

How databases shape research: labial-velars distribution in Africa

Guillaume Segerer

ギヨーム・セジェレル

LLACAN (CNRS-INALCO) – FRANCE - フランス

The experiment

Look at a relatively
well-known linguistic feature
through
online linguistic databases (ODBs)

Aims of the experiment

- Show how online databases differ
- Look at the consequences for research

and eventually

- Try to capture the nature of the areal distribution of labial-velar consonants in Africa

The well-known linguistic feature

Presence vs absence of labial-velar consonants
in the phonological inventory

- distribution already known (restricted to Africa - except Amele and Yeli Dnye, both in Papua New Guinea)
- apparently easy to decide

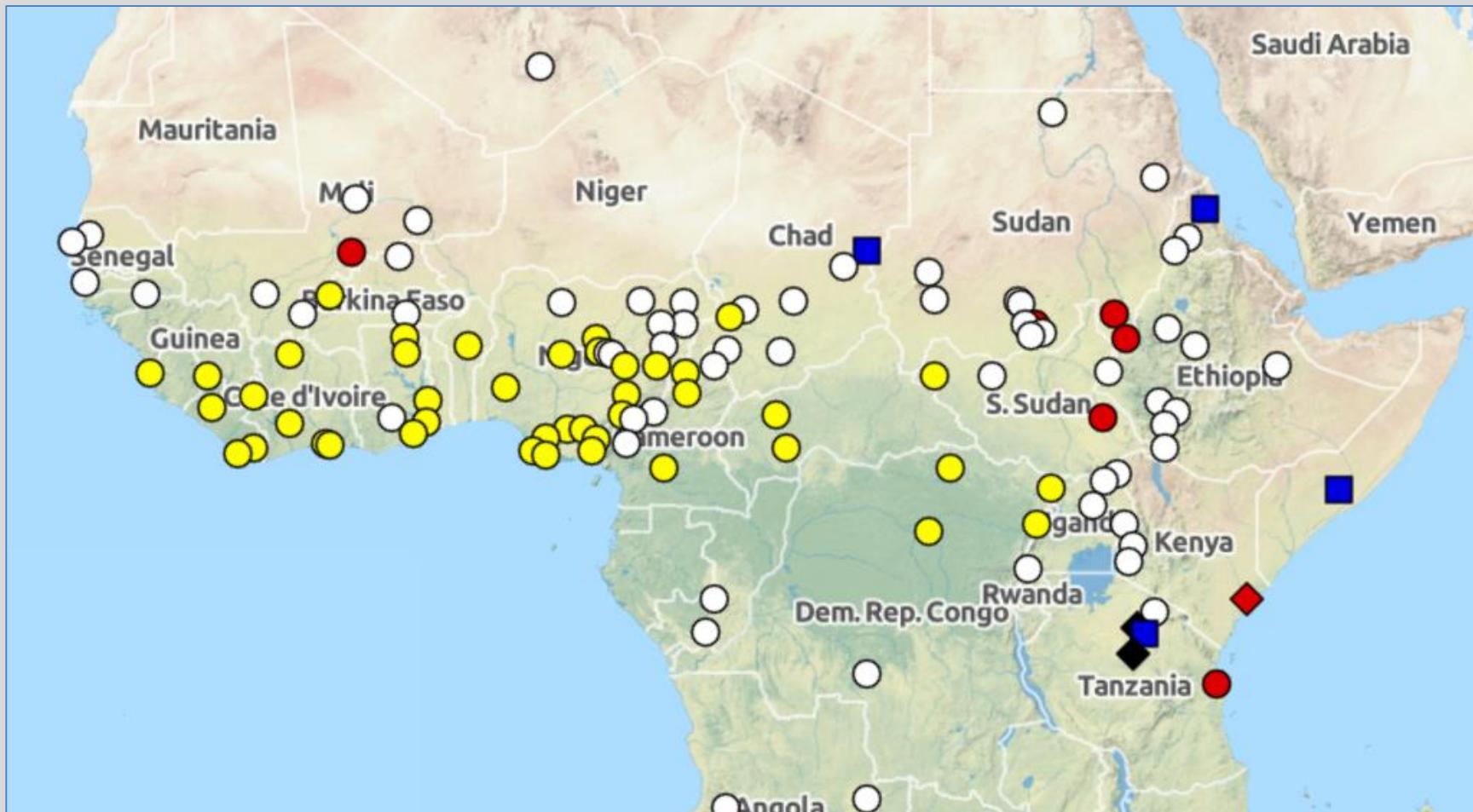
The online databases

- WALS : <http://wals.info/>
- PHOIBLE : <http://phoible.org/>
- LAPSYD : <http://www.lapsyd.ddl.ish-lyon.cnrs.fr/>
- RefLex : <http://www.reflex.cnrs.fr>

LAPSYD: 14 lgs

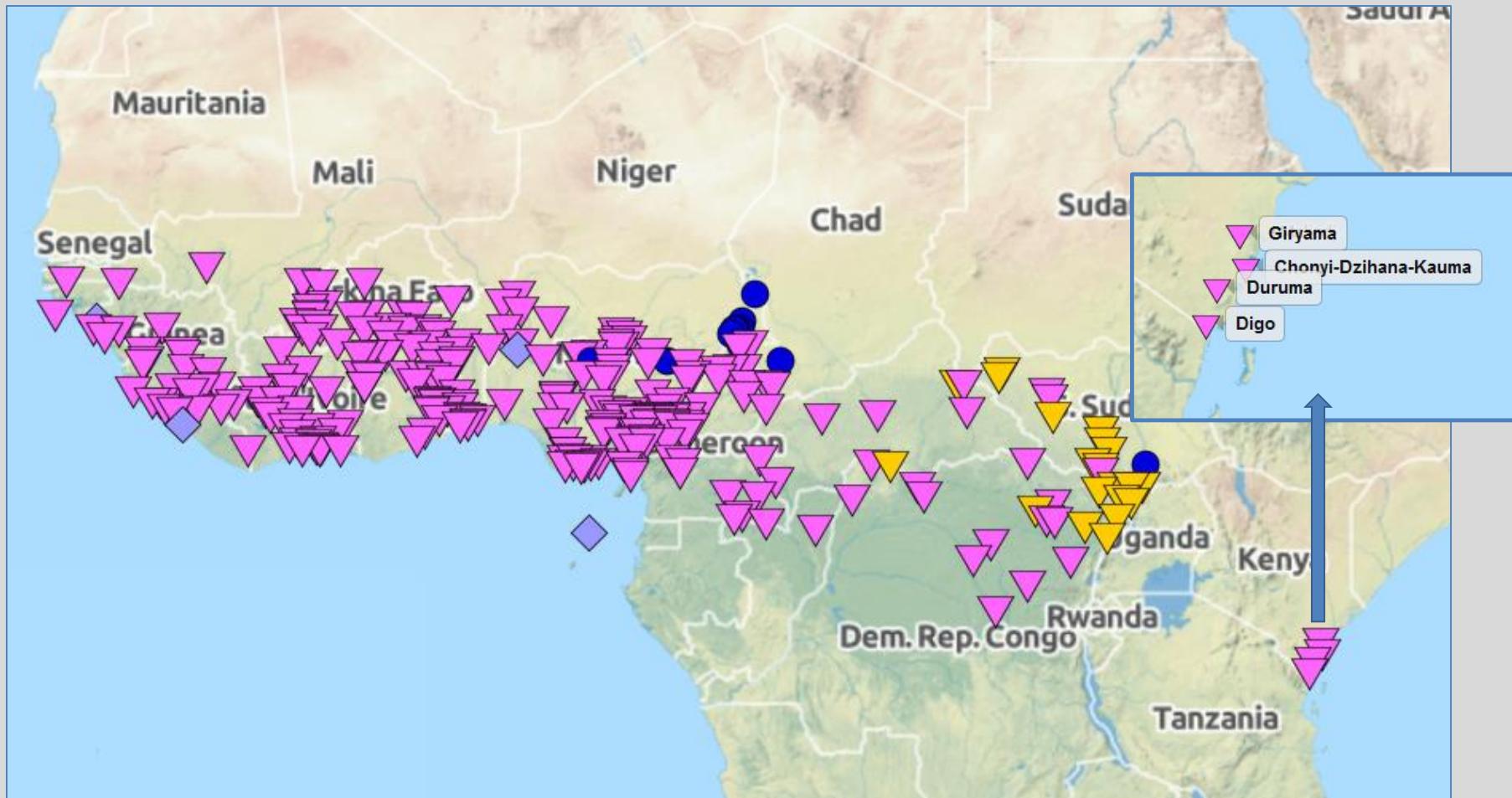


WALS: 43 lgs (yellow)



