

CCLAS

Chisasibi
Child Language
Acquisition Study

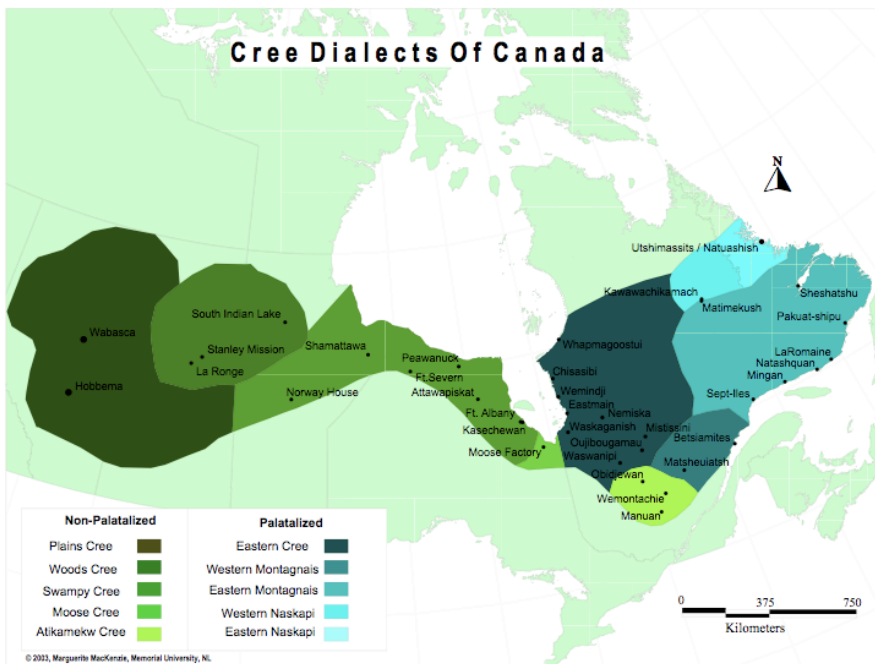


Child Language Acquisition Study (CCLAS)

<http://arts-srv.arts.mun.ca/cclas>

A naturalistic L1 acquisition study, over 30 months, filming at 2-3 week intervals; 6 participants, 3 in each age-cohort.

Cree Dialects Of Canada



Community partners

- ♦ Cree School Board (esp. Chisasibi): support for project idea; financial support; human resources; office facilities for CCLAS on-site project manager.
- ♦ Anjabowa Childcare Centre, Chisasibi: assistance in recruiting participants; allow us to film some of the children at one of their facilities.
(Band Council, Cree Nation of Chisasibi)

Time Line



Nov
2004

April
2007

x-----x

20mgroup A.....50m

44mgroup B.....74m

Data: 20m-->74m (approx. 1.5 years--> 6 years)

PRIVACY

- No shots / video clips of children in the study appear here, or anywhere else. Children referred to by number only.
- Principle funding is from SSHRC; to date (after 2.5 years), the project has cost approximately \$125,000.
 - Labour - project manager (filming, translation, data management); students (data processing)
 - Travel - site visits to Chisasibi, project manager training in St John's

Talk organization

1. Project goals
2. Why Chisasibi?
3. Procedures
4. Progress report

1. Goals

- A. Contribute to the literature on L1 acquisition -- generalizations about L1 acquisition largely based on languages typologically unlike Algonquian.
- B. Contribute to documentation of (East) Cree, with literature aimed at community and academic audience.
- C. Establish workable protocols for L1 research at a distance.

- D. Utilize specialized software (Phon; Rose et al. 2006) to structure database, facilitating linguistic analysis.
- E. Take first steps toward providing speech community with benchmark data on L1 acquisition process for Cree, for use in domains of Education and Health.



2. Why Chisasibi?

Essential components

- Working relationship already extant in community
- Infrastructure: Cree School Board; Cree curriculum language consultants
- Predominantly Cree-speaking community, (all ages; crucially, still acquired as L1)
- 4,000 population -- large enough that privacy is not difficult to protect.
- Cree as a Language of Instruction Program (CLIP), K to Grade 3. Anjabowa Childcare Centre
- On-site technical support (Cree School Board).

