST jië vi pass; supass (smb. – tã), Yaure HB cië, impf. ci-á, Gban HW gië vi become, Beng GL jë vi pass by; stir; blow (of wind); go fast, speed
show > Dan (bl) zùṯ vt show sth. (to – dÁ); teach (smb – dÁ); compare (with – kà), Dan (gw) zùṯ vt show; teach, Mano NE, ZE zùš vt teach; show sth. (to – lëĕ); point with (to – mçois), Guro ST gùš, BN gù vt show sth. (to – lè), Yaure HP kùš vt show sth. (to – lè), Mwan # zrùš

3.4. Velars

3.4.1. In the general case, Proto-SM *k- does not change in modern languages.
Series 25

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<thead>
<tr>
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*kòlì back-4 > Guro # kòlì, Yaure HO kò-dà (?), Gban ST kwí (?) n central part of back, Wan # kòlì, kòlì, Beng GL, PA kò (?)

*kòlì bark (of tree)-2 > Dan (gw) kàë, Dan (kl) kë, Dan (bl) kià rn bark of tree, scale of fish, shell of turtle; (gw) yellow fever, Mano ZE këlë n bark (of tree); unmilled seed, Guro BN kòlì n bark (of tree); envelope; scale of fish, Wan # klòŋ (?)

*kòn boar-3 > Dan (kl) kù, Mwan # kòŋ n dugout canoe, Wan # kòŋ, kòŋ

*kùgù breast-4 > Dan (gw) kùù, Beng HO kùgù

*kù calabash-3 > Dan (bl) kùš, Dan (gw) kùš n calabash (generic), Dan (kl) kùš n calabash made of a half of gourd, Tura # kwëë, Mano NE, VV kùš n bowl (made of gourd), Guro # kùš n calabash made of entire gourd

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

*kòn chameleon > Guro GR kàñà, Yaure HO kòŋ, Mwan # kwì, Wan # kà-yà-gù-kpèë

*kòŋŋí cotton (< Manding kòŋdí < Arab. qúṭ-un) > Guro BN kùñùnù, GR kùñùnù, Mwan # kwì, Wan # klòŋ, klùŋ (independent borrowing from Manding to the modern languages is also probable)
*kälôn crab > Dan (bl) kāā, Dan (gw) kā, Dan (kl) kān-kyā (?) Mano NE, ZE kāā, Gban ST klā, Wan # kälôn
*kǔlǐ dig-3 > Guro BN, GR kǔlī, Mwan # kwlēē, Beng # klǔ
*kē lé do-1 > Dan (bl, gw) kǎ vt do; chase away; hunt (in bush); pred. past mark, Dan (kl) kǎ vt do, Tura # kēã 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, Gban # kē vi happen, occur, Mwan # klǔ vi become; vt do, make, Wan # klę vt chase
*kēnē healthy-1 > Tura # kēnē-kenè-nè n health, Beng # kēnē-lè n health
*kōkō hammer-2 > Guro ST kōkō, BN kōs, Yaure HO kōgã, Wan # kōkō
*káḵ̱ house-2 > Dan (bl) kǎá, (gw) k̀ r, Dan (kl) kà, Gban ST kē
*kàáb house-1 > Dan (bl, gw, kl) kà, Tura # kwaí (?), Mano NE kà, Guro kō, > -kō (in some compound words), Yaure HP kà, Wan kù
*kōnā hump-3 > Dan (bl) klōs, Guro BN kōnā, Gban ST kō
*kēmě hundred (< Manding kêmé) > Dan (bl) kàŋ, kàŋ, Dan (gw) kàŋ, Dan (kl) kàŋ, kàŋ, Dan (yi) kàŋ, Tura # kəŋ, Mwan # kēmē, Wan kēmē (independent borrowing from Manding to the modern languages is also probable)
*kēnē load-2 > Dan (kl) kwēē, Guro # kōnē
*káltā mar-3 > Gban ST klā, Wan # klēŋ
*kēnē mosquito-2 > Guro BN kēnē, GR kēnēnē, Gban ST klē
*kà negative copula-4 > Dan (bl) kà, Guro kà, Yaure HP kà
*kulà neck > Mwan # kūlə, Beng # klūa
*kō′li penis-2 > Dan (bl) kū̀, Guro ST kōlī, BN kōlę, GR kōlē {Wan # sólī (?) (probably a loan from Manding, cf. Mandinka sólī)}
*kǔlī piece-2 > Dan (bl) klū, Guro # kǔlū
*kē sate > Dan (bl) kě, Dan (gw) kā vi sate oneself; vt sate, Tura # kā, Guro BN kā vt sate, GR kā adj satiated, Gban ST kā vi sate oneself, Beng PA kā vi be sate
*kūgā scratch > Dan (bl) kāā, kāā, Dan (gw, gb, gp) kāā, Dan (kl) kāā, Dan (bh) kwāā, Mano VV kānā vt scratch (soil), Guro GR kāā, BN kǔ, ST kǔs vt scratch; hoe, Gban ST kūā vt scratch; remove by scratching, Wan # kāgā
*kōlē shell (of snail) > Dan (bl) klāã n shell (of snail; of egg), Mano ZE kēlē n shell; scale; bark, Guro GR kēlē n shell; scale, Gban ST kū
*kulū spoon-2 > Dan (bl) klūū, Dan (gw) klūū n ladle, Guro # kūlū n ladle, Gban ST klū, Beng # klō
*kē that (conjunctive)-1 > Dan (bl) kē, Tura kē, Mwan CF kē conj and; if, when
*kūlū tie-1 > Dan (bl) klū vt tie; sharpen; vi coagulate, Tura kūli vt tie with (sth. – fàá), Wan # klü-dí
*kōlō useless-2 > Gban ST kló adj broken, in bad state, Mwan AY klōo adj stupid
*kōlůŋ well (water hole) > Dan (gw) kōn, Dan (kl) kōŋ, Dan (bl) kōŋ, Tura # kōnŋ, Mwan PM klōŋ, Wan # klōŋ.

3.4.2. In Guro, Mwan, Beng *k- > c- in the 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

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</table>

*kée certain > Tura # kē pron. certain; some, a little, Guro BN cē pron. some, certain, Mwan # kē pron. other, Wan GR ké pron. this
*kḗ cut-1 (to) > Dan (bl) kā, Dan (gw) kā vt cut (grass, lianes, wood); cross (river); tie (skirt); stop doing, Tura # kaa vi tear; separate; vt cut; stop, finish; spend (time); tell
stop doing, Mano NE ká, Yaure HB cē vt cut; dig, Mwan PM ká vi pass; vt cross (river), Wan # kó vt cut, slice; cross, go through; perform, Beng PA có (< *cēó ?)

*kipi cut-3 > Guro BN kni, GR kpi vt cut; separate; change, Gban ST kí vt cut; cut up, Beng # cí vt cut; cross, go across

*Kuñi *hair-2 > Dan (bl) käå, Dan (gw) käå, Dan (kl) käå rn hair (other than that of head; of animals); feather, piquant, Tura # kúrn hair (other than that of head; of animals), Guro GR, BN cē rn hair (other than that of head; of animals); feather, Yaure HP:75 jé, Yaure HO cē rn hair (of head, of body), feathers, Mwan # cié n hair (of body), fur, Wan VV käñ rn hair (other than that of head; of animals); feather, Beng # cëñ n hair; fur; feathers

*Këli pepper-2 > Guro BN këlë, GR këlë, Yaure HO këlni, cèlì, Gban ST kjiá (?), Wan # klë-gë, klë-gë

*Kiñi reciprocal pronoun-2 > Dan (bl, gw, kl) kó, Tura # kë each other; together, Guro BN cē, Guro (nya) VV kí, Yaure HP cí, kí, Gban ST kë, Mwan # kë, Beng GL cëñ, Beng # cëñ

*Kilé skin > Dan (bl, gw) kuí, Dan (kl) kpí n hide, leather; rn (kl) body, Tura # kuví n hide, leather, Mano NE, ZE kíi n skin; fn book; grade, year (in school), Guro ST këlë, BN këlë, Guro GR kwélê n body, skin, leather; shoe, Wan klëë, klë rn skin; leather, Beng GL cí, PA cí n hide, skin (of animal); paper, book

*Kuná theft > Dan (gw, kl) kuwá, Dan (bl) kuwá vt steal, n theft, Tura # kuñá vt steal, n theft, Mano ZE kuá n stealing, Guro # cëñ n theft, Yaure HO kùá ? n laziness, Gban ST kuá, Beng # klúá-li n thief

In the set ‘skin’, the Kla-Dan form kpí < *kwí. 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. The Series 27 is represented by one single correspondence set. *k- > w- in Beng before -2 is supposedly a part of the same process as *b- > v- and *d- > z-, In Wan, *k- > w- > ò-, like in the 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; perform’ (series ‘cut-3’).

