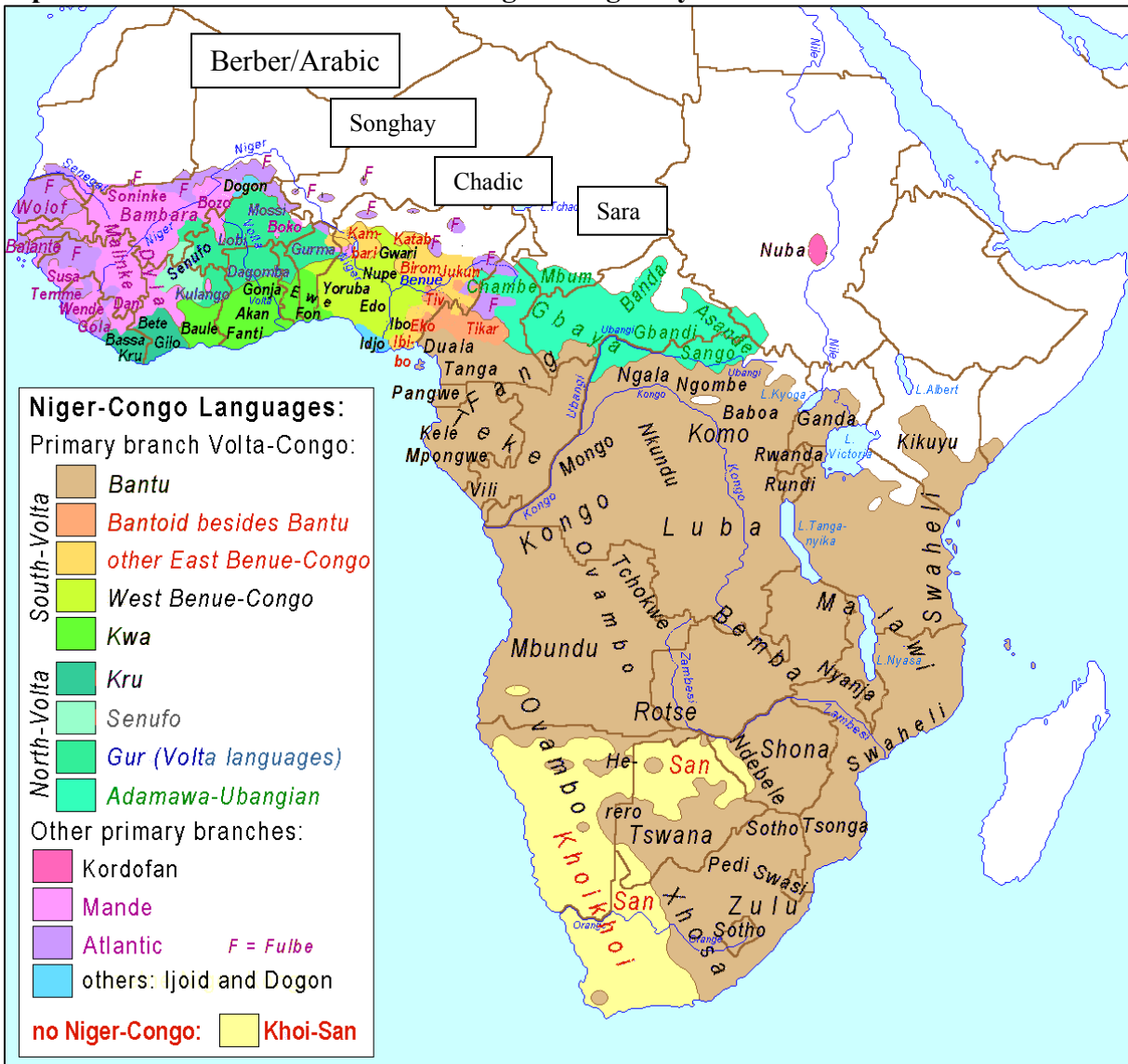


An Areal Typology of Nasal Vowels in West and Central Africa

[1] Presentation today

- [1] There exist two large, contiguous Nasal Vowel areal zones
 - (1) West African Nasal Vowel Macro-Zone
 - (2) Central African Nasal Vowel Macro-Zone
- [2] There also exist five Oral Vowel Zones 1-5
- [3] The West African Zone can be divided into two parts
 - Nasal Vowel Zone Core and Zone Periphery
- [4] Core show almost categorical absence of nasal vowels /ẽ õ/
- [5] Languages in the periphery more varied in terms of presence/absence of /ẽ õ/
- [6] Phonetic research predicts the gap of /ẽ õ/
 - However phonetic determinism is not invoked here

