# Teaching with TalkBank: New and Improved Tools to Augment Clinical Education

# ASHA Convention 2022 New Orleans LA

Davida Fromm<sup>1</sup>, Nan Bernstein Ratner<sup>2</sup>, Brian MacWhinney<sup>1</sup>



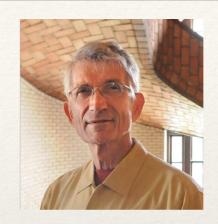
<sup>1</sup>Carnegie Mellon University -- Pittsburgh, PA <sup>2</sup>University of Maryland - College Park, MD



## Financial Disclosures







All 3 authors receive financial support for their work on the TalkBank project from:

- NSF: BCS2117578, SBE Grant SMA-1539010
- NIDCD: R01-HD082736-11, R01-DC015494, R01-DC008524

No income or royalties are received from the use of these shared databases or from the CLAN program.

# Technical Development

#### **Computer Programmers:**

- Leonid Spektor
- John Kowalski
- Franklin Chen



# TalkBank -- https://talkbank.org/

- The world's largest open access integrated repository for spoken language
- It provides shared databases to support research and teaching in many areas of our field (e.g., child language, fluency, aphasia, TBI, dementia)
  - transcribed language samples linked to media files (audio, video)
  - demographics and test data
- It provides transcription and language analysis tools CLAN program
- It has a main webpage with many links to many other webpages with many more interesting links and resources.

#### **TalkBank**



#### The TalkBank System

The CC Project

CC Manual

Digital Audio

TalkBank is a project organized by Brian MacWhinney at Carnegie Mellon University with the support and cooperation of hundreds of contributors and dozens of collaborators, including the members of the <u>TalkBank Governing Board</u>. The goal of TalkBank is to foster fundamental research in the study of human communication with an emphasis on spoken communication. Currently, TalkBank provides repositories in 14 research areas, as represented by the links on this page. This <u>CLARIN blog post</u> describes the overall functionality of TalkBank.

Data in TalkBank have been contributed by hundreds of researchers working in over 34 languages internationally who are committed to principles of open data-sharing. These data are used by thousands of researchers resulting in many thousands of published articles. Data in TalkBank use a consistent XML-compatible representation called CHAT which facilitates automatic analysis and searching, using open-source and free programs we have developed.

Transcription and language analysis program

Huge child language database

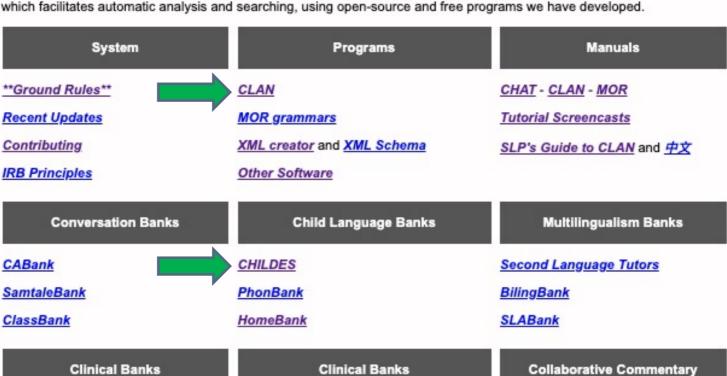
7 shared clinical databases



DementiaBank

How to subscribe to Mailing Lists

RHDBank



<u>TBIBank</u>	FluencyBank PsychosisBank	TalkBankAnno Project
Database Search	Resources	Organization
<u>TalkBankDB</u>	CLARIN Knowledge Center	TalkBank Governing Board
Database Versioning	GoogleGroups	Long-term preservation
Hints on Downloading	Picture Stimuli	CLARIN Curation
Contact	ASR	Recording
Brian MacWhinney : homepage	AWS method	Digital Video

**AphasiaBank** 

Pipeline method

**ASDBank** 



Manuals and video tutorials for CLAN and other TalkBank tools

# Teaching Tool #1 – Grand Rounds

These are guided tutorials in AphasiaBank, TBIBank, and RHDBank with curated examples from people with various types and severities of aphasia, TBI, and RHD.

At the TalkBank page https://talkbank.org/



click on AphasiaBank

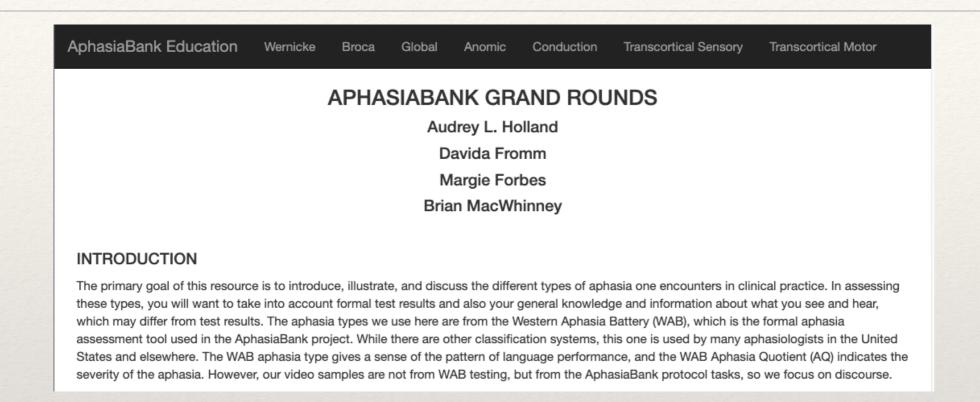
At the AphasiaBank page (or one of the other clinical bank web pages)

https://aphasia.talkbank.org/



click on Grand Rounds – students

# AphasiaBank Grand Rounds



The page starts with a general intro and general information about aphasia. It continues with:

- case histories of individuals with different types and severity of aphasia
- 40 captioned video clips of their discourse and performance on different tasks (e.g., repetition, naming)
- · clinically oriented questions to stimulate thought and discussion

# From the Anomia section in AphasiaBank Grand Rounds

#### Example #9

Here is another Cinderella clip that further illustrates some characteristics of Anomia. Violet scored 89.5 on the WAB AQ. She is in her early 60's and has had some advanced education. She was employed as a bookkeeping specialist before her stroke resulted in her retirement.