And talking of skilled personnel ...

Darlene Bearskin

- Video-recording (data-collection).
- Data compression and transfer to MUN.
- Family liaison.
- Initial translation of data into English and identification of target forms, where child forms differ (audio files).

3. PROCEDURES

In Chisasibi

1. 60 minute video-recordings are made at 2 week intervals (SONY Camcorder).
2. Each movie is compressed, and stored on the project computer (Mac G5).
3. Electronic transfer of movies to M.U.N. computer (FTP).

At Memorial ...

Currently, 2 u/g & 1 MA students are part of our research team

4. Import movie files into Phon in order to:
6. Segment videos into child utterance segments. Adult interactions are always accessible.
8. Double blind (narrow) IPA transcription (supported, where appropriate, by acoustic analysis).

PHON screen, picture removed for privacy reasons.


The screenshot shows the PHON software interface for transcript validation. The window title is "Phon - CCLAS - /Users/jcooper/PhonWorkspace/CCLAS/ - Transcript Validation". The interface is divided into several panels:

- Media:** A panel with a message "No movie component available" and playback controls (play, stop, previous, next, volume).
- Observation Data:** A table with columns "Participants", "Name", "Birth Date", and "Age". The table contains one row: "B1", "sknee", "2001-04-04", "4;2.24".
- Record Summary:** A panel with fields for "Orthography:", "Target IPA:", and "Actual IPA: wap'ʃʃ".
- Target Transcript:** A large text area with the word "Transcript" centered.
- Actual Transcript:** A large text area containing the transcription "sknee wap'ʃʃ" and "jcooper wap'ʃʃ".
- Segment Control:** A panel with a "Time: 167,131 to 171,328" and a slider.
- Record Navigation:** A panel with "Record Number: 24" and "Previous" and "Next" buttons.
- User:** A field at the bottom left.

Phon - TestProject-Nov1-05 - /Users/yrose/PhonWorkspace/TestProject-Nov1-05/ : Transcription

Save Project New Project New Corpus New Session Project Log Search Preferences Tiers Project Navigator

Media



0001 Participant: Happy Kiddie 4

- Orthography
- IPATarget
- IPAAActual
- Segment
 - Time: 2,905.380 to 2,907.455
- Segment Type
- Notes
- Excluded
- MyPATier
- MyTextTier

0002 Participant: Happy Kiddie 4

- Orthography: Get some segmentation done
- IPATarget: get'sum,segmant/en/ən'dʌn
- IPAAActual: gɛlksjfdɪkɪkɪsdɪjɪksjɪd
- Segment
 - Time: 52,268 to 55,268
- Segment Type
- Notes
- Excluded
- MyPATier
- MyTextTier

Observation Data

Participants

Name	Birth Date	Age
Happy Kiddie	1971-10-24	34.0.8

Date (YYYY-MM-DD): 2005-11-01

Session Type: text

Media Location: /Users/yrose/PhonWorkspace/


Record Number: 1

User:

Phone Alignment

Target: æ p ɪ ə k a t

Actual: a k a



Phrase Syllabification

Phrase #1

Orthography: snakes

Target IPA: 'sneiks

Actual IPA: nek

Target: | s n eɪ k s

Actual: | n e k

Orthography: I love picking blueberries

Target IPA: 'aɪ'lʌv'pɪkɪŋ'blu:,beɪrɪ:z

Actual IPA: 'æ'lɑ:'pɪt^h'bubɛ:

Reset

Phrases	Orthography	IPA Target	IPA Actual
I love picking blueberries	'aɪ'lʌv'pɪkɪŋ'blu:,beɪrɪ:z	'æ'lɑ:'pɪt ^h 'bubɛ:	

Sarah and Janelle merging PHON files.



