Vowel reduction to /i/ in functional morphemes in Northern Sub-Saharan Africa

I demonstrate that in many languages of Northern Sub-Saharan Africa vowel qualities of functional morphemes tend to be neutralized through raising, fronting and unrounding towards /i/, similarly to what has been described by Idiatov (2020:65) for the TAM and polarity markers of Greater Manding languages. Vowel reduction to /i/ in functional morphemes can be argued to be an areal phenomenon in Northern Sub-Saharan Africa, as it is attested in various language families of the area and appears to be absent in the genetically related languages spoken outside of this area. An important gap in the relevant area is formed by the Central African interior vowel zone (cf. Rolle et al. 2020), presumably formed under the influence of Chadic languages.

Even though most languages of Northern Sub-Saharan Africa are tonal, such functional morphemes, both affixes and various functional words, can be safely construed as prosodically weak thanks to the fact that typically they are affected by a whole range of concomitant lenition and neutralization processes. Neutralization through raising in prosodically weak positions can be analyzed as a type of vowel reduction process comparable to reduction through centralization. As demonstrated by Kapatsinski et al. (2020:31) reduction through raising, although well-attested in Romance and Slavic languages, is cross-linguistically much less common than reduction through centralization (contra earlier studies by Crosswhite 2001 and Barnes 2006). Interestingly, besides being typologically uncommon, reduction towards /i/ in the languages of Northern Sub-Saharan Africa seems to target primarily functional morphemes. At the same time, in prosodically weak positions within lexical morphemes where vowel reduction is also not uncommon in the region (usually driven by the phenomenon of stem-initial prominence; cf. Lionnet & Hyman 2018:652–55; Idiatov & Van de Velde 2021:93-94), it appears to proceed through the typologically more common processes of shortening, devoicing, unrounding and centralization.

Finally, I argue that recognizing the existence of an areal tendency to reduction to /i/ in functional morphemes in large parts of Northern Sub-Saharan Africa also allows us to offer a principled solution for two types of reconstruction-related issues. First, it can help us to make a principled choice in those cases where multiple, but only slightly formally divergent cognate sets and reconstructions have been proposed for a given functional morpheme, such as the reconstruction of the class 13 nominal prefix reconstructed as *ti- for Proto-Benue-Congo by De Wolf (1985) but as *tʊ- for Proto-Bantu, one of its major branches, by Meeussen (1967). Second, it can guide us in the search for the most plausible lexical source of a given functional morpheme, as in the case of the future ("potential") auxiliary sí ~ sé in Mandinka that Creissels (2020) relates to the Mandinka verb sé 'reach; overcome' ignoring the possibility of another lexical source, the verb *sá meaning 'come', that is more plausible both typologically and comparatively but absent as a lexical verb in Mandinka itself.

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