



# Multilingual Children's Speech Development

# **TOK PISIN**

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**Presented by: Jennifer M. Boer**

# Tok Pisin Authors

- **Jennifer BOER**, independent scholar, Australia [boerj1871@gmail.com](mailto:boerj1871@gmail.com)
- **Mary CLAESSEN**
- **Cori WILLIAMS**

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# Tok Pisin

## ■ Commonly spoken in

- the entire archipelago of Papua New Guinea (PNG), an island nation between the Coral sea and the pacific ocean. This includes the eastern half of the New Guinea island and all the outer islands of New Guinea, including East and West New Britain, New Ireland, Bougainville and neighboring small islands. It is most used in urban areas of Papua New Guinea where it has begun to creolise.

## ■ Dialects and variants

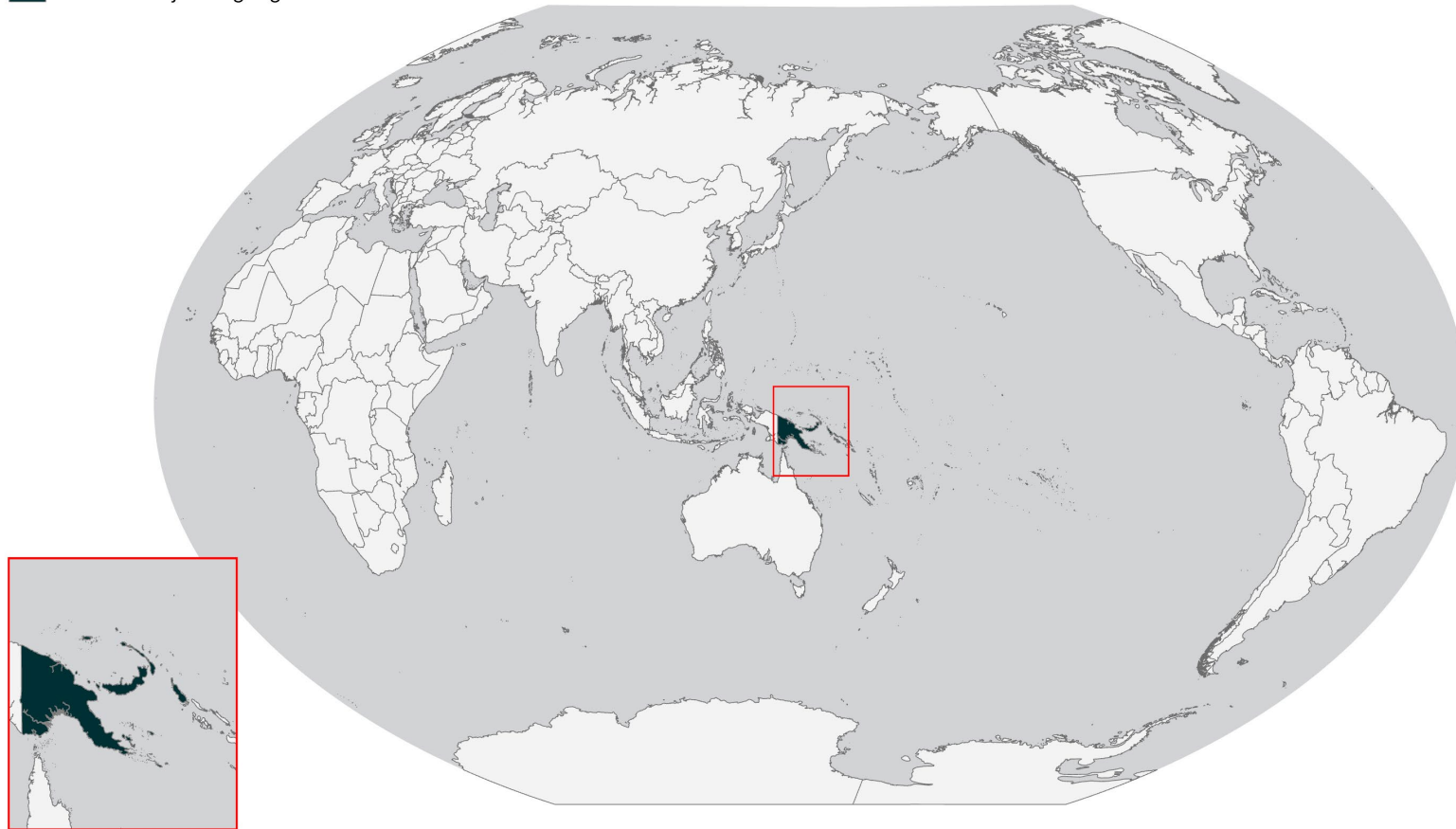
- Similar Melanesian creoles are Bislama in Vanuatu and Pijin in the Solomon Islands.

## ■ Writing

- Left to right. Latin alphabet (Roman script).
- Transparent phonetic script based on Tok Pisin PNG pronunciation.

# Tok Pisin Map

■ Official / major language



The authors acknowledge assistance provided by the Spatial Data Analysis Network (SPAN) at Charles Sturt University, and in particular Craig Poynter, for his work creating this map. Figures/maps/imagery created using ESRI ArcGIS Pro 3.1 software and data contained within ESRI's Living Atlas.