Series 27

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
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<tbody>
<tr>
<td>*k</td>
<td>k</td>
<td>k</td>
<td>k</td>
<td>k</td>
<td>k</td>
<td>k</td>
<td>k</td>
<td>ò</td>
<td>w</td>
</tr>
</tbody>
</table>

*kó hand, arm-3 > Dan (bl) kó, Dan (gw) kó rn hand (up to the elbow); front leg; branch, Tura # kóó rn hand, arm; property; way (of doing); ten (in compound numbers), Mano NE, ZE, VV kó rn hand, arm, Gban ST kwá n arm; branch, kó rn hand, Mwan # kóó n hand, Wan # 5 n hand, arm; sleeve, Beng GL, PA wó 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 *N-. At least for the second set, this reconstruction is confirmed by the external evidence (Bamana nkàrangá ‘body louse’).

Series 28

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
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<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
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</thead>
<tbody>
<tr>
<td>*N-k</td>
<td>k</td>
<td>k</td>
<td>k</td>
<td>k</td>
<td>k</td>
<td>g</td>
<td>k</td>
<td>k</td>
<td>k</td>
</tr>
</tbody>
</table>

*N-kalàŋ-gbá louse-4 > Dan (kl) kààngbá n body louse, Tura # kààbá, Gban ST ggàgbà, glàá, gbà n louse; bug; flea, Mwan # klàfà n body louse

*N-külü turtle-1 > Mano ZE, VV kùì, Guro BN kùì, Yaure HO kùlù, Gban ST ggà, Mwan # külü n terrestrial turtle, Wan AT kòtà, Beng GL kó, PA kóû n turtle Eretmochelys imbricata, Kinixys beliana
3.4.5. *k- > g-, ð- in one single correspondence set in Tura can be explained by the grammatical function of the word (a postposition).

*ká with > Dan # kä pp with; by, Tura # gá (after V-mono syllables), ðá (everywhere else) pp with (means or instrument); of (material); during, for; in the quality of (equivalence, identity meaning), Mano NE kä pp with; by; as: for.

3.4.6. In the general case, *g- > k- in Yaure, > g- in all other languages:

<table>
<thead>
<tr>
<th>Series 29</th>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
<tbody>
<tr>
<td>*gùñ beard-3 &gt; Guro BN gùñ, Wan # gùñ-gañ, gùñ-ãñ</td>
<td>*gānî-ñānī-ñ bell-2 &gt; Dan (bl) gānî-gānî, Dan (gw) gānî-gānî n gong (long piece of iron that one strikes with a stick), Tura # gānî-gañ, gānî-gañ, Guro ST gāñ-gāñ, Wan # gāñ-gañ n gong (long piece of iron that one strikes with a stick)</td>
<td>*gīñi bord-3 &gt; Dan (gw) gīñi, Guro BN gīñi, GR gīñi n bord; fold; wrinkle, Gban ST gē</td>
<td>*gīñē chest-3 &gt; Dan (bl) gōō, Guro BN, GR gōō n chest, torso, Wan # gōō</td>
<td>*gōñi cockroach-2 &gt; Dan (gw) gōñi, Dan (gw) gōñi, Tura # gōñi, Mwan # gōñi-ló</td>
<td>*gōñē deep-2 &gt; Dan (bl) gōñē, Guro BN gōñē, GR gōñē-bāñ, Mwan # gōñē-glōñē adj very deep, Wan # gōñē, glū, Beng # glōñē</td>
<td>*gēñ do-4 &gt; Dan (gw) gēñ vt make (war), Tura # gēñ vi go on (of war, etc.); vt conduct (war, fight); put into action (forces, means), Gban ST gēñ vt try, Wan # gēñ vt be engaged in (war, fight)</td>
<td>*gōñi fence-2 &gt; Dan (bl) gōñi, Guro BN gōñi, Gban ST gōñi</td>
<td>*gōñi go away (to) &gt; Dan (bl, gw) gōñi, Dan (kl) gōñi vi leave, go out; come from; vt sell, have on sale, Tura # gōñi vi leave, go away; flow (of water); make leave; take away, extract; separate; give, produce; prepare, cook, Mano NE gōñi vi come from, Guro GR, ST gōñi vi go; evade, flee, Yaure HB kō vi go, Mwan PM gōñi, Wan # gōñi vi leave; get up; vt take off; move</td>
<td>*gāñi grasshopper &gt; Guro # gāñi, BN gāñi, gāñi, Wan # gāñi</td>
<td>*gāñi hearth &gt; Guro # gāñi, BN gāñi, GR gāñi, Gban ST gāñi</td>
</tr>
</tbody>
</table>
3.4.7. In the feet of the types CVV and CV, before front vowels, *g- > j- in Guro (optionally) and in Beng. There is only one set for this phonetic context. Unfortunately, the Yaure form misses in my data; in this language one would expect c-.

Series 30

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
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<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
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<td>g, gw</td>
<td>k, kw</td>
<td>gw</td>
<td>gw</td>
<td>g</td>
<td>gb</td>
<td></td>
</tr>
</tbody>
</table>

*gułù hole > Dan (gw) gblú-gā, Dan (bl) glú, Dan (bh) gwlú-gā, Dan (kl) glū n pit, cavity, Tura # gułú n hole, cavity; rn (smb.'s) place, Mano ZE, VV gułú, Guro BN, ST, GR gułů n hole, cavity, Yaure HP klú, Gban ST gwí (?) , Mwan # gułú, Wan # gułú, gułū n hole; bed (of river); mine; adj deep

*gülú divide > Dan (bl) glū vt divide, distribute, Guro GR gulú vt divide, distribute (among – mā), Gban ST gwí vt divide, Wan # glú n piece, Beng # gblú vt divide, distribute

*gōlé leopard > Dan (gw) gwēē, Dan (kl) gō, Dan (bl) gō₃, Mano NE, VV gō, Mano NE, ZE gō, Guro BN golí, Gban ST gwé

*gōé peanut-2 (Arachis hypogaea) > Dan (bl) kéé (?), Dan (gw) gwēē, Dan (kl) gwēē, Tura # gwēē, Mano ZE gō, Guro # bèé (?)

*gólù sweep-3 > Dan (bl) gō, Dan (gw) gblý, Mano ZE gólù, Guro BN gļvt clean; rub, gį glź vt sweep, Mwan # tā-gō vt sweep, Wan # mì-gō, wā-gō vt sweep.

*gölù wall-2 > Guro BN gulu, Gban ST gwí, Mwan # gwé

*gǒli war > Dan (gw) gbłù, Dan (bh, yi) gwłu, Dan (gp, kl) glů, Dan (bl) glū, Tura # gwili n war; ʝkélě n trouble (< Jula kělé) Mano VV gélè, Guro BN, ST, GR gůli n war, BN guli n quarrel, Gban ST gwē, Mwan PM gwlé, Wan AT glè, Beng # gólí n quarrel (further examples see in the series 29: ‘crocodile-4’, ‘hearth’, ‘rest’, ‘hoe-3’).