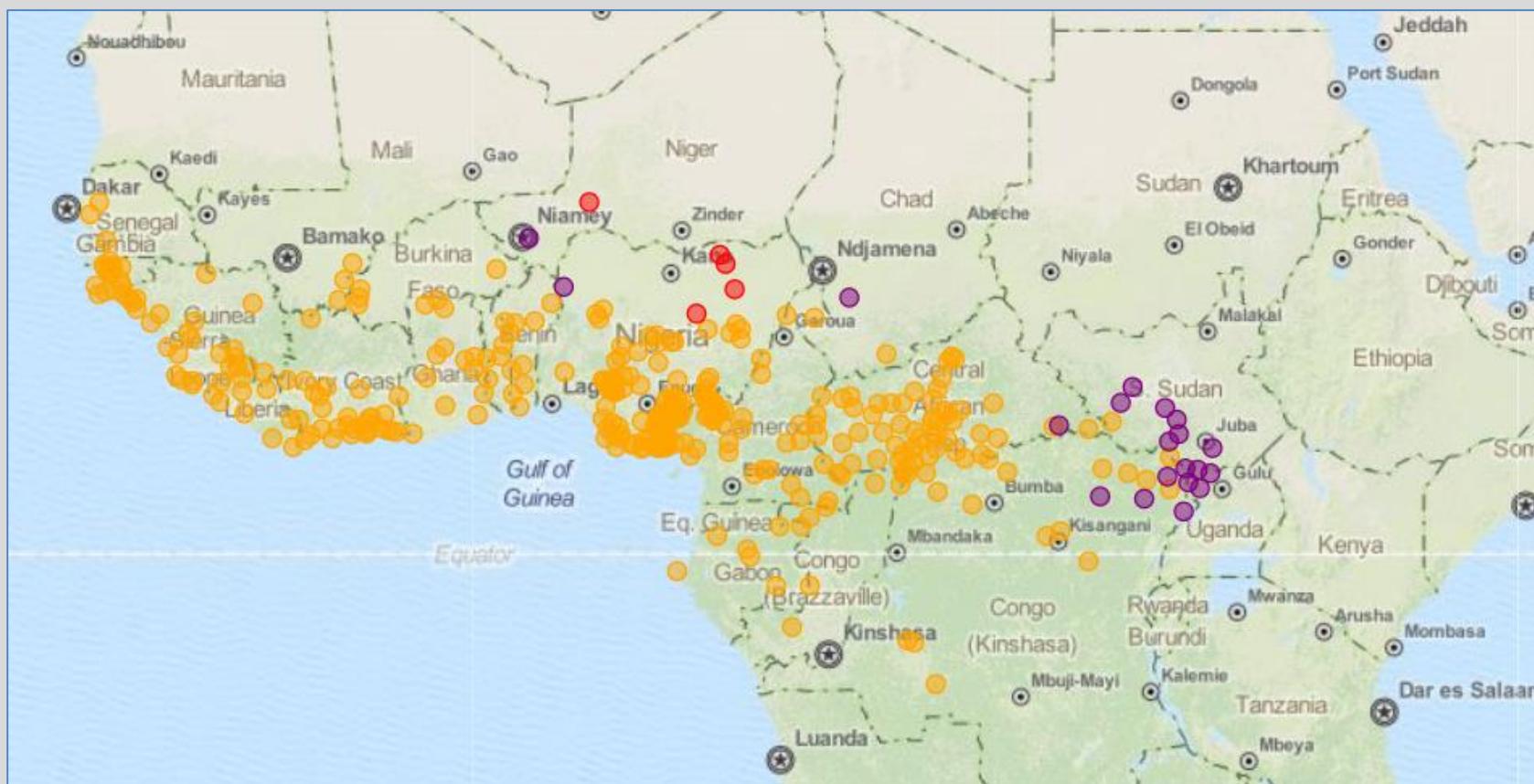
Feature 19A: Presence of Uncommon Consonants

