

# Connecting language acquisition studies to language documentation and beyond

*The Chisasibi Child Language Acquisition Study*



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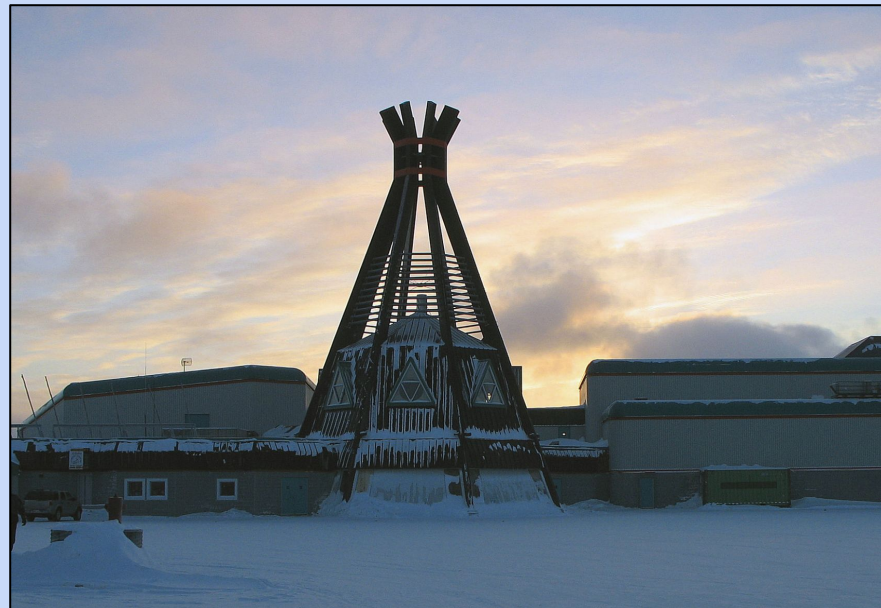
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# Roadmap

1. Language documentation
2. First language (L1) acquisition research and Indigenous languages
3. The CCLAS project
4. Connecting to documentation
5. Connecting to description
6. Connecting to communities



*Photo: The Michuap, Chisasibi's Community Centre  
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# Terminology

- We use **first language (L1)** in the *traditional academic sense* (e.g., Ortega 2009)
  - The language(s) a child learns **from/near birth**, from exposure to family, caretakers, and the community, for the first several years of life
- **Child speech:** Language spoken by children
- **Child-directed speech (CDS):** Language spoken to children
- **Naturalistic L1 acquisition research:**
  - Regular recordings of children interacting with others in natural situations
  - Analyzing child production and child-directed speech

# Language documentation

## How do we typically think of language documentation?

- **Comprehensive** (as possible) **primary** records of linguistic practice and traditions  
(e.g., Gippert et al. 2006, Himmelmann 1998, Woodbury 2011)
- Preserved + usable for **variety of purposes**: Community, academic, etc.
- Tend to be samples of **adult-level** linguistic usage in diverse genres ...
  - Traditional tales, narratives, conversations, etc.
- But **child** and **child-directed speech** often not included in language documentation

# Underrepresented genres: Child and child-directed speech

## Why aren't these genres typically included?

- Serious issues surrounding **privacy**
- **Absence or small number** of child speakers
- Concerns about **language change + code-mixing**
- But these are **really** important genres of speech ...

# Underrepresented genres: Child and child-directed speech

- How adults and children **interact linguistically**
- CDS may or may not be **simplified/changed** in a number of ways (vocabulary, phonology, grammar)
- The **details of acquisition**, how children learn:
  - The sounds of the language
  - Meanings of words
  - Building words + larger phrases
- **Naturalistic L1 acquisition research** can document these genres!

# L1 acquisition and beyond

## Our exploration today

How can L1 research enrich language documentation and description **and** benefit communities?

- Using **CCLAS project** as an example (Brittain et al. 2007)
- We have **North American focus** because we operate there
- Several hundred Indigenous languages in North America (Mithun 1999)
- Long tradition of L1 research w/ some languages ... less so w/ others

# L1 acquisition of North American languages

- **40+ years** with **Mayan** languages  
(e.g., Stross 1969, Pye 1979, Brown 1998, de León 1999, Pfeiler 2003, Pedro 2015)
- **30+ years** with **Inuit** languages  
(e.g., Fortescue 1984, Fortescue & Olsen 1992, Allen 1996, Allen & Dench 2015)
- Fewer studies outside these families, for example:
  - **Mohawk** (Feurer 1980, Mithun 1989)
  - **Navajo** (Saville-Troike 1996, Courtney & Saville-Troike 2002, Chee 2017)
  - **Dene** (Cook 2006, Jung in progress)
- **CCLAS: Northern East Cree** (Brittain et al. 2007)