[2] Map – Liberal view of families within Niger-Congo Phylum



[3] **Phonology background – Common Oral Systems**

- a. Advanced Tongue Root [ATR]/[+ATR] versus Retracted Tongue Root [RTR]/[-ATR]
 - i. /i ɪ e ε ə a o ɔ u ʊ/ OR /i̠ i̠ e̠ e̠ ə̠ a̠ ɔ̠ ɔ̠ u̠ ʊ̠/ (in pairs)
 - ii. Common oral vowel system: /i e ε a ɔ o u/
- b. 7 vowel contrasts far more common than canonical 5 vowel contrasts

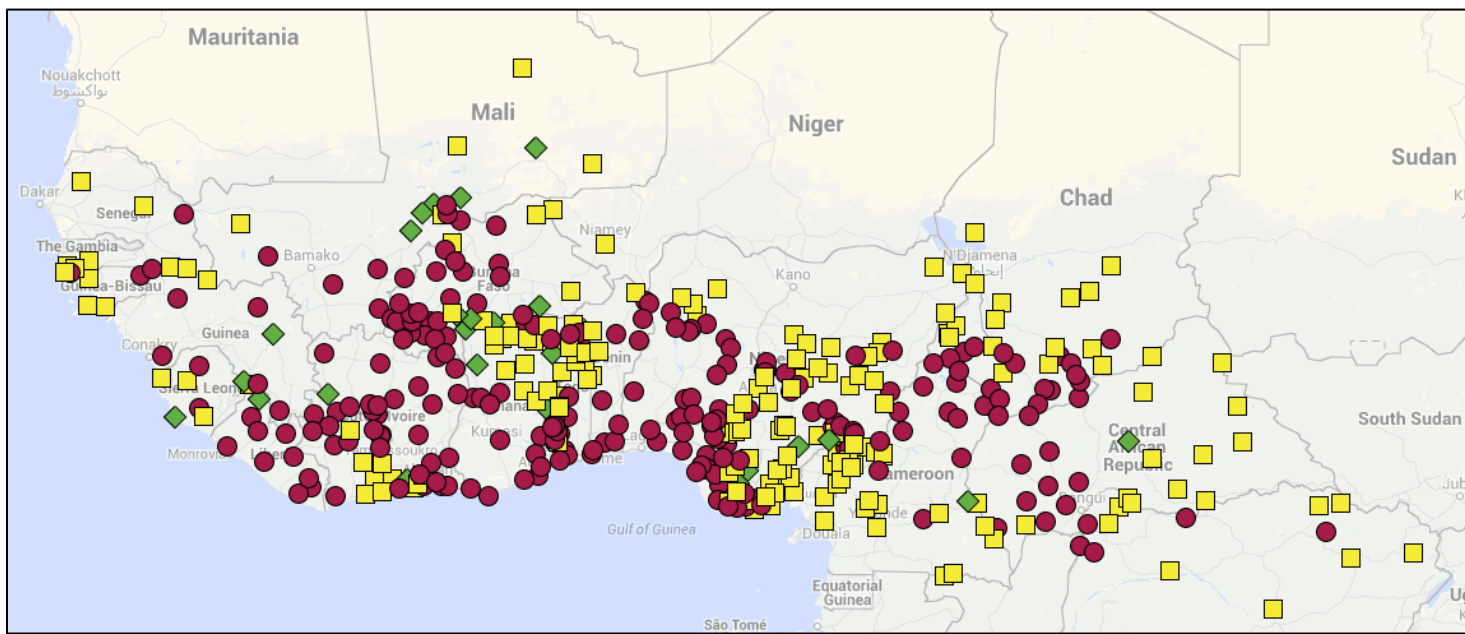
[4] **Nasal Vowel Macro-Zones**

- a. **West African Nasal Vowel Macro-Zone**
South of the Sahel Guinea, Liberia, central to Northern Ivory Coast, Central to southern Ghana and Togo, most of Benin, up to western Nigeria
- b. **Central African Nasal Vowel Macro-Zone**
Northern Cameroon, Very south of Chad, Western half of Central African Republic

[5] **West African Oral Vowel Zones 1-5**

- a. **1 – Atlantic Oral Vowel Zone** - Senegal region - mainly Atlantic languages, Some Mande languages
- b. **2 – Ivoirian Oral Vowel Zone** - Southern Ivory Coast - composed of Eastern Kru languages, Some Kwa languages
- c. **3 – Ghanaian Oral Vowel Zone** - Northern Ghana/Togo stretching into Burkina Faso - consists largely of Gur languages, but many Kwa languages
- d. **4 – Upper Nigerian Oral Vowel Zone** - Northern Nigeria stretching easterly into Chad, and westerly into Niger; many Chadic languages
- e. **5 – Lower Nigerian Oral Vowel Zone** – SE Nigeria stretching into Lower Cameroon and into Bantu Spread Zone ; many Benue-Congo languages