PHOIBLE: 315 lgs



distribution of gb only (combined distribution of gb and kp impossible to display)

REFLEX: 361 lgs



DBs drawbacks for the current purpose

- LAPSYD : not suitable for quantitative analyses
- WALS : misleading (we'll see why later)
- PHOIBLE : limited display possibilities
- RefLex : lexicon-based > needs manual tuning

- None of these have data on **ALL** lgs
- None of these can display lgs **WITHOUT** LVs

Summary of the data

552 languages

(in the databases)

have labial-velar consonants

Summary of the data

552 languages

	PHOIBLE	RefLex	
	191	237	428
	124		124
Total	315	361	552

What you can get from databases

It depends on:

- What you are looking for
- What databases actually contain
- What databases allow you to look for

Gaps in the data

- Hard to evaluate the exact number of missing languages
- Hard to evaluate if data is available for those languages

Problems / Solutions

- False positives : Limba
- False negatives : Ikwere
- Inconsistencies : Fang
- Mistakes : Bassari (Ncam)

Limba (NC, unclass.)

- Only 9 words (out of 4500) : dagba, hudigbo, kudagbala, kuligbi, kusagbi, kusegbi, kutagba, kutegbe, nalegbe
- Only gb
- Never stem-initial
- mostly class ku- nouns

>> probable borrowings (although the source could not be found yet)

Ikwere (NC, Igboid)

- no LV in Phoible

BUT (Clements & Osu 2005):

- \ddot{b} and $\dot{\ddot{b}}$ are reflexes of *gb and *kp
- \ddot{b} and $\dot{\ddot{b}}$ are written gb and kp in the orthography

Should one include Ikwere in the list?

Fang (NC, Bantu A75)

- kp & gb present in Phoible

BUT:

- no LV in Galley (1964)
- kp & ngb in Meguedo (1991)
- kp, ngb & nkp in Mba Nkoghe (1999)

Bassari (Ncam)