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 *guIv, *guV (where -U- stands for a rounded vowel) is reduced to an approximant -w-: *guUV > gwIv, *guUV > gwV, which brings us to the Gban form. In Dan-Gweetaa and Beng this phonetic complex undergoes further change: *gwIv > gblV. In some words in Gban -l- is subsequently elided: *gwIv > gwV.

Series 31

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
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<th>Mwan</th>
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<th>Beng</th>
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<tbody>
<tr>
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<td>g, gw</td>
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<td>gw</td>
<td>gw</td>
<td>g</td>
<td>gb</td>
<td></td>
</tr>
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</table>

*gułù hole > Dan (gw) gblú-gā, Dan (bl) glú, Dan (bh) gwlú-gā, Dan (kl) glū n pit, cavity, Tura # gułú n hole, cavity; rn (smb.'s) place, Mano ZE, VV gułú, Guro BN, ST, GR gułů n hole, cavity, Yaure HP klú, Gban ST gwí (?) , Mwan # gułú, Wan # gułú, gułū n hole; bed (of river); mine; adj deep

*gülú divide > Dan (bl) glú vt divide, distribute, Guro GR gulú vt divide, distribute (among – mā), Gban ST gwí vt divide, Wan # glú n piece, Beng # gblú vt divide, distribute

*gōlé leopard > Dan (gw) gwēē, Dan (kl) gō, Dan (bl) gō₃, Mano NE, VV gō, Mano NE, ZE gō, Guro BN golí, Gban ST gwē

*gōé peanut-2 (Arachis hypogaea) > Dan (bl) kéé (?), Dan (gw) gwēē, Dan (kl) gwēē, Tura # gwēē, Mano ZE gō, Guro # bèé (?)

*gólù sweep-3 > Dan (bl) gō, Dan (gw) gblý, Mano ZE gólù, Guro BN gļvt clean; rub, gį glź vt sweep, Mwan # tā-gō vt sweep, Wan # mì-gō, wā-gō vt sweep.

*gólù wall-2 > Guro BN gulu, Gban ST gwí, Mwan # gwé

*gǒli war > Dan (gw) gbłù, Dan (bh, yi) gwłu, Dan (gp, kl) glů, Dan (bl) glū, Tura # gwili n war; ʝkélě n trouble (< Jula kělé) Mano VV gélè, Guro BN, ST, GR gůli n war, BN guli n quarrel, Gban ST gwē, Mwan PM gwlé, Wan AT glè, Beng # gólí n quarrel (further examples see in the 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 above-mentioned, or should we consider these forms as non-cognate:

*ɡʊŋ* *boat-5 > Dan (gw) ɡ5 n dugout canoe; car, Tura # ɡ5 n vehicle (boat, car, plane), Mano ZE ɡ5.  {Gban ST gb5 ?}  Mwan AY ɡ0 n car, Wan AT ɡ0 n vehicle
*ɡɑŋ* *bone-2 > Dan (bl, gw) ɡɑ n bone; seed, grain; piece (of sth. hard); unit (counting word in compound numbers), Guro # ɡ5, {Gban ST gb5 ?}
*ɡʊˈe* Tura # gwɛ, Guro # gwɪ, BN gwɛ n ciet  {Gban ST gbɛa}
*ɡiɛ rub (to) > Dan (gw) giɛ vi rub oneself (against – bɑ); vr rub oneself (with – kɑ), Guro GR jiɛ-á-mɑ (?) v rub; massage, rub down, {Beng GL gbɪɡbɪ, gbɪlɛgbɪ, PA gbɪ ?}.

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

*ɡiɛ* postposition in-3 > Tura # ɡɛ n inner part; pp in, inside; for; because of, Mano NE, ZE yi pp in, inside, Guro BN giɛ, Guro GR jiɛ n interior; thought; pp in, inside, Yaure HO, HP kì, jì, yi pp in, to, Mwan GR yi pp in, inside.

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

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

Series 32

<table>
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<tr>
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<th>Yaure</th>
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<tr>
<td>*ɡ₃</td>
<td>g</td>
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<td>k</td>
<td>g</td>
<td>k</td>
<td>g</td>
<td>k</td>
</tr>
</tbody>
</table>

*K³lʊ* *banana-3 > Dan (bl, kl) gl55, Dan (gw) gl55, kl55, Gban ST klɪ-klɪ, klɪ-ɪ, kwɪ-klɪ, kwɪ-ɪ
*K³lʊ* boat-1 Tura # ɡolo (??), Guro BN, GR ɡòḷo n arch. boat; shuttle; car, Gban ST klɪ n transport, vehicle, Beng GL, PA glɔ
*Kɪlɪ* burn-3 > Dan (bl) gùrɛ, Dan (bh, bn, gw, yi) gɪ, Dan (gb) gɛ, Dan (kl) gɛ vi, vt burn, Mano NE, VV gɛlɛ, ZE gɛlɛ, Gban ST kɛ
*Kɔlɪ* cola nut > Dan (gw) ɡ5, Dan (kl) ɡ5, Dan (bl) ɡ5, Tura # ɡoʊ, Mano ZE ɡ5 ɡ5, Guro BN, ST, GR, Gban ST gwɛ, Mwan # ɡoʊ, VV kɔlɪ
*Kɑ* die-1 > Dan (bl, gw, kl) ɡɑ vi die; n death; end (of month, etc.), Tura # ɡɑ vi die; disappear, heal (of wound); vt kill, Mano ZE ɡɑ vi die; get ripe, Guro BN, GR ɡɑ, hab. ɡɑɑ vi die; dry up; ripen; n death, BN jɛ n illness; burial, Yaure HP kɑ adj dry, Gban # ɡɑ vi die; n supernatural force; disease, mutilation, Mwan # ɡɑ vi die; dry; adj dead; n sickness, Wan # ɡɑ vi dry up, Beng GL, ɡɑ, PA ɡɑ, ɡɑ n death; adj dead; vi die
*Kɑnɛ* foot, leg > Dan (bl) ɡɛ, Dan (gw) ɡɛ, Dan (kl) jɛ n foot, leg; handle (of recipient), Tura # ɡɛɛ n foot, leg, ɡɛɛ-yɑɑ n time (when counting), Mano NE, ZE ɡɑ n foot, leg, Guro BN ɡɑnɛ, GR ɡɑnɛ n leg, Yaure HO cɛ, kɛ, Gban ST ɡɛ, Mwan # ɡɛɛ, Wan # cɛ, kɛ n foot, Beng GL, PA ɡɛ n leg and foot; wheel
*Kɔnɛ* male, man-1 > Dan (bl) ɡ55, Dan (gw) ɡ55 n man, (bl) husband, Dan (gw) ɡ5 n husband, Dan (bl) ɡ5, Dan (kl) ɡ5 n husband, Tura # ɡɛɛ n husband, ɡ55 n male; man, Mano NE, ZE, VV ɡ5, pl. ɡɔa, Guro BN ɡ5-nɛ, GR gwɛ-nɛ, Yaure HP kwɪ5-m5 n man,
Gban ST kò n male, Mwan # gënà, gënà n man, male, Wan kọ-lé n man, male, Beng GL gō, PA gō
*kē pumpkin > Dan (gw) gā n pumpkin (sp.), Mano ZE gē, Guro # gē, BN jē, Gban # gī n pumpkin; water-mellon, Mwan # gē n melon, Wan # čín, čī
*kā série-2 > Dan (gw) gwā n big river, Dan (bh) gwā n sea, Dan (bl) gwā-gā, Dan (gb, gp) gwā n Sassaandra river, Dan (kl) gwā n river, Tura # gūā n big river, Wan # kāā
?*kēnē proverb-2 > Dan (gw) gwān. Guro GR gwēnë, Mwan # gō, Wan # glōn (?), Beng # kā (?)
?*kēa look-2 (to) > Dan (bl) gā, Dan (gw) gā vt look at, Tura # gā vt look at, Wan # lē-gē (? vt look at, Beng GL cā, Beng PA cā
?*kūlī round-2 Dan (bn) glūū, Dan (bl) klōklō, Dan (kl) glī̀̀gī̀̀, Mano VV kēkēkē, Guro BN kēlē, GR kīlī adj, Gban # guī, gbūī, Wan # glū ā n round; adv round; adv in round, Beng # klīlī
In fact, *kē may be also reconstructed for some sets included into the 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