Button to click to play video clip

#### Questions for discussion

Did you notice that Violet had both kinds of paraphasias (semantic and phonemic) and circumlocutions, as in "the lady who comes and gives the wishes"?

Did you notice a strategy she used when she couldn't think of a specific word like "Cinderella"?

What do you think of Violet's self-monitoring?

## **TBIBank Grand Rounds**

#### TBIBANK GRAND ROUNDS

Elise Elbourn

Leanne Togher

Joanne Steel

**Emma Power** 

Davida Fromm

**Brian MacWhinney** 

#### INTRODUCTION

What is TBIBank Grand Rounds?

TBIBank Grand Rounds is an online learning module that supports education about cognitive-communication disorders resulting from Traumatic Brain Injury (TBI). The primary aim is to enhance speech-language pathology assessment and treatment practices for the benefit of individuals with TBI.

Why was TBIBank Grand Rounds developed?

The page starts with a general intro and general information about TBI. It continues with ...

# TBIBank Grand Rounds, cont.

- 8 modules on:
  - characteristics of discourse impairments in TBI
  - discourse analyses to complement assessment
  - treatment approaches that target "real-life" discourse level
  - communication activities
  - comorbidities with TBI
  - recovery of communication disorders in TBI
- 25 captioned video clips of adults with TBI
- clinically oriented questions and answers
- a pre-learning quiz that allows for measurement of new knowledge and skills

# From TBIBank Grand Rounds Module #1: What is a Cognitive-Communication Disorder?

#### **Case Studies**



■ video 1b





#### Buttons to click to play videos

Case 1a is Liam, age 19, who sustained a severe traumatic brain injury from a motorcycle accident. He had no reported difficulties with hearing or vision. Pre-injury, Liam lived in the family home with his parents. His premorbid personality was described as a 'joker' and he was reported to have many friends. At the time of this video, Liam was 6 months post-injury. The video shows his retell of the Cinderella task from the TBIBank protocol. He indicated that he was familiar with the story. The La Trobe Communication Questionnaire (significant other report) was indicative of a social communication disorder.

#### Questions

- 1. This short video highlights how communication can be affected by cognitive difficulties. What cognitive difficulties did you observe and how did these impact on Liam's communication?
- 2. Now compare this video with a person who has aphasia in video 1b and an individual with no acquired brain injury in video 1c. What is the difference in the language skills of these individuals?
- 3. In this module, we have selected the term 'cognitive-communication' to describe the communication changes that occur following a TBI. It is helpful to become familiar with the range of terminology that may be used in the context of TBI. Source the reading below and then consider the following question. In what contexts would you use the term cognitive-communication disorder versus another term and why?

#### Answers

#### Question 1

Memory: Liam has difficulty recalling key components of the Cinderella story (e.g. attending the ball, meeting the prince and losing the glass slipper). With a memory prompt (e.g., Did Cinderella go to the ball and meet the prince?), he is able to continue with the story.

Attention: At the beginning of the story retell, Liam appears distractible (e.g., continually fiddling his hands and skin), which highlights his attention difficulties.

Processing speed: The long silence towards the end of the retell could reflect reduced processing speed as Liam is trying to remember the story and what he has already said about the story.

Executive functioning: Liam also has difficulty monitoring his retell of the story.

# From the TBIBank Grand Rounds Module: What is a cognitive-communication disorder?

#### **Answers**

Question 1

Memory: Liam has difficulty recalling key components of the Cinderella story (e.g., attending the ball, meeting the prince and losing the glass slipper). With a memory prompt (e.g., Did Cinderella go to the ball and meet the prince?), he is able to continue with the story.

Attention: At the beginning of the story retell, Liam appears distractible (e.g., continually fiddling his hands and skin), which highlights his attention difficulties.

Processing speed: The long silence towards the end of the retell could reflect reduced processing speed as Liam is trying to remember the story and what he has already said about the story.

Executive functioning: Liam also has difficulty monitoring his retell of the story.

## RHDBank Grand Rounds

- 13 video clips
- material that highlights the cognitive-linguistic deficits associated with RHD
   (e.g., discourse that's tangential and verbose and egocentric, pragmatic issues
   like eye contact and turn-taking, lack of normal prosody, anosognosia)
- clinically oriented discussion questions
- evidence-based literature on treatment of cognitive-linguistic deficits

Note: Individuals with RHD are often underserved because of intact expressive language skills, but their problems are often more in the pragmatics, the use of language. These folks need better services and that depends on better identification and assessment.

# Teaching Tool #2 – Collaborative Commentary WHAT IS IT?!?!

- It's a tool for collective coding and commenting on the transcripts in all of the TalkBank shared databases
- You access a language transcript, watch the video, and enter codes or comments directly into the transcript.
- These codes or comments can only be seen by the people in your group – which may be your class, you research group, your clinical trainees, etc.

