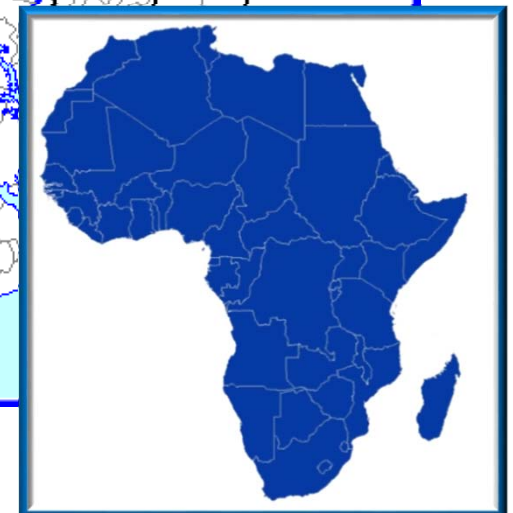
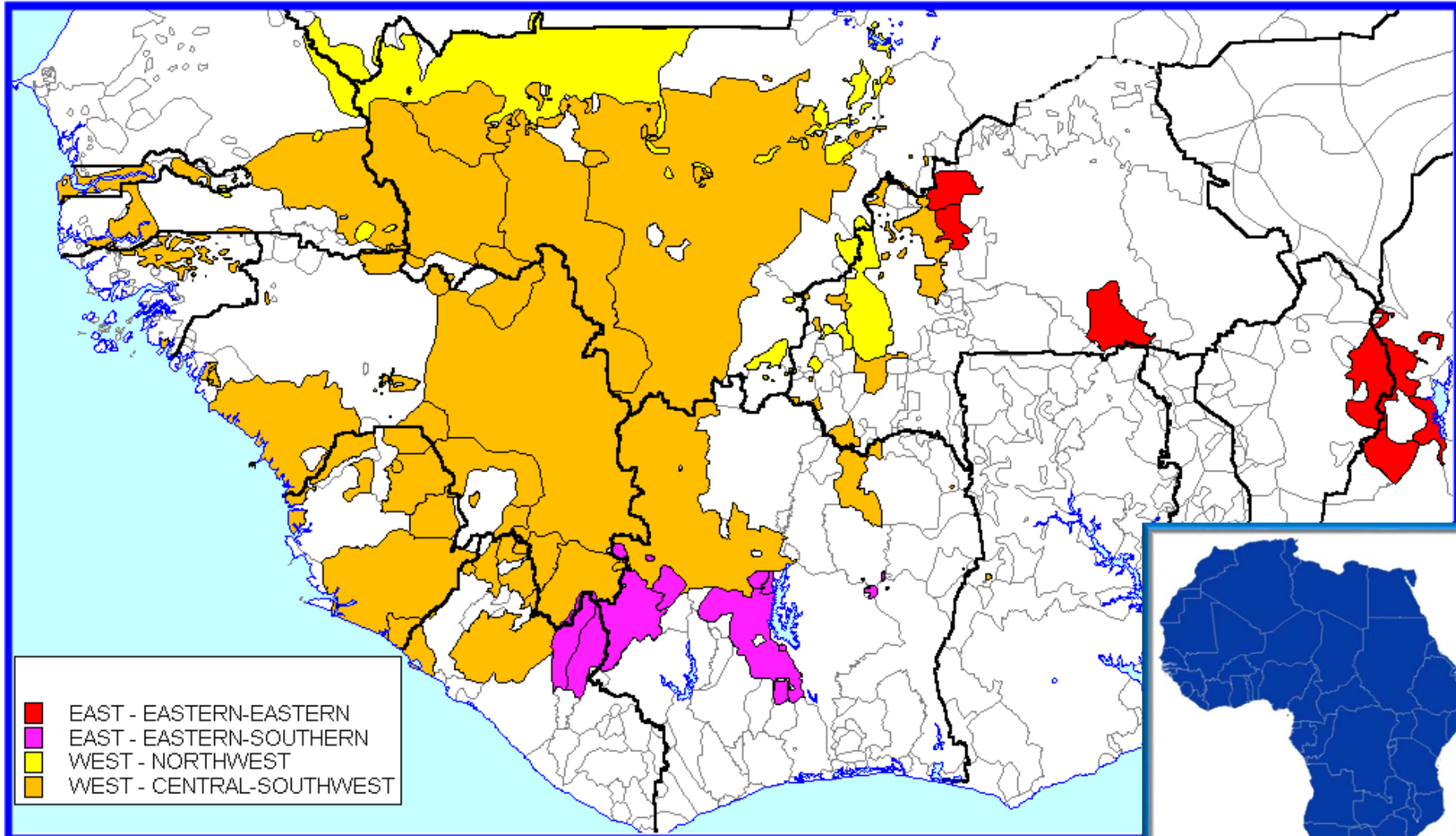