Phon's alignment module will facilitate (probably non-automated) actual and target morpheme alignment

- ♦ Hypothetical morphemic sequence

- ♦ Adult: mor mor mor mor mor
- ♦ Child: mor **** mor mor ****
- ♦ Gloss: gl1 gl2 gl3 gl4 gl5

- ♦ We will investigate the possibility of IPA / orthography matching being automated within Phon.
- ♦ If feasible: allows CCLAS to contribute to on-line East Cree dictionary (at the Interactive East Cree Language Website: Cree school Board / Marie-Odile Junker, Carleton University).

Fields we currently use:

Orthography:	wâpush
IPA target:	[wæp ^h ʃ]
IPA actual:	[wæpʃ]
Translation:	"rabbit"

In Chisasibi again ...

- ♦ Darlene accesses segmented data in Phon (on-line), listens to segments and provides spoken commentary on each chunk (using Amadeus):
- ♦ "B1 said 'mæwmindʒet'əkʌnəbæn?a:' which means 'I will hold this, OK?' I said ..." (Where required, Darlene provides adult interaction.)

And then back at MUN ...

- ♦ Darlene's sound files are received in our lab: (1) IPA of target (adult) forms (allowing comparison with IPA actual) and (2) transcription of English translation, entered into a field in Phon .
- ♦ This info is passed to MM for orthography reconstruction and morphological breakdown.

So, for each movie, we minimally require the following information.

- IPA transcriptions (and alignment) of actual (child) forms with target (adult) forms, focus here is on phonology, but also we are interested in alignment of actual and target forms in the domains of morphology and syntax ...
- Orthographic transcription
- English translation
- Morphological analysis of complex words

Some examples from our database: 44 months

[kæmʃætʃʔɒmpkumæn]

Kaa mishaach uu muuhkumaan

Kaa + mishaa + ch uu muuhkumaan

Rel be.big CIN.0 this knife

“this is the big knife”

CIN = Conjunct Indicative Neutral

0 = inanimate subject

[bədætsæjægɪnɒtʃ]

pitaatis aay + aakiniwi + ch

potato have + passive + CIN.3

“potatoes ... having to do with”

(talking about potato peeler -- child has toy potato peeler)

4. What we've done

- Approximately 120 movies (of A1, A2, A3, B1, B2, B3) -- priority is currently on processing A1 and B1 all the way through the stages outlined here.
- Analysis of adult Northern East Cree stress system (Dyck et al. 2006)
- Lay version of Dyck et al. 2006 in preparation for submission to community publication

- Erin Swain, MA student, thesis = comparison of child data with adult data (investigation of phonetic and phonological acquisition of the stress parameters of NE Cree).
- Community information dissemination (public lectures & media)

References

Dyck, C., J. **Brittain**, and M. MacKenzie. 2006. *Northern East Cree Accent*. To appear in *Proceedings of the 2006 Annual Conference of the Canadian Linguistic Association*.

Rose, Y., B. MacWhinney, R. Byrne, G. Hedlund, K. Maddocks, P. O'Brien, and T. Wareham. 2006. Introducing Phon: a software solution for the study of phonological acquisition. *Proceedings of the 30th Boston University Conference on Language Development*, D. Bamman, T. Magnitskaia and C. Zaller (eds.). Somerville, MA: Cascadilla Press. 489-500.

Research team presentations to members of Community.

2006, May 24, *The Chisasibi Child Language Acquisition Study (CCLAS)*, (Presentation to members of general public in Chisasibi, Quebec (The Inuit Centre).

2006, May 20, *First Language Acquisition and the Chisasibi Child Language Acquisition Study (CCLAS)*, (Presentation to members of the Cree School Board and Cree-medium trainee teachers, Chisasibi, Quebec (Cree School Board).

2005, Nov 16, *The Chisasibi Child Language Acquisition Study*: Cree School Board Education Symposium 2005 (*Languages: Paths to Student Success*), Val d'Or.

2005, **April 25**, *First language acquisition and the Chisasibi Child Language Acquisition Study (CCLAS)*, (Presentation to Board of Directors of Anjabowa Childcare/Headstart Centre).