# Teaching Tool #2 – Collaborative Commentary HOW WOULD I USE IT?!?!

- Students in an introductory course can comment on behaviors that distinguish:
  - a person with fluent aphasia from a person with nonfluent aphasia
  - individuals with aphasia vs TBI vs RHD vs dementia
  - children with typical disfluencies vs stuttering
  - normal vs delayed language development
- Students learning about aphasia can:
  - identify behaviors such as paraphasia, circumlocution, agrammatism, disfluency
  - code gestures, global coherence, CIUs
  - observe the administration of formal and informal tests (e.g., Boston Naming Test, Quick Aphasia Battery) and practice scoring them
  - identify individuals with apraxia of speech and code relevant behaviors

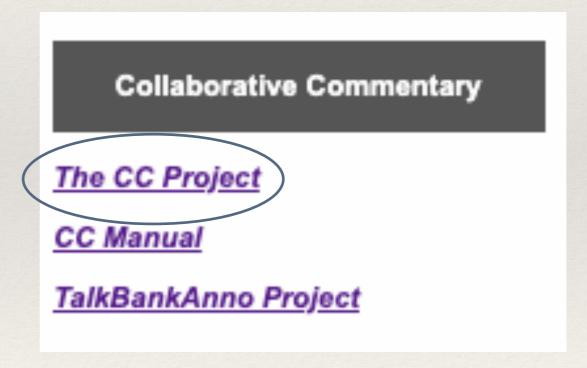
# Teaching Tool #2 – Collaborative Commentary MORE EXAMPLES

- Students learning about fluency disorders can use FluencyBank materials to practice completing the Stuttering Severity Instrument (SSI) and the Overall Assessment of the Speaker's Experience of Stuttering (OASES) on over 30 adults and a dozen children who stutter.
- Students learning about child language can tap the CHILDES
  database and use conversation analysis codes (e.g., argumentation,
  imitation, repair, hedge, alignment) or phonological process codes
  (e.g., fronting, gliding, cluster reduction)
- Students learning clinical skills can use any of the databases to comment on strategies the speaker uses successfully or unsuccessfully and suggest ideas for how/when to intervene when speakers demonstrate difficulties.
- and so on and so on ...

# Teaching Tool #2 – WHERE IS IT?

#### Again ...

- from the main TalkBank webpage
- find the Collaborative Commentary section
- click on The CC Project



These links provide examples of assignments that used CC to teach about aphasia, TBI, RHD, and child language.

This link takes you to Collaborative Commentary which is housed in the Browsable Database.

#### **TalkBank**



Collaborative Commentary

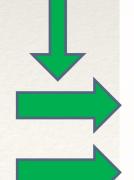
To start up CC, you first start up the TalkBank browser. You can do this by clicking on this link or you can click on one of the links called "Browsable Database" from the home page of any one of the 14 separate TalkBanks. Once you have started the TalkBank Browser, you can click on the blue button in the upper right of the window and it will start CC.

You may find it most useful to learn CC by first reading the <u>CC manual</u> and viewing the <u>screencasts that describe CC</u> functions.

#### Illustrations

This page illustrates the use of CC for annotating transcriptions in AphasiaBank, TBIBank, and RHDBank. These tasks were used by a group of colleagues and their research staff to learn how to use CC.

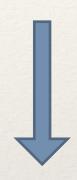
This page illustrates the use of CC for annotating transcriptions in CHILDES. It was used as an assignment in a class at CMU.



# Drop-down menu for all shared databases



Collab button for Collaborative Commentary



TalkBank: CHILDES ~

childes /

- Biling
- Celtic
- Chinese
- Clinical
- Clinical-MOR
- DutchAfrikaans
- EastAsian
- Eng-AAE
- Eng-NA
- Eng-UK
- French
- FrogsGerman
- Japanese
- Other
- Romance
- Scandinavian
- Slavic
- Spanish
- XLing

#### TalkBank Browser

#### Selecting a TalkBank Collection

First, use the pulldown menu in the top left to choose the TalkBank collection.

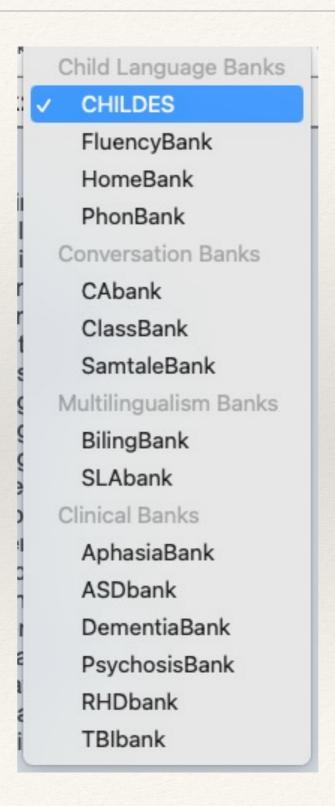
#### Selecting Transcripts

Use the left menu to navigate through the TalkBank corpora. Click once on the folder you want to explore, and it will expand to show any available subfolders and transcripts. Once you have found the transcript you want to review, click its filename. Your browser will load the transcript in this space and any associated media below the navigation.

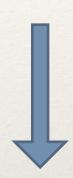
- · 1 Transcript with audio.
- II Transcript with video.
- · # Transcript with media, but not linked with timestamps.
- Transcript only (no media).
- O Media only (with empty transcript).

Collab

If you click on the drop-down menu in that directory on the left, you'll get this list of TalkBank shared databases in the Browser.



# Collab button for Collaborative Commentary



TalkBank: CHILDES

childes /

- Biling
- Celtic
- Chinese
- Clinical
- Clinical-MOR
- DutchAfrikaans
- EastAsian
- Eng-AAE
- Eng-NAEng-UK
- French
- Frogs
- GermanJapanese
- Other
- Romance
- Scandinavian
- Slavic
- Spanish
- XLing

#### TalkBank Browser

#### Selecting a TalkBank Collection

First, use the pulldown menu in the top left to choose the TalkBank collection.

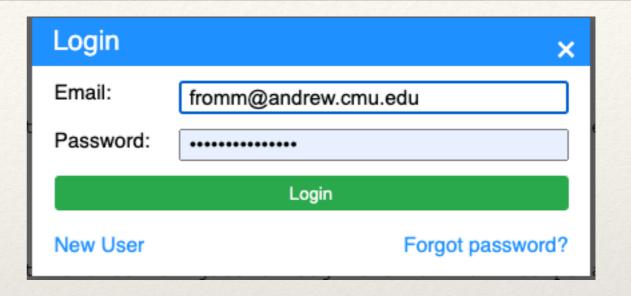
#### Selecting Transcripts

Use the left menu to navigate through the TalkBank corpora. Click once on the folder you want to explore, and it will expand to show any available subfolders and transcripts. Once you have found the transcript you want to review, click its filename. Your browser will load the transcript in this space and any associated media below the navigation.