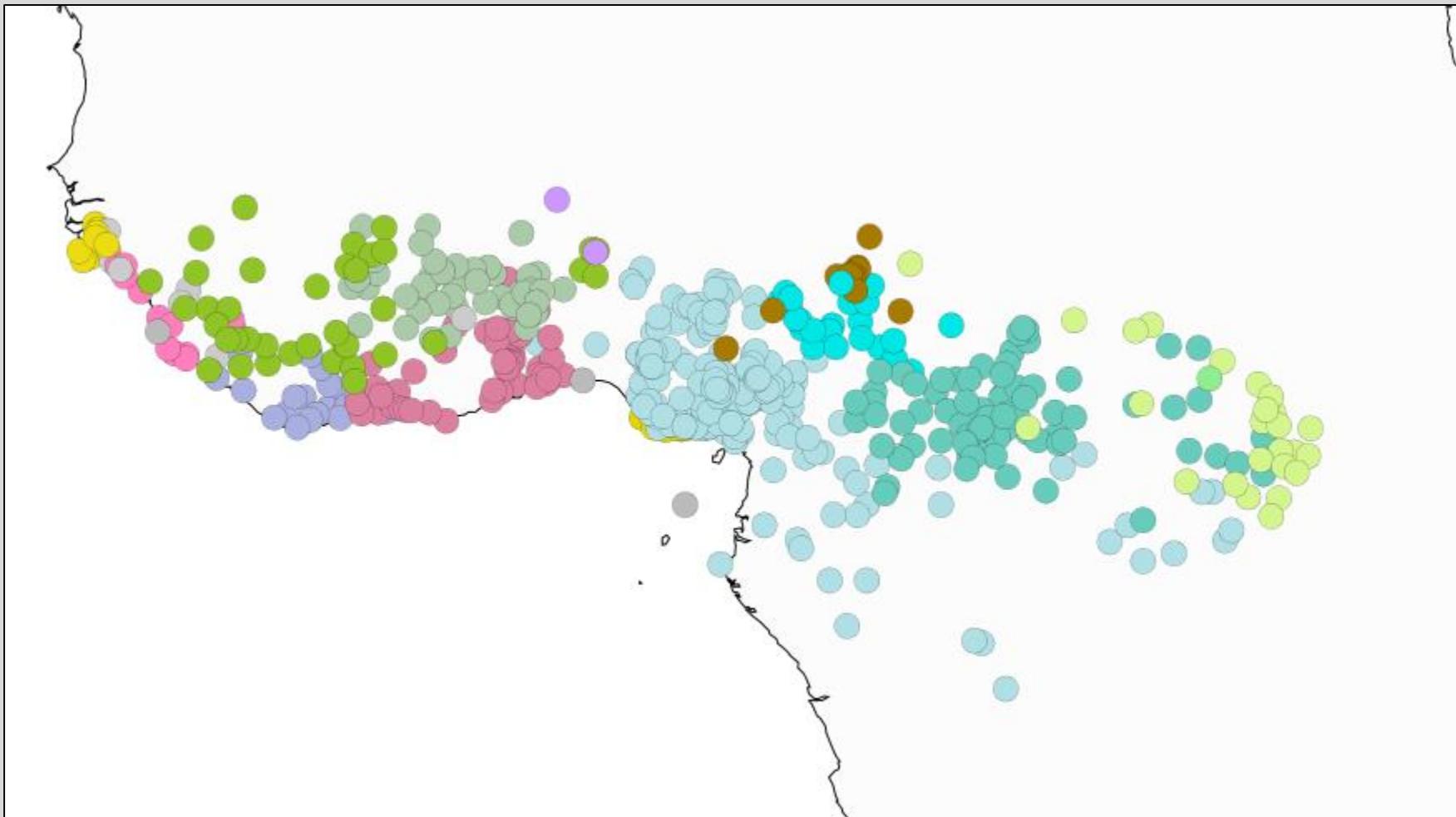
Two languages are known in the literature under the name Bassari:

