Synchronic and diachronic phonological patterns involving the retroflex click in Juu languages

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We present phonetic and phonological data on the present-day reflexes of the proto-retroflex click in three sub-branches of the Juu branch of the Ju-ǁHoan language family spoken in northern Namibia: Mangetti Dune !Xung (Northwestern Ju), Grootfontein !Xung (Central Ju) and Ju‖hoansi (Southeastern Ju). The data shed light on the analysis of diachronic and synchronic sound patterns.

There is a set of corresponding lexical items that have an initial alveolar click in Ju‖hoansi, a lateral click in Mangetti Dune !Xung, and a retroflex click in Grootfontein !Xung. Sands (2010) argues that the proto-sound was a retroflex click, and that there were two innovations leading to a change from the proto-retroflex click [!!] to the modern day lateral click [l] in Mangetti Dune !Xung, and to a post-alveolar click in Ju‖hoansi. She suggests that the seal of a sublaminal retroflex click is difficult to produce and there is a tendency for speakers to unroll the tongue before the closure is released, resulting in a click with lateral leakage. It may then have merged with the lateral click already present in Mangetti Dune !Xung. We provide phonetic and phonological data to assess the attributes of the modern day reflexes of the proto-retroflex click. Corrected High frame rate Anchored Ultrasound with Software Alignment (CHAUSA) (Miller and Finch 2010) data of the retroflex click in Grootfontein !Xung is analyzed to assess the variability of this click type in the one language where it has survived. The retroflex click has been documented in Grootfontein !Xung (Doke 1925, Snyman 1997). However, no instrumental phonetic description of this click exists, and it is not currently recognized by the IPA. CHAUSA data for the lateral click in Mangetti Dune !Xung is also analyzed, and the tongue shapes of the lateral click are compared with the retroflex click. The CHAUSA method allows us to view the entire rarefaction process associated with these clicks by tracing the tongue edge at 5 distinct points in their production (Miller, Scott et al. 2009) and to show at which stages the retroflex clicks in Grootfontein !Xung and their lateral click reflexes in Mangetti Dune !Xung are similar, and at which stages they differ. Synchronic phonological patterns of the different clicks with respect to the Back Vowel Constraint (BVC) (Traill 1985) are provided. The BVC is a lexical co-occurrence constraint, which blocks the co-occurrence of certain clicks with the front vowel [i]. The dental and palatal clicks occur with [i], while the alveolar and lateral alveolar clicks occur with [ai] (Traill 1985). We provide new lexical data showing that the retroflex click does not occur with [i] in Grootfontein !Xung. We provide detailed mechanisms of the two diachronic mergers that occurred in the Juu sub-group, and show how the rarefaction gestures associated with the three clicks provide the motivation for the BVC.

References


