Tok Pisin and English in Papua New Guinea – the value of Census data

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Sources of Census Data

1966-1971:

1980:

1990:

2000:

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Papua New Guinea language situation

- Urban Centres:  Tok Pisin, English
- Rural Areas: Indigenous, Tok Pisin
- Education: Tok Ples, English

- Population 2000: ≈ 5.14 million
  10+ Years old: ≈ 3.7 million

- Extreme case of Indigenous Linguistic Diversity

- 800+ Indigenous Languages

- Pidgin ‘National Languages’: Tok Pisin (TP), Hiri Motu (HM)

- ‘Official Language’: English (Eng)
Questions of Interest

• I. Spread of a pidgin/creole language
  – Number of users *

• II. First-language usage
  – ‘creole’ speakers *

• III. Multilingualism with Indigenous Vernaculars
  – ‘substrate’ effects *

• IV. Multilingualism with Lexifier
  – ‘superstrate’ effects & ‘decreolization’ *
PNG Census History - Summary

• Early: 1966-1971:
  – Restricted to urban and 10% of rural population
  – Spread of ‘national’ languages
    • Tok Pisin – spoken/written
    • Hiri Motu – spoken/written
    • English – spoken/written
  – Literacy in other languages

• Post-Independence: 1980
  – ‘long form’ question for urban population mainly
  – Domains of language use
  – Spread of English, Creole Tok Pisin

• National Census: 1990-2000
  – National Census
  – Literacy skills: United Nations Education Index
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Papua New Guinea Census
Changing Questions

Questions:
Spoken / Written Languages
1966, 1971

Home & Market language
1980

Ability to Read & Write
1990, 2000, 2011

Competence
Australian Administration
Independence = 1975
Urban + 10% Rural

Domains / Use
‘long form’ & ‘short form’

National Census
Literacy
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1990 ‘Literacy’ focus

• UN Index requires literacy rates
• No measure of verbal vs literate competence in the community.
• 1990: asked if literate in English, Tok Pisin, Motu, or any other language.
  – read and write simple messages or letters in a language
  – No specific language skills tested
    • "it was assumed that as in most cases the enumerator was appointed from the locality, he also knew who was able to read and write with understanding."

  (National Statistical office 1994)
Census 2000 National Literacy
Population over 10 years ≈ 3.7 million

• The 2000 census was conducted using a single one-page form, printed entirely in English.
• The task of interpreting the questions for non-English-literate informants was left to English-speakers in individual households or the community at large, or to the census enumerators.
• Literacy Question:
  – Language skills were only assessed for persons over 10 years of age, along with advanced educational attainments and details of employment.
• Question 14 asked “Which languages can the person read and write with understanding?”.
  – The four options given were: English, Pidgin, Motu, Tokples.
  – Yes/No answers were provided by check-box.
Changing Questions = Changing Data

• Data Differences:
  – Different Sample sizes
  – Different Questions
  – Different tests applied
  – Different Political Agendas

• Questions:
  – Compatible Data?
  – Tok Pisin & English : change over time?
  – What can ‘literacy’ tell us?

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Census 2000 National Literacy
Population over 10 years ≈ 3.7 million

- Total Literate in any language: 55%
- Total not literate: 42%
- Total literacy not reported: 3%

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2000 Literate – Hiri Motu
180,000 ≈ 5%

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2000 Literacy - English
1.4 million ≈ 39%

Literate in English
Literate without English

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2000 Literacy – Tok Pisin
1.6 million ≈ 44%

Literate in Tok Pisin
Literate without Tok Pisin

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Literacy as a measure of Competence?

(45% illiterate population must be speaking something...)
Census Data 1966 – Literacy (non-indigenous languages)

- Tok Pisin
- Tok Pisin, English
- Police (Hiri) Motu
- English

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Census Data 1966 – Competence (non-indigenous languages)

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Census Data 1971 – Competence (non-indigenous languages)

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## Comparing Census Data

- Papua New Guinea Census figures: Combined (literacy figures indicated)

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<td>14.23</td>
<td>38.5</td>
<td>40.5</td>
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</tbody>
</table>

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Literacy % 1966-2000

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Census Data 1966 – Literacy (non-indigenous languages)

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Census Data 2000 – Literacy (non-indigenous languages)

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Calculating Literacy 1980-1990

• Literacy Rates: 1966: 22% → 1990: 45% → 2000: 55%

• 1994 Report: 1980 figures were estimated on the assumption that citizens over 10 years who had completed grade 3+ were literate.
  – National Statistical office 1994 report calculation of 27.7%
    • Romaine obtained literacy figures around 32.3% for 1980 census = 5% higher
  – 1980-1990: Literacy growth rate per annum at 6.4% is much higher than population growth rate of 2.3%

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Census 2000 – ‘Literacy Gap’

- ≈ 500,000 more citizens reported reading and writing ability (literacy) at question 14 than who had completed grade 3 education.
  - Grade 3+ ≈ 1.64 million
  - Q14 Literate ≈ 2.15 million

- This represents approximately 10% of the population of Papua New Guinea
  - Even though Grade 3+ figures include 5-9 y/olds who were not included in Q14
‘Literacy Gap’ - Questions

• Q1. How does this gap effect literacy growth rates?
• Q2. Why is there a gap?
  – i. D. Sankoff’s account
  – ii. Alternative explanation
1. Growth in Literacy over time

Estimated Literacy Rates for 2000 are 10% lower than reported rates.