- . On Transcript with audio.
- II Transcript with video.
- · # Transcript with media, but not linked with timestamps.
- . Transcript only (no media).
- O Media only (with empty transcript).

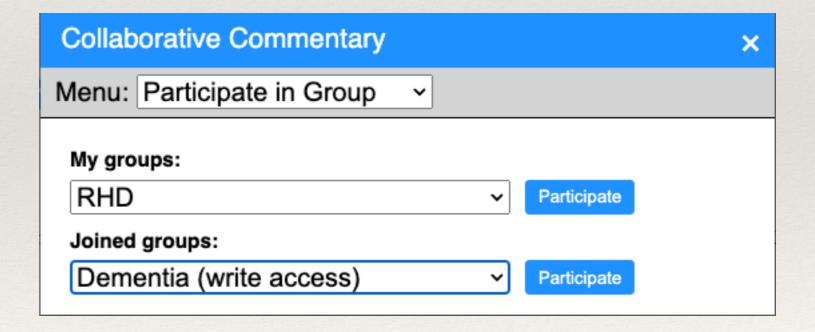
Collab

First, you'll be prompted to login or register as a new user



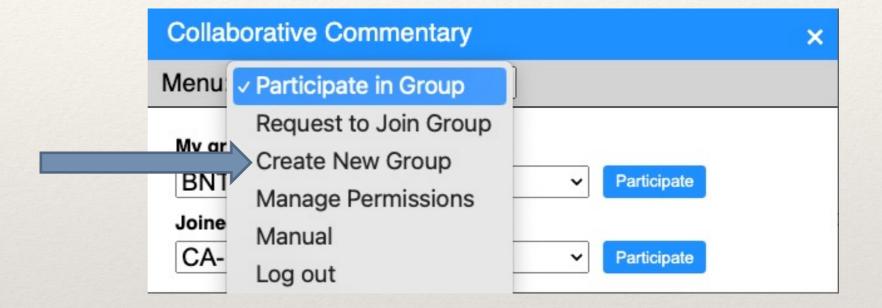
Then, it will show you

- a MENU of options
- the groups you own (My groups)
- the groups you joined (Joined groups)

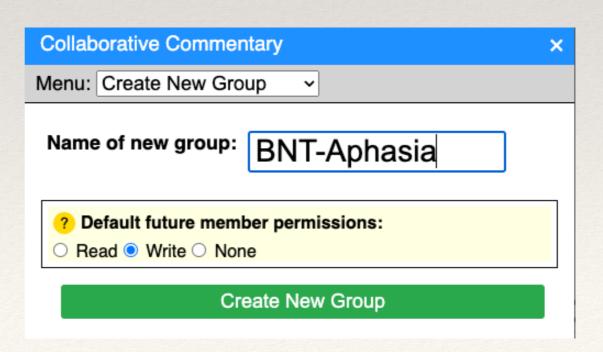


Here are the MENU options from the drop-down list.

Create New Group is likely what you will want to do.



Then you'll be prompted to name the group and set permissions for users.



2 more things to do ...

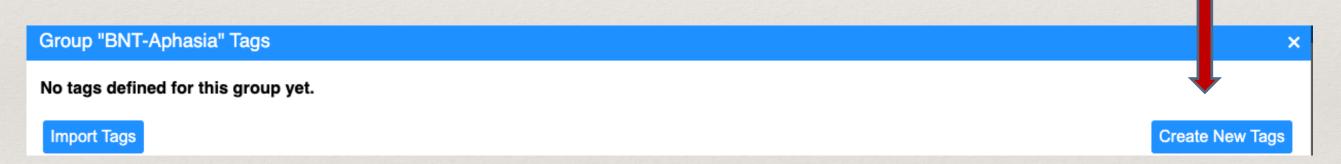
- 1. Give students
  - your email address
  - the group name
  - names of AphasiaBank files that you want them to score

2. Create tags for BNT scoring and coding

To create tags, you click on the TAG icon next to the Collab button



Then you click on the Create New Tags button



These are the scoring codes that come directly from the Boston Naming Test Scoring booklet – 0 for incorrect, 1 for correct, and then the various error codes.

#### Group "BNT-AphasiaBank" Tags

- 0: incorrect
- 1: correct
- cl: Circumlocution
- mw: Multi-word paraphasic error
- otu: Other off-target utterances or comments
- p: Perseveration
- perc: Perceptual misnaming
- ph: Nonword phonemically based paraphasic error
- ph/v: Real word phonemically based paraphasic error
- v: Verbal paraphasia, semantically related to the target word
- v/u: Verbal paraphasia unrelated to the target word

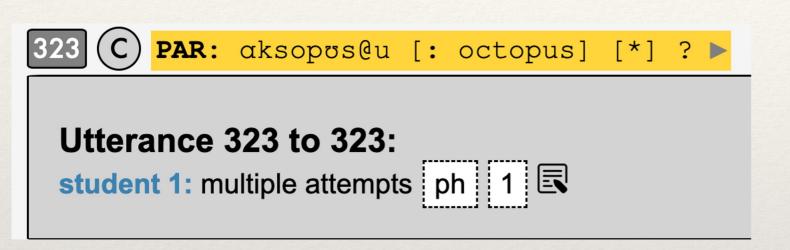
Students then go to the file, find the section on BNT, play the video and enter tags or comments for each response.