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
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</tbody>
</table>

*kpē bend-1 > Tura # kpē vi bend oneself backwards; vt bend backwards, Guro ST pēnē vt
*kpē all-3 > Dan (bl) kpē-kpē, Yaure HP pē-rō ?, Mwan # kpē, Beng # kpā (?)
*kpā centipede > Dan (bl) kpā-klū, Tura # kpā-ī n centipede; scolopendrid, Gban ST kpā n centipede (sp.)
*kpē chair > Mwan # kpē, Wan # kpē n chair, stool
*kpōnō cowrie-2 > Dan (bl) kpō-ī, Tura # kpō-nē (< *kpō-ō-wē), Mwan kpō
*kpālā dry-2 > Dan (bl) kpālı, Dan (bn) kpēé, Dan (gp) kpō, Dan (gw) kpē, Dan (kl) kpāā, Dan (gw, yi) kpēē, adj dry; thin (human), Tura # kpā adj, Mano VV kpālā-kwā adj dry, dead (tree, etc.), Mwan PM kpā adj dry, Wan (k) VV kpā lā vt make dry; roast; vi heat oneself
*kpō fish (water dweller)-2 > Dan (kl) kpō-nō, Mano NE, ZE, VV kpāā, Guro BN, GR pō, Yaure HB pō, Wan # kpō
*kpōnō knee-2 > Dan (bl) kpōgō, Dan (gw) kpōyō, Dan (kl) kpōyō, Dan (bh) kpōō, Tura # kpō-ū n man, Mano ZE, VV kpūō, Guro BN, GR pō, Yaure HO pō, Gban ST kpō, Mwan PM kpō, Wan # kpō-gōlī, Beng GL, PA kpō
*kpā put-2 > Dan (bl, gw) kpā vi lean (on – bā); vt cover with (sth. – ŭā), Tura # kpā vi lie down; vt make lie down; bend, Guro # pā vt put; bury; follow (smb. – ūū); vi help (smb. – ŭā, vá), Yaure HP pā vi help (smb. – vá); vt do, Yaure HB pā-lá vt put over, Mwan # kpā
*kpālēŋ shin > Dan (gw) kpāā-gā (?), Wan # kpēŋ, kpēŋ
*kpēŋ-ŋpē short-2 > Mwan # kpēŋ-kpē, Wan kpēŋ-kpē, kpēŋ-kpē
*kpōndi stone-2 > Mwan # kpōndi, Wan kpōndi
*kpōndi unripe > Dan (kl) kpō, Tura # kpōlō, Mano ZE kpōlō, Guro BN pē-nē, GR pē-nē (?) n young man; youth, Wan # kpōnūŋ

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 # kpākū, Guro GR kpāō, Mwan # kpākō, Wan # kpākō (a wandering word in Côte d’Ivoire, cf. Baule kpākō, kpākō)
We have some other sporadic irregularities, and it is difficult to judge so far whether they reflect some phonological or morphophonological features of the proto-language (such as archaic class prefix *N-), or the irregular forms just do not belong to the comparative sets:

?*N-kipōi cheek-1 > Dan (bl) kpeŋ, Dan (gw) kpiŋ, Dan (kl) kpeŋ. Tura # kpiŋ. Guro ST, GR, BN bniŋ (a voiced initial consonant in Guro, one would expect *p-)

?*N-kipōlù hump-2 > Dan (bl, gw, kl) kpu fn bump (on body); hump; callus. Tura # kpu rn hump; bump, Mano ZE gbù (?) n bump (on the skin), Guro BN, GR pälù n BN knot, GR bump, GR pälù n knot, or GR pō n fist, Yaure HO pōu ? n hump, bump, Gban ST kpu n hump; fist, Wan # kpu, kpōō. Beng GL pūŋ. Beng PA pō-render (?) n hump PA; knot (in wood) GL (a voiced initial consonant in Mano; p- instead of kp- in Geng)

?*kpoŋ road-2 > Dan (bl) kpeŋ, Dan (gw) kpoŋ. Tura # gbőŋ-fək, Guro (nya) VV gbē, BN gbōŋ, Yaure kpō, Wan # kpo (one would expect kp- in Tura, p- in Guro)

3.4.13. In the general case, Proto-SM *gb- > b- in Guro, > p- in Yaure, in the other languages it remained unchanged:

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<tr>
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<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
</tr>
</thead>
</table>
| *gbēŋ | arm > Dan (gw) gbēŋ, Dan (bh, yi) gbie, Dan (bl) gbir, Dan (dh) gbir, Dan (kl) gbē rn arm, {cf. Dan (gw) # gbēŋ n branch (of river), brook.} Tura # gbā rn, Guro BN, GR, VV bē rn arm, {cf. bē n branch}, Yaure HP:73,75,77 pē ~ pē rn arm, Mwan # gbē rn arm; forearm; side
| *gbōŋ baboon (Papio cynocephalus) > Dan (bl) gbōŋ, gbōŋ. Guro # bā, Beng GL gbōŋ n chimpanzee
| *gbāŋ bachelor > Dan (gw) # gbā, {Dan (kl) cē-gbā (< Jula)} Guro BN bī {Beng GL cē-gbān n bachelor; spinster (< Jula)}
| *gbōo bamboo-2 > Dan (bl) gbōōgō n bamboo. Dan (gw) gbōō, Dan (kl) gbōō n bamboo Bambusa vulgaris, gbōō n West African bamboo Oxytenanthera abyssinica, Guro # bāō, GR bōō, Wan # gbō-pō (?)
| *gbāa bat-4 > Guro BN bā ā n flying fox, Mwan # gbā-nē, Wan # gbāa
| *gbēŋ branch-2 > Dan (gw) gbēŋ n branch (except that of a palm), Tura # gbēn n branch (except that of a palm), Mano ZE gbēŋa, Guro BN, GR, VV bē rn, Mwan # gbē, Wan # gbē *gbōogōŋ bucket > Dan (bl) gbōōgō, gbōōgō, Dan (gw) gbōōgō, Tura # gbōōgō
| *gbāa bug-2 > Dan (bl) gbāū, Guro GR bāō, Gban ST gbā (?) n bedbug, flea, louse, Mwan # gbē
| *gbē chase (to) > Guro # bē, BN bē, bē vt chase away, Yaure HB pē, Mwan # gbē
| *gbāŋ cry-2 > Dan (gw) gbāŋ n noise (of a crowd), Tura # gbāa n noise, Guro # bāa vi shout, (si) BN bā vi cry (of animal), Mwan # gbē, Wan # gbē-kō vi cry (of animal); call, Beng GL gbē, PA gbē; shout out, scream
| *gbā drive in > Dan (bl) gbā vt drive in, fix; organize; vi strike (sbm. – bā), Tura # gbā vt drive in, fix; lay foundation of (house); vi start (+ ger.), Mwan # gbā vt set (trap), Wan # gbā (?) vt sting; pierce
| *gbā give (to)-2 > Dan (gw) gbā, Dan (bl) gbāā. Dan (kl) gbā vt give smb. (sth. – kā), Tura # gbā vt give smb. (sth. – gā); n gift, Mano ZE gbā vt give smb. (sth. – kā), Guro VV bāā,
BN bâ vt sacrifice (sth. -- yâ) to; honour smb., give a honourable gift, Yaure HO pâ vt offer sacrifice to, consult (fetish), Gban ST gbâ n gift; dowry (paid by bridegroom), Mwan # gbâ vt worship (fetish), Beng GL, PA gbâ vt give; sacrifice

*gbâ granary-4 > Dan (gw) gbâ n granary in the house, Gban ST gbâ
*gbînj heavy-2 > Dan (bl) gbînj, gbînj, gbînj, gbigfînj, Dan (gw) gbînj, gbînj, Dan (kl) gbînj adj hard, difficult; thick (cloth); vigorous, Mano ZE gbînj, gbînj, Guro BN bêê, Wan # gbêê, Beng GL gbînj adj heavy; weighty