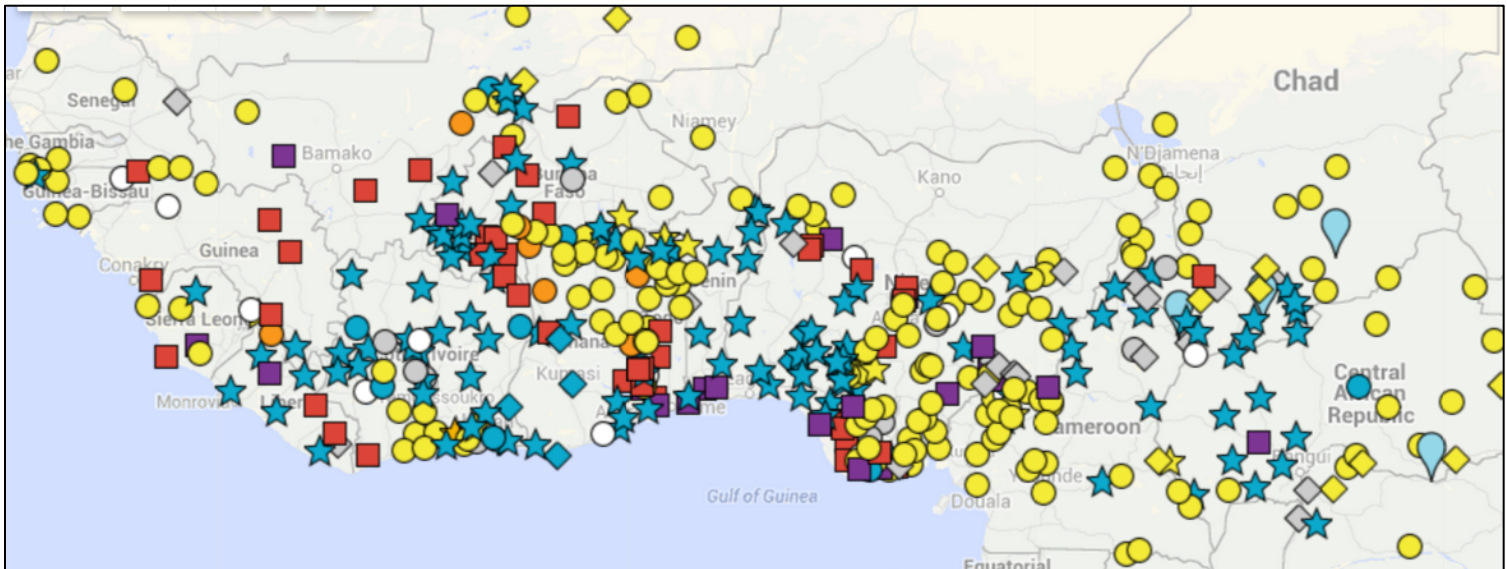
[6] **Map 1 – Distribution of absence vs. presence of contrastive nasal vowels**
(Absence = **Yellow** ; Presence = **Red** ; Conflicting Analyses = **Green**)



[7] **Nasal vowel inventory pattern – Major patterns**

- **Oral – no contrastive nasal vowels**
 - Noyo: /i e ε a ɔ o u/
- **Nasal – no nasal counterpart missing**
 - Bambara: /i e ε a ɔ o u/ /ĩ ẽ ẽ̃ ã ã̃ õ ã̃/
- ★ **Nasal - / ẽ õ / missing**
 - Edo: /i e ε a ɔ o u/ /ĩ ẽ ã ã̃ õ/
- **Nasal – no nasal counterpart missing – restriction on ẽ õ**
 - Some Ijò lects: /ẽ õ/ found only in ideophones, or in diphthongs
- **Nasal – other missing**
 - Ebric: /i e ε a ɔ o u/ /ẽ ã õ/
- **Other Nasal – e.g. Those with only three heights**
 - Soninke: /i e a o u/ /ĩ ẽ ã õ ã̃/

[8] **West African and Central African Nasal Vowel Macro-Zones**



[9] **West African Nasal Vowel Macro-Zone [SEE NEXT PAGE]**
Core Nasal Vowel Zone (Blue Stars), Peripheral Areas (Red and Purple Squares), and Oral Vowel Zones (Yellow Circles)

Red dashed lines indicate controversial peripheral areas

[10] Full references, Google Map link, and manuscript version of this talk are available upon request.
[NOTE: Statistics for this paper are constantly being updated as new sources are processed.]

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