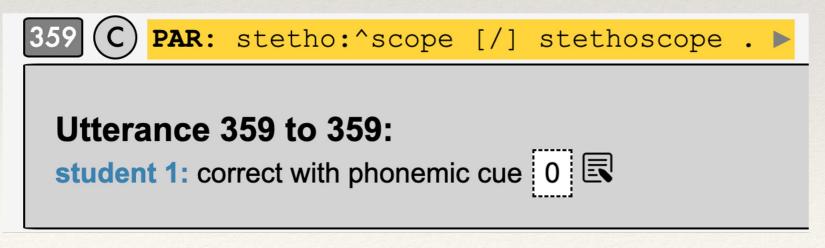
means a comment was inserted for that utterance

```
TalkBank: AphasiaBank
aphasia / English / Aphasia / ACWT /
   • ACWT01a [+]
    • ACWT02a [+]
   • ACWT03a 🔼 [+]
   • ACWT04a [+]
   • ACWT05a ► [+]
   • ACWT07a ► [+]
   • ACWT08a [+]
    0:00 / 43:06
```

```
@G: BNT
                                                                                     Collab Group: BNT-AphasiaBan
    (C) PAR: house . >
    C) PAR: comb . ▶
       PAR: &-uh &+s &+t &+f &+s (.) &+f &+ch &+ch &=head:no toothbrush . ▶
    (C) PAR: ps^piowkpws@u [: octopus] [* n:k] . ▶
       PAR: (...) you wants [: want] [* m:+3s:a] me to xxx ? [+ exc] ▶
       INV: if you will " sure . ▶
       PAR: +< okay . [+ exc] ▶
       PAR: okay . [+ exc] ▶
    C) PAR: &-uh bench . >
       PAR: polklernzow@u [: volcano] [* n:k] . >
    (C) PAR: kʊlnju@u [: canoe] [* n:k-ret] [//] &-uh &+kuln &=head:no no [//] kʊlnu@u [: canoe] [* n:k] . ▶
    (C) PAR: beeper [: beaver] [* p:w] . \triangleright
       PAR: &+fee &-uh &=groans &=head:no +... >
       INV: that's right . ▶
    C) PAR: beaver . >
       INV: you're good . ▶
    (C) PAR: +< &-um kæt∫tos@u [: cactus] [* p:n] . ▶
       PAR: &-uh hæməp@u [: hammock] [* p:n] +... ▶
```



# comment:multiple attemptstags:1 point – correctph – phonemic paraphasia



comment:
correct but with phonemic
cue
tags:
0 points – incorrect

- ... in conjunction with Grand Rounds
- All 3 clinical Grand Rounds (GR) have many video examples used for instructional purposes
- We've created a GR corpus of those videos and transcripts for each of the databases so students can comment directly in the transcripts in response to discussion questions from the GR

1. Video 6a shows a 56-year-old woman who presents with an aphasia in addition to a cognitive communication disorder as a result of a motor vehicle accident. In this video, she is producing the cat story retell and the procedural discourse tasks. Her Aphasia Quotient score on the Western Aphasia Battery-Revised (WAB-R; Kertesz, 2012) was 84, with predominant difficulties with naming and word-retrieval and relative strengths with auditory comprehension, automatic naming and repetition, consistent with mild anomic aphasia. Her performance on the Boston Naming Test (Kaplan, Goodglass, & Weintraub, 2001) was 10/60. What features of her spoken discourse are more consistent with aphasia vs cognitive-communication disorder?