*gbôñô intestine-2 > Dan (bl) gbôñô, gbôñô, gbôñô, Dan (kl) gbîlû (?), Tura # gbôñô, Guro GR bwâ, Gban # gbû, Wan # gbôñô

*gbêlêng long-2 > Dan (bl) gbêêng, gbêêng, gbêêng, Dan (gw) gbêêng adj long, high, profound; remote; adv far away, Mano ZE, VV gbêêng adv far away, Yaure HO pôlû ? adj long, Beng GL gbûlêng, PA gbêlêng

*gbêlî night-2 > Dan (bl, gw, kl) gbêlî. Tura # gbêlî, Guro ST bèlî, Guro (ysaua) bèlî

*gbô poît-2 > Dan (bl, gw, kl) gbô, Tura # gbô n pot; hive, Mano NE, ZE gbôô, Guro BN, VV bôî, Yaure HP, HO pôî, Mwan # gbô, Wan gbô, Beng GR gbô n bowl

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

*gbî son > Dan (bl, gw) gbôî n son; brother's son (for a man); elder sister's son (for a woman), Dan (kl) gbî n son; brother's or sister's son (for both man and woman), Tura # gbê n son, Mano ZE gbê n, Guro ST bî, Yaure HP pî n son, Mwan PM gbê, Wan # gbê n son; elder brother's son

*gbânô thîg high > Dan (gw) gbânô-blâx, Dan (bl, kl) gbâ, Tura # gbânô, gbânô, Guro # bôtô (?), Gban ST gbô, Wan # gbânô, gbânô, blânô (?), Beng GL gbâ

*gbâlông thunder (to) > Dan (kl) gbâlông vi, Tura # gbâlông vi, Mano ZE gbânô n thunder, lightening, Wan # gbâlông

*gbêlê tick > Dan (gw) gbêlê n tick of dog, Tura # gbêêng, Mano ZE gbêêng, Guro GR bêlê-nê

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

*gbê wait-2 > Guro ST, BN, VV bê, Wan # gbê

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

*kânê-gbô calf (anat.) > Dan (gw) gê-gbô, Guro GR gânê-bô ( = gânê-bô ?)  
Most probably, the element gbô in Dan, bô in Guro is the the same as in the lexeme 'pot'.

3.4.14. In yet another correspondence, Guro and (presumably) Yaure have gb-, exactly as 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, they result from independent recent borrowing from Manding or Baule.

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<tr>
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<td>gb</td>
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albino-2 – Dan (gw) gbânôbhê, gbânô n light-skinned albino. Dan (kl) kpâfïlê n albino. Tura # gbânô, Guro BN gbânôbê, Mwan gbânôbê, Wan # gbânôbê n redhead, red-skinned albino (cf. Odienne Jula gbânôbê, gbânôbhê 'light-skinned albino')

box – Guro BN gbô n box, case; suitcase; coffin, Yaure HO gbôgbô (cf. Jula gbôngô, Baule gbôgbô, gbôgbô 'basket')
cannon – Guro GR gbêêng n bomb, Gban ST gbêêng n bomb; burst (< Jula gbêêng)
3.4.15. Before upper vowels, *gb- > b- in Wan:

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<tr>
<td>*gb</td>
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<td>gb</td>
<td>b</td>
<td>p</td>
<td>gb</td>
<td>gb</td>
<td>b</td>
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*gbō excrement-1 > Dan (bl, gw) gbō, Dan (kl) gbō rn excrement, gbōō vr defecate, Tura # gbō, Mano NE, ZE gbō, Guro ST bō, Yaure HB pō, Mwan # gbō n excrement; waste, Wan AT bū, Beng GL, PA gbō

*gbilæ pull (to)-3 > Dan (gw, gp) gbīyyæ, Dan (bh, bn) gbīū, Dan (bl) gbīā, Dan (kl) gbīē, Tura # gbīē vt fix; drag, gbīē-lā vt carry away, Gban ST gbīē vt drag; sing in chorus, Wan # bilă vt pull; draw

*gbilōng trace-2 > Dan (bl) gblō, (gw) gblīyy řrn trace, Tura # gbōlō, Wan blīŋ

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

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<tr>
<td>*gb</td>
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<td>?</td>
<td>b</td>
<td>?</td>
<td>?</td>
<td>gb</td>
<td>gb</td>
<td>b</td>
</tr>
</tbody>
</table>

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

*gbēlāŋ shoulder-2 > Dan (bl, gw, kl) gbā rn shoulder, wing, Tura # gbā, Guro BN bēā-pā, Wan # gbēlō řrn wing; shoulder, Beng # bāŋ-cēj (< gbēaŋ-cēj ?) n wing («shoulder-feathers»?)

3.4.17. As usual, there are leftover sets where some languages display irregular forms difficult to interpret because of their isolated character. They may witness for some morphophonological or phonological features of the proto-language or be just non-cognate:

*gbalē difficult > Dan (bl) gbēē, Dan (gw) # gbāa (?), Dan (kl) gbūū (gbūū-u?) adj difficult; (bl) hard, solid; strong; (bl) vt compel. {Wan # kpālē, kpālē adj difficult; hard, solid; effective; brave,} {Beng GL goī adj difficult}

*gbāŋ shed-2 > Dan (gw) gbā n shelter, Dan (gw) gbāŋ n drier (for coffee, cacao), Tura # gbāā n scaffolding (to chase birds); drier, gbāŋ n drier for coffee, vessels; pallet (poor bed), Guro BN bā, GR bā n shed (for cooking, for rest); enclosure; palaver house {Mwan # kpāa}

*gbēlēŋ squirrel-3 > Dan (bl) gbēŋ, Dan (dh, ka) gbē, Dan (gw) gbēŋ, Tura # gbēŋ. Guro GR, BN bā (?), Yaure HO pāāa, {Gban ST kpō n squirrel (sp.)} Mwan PM gbē, Wan # gbē n western palm squirrel, Beng # gbēēē

*? parrot > Tura # gbāangbāa, Mwan # gāagāa

*gbāŋi smoke-2 > Dan (kl) sē-gbēē. Tura # gbēē, Mano ZE gbēē. {Guro BN gbī, # gbī n smoke; smell (unpleasant), GR cē-gwēi smoke} {Gban ST gimi} Wan # gbāņi, té-gbānī, Beng # gbī

*gbēnā dog-2 > Dan (bl) gbē, Dan (gw) gbē. Tura # gbēē, Mano NE, ZE gbā, Guro ST bènā, Yaure HP plē, Mwan # gbāā, Mwan PM gbāā, Wan AT gbāā-nē, {Beng GL jēŋ,
Beng PA jēŋ n dog; tetanus-like disease believed to result from beating a dog to death or seeing a dead dog

3.4.18. Reconstruction of *kw- in Proto-SM is problematic. As we can see from the sets given in the 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 *kUlE, *kULA, *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-, was it one phoneme or a biphonemic complex.

Let us consider these sets one by one. the set ‘white man’ can hardly be traced back to the 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 gbį (? ) n foreigners.

This root is also represented in South-West Mande, but it is most probably a migrant word. For two other sets, a biphonemic cluster can be reconstructed (according to the above mentioned model of the vowel reduction):

*kleī nest-3 > Tura # kwéè, Gban ST kwéè

*kuè year-2 > Dan (gw) kwèè, Dan (kl) kwèè, Dan (kl, bl) kwèè, Tura # kwéè n year; day, Mano ZE këè, Gban ST kwèè, Beng GL kwèè, Beng PA kùè.

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 “sonant + vowel” clusters in Dan dialects:

*kōj door > Dan (bn, gw, kl) kwēë, Dan (bh, yi) kwēë, Dan (bl) kwēí. Tura # kōj, Mano VV kpōj, Mwan PM kōj, Beng # kpōj (?)

