

From a one-variant system to a two-variant system: Acoustic properties of alveolar plosives in Te Kiribati and Kiribati English

Leonhardt, Tobias (University of Bern)

Kiribati is an independent nation comprised of 33 islands that are scattered across Micronesia, in the middle of the Pacific. Between 1892 and 1979, it has been under British administration and English is now an official language. However, there were and are hardly any foreigners in Kiribati, neither residents (2010 Census) nor tourists (UNWTO, 2015), and English education was grossly neglected until after the Second World War. Consequently, there are many substrate influences on the English variety spoken by I-Kiribati, especially on its phonetics and phonology.

In the focus of my presentation are alveolar plosives in Te Kiribati, the substrate language, and Kiribati English; the former is a one-variant system, the latter a two-variant system. I make the following key observations in my data (recorded conversations with 33 I-Kiribati speakers of English, collected in 2015): older speakers tend not to differentiate English /t⁰/ and /t^h/, and to produce VOT values that are fairly similar to their one variant of the substrate language; younger speakers, on the other hand, tend to produce a distinction, but longer and more target-like VOT values are achieved by means of affrication: /t^h/ → [t^s].

I discuss four socio-linguistic factors which are plausible influences for the emergence of such affricated variants, either individually or in combination with one another:

1. acoustic intensity,
2. pronunciation drills,
3. an assibilation process in Te Kiribati,
4. [t^s] in influential English varieties.

Firstly, the production of a sibilant is not only an alternative to arguably less readily available glottal frication (there is no [h] in Te Kiribati), it also adds acoustic intensity which facilitates the perception of an aspirated variant (Repp, 1979). Secondly, there are teaching methodologies which involve pronunciation drills for the acquisition of the distinction between English /t⁰/ and /t^h/; these drills were and are mostly carried out by I-Kiribati teachers who are themselves non-native speakers of English (Rennie, 1993); their production may well promote affricated variants in the speech of those they teach. Thirdly, through a similar assibilation process in the substrate language, [s] is a variant of Te Kiribati /t⁰/ and there are clear indications that, at previous stages, this sibilant was also preceded by a plosive (e.g. Bingham, 1908; and Groves et al. 1985), like Kiribati English [t^s] today. And fourthly, affricated /t/ is also found in other L1 varieties of English that are – relatively – well represented in Kiribati and its educational system, namely NZE and AusE (Cox, 2012; Docherty et al., 2006; Horvath, 1985; Jones & McDougall, 2009; Tollfree, 2001) which, again, may promote the usage of affricated variants.

References

- Cox, F. 2012. *Australian English: Pronunciation and Transcription*. Cambridge: Cambridge University Press.
- Docherty, G., Hay, J., and Walker, A. 2006. Sociophonetic patterning of phrase-final /t/ in New Zealand English. *Proceedings of the 11th Australian International Conference on Speech Science & Technology*.
- Horvath, B. M. 1985. Variation in Australian English. *The Sociolects of Sydney. Cambridge Studies in Linguistics London*, (45), 1-200.
- Jones, M. J., & McDougall, K. 2009. The acoustic character of fricated /t/ in Australian English: A comparison with /s/ and /ʃ/. *Journal of the International Phonetic Association*, 39(03), 265-289.
- Kiribati National Statistics Office; Secretariat of the Pacific Community Statistics for Development Programme. 2012. *Kiribati 2010 Census Volume 2: Analytical Report*. Noumea: Secretariat of the Pacific Community.

- Rennie, S. J. 1985. *In search of souls: The cultural interaction between Hiram Bingham Jr., the Hawaiians and the Gilbertese through mission contact 1857-1903* [Unpublished doctoral dissertation]. Canberra: Australian National University Library.
- Repp, B. H. 1979. Relative amplitude of aspiration noise as a voicing cue for syllable-initial stop consonants. *Language and Speech*, 22(2), 173-189.
- Tollfree, L. 2001. Variation and change in Australian English consonants. *English in Australia*, 45-67.
- United Nations World Tourism Organization. (2015). *UNWTO tourism highlights, 2015 edition*. Retrieved from <http://www.e-unwto.org/doi/book/10.18111/9789284416899>