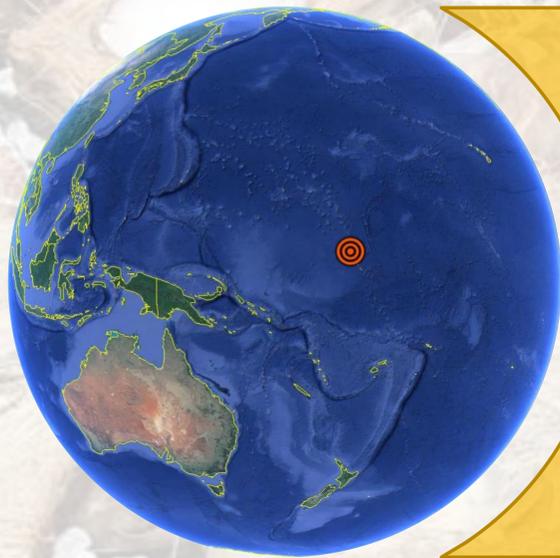


Post-alveolar fricatives and affricates in Kiribati English

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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)

Background

History

16th/17th Cent.: Few islands sighted by Spanish explorers
1765: First known contact – with British
1788: First sightings by Captain Thomas Gilbert
1886: British "sphere of influence"
1892: British protectorate
1915: 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 always speak together in Kiribati, never in English
 - Few contact possibilities (no non-I-Kiribati residents, no tourism)
 - Growing contact with Australia and New Zealand
- ▶ Strong substrate language influences
▶ Growing AusE & NZE influence

Linguistic Survey

Informants

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

Data

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

Variables: /ʃ,ʒ/ & /tʃ,dʒ/

In the Kiribati language,

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

- ▶ Hypothesis: transfer of substrate sounds rather than [ʃ,ʒ] & [tʃ,dʒ]

Results

Alveolarisation rates (Table 1)

- 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-linguistic findings (Table 2)

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

Other findings

- cluster reduction: mostly /tʃ/ → [ʃ], e.g. *language* → [lɛŋwi]
- vowel assimilation: /i,ɪ/ → [y], e.g. *English* → [ɪŋly], *children* → [tʃyldrən]
- harmony: preceding /t/ → [tʃ], e.g. *teaching* → [tʃtʃɪŋ]
- correction: /ʃ/ → [sʃ], e.g. *to show* → [tu sʃou]
- hypercorrection: /ʃ/ → [ʃs], e.g. *English* → [ɪŋʃs] (also: /s/ → [ʃ], e.g. *prison* → [prɪʃən])

Reductions, assimilations and harmony are found in tokens with and without alveolarisation, e.g. [lɛŋwis, ɪŋlys, tsɪtsɪŋ] do also occur.

Table 1 Alveolarisation rates.

	Alveolarisation rate (Standard Deviation)
/ʃ/ → [s] /ʒ/ → [z]	16.9 % (4.1)
/tʃ/ → [ts] /dʒ/ → [dz]	3.9 % (1.6)
Total	10.1 % (4.8)

4x speaker differences

Table 2 Intra-linguistic findings (all significant, unless otherwise stated). FW range: range of factor weights (the higher the FW the stronger the effect).

	/ʃ/ → [s] /ʒ/ → [z]	/tʃ/ → [ts] /dʒ/ → [dz]
Position in word	word-final > medial > initial (FW range: 0.25)	word-final > medial > initial (FW range: 0.55)
Preceding environment	vowel > pause > consonant (FW range: 0.36) vowels: slight favouring effect of front vowels, [ə] clearly disfavouring consonants: no variation, except for [s,n]	consonant > vowel > pause (not significant) vowels: slight favouring effect of front vowels and/or high vowels consonants: no variation, except for [s,m,l]
Following environment	vowel > pause > consonant (FW range: 0.20) (no significant patterns for vowels or consonants)	consonant > pause > vowel (FW range: 0.36) (no significant patterns for vowels or consonants)

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, let alone 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 /s,z/ and /tʃ,dʒ/

The voicing parameter, VOT, and emigration

Issues in the assessment of the voicing of the tokens analysed for the present survey:

- speakers often devoice, i.e. /z,dʒ/ → [s,tʃ],
- 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* → [tsaim]),
- affrication is also found in AusE (Tollfree 2001) and NZE (Docherty et al. 2006),
- Australia and New Zealand are becoming / may become new homes for many I-Kiribati emigrating due to rising sea levels

- ▶ Affrication of /t,d/ to [ts,dz] as manifestations of on-going linguistic as well as cultural changes? (Research question of PhD dissertation)