# from the Cat in the Tree picture description ...

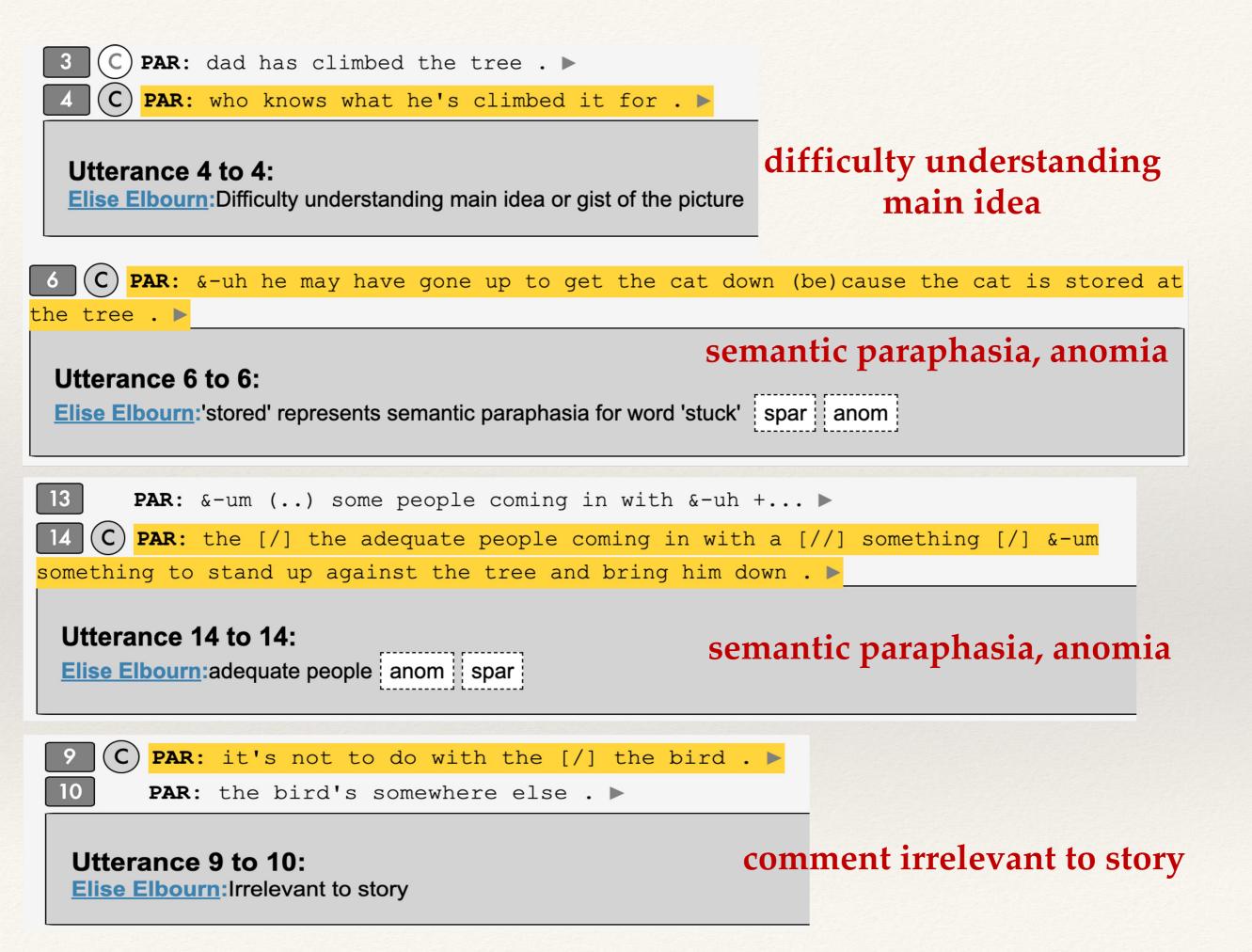


comments entered in the transcript





```
@G: Cat
                                                                     Collab Group: TBI-GR
       INV: beginning a middle and an end . >
       PAR: who knows ? ▶
       PAR: dad has climbed the tree . >
       PAR: who knows what he's climbed it for . >
5
       PAR: there's a dog (.) barking at the bottom of the tree . >
    C) PAR: &-uh he may have gone up to get the cat down (be) cause the cat is stored at
the tree . \triangleright
7
       PAR: &-um <it can't> [//] he's [/] he's out on the same branch . >
8
       PAR: so ‡ that may be his &-uh reason . ▶
       PAR: it's not to do with the [/] the bird . ▶
10
       PAR: the bird's somewhere else . >
       PAR: &-um the child is down under putting her hands up to the cat . >
12
       PAR: so # maybe dad is [*] being there to help out her worry . >
       PAR: &-um (..) some people coming in with &-uh +... >
       PAR: the [/] the adequate people coming in with a [//] something [/] &-um
something to stand up against the tree and bring him down . >
```



#### Group "Clinical-1" Tags

Students can use a set of tags to identify specific behaviors of a skilled clinician.

comm-conv: Conversational comment

• comm-impr: Comment on improvement

• cues: Provides cue

hum: Uses humor

• interp: Interprets/restates

• ques-c: Uses closed questions

• ques-o: Uses open questions

reinf: Reinforces use of strategy

sugg: Suggests/models strategy

• **supp**: Supports/empathizes

• time: Gives time/slows pace

AphasiaBank Holland2 corpus Jean video



#### comments entered

**JE:** okay . ▶

Clinical-1 group



TalkBank: AphasiaBank

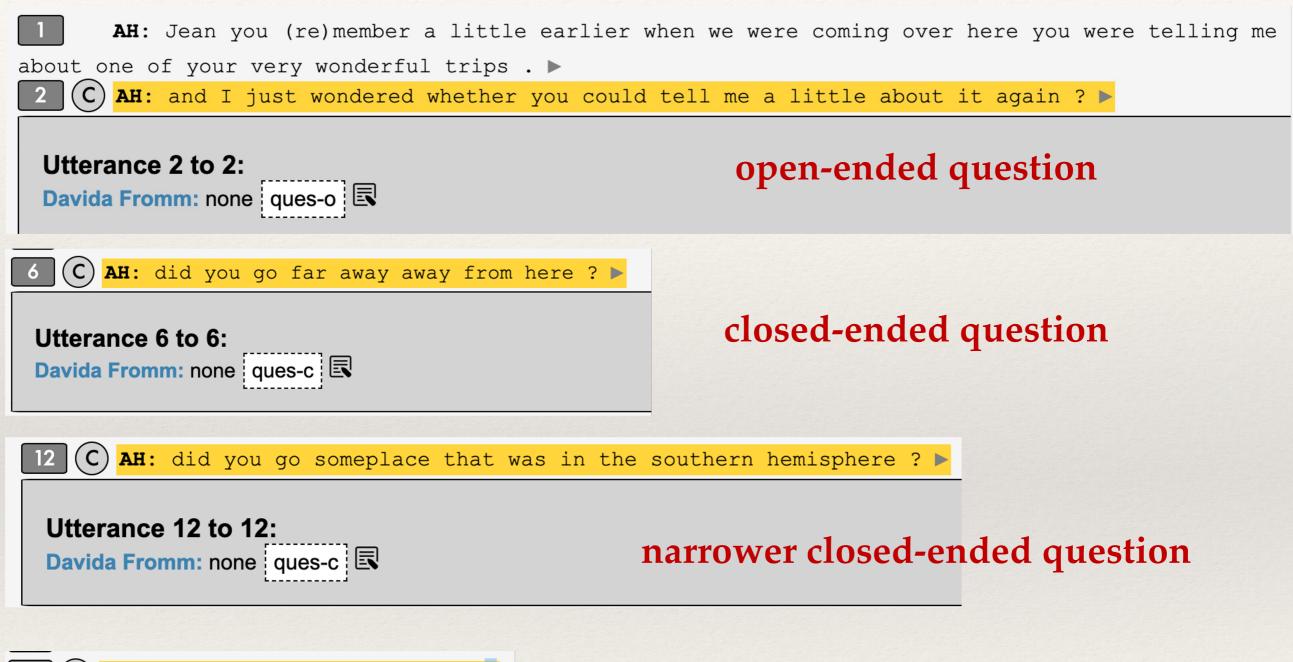
aphasia / English / NonProtocol / Holland2 /