Image: NASA (public domain)



# CCLAS: L1 acquisition of Northern East Cree

## Chisasibi Child Language Acquisition Study

- **Community initiated:** Cree School Board of Quebec → 15 years of ongoing support
  - Permission from **Cree Nation of Chisasibi**
- **Funding and support**
  - Funding: SSHRC Canada, Cree School Board, Memorial University
  - In-kind support: Cree School Board, Anjabowa Child Care Centres
- **Data collection:** 2004-2007, video recording in **Chisasibi**
  - Starts w/ six participants, three on completion (**ages 2;0–6;0**)

# CCLAS: L1 acquisition + documentation

- **55+ hours of video recordings:**  
Child and child-directed speech
- **Naturalistic** interactions  
between one adult + one child
- Recordings **richly annotated**  
using **open-source** software
  - IPA transcriptions,  
translations, etc.
  - Powerful search capability
- This is a **corpus** of language documentation containing **underrepresented genres**

The screenshot displays the CCLAS Auto Parser software interface. At the top, a window titled "Session Editor : B1.01-Daisy-03\_08\_10\*" contains a menu bar (File, Edit, Workspace, Session, View, Query, Analysis, Tools, Window, Help) and a toolbar. Below the menu bar, a "Record Data" section shows "Record: 580 of 882" and a search bar. A "Media Player" window is open, showing a video recording of two people. Below the video, the "CCLAS Auto Parser" window is active, displaying a table for "Morpheme Selection" and a "Morpheme Search" section.

Orthography	Meaning	Type
awásh	child	na
ish	dim	dim
h	pl	pl

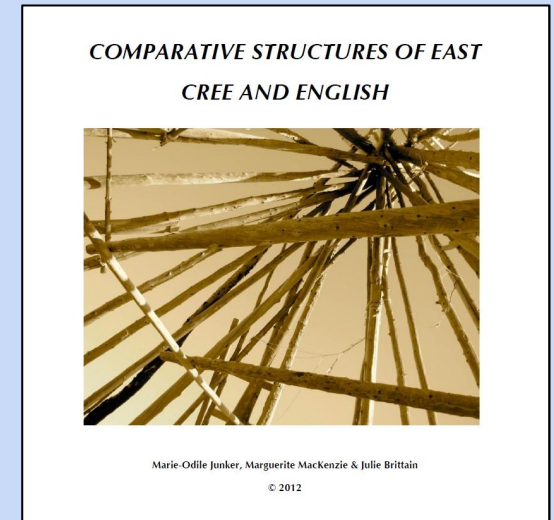
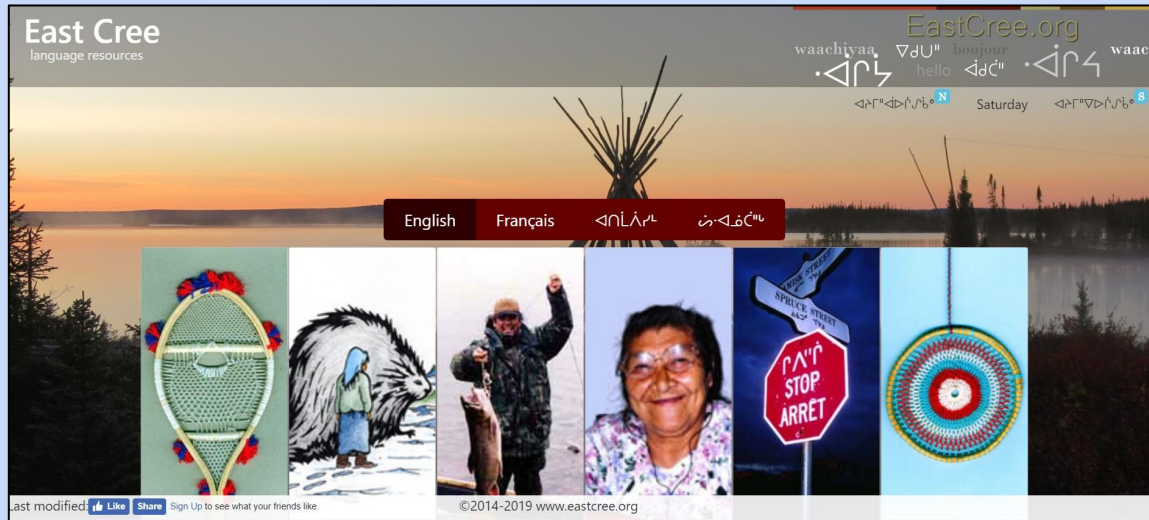
The "Morpheme Search" section includes a search input field and a table with columns for Orthography, Meaning, and Type.