PNG National Census Literacy Rates
Reported and Calculated 1966-2000

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2.i. D. Sankoff : continuing education

• Argued that the post-school age growth in literacy was due to acquisition of skills in the workplace/adulthood
• One explanation for difference between Grade 3+ ‘literacy’ and reported literacy (‘literacy gap’) in 2000 census
2.i. D Sankoff’s Late-literacy

- REM: under 18s = Mühlhäusler’s (1985g: 238) earliest category of Tok Pisin speakers

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2.ii. Alternative Explanation

I looked at the high levels of *Tokples* ‘Other’ language literacy reported in 2000 Census:

- 1.5 million people
- A remarkable success for the *Tokples* Education Program?
- Siegel 1998:
  - Adult literacy programs: 330, with 449 teachers and 7,543 students
  - These included Tok Pisin as an accepted *Tokples*
- Nb. many *Tokples* with limited orthographies

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2.ii. 2000 Literacy – ‘Other’
1.5 million \(\approx 40\%\)
Tokples Education

• A (very) rough (over-) estimate:
• 80,000 Preschool students each 2 years 1980-2000

=> 800,000+ Vernacular literates

– Still well short of the Reported Census figures of 1.5 million
  • Nb. Estimate would include Tok Pisin literates also

=> An even larger ‘literacy gap’?

• Where does all this ‘Other’ language literacy come from?
2.ii. Explanation: Answering the Question

• Was the Census 2000 Language Question interpreted as a question on language Ability, rather than Literacy?
  – 50% of informants in Port Moresby Households could not recall if there was a language question 2 years later
  – 1:3 of them recalled it as a question about reading/writing skills
  – Suggests that reported ‘literacy’ figures may represent overestimations:
    • People misunderstood the question
    • Literate citizens included all the languages they knew
    • High figures for vernacular literacy compared to formal education/orthographies etc.

“care needs to be exercised in how the figures are to be interpreted.” (Crowley 1994: 2)
Recap: Questions of Interest

• I. Spread of a pidgin/creole language
  – Number of users *

• II. First-language usage
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• III. Multilingualism with Indigenous Vernaculars
  – ‘substrate’ effects *

• IV. Multilingualism with Lexifier
  – ‘superstrate’ effects & ‘decreolization’ *

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Interpretations: Literacy

‘Literacy’ figure may be higher or lower than reading and writing skills, but presumably lower than speaking skills.

Census Data 1966 – Literacy (non-indigenous languages)

- Tok Pisin
- Tok Pisin, English
- Police (Hiri) Motu
- English
- Tok Pisin, Hiri Motu
- Hiri Motu, English

Census Data 1966 – Competence (non-indigenous languages)

- Tok Pisin
- Tok Pisin, English
- Police (Hiri) Motu
- English
- Tok Pisin, Hiri Motu
- Hiri Motu, English
Interpretations I

• Number of Users of Tok Pisin
Census 2000 Literacy – Tok Pisin
1.6 million ≈ 44%

Literate in Tok Pisin
Literate without Tok Pisin

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Interpretations II

• ‘Creole’
‘Creole’ Literacy – Tok Pisin
Mono-literate: 136,000 ≈ 4%

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Interpretations III

• ‘Substrates’

• Assuming those reporting ‘literacy’ in a Tokples are able to speak it to some degree:
  – Potential for ‘substrate’ or L1 effects
Substrate Effects?
Hiri Motu with ‘Other’
Substrate Effects?
English with ‘Other’

- Mono-literate
- Bi-literate with 'Other'
- Multi-literate with 'Other'
- Multi-literate without 'Other'

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‘Substrate’?

- 800+ ‘Other’ languages = ‘Substrate’?
- English a significant language in multilingualism
- Big overlap of ‘Other’ with Hiri Motu
- ‘Substrate’ Effect arguably present on English as well as Tok Pisin
- REM: Over-estimation of *Tokples* literacy?
- REM: Literacy and Competance

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Interpretations IV

• ‘Superstrate’
Superstrate Effects?
Tok Pisin Literates ≈ 1.6 million

- Mono-literate
- Biliterate with English
- Multiliterate with English
- Multiliterate without English
Tok Pisin and English

• Conclusions for my work on Bilingual effects on Tok Pisin from English:
  – Multi-literate Tok Pisin / English frequent
  – As many people bi-literate in Tok Pisin and English as literate in Tok Pisin without English

• ‘Literacy’ figure may be higher or lower than reading and writing skills, but presumably lower than speaking skills
Interpretations: Summary Tok Pisin in 2000 Census

– I. Tok Pisin Community > 44%
– II. Tok Pisin Creole community? : 4%
– III. Substrate Effects? : 37%
– IV. Superstrate effects? : 33%

• Bi-literacy Tok Pisin / English : 7% of population

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Census Data 2000 – Literacy (non-indigenous languages)

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Comments

• Census data on literacy is only the tip of the iceberg
• 1 million strong community of Tok Pisin / English multi-literate
• An underlying greater non-literate community?
• Census 2000 data establishes English and Tok Pisin as key growth languages in Papua New Guinean
• Community featuring Post-pidgin ‘superstrate’ effects?

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Goroka Market - Signage

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References I.


References II.


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