MANDE TONAL RECONSTRUCTION: MAKING SENSE OF TONAL ASYMMETRIES BETWEEN WORD CLASSES AND WORD SHAPES

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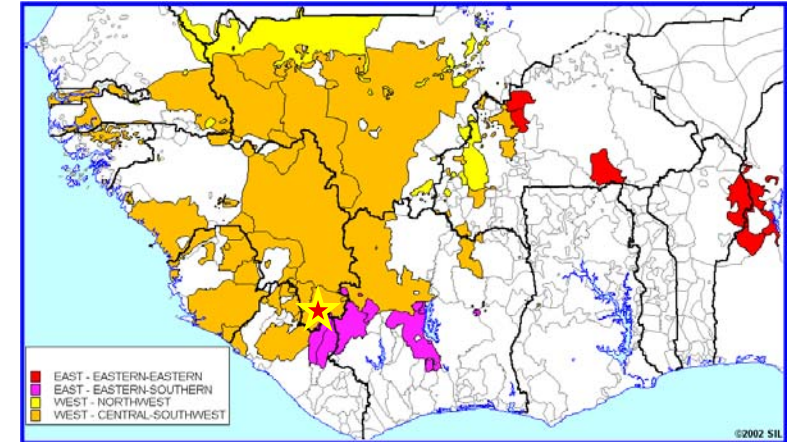
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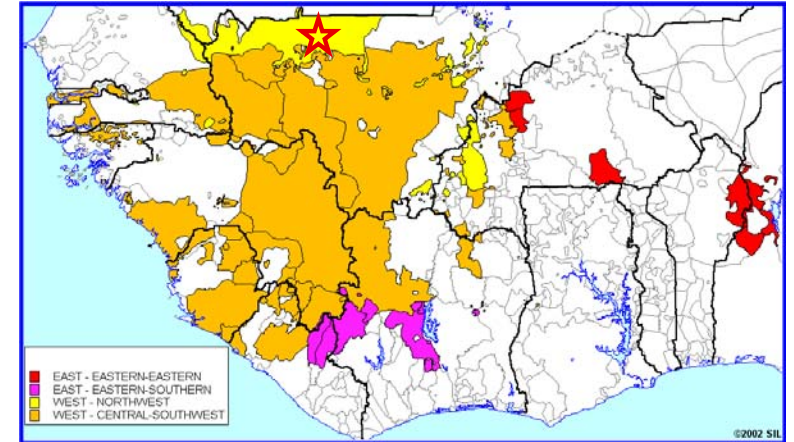
- **Asymmetries** in the tone patterns available for words of different **categories** and **shapes**
 - light (single TBU: monomoraic, monosyllabic) stems vs. heavy stems
 - verbs vs. nouns vs. other
- These asymmetries are usually in terms of **subset inclusion relations** (i.e. **restrictions** on the tone patterns available) rather than set intersection or set disjunction.
 - **light** (single TBU: monomoraic, monosyllabic) stems vs. heavy stems
 - **verbs** vs. **nouns** vs. other
 - **all L** pattern

- **Guinean Kpelle**
 (WM; Konoshenko 2018)

- TBU = μ
- **2 tone levels:** L, H
- **underived stems** distributed among 6 tone classes: H, L^H, HL, LHL, L, LH
- **1 μ stems** can be H, L or L^H..
 e.g. monomoraic **functional morphemes** functional morphemes: *bé* 'here', *bà* 'on', *dì^H* 3SG.BASE
- **1 μ verbs & nouns** can be **only H**, e.g. *yá* '(n) water' and *kó* '(v) fight'