- Bassari of Senegal (Onyan) : Atlantic
- Bassari of Burkina Faso (Ncam) : Gur

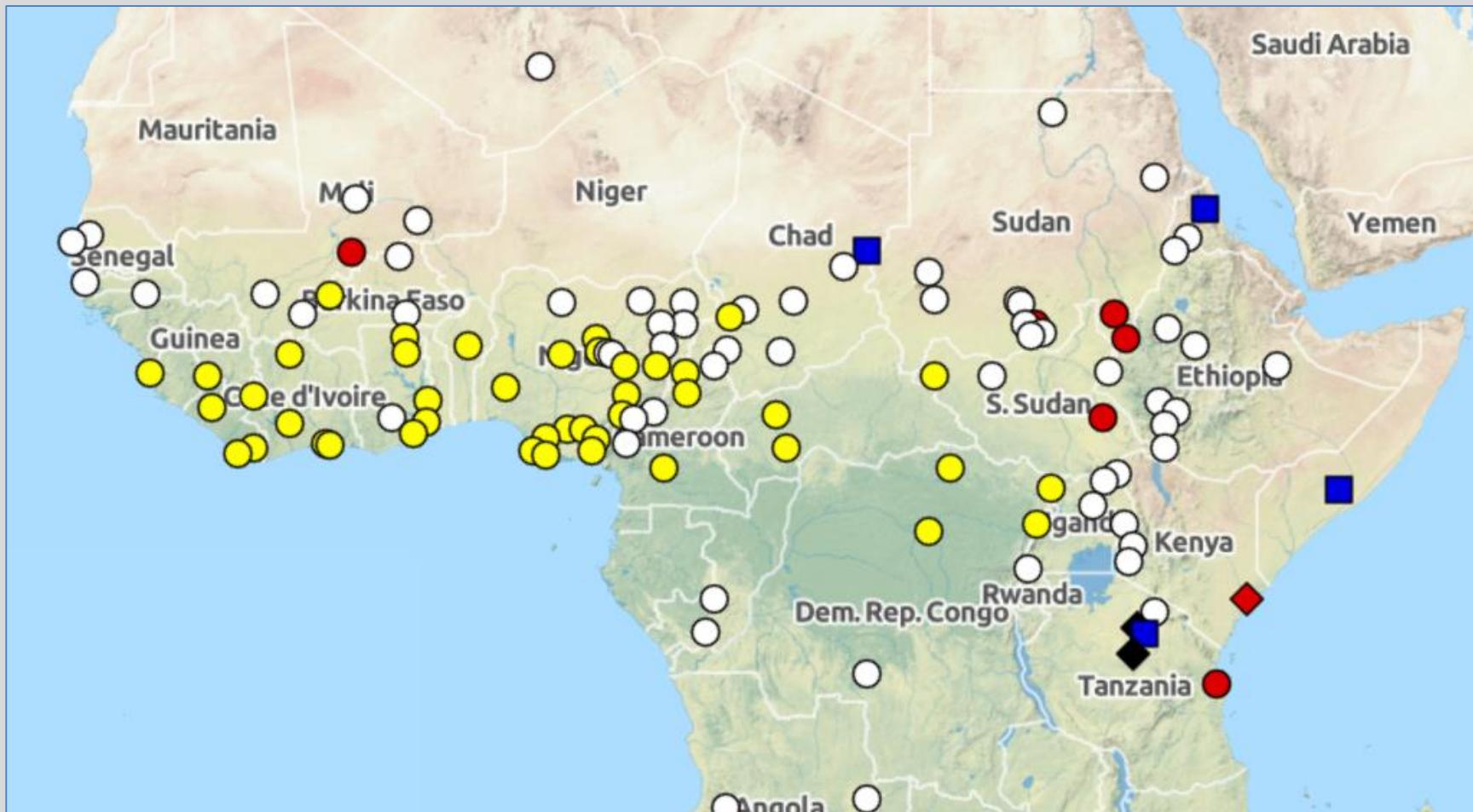
They are commonly mistaken.

In Phoible, the Ncam inventory is attributed to Onyan > Onyan is supposed to have **kp** and **gb**, which is **not** the case (Ferry 1968).