- Earl [+]
- Jean 🔼 [+]
- John [+]
- RRoss [+]
- SW [+]

```
@Beq
                                                                                  Collab Group: Clinical-1
@Langages: eng
@Par ipants: JE Adult, AH Adult
@ID: Mg | Holland2 | JE | | | | Adult | | |
@ID: Mang | Holland2 | AH | | | | Adult | | |
@Med Jean, video
@Comment: Conduction Aphasia - Casual Conversation
       AH: Jean you (re) member a little earlier when we were coming over here you were telling me
about one of your very wonderful trips . >
    (C) AH: and I just wondered whether you could tell me a little about it again ? >
3
       JE: well we &uh &uh tired it wery [: very] [* pn] good to go . [+ jar] ▶
       JE: it wonderthalled@n . [+ jar] ▶
       JE: but &uh it was &uh bery [: very] [* pw] good . ▶
    (C) AH: did you go far away away from here ? ▶
       JE: yes we went a long way about . ▶
       JE: Down signed [: Down under] [* wk] inside [: Down under] [* s] . [+ jar] ▶
       JE: &=laughs . ▶
       JE: all timed . [+ jar] ▶
       AH: okay . ▶
    (C) \mathtt{AH}\colon did you go someplace that was in the southern hemisphere ? \blacktriangleright
       JE: yes I did . ▶
       JE: and it was wonderful . ▶
```



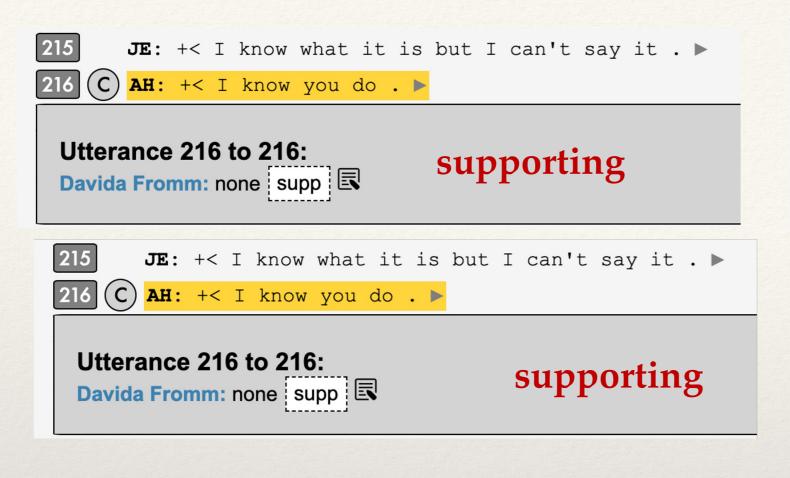
### Using a sequence of questions to prompt

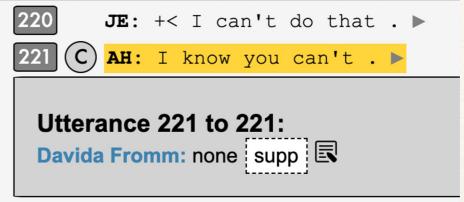


O AH: did you go to Antarctica ? Leavida Fromm: none ques-c

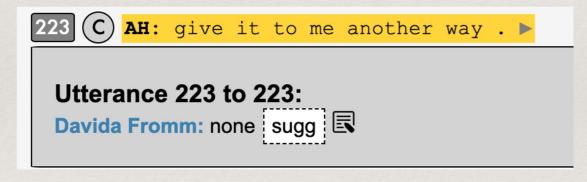
even narrower closed-ended question

### Supporting and suggesting and reinforcing





supporting



suggesting another approach

Utterance 149 to 149:

Davida Fromm: use of gesture reinf 

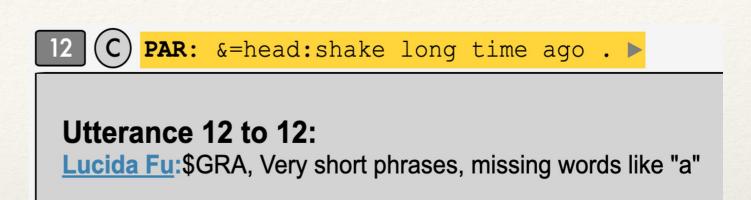
Teinforcing use of strategy -- gesture

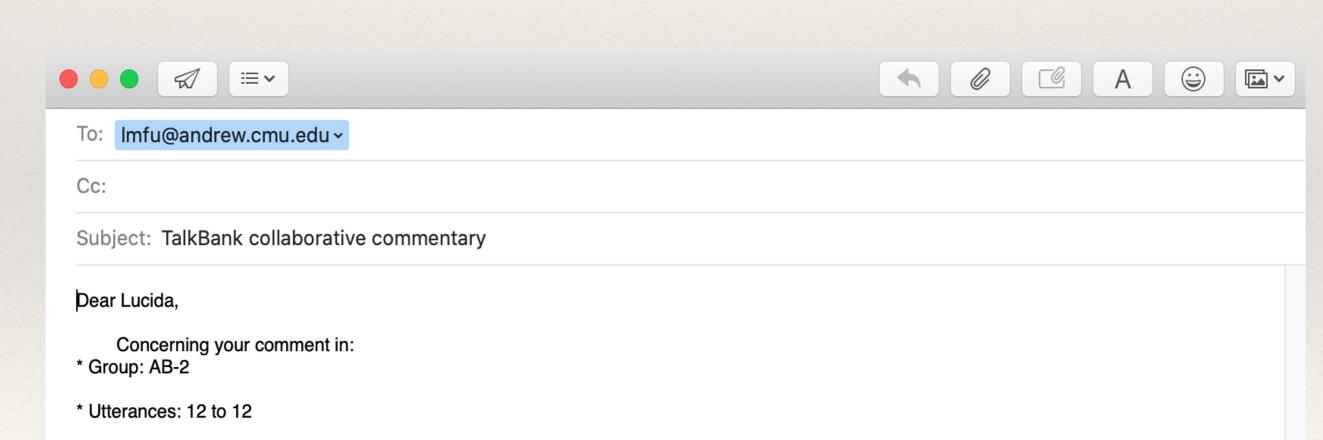
### Teaching Tool #2 – Collaborative Commentary

Direct email feedback to students:

\* In: https://sla.talkbank.org/testTBB/aphasia/English/Aphasia/Tucson/tucson14a.cha

\* Stating: "\$GRA, Very short phrases, missing words like "a""





### YOUR IDEAS

... for ways to use Collaborative Commentary?