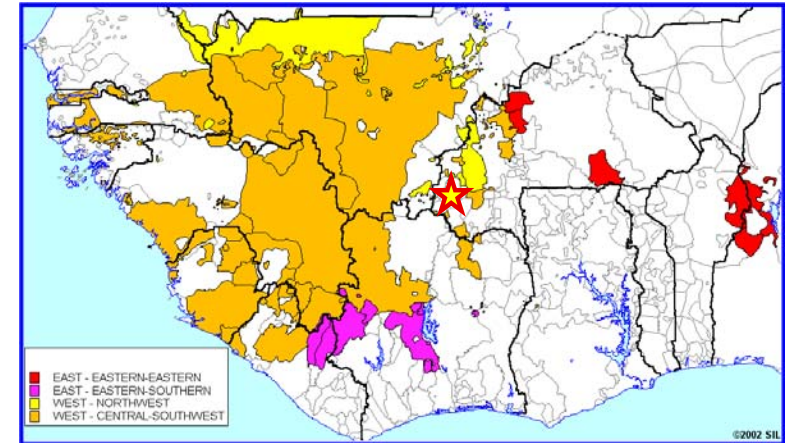


- **Soninke**
(WM; Creissels & Urmanchieva 2018)
 - TBU = σ
 - **2 tone levels: L, H**
 - **1σ stems** can be H, L and L H, but not HL (or LH).
 - **1σ verbs & nouns** can be **only H** or L H
 - more generally, **verbs, nouns & adjectives** must have **at least one H**

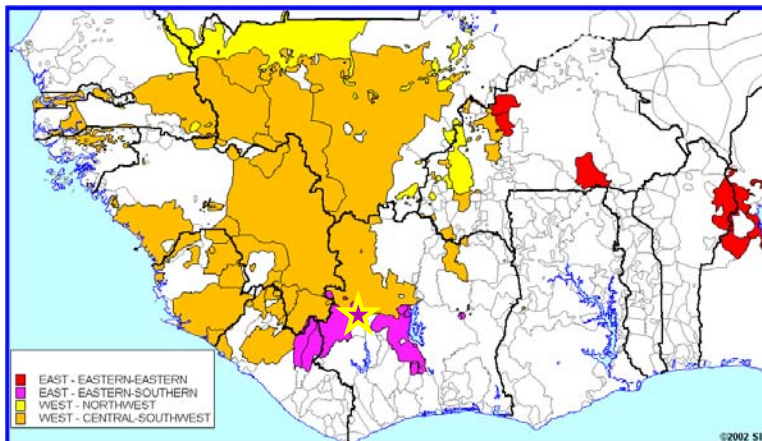




- **Dzuun**
(WM; Solomiac 2007)
 - TBU = μ
 - **3 tone levels:** L, M, H
 - **1 μ stems** can be H, M, M^H , L and L^H .
 - **1 μ nouns** can be **H, M, M^H , L** or **L^H**
 - **1 μ verbs** can be **only H, M^H** or **L^H**



- Such tonal asymmetries offer an invaluable **window on the history** of tone systems that have them.
- I will take **Tura** (SEM; Côte d'Ivoire) as an illustration of how tonal asymmetries can be fruitfully exploited for purposes of tonal reconstruction with some far-reaching implications for the tonal reconstruction of Mande as a whole.



- **Inventory & combinatorics:**
 - TBU = μ
 - **4 tone levels:** B (“bottom”) \grave{a} , L \grave{a} , H \acute{a} , T (“top”) \acute{a}
 - **1 μ stems** can be B, L, H, T.
 - **2 μ stems** are predominantly (N) / obligatory (V) **flat** (monotonal). 2 μ N can sometimes have **falling** and rarely rising contours.



- **Stem shapes & word categories:**
 - major stem shapes → nouns & verbs: CV, CVV, CVLV.
 - minor stem shapes → nouns: CV(L)(V)η, CVVV
 - minor stem shapes → functional morphemes: V, VV, Vη

- **Stem weight:**
 - In synchronic processes, morae tend to be preserved
 - Diachronically, 2μ maximality constraint vs. faithful preservation of the weight of 1μ and 2μ stems

ń dǎó òó = à nǔ 6é
1SG.NS elder.brother 3SG.NEG.PFV = 3SG.NS give yet
'My elder brother has not given it yet'.

→ ń dǎòòóò nǔ 6è



- The **full 4 tone level range** is exploited only on 2 μ nominal stems and on 1 μ personal pronominal stems (STAMPs)
- **1 μ N stems** can be T, H and B
- **1 μ PP stems** can be T and B
- **1 μ V stems** can be T and H
- **HYP:** 1 μ V stems faithfully reflect **the original 2-level tone system** with the present T < *H and H < *L, while the present L and B also both go back to *L.



