

Explaining variation in three dialects of Meru, Kenya

Conceição Cunha¹, Fridah Kanana^{1,2}, Jonathan Harrington¹

¹*Institute of Phonetics, LMU Munich, Germany* ²*Kenyatta University, Kenya*

The main aim of this study is to document the phonetic variation for Kenyan dialects of the Meru-Tharaka group, with a particular focus on the inclusion of unstudied varieties. The focus is on the morphophonological variation in the palatalization of the plural prefixes in class 8 nouns in three dialects of the Meru language, of Bantu origin, and spoken on the north eastern slopes of Mount Kenya: Imenti, which is considered the standard variety, Tigania in the northern and Chuka in the southern. Imenti has the most developed literature and is also used in formative years of schooling. The literature development in Chuka is more recent, while Tigania exists almost exclusively in oral forms and social media. In earlier studies of the dialects of the Meru-Tharaka group, Kanana ([1-3]) showed that the consonant of the plural prefix derived from a proto-Bantu bilabial stop */*bi/* ([4]) is produced with different kinds of palatals in Imenti and Chuka. The so far unstudied region of Tigania which is part of the present study was predicted to be predominantly influenced by the geographical proximal Imenti dialect region (with which it shared a border to the north and because Imenti has some characteristics of a standard accent).

For the present study, the focus of the analysis was on five pairs of singular-plural class 7/8 nouns that were recorded in 2022 from 75 multilingual adult speakers from Chuka (n = 26, 14F), Imenti (n = 23, 6F), and Tigania (n = 26, 9F). The participants provided informed written consent and were compensated for their participation. The experiment was reading task consisting of a randomized order of 2-3 repetitions of 96 words, with one word at a time presented on a computer monitor using SpeechRecorder [5]. Since the participants were educated in English and Swahili and we wanted to avoid orthographic forms from these dialects, the words were presented in both English and in Swahili and the task was to produce the equivalents in the local dialect. Words were repeated if the participants gave an incorrect equivalent (e.g., ‘woman’ or ‘small girl’ for the targeted ‘girl’). The singular and plurals forms were presented together. Following an orthographic transcription by a native speaker of each variety, the speech signals were forced-aligned with WebMAUS [6] and manually corrected. The output was structured into a speech database using EMU-SDMS [7] for further processing.

Consistently with earlier findings [1-3], the results showed the plural prefix was produced with palatalised labials in Imenti, but with palatalised lingual consonants in Chuka. The prefix in Tigania (Fig.1) ranged over all these places of articulation. A further analysis of Tigania showed two main findings: (1) participants were more likely to produce a palatalised labial when the investigator conducting the experiment was an Imenti speaker (Fig. 2) whereas lingual consonants were more likely when the investigator was from the Tigania region, (2) within lingual prefixes, Tigania participants preferred dorsal /ɛ, tɛ/ whereas apical prefixes /sj, ts, tʃ, ʃ/ were more likely in Chuka.

We interpret the first finding as a form of style-shifting [8] in which the Tigania participants adapted their speaking style towards the dialect of the investigator resulting in more productions of an Imenti-style palatalised labial prefix with the Imenti investigator. To explain the second finding, we assume that both Chuka and Tigania have undergone a sound change of labial palatalisation [references] in which palatalised labials became palatal consonants with a dorsal constriction /ɛ, tɛ/. Chuka may then have introduced a further innovation by which these dorsals have undergone velar palatalisation [9, 10] resulting in prefixes with an apical constriction. Chuka could be at the forefront of this change given that it is geographically and administratively more removed from Imenti than Tigania: this could explain why apical prefixes are more common in Chuka than in Tigania. Further analyses of the many other dialects in this region are necessary to further substantiate this hypothesis.

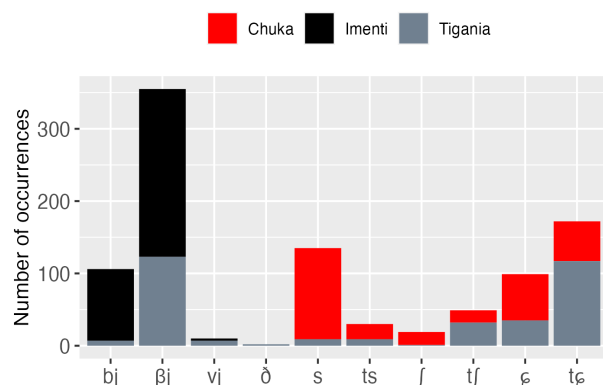


Figure 1. A count of the different forms of the initial plural prefix consonant in three Meru dialects.

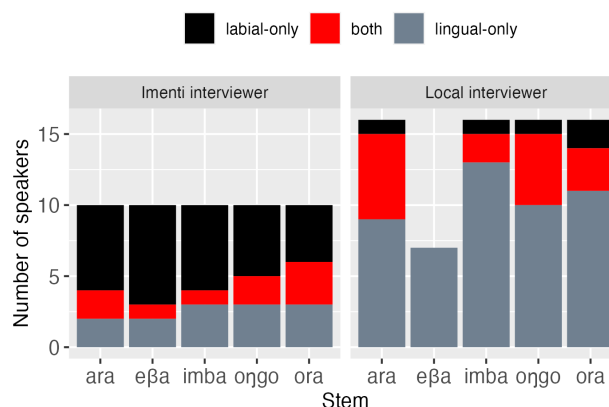


Figure 2. Number of Tigania speakers by interviewer and stem who produced labial, lingual or both types of plural prefixes

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