

Description and theory in the voicing/tone interaction of Kera **Mary Pearce UCL and SIL**

Early descriptions of the phonology of Kera (Ebert 1976, 1979; Pearce 1999) portrayed Kera as a language with voicing contrast in the obstruents. This was in keeping with the common view held for most Chadic languages. Some theoretical linguists built on this assumption and, citing a few items of data, they concluded that Kera demonstrates non-adjacent consonant-to-consonant voicing spread (Odden 1994, Rose and Walker 2004, Uffmann 2003). This paper suggests that these claims need reviewing because most dialects of Kera have no voicing contrast. It may well be that historically there was such a contrast, following the development of tone in a process of tonogenesis, but tone has now taken over the contrastive role, and any differences in voicing or Voice Onset Time (VOT) enhance the tone contrast. This paper demonstrates that without extensive data collection and careful analysis on the basis of acoustic measurements, there is the danger of hearing a voicing contrast that doesn't exist or developing a theory that does not apply. Both the descriptive and theoretical approaches to linguistics are necessary for understanding the Kera voicing/tone facts.

We will consider whether or not a [voice] feature exists in Kera, and whether voicing affects the tone, or whether the tone is now the main cue for the contrast. We will then consider the evidence put forward for long-distance voice spreading. For example in (1), the plural prefix appears to assume the voicing of the following consonant. (2) demonstrates the underlying voicelessness of this prefix. We will also look at counter-evidence showing that the 'voice spreading' effect is really brought about by an interaction between VOT and tone. In (3), we see how the k-prefix remains voiceless even when a voiced obstruent follows, because of the H tone on the first vowel. Voicing does not spread, but tone can spread, resulting in phonetic changes in the VOT of the preceding obstruent. We will conclude that Kera cannot be used as evidence for the controversial theory of long-distance voice spreading. As Kera is one of the main languages used to support this claim (particularly because of apparent spreading across morpheme boundaries), it brings the theory into question.

This research also brings to light the interesting variation in the VOT/fundamental frequency relationship between dialects of Kera as shown in (4). The roles of VOT and F₀ are affected by gender and location. We will briefly discuss the implications of this.

The conclusion of this paper is that thorough data collection, careful measurement, and insightful analysis with the application of appropriate theory are all important tools for a good field linguist and that there are dangers in omitting any of these elements if we wish to have a comprehensive understanding of the phonology of a language.

References

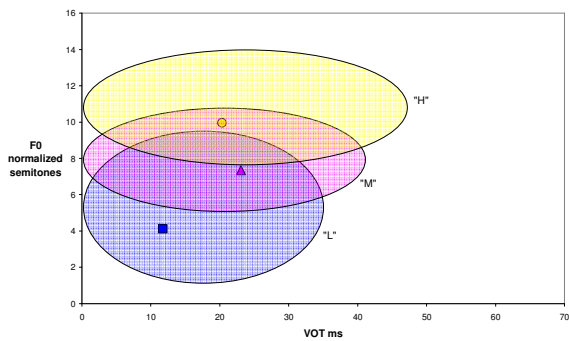
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(1) /k- b̄irwá-ŋ/ ḡib̄irwáŋ ‘white (pl.)’

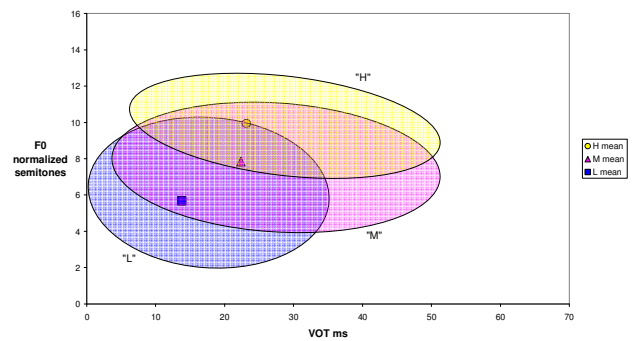
(2) /k- m̄arwā-ŋ/ k̄om̄arwāŋ ‘new (pl.)’

(3) sg pl
 ágày k-ágày ‘hoe’ (pronounced [kógày])
 ágàmlà k-ágàmlà ‘bull’ (pronounced [kógàmlà])

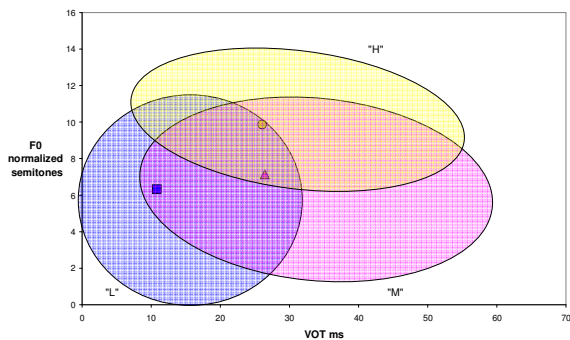
(4) a. *Village women - plot of VOT and F0 with circles indicating the three tonal contrasts*



b. *Village men - plot of VOT and F0 with circles indicating the three contrasts*



c. *Town men - plot of VOT and F0 with circles indicating the three contrasts*



d. *Town women - plot of VOT and F0 with circles indicating the three contrasts*