- **HYP:** In 1μ stems:
 - $*H > T$
 - $*L > H, L, B$
- We need to show that H, L, B in 1μ stems derive from one $*L$

- **L** has a **clearly secondary status** in the system, as it is only possible on a limited number of 1μ functional stems
e.g. *lè* FOC, *zà* CONTR, *(y)à* 3SG.PRF
- **tonal sandhi**: μ H, L, B > L / _ final pause \rightarrow T vs. L
(except: (i) H < *T, (ii) B / B _ final pause)
- In a 4-tone level system, we have at least 3 cases where **the opposition** is actually **binary**, viz. **T vs. non-T**:
 - T vs. H in 1μ V stems
 - T vs. B in 1μ PP stems
 - T vs. L for lexical H before a final pause.
- What is the status of the **B tone** in **1μ stems**, especially nouns?

unique stems	B	H	T	total
N	13	35	30	78
V	0	29	22	51
PP	7	0	5	12
modifiers	3	2	1	6
other	13	16	22	51
total	36	82	80	198

unique stems	B	H	T
N	36%	43%	38%
V	0%	35%	28%
PP	19%	0%	6%
modifiers	8%	2%	1%
other	36%	20%	28%
total	100%	100%	100%

unique stems	B	H	T	total
N	13	35	30	78
V	0	29	22	51
PP	7	0	5	12
modifiers	3	2	1	6
other	13	16	22	51
total	36	82	80	198

nouns	B	H	T
borrowings	8	2	6
CF	6	NA	NA
total	13	35	30

nouns	B	H	T
borrowings	62%	6%	20%
CF	46%	NA	NA

- **B tone** is also a grammatical **replacive tone** in [N1 N2] head-marked possessive construction, where N1 is a (non-specific) modifier and N2 is the head (in its **Construct Form** marked by B tone).
- A very high proportion of B tone 1 μ nouns are transparent **borrowings** and **CF** → **B tone should not be reconstructed**.



- A very high proportion of B tone 1 μ nouns are transparent **borrowings** and **CF** → **B tone should not be reconstructed.**
- **B tone** is also a grammatical **replacive tone** in some **verb forms**
- **B tone** is likely to have entered the system primarily through the evolution of the **tone of the 3SG.NS pronoun *à**, which has also been the **source of the tone of the CF marker**
- The role of the B tone in the system was later **reinforced by borrowings**
- Compare Dwyer (1973), who argues for **SWM** that most new tone patterns entered the system through the grammatical tone in [NN] modifying constructions (compounds).

- **2 μ stems** are predominantly (N)/ obligatory (V) **flat**
- Only **2 μ Ns** can be all B.
- A high proportion of **all B 2 μ Ns** are probable **borrowings** and **CF**, as well as **proper names** → **all B tone pattern in 2 μ Ns should not be reconstructed.**

- **2 μ stems** with **flat tone patterns other than all B** can **primarily** be reconstructed as follows:
 - TT < *HH
 - HH < *HL
 - LL < *LH

- But the reconstruction is more complicated than in 1 μ stems...

	Tura (4 levels)	Dan-Gw (5 levels)	G. Mano (3 levels)	
*H	T	H	H	*dó 'go'
*L	H	M	M	*pà 'fill'
*HH	TT	T	HH	*táá 'walk'
*HL	HH	?M	?M(M)	*dǒǒ 'cough'
*LH	LL	B	B	*kòó 'hand, arm'

■ Some **irregularities**:

- **yíí* 'water': Tura *yíí*, Dan-Gw *yíí*, Mano *yíí*
 but Tura has regular *yíí-yè* 'wet' (-*yè* NMLZ)
- **yáá* 'eye': Tura *yáá*, Dan-Gw *yáá*, Mano *ɲèè*
 but Tura has regular *yáá* 'sight'

- Even such exuberant tone systems as that of the languages of the **DMT group** with their 3-5 tone levels can be safely brought back to an **earlier 2-level tone system**.

Most likely, the **emergence of new tone levels** in DMT **postdates the split of the DMT group**.

- Given that the same can also be argued for the tone systems of WM languages which are usually much more modest (cf. Dwyer 1994 on Bobo), **Proto Mandé** can be equally **safely reconstructed with just two tone levels**.

- Proto-Mande **TBU = μ** (it distinguished between **CV** and **CV:** stems)
- **1 μ** CV stems could be only L or H, while **2 μ** CV: stems could also have contours, at least LH
- In Proto-Mande, **personal pronouns** of all persons were ***L**.

In Tura, non-subject personal pronouns are 1 μ stems with H, L or B tone all reflecting *L.