

A woman in a pink shirt and blue shorts is sitting on a tiled floor, interacting with a young child in a yellow shirt. They are surrounded by professional video equipment, including two cameras on tripods and a boom microphone, indicating a field recording session. The room has a tiled floor and a yellow curtain in the background.

# Documenting child language in an Indigenous Amazonian community

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# Land Acknowledgement

This is to respectfully acknowledge and honor the present and past relationships of Native American peoples to the lands on which the University of Texas at Austin now stands, including Tonkawas, Lipan Apaches, Comanches, and others extending back tens of millennia.

# Why study child language in documentation?

Crucial for:

- Language reclamation programs: curriculum, assessment, program evaluation (CLRRW 2017; Brittain et al. 2007)
- L1 acquisition research (Pye 2020)
- Complete language documentation (Grenoble – ICLDC 2015)

# Obstacles

We lack established methods for studying child language in documentation.

- Documentation methods – often inappropriate for kids
- L1 methods – often inappropriate in documentation/Indigenous ctx

Goal of this talk: Share example methods.



# Ticuna Language & People

- Isolate
- Spoken along Amazon River in Brazil, Colombia, and Peru
- 40,000 - 70,000 speakers
- Most widely spoken Indigenous language of Brazil

Anderson & Anderson (2017), Montes Rodriguez (1995), Santos (2004), Soares (2000)



# Project Background

- Fieldwork 13 months 2015-2019
  - 11 months before L1 study
- Location: Cushillococha, Peru
  - Titled Indigenous community
  - Population ~5,000
  - Most people speak Ticuna as first & dominant language



# Participant Structure

# Traditional L1 Study Design

- Many child language studies have longitudinal design
  - Record relatively few kids of similar age, for several months/years.
  - Examples: Demuth et al. (2006), Mateo Pedro (2010).
- Alternative: cross-sectional design
  - Enroll many kids of different ages, record each just once.
  - Examples: Bergelson et al. (2019), Casillas et al. (2020).



# Cross-Sectional Design

- Longitudinal design not possible due to timeframe (cf. Chee 2017).
- Chose cross-sectional design instead
  - Age range: 1 to 4 years.
  - 45 kids, 14 one-year-olds, other age bins even.
- Started with children of existing language consultants; then snowballed.

# Roots of the Cross-Sectional Recruitment

- I had a large network of contacts.
- Many existing consultants had young children.
- Nearly all children in Cushillococha (90+%) were acquiring Ticuna.

Tasks

# Traditional L1 Study Tasks

- Key method for L1 studies: Record children doing everyday activities.
  - Interacting with caregivers/family at home.
- Additional/alternative methods do exist.
  - Caregiver surveys, experiments, prompted storytelling, etc.
- Exclusively collected recordings of everyday life.
  - More likely to succeed + more credible to participants than other methods.



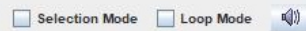
# Data Collection / Tasks

1. Daylong audio recording – 9 hours
  - Child recorded on body-worn device for entire day (Casillas et al. 2020)
  - Maximally natural, but very hard to analyze
2. Object play video – 30 minutes
  - Child and caregiver play with object (provided by me) at home
  - Maximally comparable
3. Free play video – 60 minutes
  - Child and caregiver do whatever they want at home
  - Maximally natural



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CHI-tca [189]

Caregiver-tca [72] | m31, a4 Na4a2 r+3A3, na4nu4e1gu1pa3ra1 | nu5a2ma4tSi4r\_e1 me31A2 nu4pa3ra1

CHI-tns [189]

CHI-notes [19]

Caregiver-tns [72] | Mm, and this one, it had its feet put back on | So now its legs have got put on properly here

Caregiver-notes | Other recordings show that in this model of toy, the feet and legs can be removed piece by piece.

# Roots of the Tasks

- 1:1 child-caregiver interactions are common.
  - Multiparty interactions are the norm in some settings (Kelly et al. 2015).
- Common for adult caregivers to talk to children – even newborns.
  - Caregivers avoid directly talking to children in some settings: Samoa (Ochs), Mayan world (Mateo Pedro 2010, Casillas et al. 2020).

# Sampling & Transcription



# Traditional L1 Transcription/Sampling

- Don't sample – transcribe everything
  - Requires large team and (usually) longitudinal design
- Don't transcribe – use automated protocol instead
  - Produces only word and turn count (Greenwood et al. 2011)
- Sample small part of recordings – transcribe only that
  - Sampling can be random, by timestamp, or by information density (Casillas & Cristia 2019; Cychosz et al. 2020)

# Sampling Technique

Object play: First 10 min (timestamp-based)

- Low effort

Free play: 10 min with most child/child-directed speech (density-based)

- Higher effort to identify & transcribe, but higher information
- Imperfect: sacrifices context

Daylong recordings: No transcription yet

# Roots of the Transcription Process

- Object play is very similar over time & between participants.
- Free play has long silences & short bursts of talk.
- Daylong recordings are not a priority.
  - Other recordings are easier to transcribe/analyze.

Conclusion

# Lab methods ≠ Field methods

Don't import L1 acquisition labs into Indigenous settings.

- Many lab methods are inappropriate (e.g., caregiver surveys).

Instead, work with / recognize what is already there.

- Child-caregiver interaction is intrinsically natural, comparable, rich.

# Impacts

What this work can deliver:

- Knowledge about development → reclamation/conservation
- Holistic picture of language use → documentation
- Rich source of adult speech → description



# Thank You!

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  - Opinions & recommendations mine and not those of NSF

# Thank you!

- See more of my work at:

<http://sites.utexas.edu/amaliaskilton>

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