# Tok Pisin Speech Components

- **Consonants:** 21 consonants, although there are only 17 contrastive consonant phonemes. These include six plosives /p, b, t, d, k, g/, three nasals /m, n, ŋ/, three fricatives /f, v, s/, two approximants /w, j/, a lateral /l/, a flap /r/ and one affricate /dʒ/.
- **Consonant clusters (17+):** Consonant clusters in all sociolects. Those included in the Tok Pisin dictionaries are: /st, sp, sn, sm, sw, str, skr, br, dr, fr, tr, kr, bl, pl, gl, kl, kw/ (Mihalic 1971; Volker, 2008).
- **Vowels (Short and long vowels, diphthongs):** / i, ɪ, ε, e, a, u, ʊ, ɒ, ei, aɪ, aʊ, ɔɪ /
- **Tones (0):** None
- **Phonotactic restrictions:**  $C_{(0-3)}V_{(0-2)}C_{(0-1)}$
- **Prosody:** Early pre-creole versions dominated by CVCV structure. Morphophonemic condensation during creolisation (Romaine, 1992) has eliminated some epenthetic vowels and led to consonant cluster formation. For example, suffix *pela* /pela/ → [pla]

# Tok Pisin

## Age of Acquisition

### ■ Consonants

- Early / m, n, ŋ, p, b, t, d, f, k, w, l / Middle /dʒ, j/ Late /s, r, v, g/

### ■ Consonant clusters

- /pl/, /bl/ and /kl/ acquired by 75% children at 3 years (Boer, 2020)
- By 4;0 /sk/ and /fl/ added
- All clusters in the sample; /pl, bl, kl, fl, tr, dr/ were mastered by 6;0
- /skr/ found in an anglicised variant of a target word was successfully attempted by 9/80 participants in all age groups (3:0 – 6;0) (Boer, 2020)

### ■ Vowels

- To date there have been no studies of vowel acquisition in Tok Pisin

### ■ Tones

- Not applicable

# Tok Pisin Speech Development

## ■ Percentage correct

- 83.46% for the youngest group (3;0-3;11). Increased to 92.38% in the oldest group (6;0-6;11).
- PCC showed an overall upward trend with age but no strong linear correlation between age and PCC (Boer, 2020).

## ■ Intelligibility

- To date there are no studies of Tok-Pisin-speaking children's intelligibility

## ■ Common phonological patterns

- The two most common mismatches were [ʔ] for /s, z, dʒ, l/, *balus* /balus/ → [baluʔ] 'plane', *Jesus* /dʒizəs/ → [ʒiʔaʔ] 'Jesus' and /l/ for /r/ e.g. *rausim* /rausim/ → [lausim] 'remove' (Boer, 2020).
- **Structural simplifications:** vowel deletion (e.g., *kakaruk* /kakaruk/ → [kakruk] 'chicken'), consonant deletion (e.g., *digim* /dɪgim/ → [dɪgɪ] 'to dig'), and cluster reduction (e.g., *blek* /blek/ → [bek] 'black').
- **Systematic simplifications:** voicing or de-aspiration (e.g., *klaud* /klaud<sup>h</sup>/ → [klaud] 'cloud'), de-voicing (e.g., *bebi* /bebi/ → [bepi] 'baby'), stopping (e.g., *solwara* /solwara/ → [ʔolwada] 'sea'), palatalization (e.g., *laulau* /laulau/ → [ʎaulau] 'laulau') - and deaffrication (e.g., anglicized *ginger* /dʒɪndʒə/ → [dɪnda] 'ginger') (Boer, 2020).

# Tok Pisin

## Children with Speech Sound Disorders

### ■ Also called

- Pikinini gat hevi bilong toktok → speech sound disorder
- Tang i wokim isi isi → dysarthria
- Phonological disorder, articulation disorder, childhood apraxia of speech

### ■ Research

- No formal research has been completed for Tok Pisin-speaking children with speech sound disorders

# Tok Pisin Speech Assessments

- To date there are no formal speech assessments that have been developed for Tok Pisin-speaking children.
- **Highlands Speech Naming task** (Boer, 2020). This is an informal picture naming task developed in 2014 using locally sourced photographic stimuli. It has been trialled on 80 children aged 3;0 to 7;0. Available from the author.

# Tok Pisin Speech Interventions

- There has been no formal research to support speech interventions in Tok Pisin.
- Cued Articulation (Passy, 2010) has been used successfully to support comparative phonology as part of teaching and speech sound mismatch correction.

# Reference

## Book chapter

- Boer, J.M., Claessen, M., Williams, C. (forthcoming). Tok Pisin speech development. In S. McLeod (Ed.). *The Oxford handbook of speech development in languages of the world*. Oxford University Press.

## Presentation

- Boer, J.M., Claessen, M., Williams, C. (2023). Tok Pisin: *Multilingual children's speech development*. Charles Sturt University, Australia.

<https://www.csu.edu.au/research/multilingual-speech/languages>

- Sharynne McLeod, Charles Sturt University, Australia
- Helen L. Blake, University of Technology Sydney, Australia