Distribution of LV in Western Africa

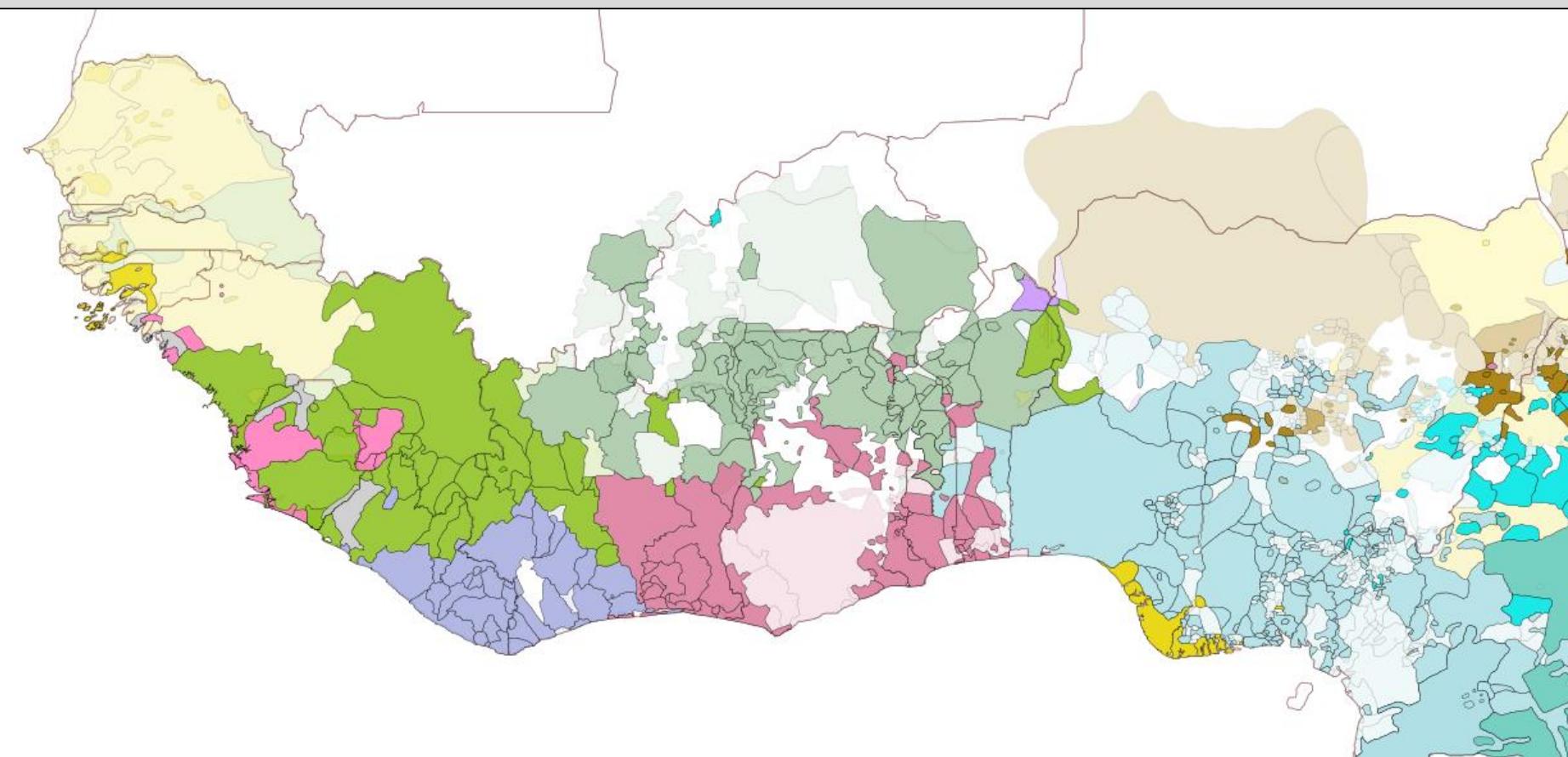


WALS: 43 lgs (yellow)



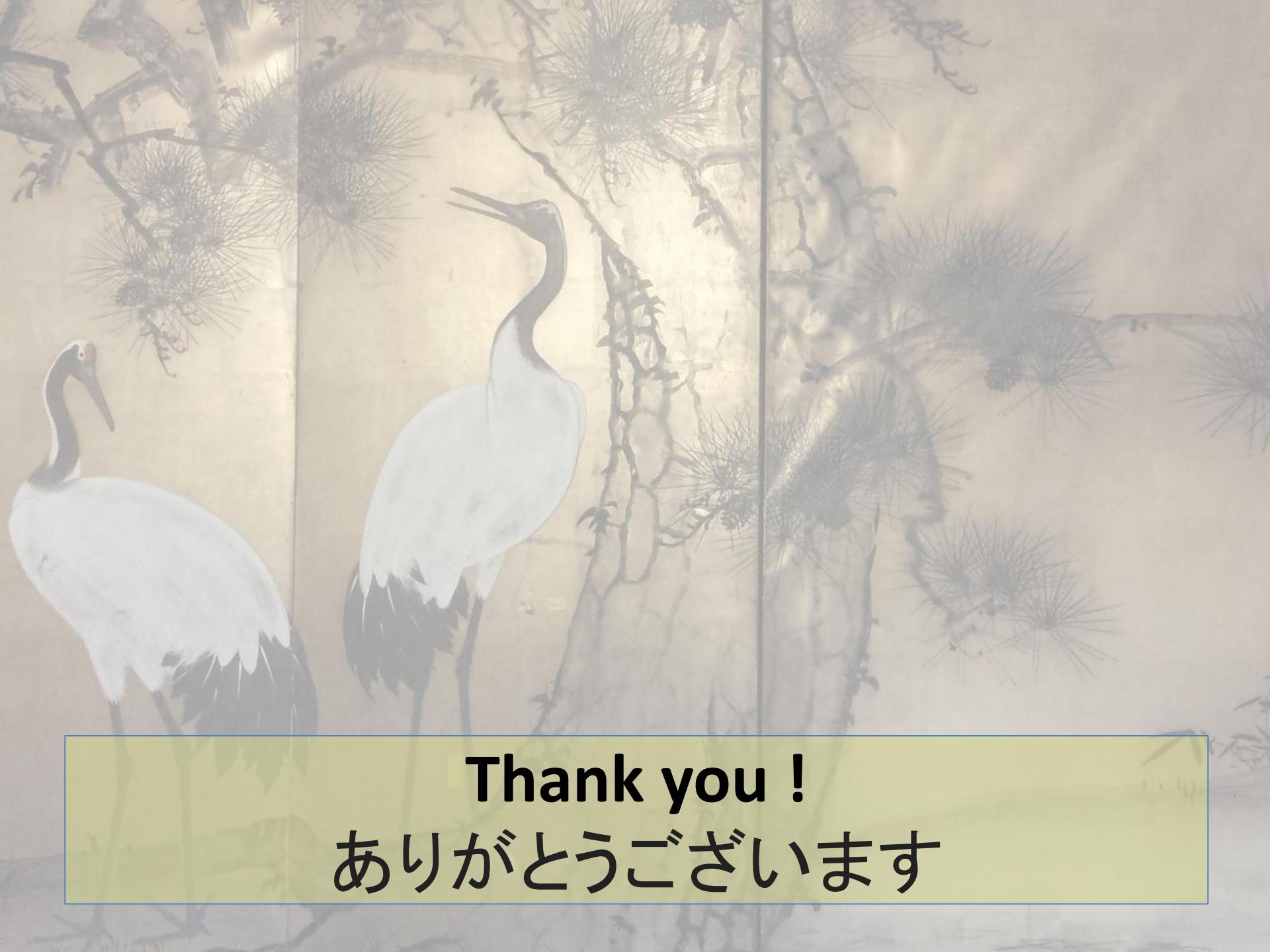
Feature 19A: Presence of Uncommon Consonants