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

3.4.19. Reconstruction of *gw- encounters problems similar to that of *kw-. In the 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 of a weak output) that probably reflects *gw-. Its main features are v- in Mwan and g- (instead of gb-) in Beng:

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<tr>
<td>*gw</td>
<td>g</td>
<td>g</td>
<td>g</td>
<td>k, c</td>
<td>?</td>
<td>v</td>
<td>gw</td>
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?*gwēlēë iroko tree > Dan (bl) gŷŷ, Dan (gw) gyy, Tura # gēlǐ, Guro BN g55lė, Mwan # vē-yrì, Wan # gwē, gwē, Beng # gūē

?*gwī stomach, belly-4 > Dan (gw) gūī, gwūī, guī rn stomach; inner side, Dan (bl) guī, Dan (gw) guī, guī pp in, inside; n (bl) inner side, Tura # gwī rn stomach, gī rn inner side; character; moment; pp in, inside; for, Mano ZE gī rn outside of belly, Yaure HP ci, cī rn inside; stomach, Mwan # vi.

3.4.20. The principal distinction of 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-:

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<tr>
<td>*gw</td>
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<td>g</td>
<td>k, c</td>
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<td>v</td>
<td>gw</td>
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3.5. Sonants

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

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*yáá* bear, give birth-3 > Guro BN yáá vt, Yaure HP ya, Mwan AY yá, Beng # yí
*yúná* bitter-2 > Mano ZE yúná (¿?), Guro BN jánané
*yúŋ* breast-3 > Dan (bl, gw, kl) yúŋ *ru, Tura # yúŋ ru, Mano ZE yúŋ, Guro BN yúŋ *ru breast; nipple, Yaure HO yúŋ, Gban ST yúŋ, Mwan # yúŋ, Wan AT yúŋ, Beng GL yúŋ, Beng PA yúŋ
*yúŋ̌ë came < (Manding yúŋ̌ë) > Tura # yúŋ̌ë, Wan # yúŋ̌ë
*yúñá* cane rat > Tura # yúñá, Guro BN yáñá, Wan # yółé (¿?)
*yúñá* carve (to) > Dan (bl, gw) yáñá, Tura # yáñá, Mano ZE yáñá, Guro BN yáñá, Gban ST ylá, Mwan # yáñá
*yí* day-2 > Dan (bl, gw) yí, Tura # yí n day (in some names of holidays), Guro ST, BN yí, Yaure HP yi, Gban ST yi, Mwan # yi
*yúŋ* descend-2 > Dan (bl) yúŋ *vi descend; vt swallow, Tura # yúŋ
*yí-ë* dream-2 (*sleep + ?) > Dan (bl) yí, Guro BN yí, ST yíë, Gban ST yâ
*yáá* evil > Dan (bl) yáá, yáá, Dan (gw) yáá adj bad; ugly; evil; unpalatable, Tura # yóó adj bad, Mano ZE, VV yóó adj bad; ugly, Guro BN yáá vi be bad, yáñé adj bad, evil, Gban ST yá n evilness; egotism, Mwan # yóó adj bad
*yólö flow (to) > Guro BN yólö, á, Gban GR yó
*yí-ë* good-3 > Mano ZE yí-ë adj good, Yaure HO yí-ë adj good; n goodness
*yáá* grass-3 > Dan (bl) yááa, Gban ST yëë, Wan # yëë n grass; savannah
*yú* fetish, idol > Tura # yú, Guro VV yú, (BN jò n mask of fabric (< Jula)), Yaure HB yú, Mwan PM yó, Wan # yó n fetish; mask
*yí-ná lie down-2 (*sleep + ?) > Guro BN yíá, ST yíá vi go to bed, Yaure yírâ, Mwan # yílá
*yúë* nose > Dan (bl, gw) yúë *ru nose, Dan (kl) yúë (¿?) *ru snot, nasal mucus, Tura # yúü, Mano ZE yúë, Guro yúë, Gban ST yúë, Wan # yëë, Beng # yëë
*yëëlë pet-2 > Dan (gw) yëë-gáa, Dan (kl) yëë, Tura # yëë, Guro BN, GR yëëlë n hole (of animal), burrow, Beng # yëë
*yá* postposition with-2 > Guro yá, Gban ST yé *pp with; by, Wan yá
*yúmë push > Dan (gw) yúmë vi push (sth. – báá); vt gather (together – kwáá), Tura # yóó vi push (sth. – tâ); vt pile, Guro BN, GR yámnë vt push; press
*yá(-na) sit (to)-2 > Dan (bl) yá, Dan (gw) yá, vi sit down; live; seize; begin (do smth – báá) vt make sit down; put, install; wear (hat); cultivate; write, Dan (bl) yáámnë, yáámnë, Dan (kl) yá-áñá vi sit down, Tura # yáá vi sit down; live; marry (of woman; with – gáá); be vigilant (against – gëë); vt make sit down; put, locate; install; give for marriage, Mano NE, ZE yá vi
sit down, vt set, Guro ST yáñá, Yaure HB yáñá vi sit down. Gban ST yë vi sit down; vt seat down; install, put, yá vi put, install, Mwan AY yáñá, Wan yáñá, Beng GL yá
*yí sleep > Dan (gw, bl) yí, Dan (kl) yí n sleep, Tura # yí n sleep, Mano NE, ZE yí, yí n sleep, Guro BN yí n sleep, Yaure HO yí n sleep, Gban ST yí n sleep, Mwan # yí-de vi sleep, Wan # yí vi sleep; pass a night; stay, leave; n dream; sleeping. Beng GL yí vi sleep; vt sleep with, have sex with; n sleeping
*ýâñé sufferance-1 > Guro BN yâñé, Wan # yrá, yrë
*yéñé sun-2 > Dan (bn) yáñá, Dan (gw) yáñá, Tura # yáñá, Mano ZE, VV yéñé, ñlé n sun: day, Guro BN, GR yíllí, Yaure HO yí-de, Gban ST yè-vé, yè-ë, Mwan # yére-té, Wan # yè-té n sun; hour, or élí n day, Beng GL yí-gbyé
*yáðo trade > Guro BN yáñá, GR yáñá, Wan # yáñá
*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 # yí, Wan # yí, Beng GL, PA yí
*yéñé work > Dan (bl) yűř, Dan (gw) yá, Dan (kl) yé (yé?) n work; (bl) vi work, vt make; fix, mend, Mano NE yéñé n farm; agriculture work, or, Mano ZE yá-bó, yé-bó n work, Guro ST yáñá, Yaure HP yná-má, Mwan PM yë, Wan #, VV yëre n agriculture work; work
*yáñá yam (Dioscorea gen.)-3 > Dan (gw) yáñá n yam, Dan (kl) yáñá n staple food. Tura # yáñá, Guro BN yáñá, Yaure HP, HO yáñá, Gban ST yó n soft yam, Mwan # yáñá, Beng GR yáñá

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 a 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 dissyllabic words where the consonant had preceded a labial nasal vowel (‘oil palm’ being the only exception of this rule; the Gban form wó ‘big oil palm’ can be, in fact, non-cognate to the other forms in this set). In Beng (‘yesterday-1’, ‘laugh (to)’) the change occurred in dissyllabic feet before front vowels (cf., however, ‘three-2’ in 3.5.3., where y- < *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

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
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<tbody>
<tr>
<td>y</td>
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</table>

