Post-alveolar fricatives and affricates in Kiribati English

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Background

![Image](micronesia.weebly.com)

KIRIBATI

- 33 Islands, 21 inhabited
- 103,058 inhabitants, 892 foreigners (Census 2010)
- One of the least visited countries of the world (UN World Tourism Organization 2015)
- 2015: Few islands sighted by Spanish explorers
- 1754: First known contact – with British
- 1886: British *sphere of influence*
- 1892: British protectorate
- 1920: British colony
- 1979: Independent Republic of Kiribati

The English language in Kiribati

- Official language, prominent in educational and legal domains
- Present for almost 2 centuries
- No other languages besides Kiribati and English
- However:
  - Locals speak Kiribati, never in English
  - Few contact possibilities (no non-Kiribati residents, no tourism)
  - Growing contact with Australia and New Zealand

![Diagram](micronesia.weebly.com)

The English language in Kiribati

- Post-alveolar fricatives do not occur,
- Voicing is not a distinctive parameter,
- and there are no affricates.

Hypothesis: transfer of substitute sounds rather than [ʃ] & [tʃ]

Linguistic Survey

### Variables:
- [ʃ], [ʒ] & [tʃ], [dʒ]

#### Data
- 30 recordings
- Average duration: 60 mins
- Tokens per speaker: 50 (where available)
- Total number of tokens: 1,566 (729 fricatives, 837 affricates)

#### Infrants
- 15 Kiribati
- Sex: 17 female, 16 male
- Age: 19-66
- Different educational levels
- Different background with the English language

#### History
- 16th/17th Cent.: Few islands sighted by Spanish explorers
- 1754: First known contact – with British
- 1886: British *sphere of influence*
- 1892: British protectorate
- 1920: British colony
- 1979: Independent Republic of Kiribati

#### Results

**Alveolarisation rates (Table 2)**

- Simple fricatives ([ʃ] → [s]; [ʒ] → [z]) alveolarised 4x more than affricates ([tʃ] → [ts], [dʒ] → [dz]).
- Greater inter-speaker differences for simple fricatives ([ʃ] → [s] and [ʒ] → [z]) (greater standard deviation).
- Neither sex, age, education, or background with the English language explain this finding.

**Intra-language findings (Table 2)**

- Relatively consistent intra-linguistic effects across all speakers.
- Key factors:
  - position in word (arguably due to restricted codas rules in the language substrate)
  - front and/or high vowels in the preceding environment.

**Other findings**

- Cluster reduction: mostly ([ʃ] → [s], [ʒ] → [z])
- E.g.: language → [leryll]
- Alveolarisation: ([ʃ] → [ʃ], [ʒ] → [ʒ])
- E.g.: English /ɪʃ/ → [iʃ]
- Harmony: preceding /ɪ → [iʃ]
- E.g.: teaching → [teʃing]
- Correction: [ʃ] → [ʃ]
- E.g.: to show → [ʃuʃjoʊ]
- Hypercorrection: [ʃ] → [ʃ]
- E.g.: English /ɪŋly/ → [ɪŋly]
- (also: /n → [ŋ], e.g.: prison → [prɪʃən])

Reductions, assimilations and harmony are found in tokens with and without alveolarisation, e.g. [leryll, leryl, tootsi](l)

#### Discussion & Outlook

### Presence of the English Language, and Substrate Influences

This survey of post-alveolar fricatives and affricates shows that
- Alveolarisation occurs for all speakers, overall rate 10.1%.
- Inter-speaker differences are due to intra-linguistic not social constraints.

- Evidence for substrate language influence

In spite of its colonial history and the prominence of the English language in educational and legal domains, there has never been a large, long-term permanent, English-speaking community in Kiribati, neither in the past nor today, and English is taught to I-Kiribati by I-Kiribati in the vast majority of cases.

- The English language is much more prominent than it is present
- Substrate language influences – which are by no means restricted to the alveolarisation of [ʃ] and [ʒ]

### The Voicing parameter, VOT, and Emigration

Issues in the assessment of the voicing of the tokens analysed for the present survey:
- Speakers often do not, i.e. [dʒ] → [dʒ]
- Interference noises, e.g. traffic, wind, waves.

- Presence or absence of voicing is often not possible to assess

However, these issues are often non-applicable for the voice onset times (VOT) of plosives (primary cue for voiced/unvoiced distinction). Why investigating VOT in Kiribati?

- Substantial VOT differences between Kiribati and English.
- Differences are often bridged by affrication (e.g. time → [tʃaim]),
- Affrication is also found in AusE (Tolfree 2001) and NZE (Docherty et al. 2006).
- Australia and New Zealand are becoming a destination for Kiribati emigrants due to rising sea levels.

- Affrication of [ʃ] as [ʃʃ] as a manifestation of on-going linguistic change as well as cultural changes (Research question of PhD dissertation)

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