On the right side of the interface, a "Record Data" panel shows the following information:

- Orthography: awásh = ish = h u = pípi = m = ish = h
- Morpheme Meaning: child = dim = pl 3 = baby = poss = dim = an.obv
- Morpheme Type: na = dim = pl 3 = na = poss = dim = an.obv
- Translation: children, her little baby
- Segment: 023:28.249-023:30.818
- Actual Morphology: a'waf = h u = bibi = p = f = h
- Target Morphology: a'waf = h u = bi'bi = m = f = h
- Notes: [ ]
- Questions: [ ]

# CCLAS: L1 acquisition + description

- L1 research **description** (of target language) > **analysis**
- Projects like CCLAS can contribute description of sound system, lexicon, syntax, etc.
- East Cree is under-described, but some great existing tools (esp. **eastcree.org**)



# CCLAS: L1 acquisition + description

## Examples of CCLAS-generated description

- How the **stress system** of East Cree works (Dyck et al. 2006)
- Processes of **vowel deletion** in the language (Dyck et al. 2014)
  - Acquisition of stress in NE Cree (Swain 2008; Rose et al. 2010)
- **Semantics + syntax** (Brittain 2014; Brittain & Acton 2014)
- Linguistic description is **relevant** to the **community** and language **learners** too

### NORTHERN EAST CREE ACCENT<sup>\*</sup>

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#### 1. Introduction

This paper provides a description and preliminary analysis of accent in Northern East Cree, a Cree-Montagnais-Naskapi dialect spoken in Chisasibi (formerly Fort George), Quebec. While brief descriptions of Northern East Cree accent are to be found in Martin (1974) and MacKenzie (1980), the accentual system of Northern East Cree is otherwise undocumented. The closely-related dialect of Southern East Cree accent has been analysed by Brittain (2000) and Piggott (2003).

The research described here is part of a larger project, the Chisasibi Child Language Acquisition Study (CCLAS <http://arts-srv.arts.mun.ca/cclaz/>). One of the project goals is to characterize the acquisition of heads in Northern East Cree. In this paper we describe the target (adult) metrical system as a prerequisite to characterizing the acquisition of metrical heads in Northern East Cree.

#### 2. Methodology

The data is based on three separate recordings of a word list, provided in 2005 and 2006 by two female Northern East Cree speakers (LBS and DB) from Chisasibi. Four linguists phonetically transcribed the recordings. The two most experienced transcribers largely agreed on the placement of word accent. We also measured the pitch, intensity, and length of some penults and antepenults in PRAAT. Further details are provided in §8 and §9.

#### 3. Overview

We describe Northern East Cree segments and syllable structure in §4, and the evidence for metrical constituents in §5. Metrical parameters are provided in §6, and data conforming to the parameters are described in §7. The remaining data

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# CCLAS: L1 acquisition + communities

- **Supporting Speech-Language Pathology (SLP) clinicians**
- SLP tools typically **English-** or **French-centric**
- Case studies are a start for making better **tools**, establishing **benchmarks**
  - **Resonance Screening Tool** for speakers of Northern East Cree  
(Brittain, Woolridge & Erdos 2014)
  - “Ani” favours particular verb types 24–44 months (Terry 2010; Rose & Brittain 2011)
- Training + future SLPs

# CCLAS: L1 acquisition + communities

- Community-driven **research**
  - Ex) **Code-mixing**: English words but **Cree** sounds + affixes (Bryant 2013, Pile 2018)
- Community **presentations**
  - The future of Cree, bilingualism, SLPs, etc.
- Community **training**: Cree language consultants
- **Future** applications:
  - L1 and L2 **curriculum** materials
  - Apply CCLAS methodology in **other communities**

# Conclusions

- Projects like CCLAS necessarily **go beyond studying L1 acquisition**
  - Contributions to language **documentation**
  - Contributions to language **description**
  - Contributions to **community** goals and interests

# Acknowledgements + Thanks to ...

- The **families** who made CCLAS possible by taking part, and the **community at large** for ongoing support
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- The **Cree School Board of Québec**
- **Anjabowa Childcare Centres** in Chisasibi
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