*yómá blood-1 > Dan (bl, gw, kl) yóñá, Tura yóñá, Guro BN, yëëë, GR yëëë, Yaure HP yëëë, Gban ST wó, Wan # yómní, Beng # wáñá
*yóñá eye > Dan (gw) yóñá-gá, Dan (bl, kl) yóñá (-gá) rn eye; look. Tura # yóñí rn, Mano ZE yóñí rn eye, yóñí rn colour, Guro ST yóñí, Guro (nya) VV yóñí, Yaure HO yóñí, Gban ST wó
*yóñó oil-2 > Dan (bl) yóñó, Dan (gw) # yóñó, Dan (kl) yóñó. Tura # yóñó, Mano NE, ZE yóñóë, Guro BN yóñó n oil; fat, Gban ST wó n oil, fat, Mwan # yóñó, Wan # yóñó n oil; fat, Beng # yóñó n oil; fat
*yóñó oil palm > Dan (bl, gw) yóñó n oil palm wine; alcoholic drink, Tura # yóñó n oil palm; plantation of oil palms; oil palm wine, Mano ZE yóñó n wine, Guro BN, Gban ST wó n big oil palm, Mwan PM yóñó, Wan # yóñó, yóñó
?yóñó yesterday-1 > Dan (bl) yóñó, yóñó, yóñóë, yóñó, Dan (gw) yóñó, yóñóë. Tura # yóñó, Mano NE, ZE yóñóë, yóñóë, Guro BN yéëë, yéëë, Gban ST wó (?), Mwan # yóñóë
*yéllí laugh (to) > Dan (bh, gw, yi) yéllí, Dan (bl) yéllí, Dan (kl) yéllí. Mano ZE, VV yéllí vi laugh (at – mó), Guro BN, GR yélí n laughter; smile, Gban ST yéllí, Gban (bk) VV yérëë n laugh, Beng # wlá
3.5.3. The only special feature of the Series 42 is *y- > o- 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 transparent, tonal marks in Tatiana Nikitina’s current version of the Wan Dictionary are preliminary and sometimes controversial. It is not even clear whether this language has a dynamic accent (in addition to tone) or not.

And 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 a striking contrast to the Wan forms of the 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 reconstruction of the suprasegmental level of the Proto-SM.
interest is the form for ‘tree’ in Dan-Gweetaa and Dan-Kla, for which may be reconstructed a following process: *yâli > *yâli > *lû > *ûr. I.e., unlike in other words of this series, and unlike in Dan-Blo, the resulting *l- was reinterpreted into a «true» initial consonant, which is /l/.

Taking into account a week output 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 *l- in Dan dialects occurs when the vowel of that syllable can be reconstructed as non-back and 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 the modern Guro (Vydrine 2003).

Series 43

- *yôla tie-I, bind > Dan (bl) îl, Dan (gw, bn) îl vt truss; (bl) tie; catch; steal, Dan (kl) yîlû vt tie, fasten; truss, Tura # yeèlè, Mano ZE, VV yeèlè, Guro BN yeèLè, -â, Yaure HB yîlû vt tie; plait, Gban ST yeè vt attach, Mwan # yrè, Beng # yrû
- *yôli tree > Dan (gw, kl) duû, Dan (bl) luû, Tura # yîlî, Mano NE, ZE, VV yîlî n tree; stalk, stem, trunk; wood, Guro ST yîLi, Mwan # yrû, Wan # yrû, Beng PA yîlî, GL yîrà n tree; wood

3.5.5. In the 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 a weak output of the series provides insufficient data to establish rules. The proto-phoneme that can be reconstructed for this series is *j-.

Series 44

- *jâûmâ (or Ñ-jâûmâ?) cat-I > Dan (gw) yûmàa-nû, Dan (kl) yàâmû-nû, Dan (bl) yàû, Guro BN zàwû-nû, GR zàû, Gban ST yàû, Beng GL jàmà n cat, jâkûmà (< Jula?) n bushbaby, galago
- *jôrî chain > Dan (bl) yôs, Tura # yôàs-éè, Mano ZE yôs n chain; necklace, Mwan # yrû, Beng # jôrî
- *jâsà fence (< Jula jása ?) > Dan (bl) yâsà n fence; yard, Wan # jôsà
- *jâlà lion > Dan (gw) làà, Dan (kl) yirà, Dan (bl) làà, Tura # yàà, Guro BN jéLà, Yaure HO jàLà, Mwan # jrà, jàrà, Wan # jrà, Beng GL jàtà n leopard (< Jula?), jrà n lion
- *jâbà onion > Dan (kl) yâbà, Tura # yâbà, Mano ZE yâbà, Guro BN jàbà, gàbà, GR jâbà, Yaure HO jàbà, Gban ST jàbà, jàà, Beng GL jàflà, PA jàflà
- *jûfà pocket (< Manding jûfà < Arab. jawf cavity, hollow ?) Dan (bl) yûfà, Dan (gw) yûfà, Dan (kl) yêè, Mano ZE yûfà, Mano VV yîfà, Beng GL jûfû, Beng PA jûfà (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:
- *jêsè thread-I > Dan (gw, gp) yêè, Dan (bl) yêè, yêè, Dan (kl) yêè n cotton, Tura # yêè, Mano VV yêè, Beng GL jêsè n thread; cotton (< Manding jêsè ?)
- *jôsà net > Dan (kl) yôs n fishing net; hammock, Mwan # yôsà n hammock, Beng GL jôsà, PA jô, jô n hammock, GL jô n fishing net (< Jula jôsà)
3.5.7. In the common case, Proto-SM *w- > w- in all the daughter languages.  

<table>
<thead>
<tr>
<th>Series 45</th>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
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</thead>
<tbody>
<tr>
<td>*w</td>
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</table>

*wi: affair, matter-2 > Dan (bl) wù, Dan (gw) wó, Dan (kl) wò (wò?), Tura # wúí, Mano NE, VV wò n deed, matter, Guro # wí, Yaure HO, HP:85 wí, wí, Wan # wó vi become; last long; vt perform, accomplish, Beng # wó vt do  
*wi break (to)-2 > Dan (bl) wúí, Dan (kl) wùí, Tura # wíí, Mano ZE wí vt break, shatter, Guro BN wíí, -ê, Gban ST wíí, Mwan # wí vt break, destroy, Beng # wíí  
*wiú: cry-1 > Guro ST wúí, Guro BN wúí n cry, Yaure HB wúíí, perf. wúíí v cry, Gban ST wóí cry, Mwan AY wíí n weeping  
*wií: enter-2 > Guro BN wóíí, Mwan # wóíí vi enter, vt let in, Wan # wííá, wííá vi enter; vt put on, wear  
*wéí: face-2 > Dan (bl) wýí, wýíí-dé, wýíí-déí, Dan (kl) wýíí-lííí, Tura # wéíí, Mano NE wéíí, Mano ZE wéíí, Gban ST wáíí face; appearance; aspect  
*wálá knife-6 > Tura # wáláíí, Mwan PM wáláíí  
*wá: lie down-3 > Dan (bl) wáíí, Dan (gw) wáíí vi lie down; spend a night; live; vt put (on – ká), Mano ZE wáíí, Gban ST wóíí vt put  
*wíí: meat, animal-2 > Dan (bl, gw) wúíí, Dan (kl) wúíí, Tura # wííí, Mano NE, ZE wííí, Guro BN wííí, Yaure HP wííí, Gban ST wííí, Mwan # wííí, Wan # wííí, wííí  
*wéíí: monkey-3 > Dan (bl) wóíí, Dan (ka) wóíí, Tura # wéííí, Mano NE wéíí, Yaure HO wéííí, Gban ST wíííí (?!) n monkey (sp.), Mwan # wóííí, Wan VV wéííí n monkey (any sp., except for chimpanzee)  
*wáíí negative copula-5 > Mano waíí, Beng # wáíí  
*wíí: oilpalm grain > Dan (bl, gw) wéíí, Dan (kl) wéíí, Tura # wéíí, Guro BN wíííí n kernel of oilpalm grain  
*wéíí: pour-3 (to) > Dan (gw) wéííí, Dan (kl) wéííí vt pour away, throw away; sow (by throwing), Tura # wéííí, Guro #, BN wéííí vt pour, spill  
*wéíí: search-2 > Guro BN wéííí, hab. wéííí vt search, look for; have sex with (woman), Yaure HB wéííí, Mwan # wéííí vt desire; make love with (of man)  
*wéíí: tail-1 > Dan (bl) wéíííí, Dan (bl, gw, kl) wéíííí, Tura # wííííí, Mano VV wóíííí, Guro ST wóíííí, BN wóíííí, Gban ST wíííí tail; end; backside, Mwan # wéííí, Wan VV wéíííí  
*wágá: thousand-2 > Dan (kl) wáíííí, Tura # wáíííí, Mano VV wáíííí, Mwan # wáíííí, Wan wáíííí  
*wáááíí time-3 (< Arab. waqt) > Tura # wáááíííí, Mwan CF:77 wáááíííí, Wan # wáááíííí (independent borrowing into single languages is also probable)  
*wéíííí: voice > Dan (bl) wéíííí, Dan (gw) wéíííí, Dan (kl) wóíííí n voice; speech; language, Mano VV wóíííí, Mwan # wóíííí vi speak.  