Distribution of LV in Western Africa



References

- Clements, George N. & Sylvester Nhneanothu Osu** (2005). Nasal harmony in Ikwere, a language with no phonemic nasal consonants. *Journal of African languages and linguistics* 26-2., pp. 165-200.
- Ferry, Marie-Paule** (1968). Deux langues tenda du Sénégal oriental, basari et bedik. Paris : Société des Etudes Linguistiques et Anthropologiques de France (SELAF).
- Galley, Samuel** (1964). *Dictionnaire fang-français et français-fang, suivi d'une grammaire fang*. Neuchâtel : Editions Henri Messeiller. 588 pp.
- Mba-Nkoghe, Jules** (1999). *Description linguistique du fang du Gabon (parler atsi): phonologie, morphologie, syntaxe, lexique*. Université de la Sorbonne Nouvelle (Paris 3) (Thèse).
- Maddieson, Ian** (2013). *Presence of Uncommon Consonants*. In: Dryer, Matthew S. & Haspelmath, Martin (eds.). The World Atlas of Language Structures Online. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at <http://wals.info/chapter/19A>, accessed 2015-08-21).
- Maddieson Ian, Sébastien Flavier, Egidio Marsico, François Pellegrino** (2014-2015). *LAPSyD: Lyon-Albuquerque Phonological Systems Databases*, Version 1.0. <http://www.lapsyd.ddl.ish-lyon.cnrs.fr/lapsyd/> (accessed 2015-08-21).
- Meguedo, Berthe** (1991). *Esquisse phonologique du mvae*. Département de Langues Africaines et Linguistique, Faculté des Lettres et Sciences Humaines, Université de Yaoundé (*Mémoire de maîtrise en linguistique*). 111 pp.
- Moran, Steven & McCloy, Daniel & Wright, Richard (eds.)** (2014). *PHOIBLE Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at <http://phoible.org>, accessed on 2015-08-21).
- Segerer Guillaume & Sébastien Flavier** (2011-2015). *RefLex: Reference Lexicon of Africa*, Version 1.1. Paris, Lyon. <http://reflex.cnrs.fr/> (accessed 2015-08-21).



Thank you !
ありがとうございます