

## Testing typologies of consonant inventories on African languages

There are currently two theories regarding how laryngeal contrasts are expected to be realized in individual languages. The traditional view, put forward by Lisker & Abramson (1964; L&A) and much subsequent work, is that languages with a two-way laryngeal contrast split into two types, which define the contrast by using different neighboring positions on a VOT scale: D > T > Th. In “voice” languages, like Hungarian, Russian, French and Dutch, the contrast is between stops that are voiced during closure (D) and voiceless unaspirated stops (T). In “aspiration” languages, like English and German, the contrast is between voiceless unaspirated stops (T) and voiceless aspirated stops (Th). (See Abramson & Whalen 2017, Beckman et al. 2013 and Jansen 2004 for detailed discussion.) Languages with a three-way contrast would choose all three positions: D, T, Th. According to Maddieson’s (2013) survey, languages with no laryngeal contrast – about 1/3 of the world’s languages – have only voiceless unaspirated stops (T). Lindblom & Maddieson (1988; L&M) propose that “elaborated” stop types, like implosives and ejectives, should only be found in languages with large stop inventories.

Vaux & Samuels (2005; V&S) call this traditional view into question and provide detailed arguments that the least marked laryngeal setting for voiceless stops is with aspiration: e.g., Th, rather than T. Therefore, the two unmarked types of laryngeal contrasts should be T:Th (e.g., “aspiration” languages) and D:Th, contrasting true voice with aspirated voiceless stops. Note that the D:Th contrast is between the endpoints of the laryngeal scale, rather than neighboring positions, making the contrast perceptually most distinct (Boersma 1998, Flemming 2005).

This talk presents preliminary results of a survey of the stop inventories of African languages which aims to test these theories of the typology of laryngeal contrasts. The survey includes 280+ languages from a diverse and representative set of language families, with the data collected from published sources. Results so far show that the attested laryngeal contrast systems are often more complex than the ones that the traditional view predicts. For example, in support of V&S’s model, it turns out to be fairly common for voiceless stops to be non-contrastively aspirated. However, a problem for V&S as well as more traditional models is posed by the widespread occurrence of implosive (hyper-voiced) consonants in African languages compared to other language areas (Clements & Rialland 2005). When implosives are the only voiced stops in a phoneme inventory, what type of voiceless stops should they contrast with? And if implosives are so common, should they be considered a complex consonant type, only found in languages with large consonant inventories, as L&M (1988) suggest? The talk will conclude with a discussion of the implications of the survey results for typological issues like these related to consonant and consonant inventory complexity.

### Selected references

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