In Kla-Dan, we have palatalization of the sonant before -i, *wi > yi:  
*wií: speak-3 > Dan (bl) wéíííí, Dan (gw) wíííí, Dan (kl) yií vi, Tura # wíííí vi speak; cry (of birds); greet (smb. – bá), n talk, chat, Mano ZE, VV wéííí n word, speech, Guro wéííí (wííí?) vi speak, produce a sound, Yaure HB wííí, impf. wéííí vi speak, Yaure HP wéííí n language, Mwan wéííí vi speak, Wan # wéííí n speech, Beng # wéííí n voice; language  

3.5.8. In Wan *w- > ø- in the same suprasegmental context as the abovementioned (cf. 3.5.3.)  
*ø- > ø (see also the sets ‘urine’ and ‘salt’ below). A side effect is the labialization of the remaining vowel (*wE > U):  

<table>
<thead>
<tr>
<th>Series 46</th>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
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<td>*w</td>
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</tbody>
</table>
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 the Proto-SM vocalism is done, it is difficult to formulate the conditions in which this change took place; let us just assume that the main factor was of prosodic character.

**Series 47** (see also the set ‘mortar-3’ in the division 3.5.8.)

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
<th>Yaure</th>
<th>Gban</th>
<th>Mwan</th>
<th>Wan</th>
<th>Beng</th>
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<td><em>w</em></td>
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</table>

**wèlé louse-3 > Dan (bl) lỳỳ, Dan (bh) wìỳ, Dan (gw, kl) wèè, n body louse, Mano VV wèè n headlouse, Guro LS wólì, BN wóì, Guro VV wèì n body louse, Wan wèŋ**

**wòlò pick up > Dan (bl) lòò vt pick up (leaves), Dan (gw) wìỳ, Tura # wòò, Gban ST wì5 vt pick up one by one, Beng # wè**

**wèlé rise (to)-2 > Dan (bl) lùù, Dan (gw, kl) wùùùù, Mano ZE, VV wèìɛ, wèlé vi rise; get up (out of bed); fly**

**wùlè under-2 > Dan (bl) lỳỳ, Dan (gw) wìỳììì, glwòùù pp under, below; toward, Tura # wàlà (?) pp under, below, Mano ZE wìì n bottom, lower part; floor; pp under, below, Guro ST wùòò pp under**

**wòñè worm-2 > Dan (bl) lỳỳìì, Dan (kl) wìììì n dew-worm, Tura # wìììì n dew-worm, Mano NE, ZE wèñè, Gban ST wì5.**

3.5.10. In Gban *w-* > m- in nasal feet before a back rounded vowel; the only Beng form in this series, ‘urine’, has ɲm-. 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**

<table>
<thead>
<tr>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
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<th>Mwan</th>
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<tr>
<td><em>w</em></td>
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<td>w</td>
<td>m</td>
<td>w</td>
<td>ɲm</td>
</tr>
</tbody>
</table>

**wòñà gray hair > Dan (bl) wlàà, Dan (gw, kl) wìàà n gray hair; (bl) mane (of donkey, horse), Tura # wààà, Guro BN wòñà, Gban ST mùà**

**wùñì hair-3 > Dan (bl, gw) wùì, Tura # wùí-kwëè, Mano ZE wììì, {wììì}-wùì, Guro ST wùì, BN, GR wìì n hair; pp on, on the top, Gban ST mìèì, Mwan # wìììì, wìì**

**wùñì urine > Dan (bl) wèèìì, wèèìì, Dan (gw) # wèìì, Dan (kl) wìììì, Tura # wìììì, Mano ZE wèìììì, wèìììì, Mano VV wèìììì, Guro VV wùìììì, Guro BN wòìììì. Gban ST mùìììì, Wan GR ɲìììì, ììììì, Wan # ɲìììì, Beng GL mwòìììì, PA ɲmììììì (?)**
There is a half dozen sets where g- appears sporadically in Mwan, Wan, Guro, Beng and corresponds to w- of the other languages:

money > Dan (bl) wáãú(-gã), Dan (gw) wáã, Dan (kl) wáã, Tura # wëí n silver, Mano (Nzerekore) VV wëyí, Mano (Lola) VV wálé, Guro BN gõlí, gõëí, # gwëí n silver?
money?, Mwan # gôlí, Wan # gôlí, Beng # wâlí

thousand-1 > Dan (gw) # gbl é íÉ (< *gôlí ?), Guro wûlû BN two hundred (Zuénoula), two thousand (si), Gban ST wûlû

salt > Dan (gw) wëë, Dan (kl) kwëë, Dan (bl) kwëë (?), Tura # wëë, Mano ZE, VV wëë n salt; soap (potash?), Guro BN wëë, Gban ST gëë, Mwan CF:56 wëë, Wan # 5

fly, spring (to)-3 > Dan (gw, kl) wëë, Dan (bl) hëë, Wan # glûj, glûj vi fly; spring; evaporate

pestle Dan (bl) wëñj, Tura # wëë, Guro BN wûnî, Mwan # vîj (< *gûlû ?)

Reconstruction of the proto-forms 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, they 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 wëri/û, wâri, wëri, Mandinka kódi n silver; money, Jaxanka kod-o, Xasonka gôdi n bracelet, Kagoro wôri, Maninka wâdi, wôri n silver; money, Bamana wârî n silver; money: price, Marka-Dafin VV wari, Kong Jula wâri, Soninke godo/e, pl. -o n metal; monetary unit; five francs coin; gold decoration

thousand – Loko wulu, Soso wûlû, Mandinka wûlû, Odienne Jula wûlû, Bozo-Tieyaxo gulu

A special problem is represented by the set ‘head-1’.

head-1 – Dan (gw) gõõ, Dan (bl, kl) gõõ rû head; edge; handle (of instrument); theme, Tura # wû rû, Mano ZE wû-kêlê, Guro BN, ST wû-ô, Yaure HO wûlô rû, Mwan # ñgblô, ñgblô, Wan # bô-ñgblô, Beng GL ñlû, Beng PA wûlû

The set is very irregular, it suffices to say that it is the only word in Mwan with a prenasalized consonant. It looks as if some languages (Mwan, Wan, Beng; probably Dan) have conserved a trace of some unproductive prefix ñ- that prevented the initial consonant of the stem from the weakening. Anyway, this problem needs further consideration.

One of the solution would be to consider the forms beginning with g- as non-cognate to the forms in the other languages. Another solution is to reconstruct a separate velar proto-phoneme, for example *x-, which would be supported by the West Mande evidence (cf. Xasonka xûjy ‘head’, xôixo ‘salt’).

4. The reconstructed proto-SM system of initial consonants is as follows:

<table>
<thead>
<tr>
<th></th>
<th>*p</th>
<th>*t</th>
<th>*k</th>
<th>*k'p</th>
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<td>*d</td>
<td>*j</td>
<td>*g</td>
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<td>*f</td>
<td>*S</td>
<td>*x</td>
<td>*gb</td>
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<td>*z</td>
<td>*m</td>
<td>*y/n</td>
<td>*k</td>
<td>*kw'</td>
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</tbody>
</table>

Abbreviations
adj – adjective

This fact has created a special problem for the practical orthography of Mwan.
References


### Appendix: Correspondences of initial consonants of South Mande languages

<table>
<thead>
<tr>
<th>Series</th>
<th>SMande</th>
<th>Dan</th>
<th>Tura</th>
<th>Mano</th>
<th>Guro</th>
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<td>p</td>
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<td>f</td>
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