### Teaching Tool #2 – Collaborative Commentary

### 2 tips!

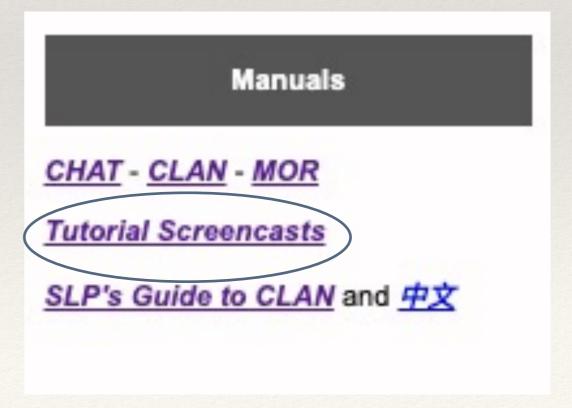
 The CC Manual link has step-bystep instructions for how to use Collaborative Commentary Collaborative Commentary

The CC Project

CC Manual

TalkBankAnno Project

 Remember the Tutorial Screencasts at the main TalkBank webpage



#### **TalkBank**



#### Tutorial Screencasts

These screencasts have been created by Dr. Davida Fromm. The links in the "Screencast" column are to videos on our website. These work well if you have a fast connection. For slower connections, or for connections outside of North America, the YouTube links in the second column may load more quickly.

If you are interested in creating versions of these screencasts in your local language, you may find these <u>production</u> instructions useful.

We also have a set of five screencasts designed specifically for SLPs.

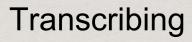
You may also wish to look at some of the materials on <u>the second page of screencasts</u> describing these more specialized CLAN functions: SUGAR, CHAT2PHON, CHAT2ELAN, TEXTIN, SALTIN, gesture coding, utilities, and multiple videos.

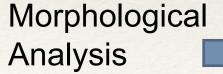
The media and transcript resources used in these screencasts can all be download from this folder.

### Introductions









	V. T. L.	A contact to	B
Screencast	YouTube	Contents	Duration
Introductions			70
Tour of the Websites	Tour of the Websites	what is available at the TalkBank websites	7:37
Tour of the Manuals	<u>Tour of the Manuals</u>	what is in the four TalkBank manuals	6:19
Installing CLAN	Installing CLAN	installing and configuring the CLAN program	4:25
Chinese Example	Chinese Example	an example of transcribing in Chinese	6:26
Using the Website			
Browsable Watch	Browsable Watch	listening and watching through the browsable database	5:56
Browsable Search	Browsable Search	searching through the browsable database	5:55
Transcribing			
<u>template</u>	<u>template</u>	creating a CHAT file from scratch	5:20
<u>addID</u>	<u>addID</u>	adding speaker ID tiers using the CLAN menu	3:33
<u>autoinsertID</u>	<u>autoinsertID</u>	adding speaker ID tiers using escape-L	2:39
F5-transcribe	F5-transcribe	linking and transcribing with F5	11:06
check-1	check-1 checking a transcript for errors		3:16
walker-1	walker-1	setting up and using Walker Controller options	6:07
walker-2	walker-2	transcribing in Walker Controller	6:08
Morphological Analysis			
MOR-download	MOR-download	downloading the MOR grammar for English	
MOR-xb	MOR-xb	checking for words not recognized by MOR	4:34
MOR-chain MOR-chain		running the MOR, POST, POSTMORTEM, MEGRASP chain	5:16



2 pages of videos organized by topic

### Teaching Tool #2 – Collaborative Commentary

Collaborative Commentary (CC)			
CC-overview	CC-overview	introduction to CC	7:59
CC-new_user	CC-new_user	registering as a new user for CC	2:25
CC-join_group	CC-join_group	joining a CC group	2:23
CC-commments	<u>CC-comments</u>	inserting tags and comments in CC	5:21
CC-search	CC-search	searching by documents, tags, and users in CC	2:51
CC-contact_user	CC-contact_user	contacting group users in CC	2:13
CC-owner	CC-owner	how the group owner can create tag sets	2:09
CC-manage	CC-manage	how the group owner can manage permissions for users (read, write, etc.)	1:09

## Teaching Tools #3 and #4 – AphasiaBank Examples and Classroom Activities

2 more useful links to explore for teaching at AphasiaBank:

Short video examples of common features from the connected speech of PWA

Examples
Classroom Activities

Grand Rounds -- students

Grand Rounds -- videos only

Teaching

A selection of assignments that make use of AphasiaBank cases

# Teaching Tool #3 – AphasiaBank Examples

Multiple video examples for each behavior:

- anomia
- circumlocution
- conduit d'approche
- jargon
- neologism
- perseveration
- phonemic paraphasia
- semantic paraphasia
- stereotypy
- agrammatism
- empty speech

### **AphasiaBank**



**Examples** 

This page provides short video examples of common features from the connected speech of people with aphasia. Most of these examples are from participants who did the standard AphasiaBank discourse protocol; others are from additional corpora contributed to AphasiaBank. We express our deep gratitude to the participants and our colleagues who contributed language samples or facilitated the collection of language samples.

Features are organized at the word-level and sentence-level for purposes of illustration, though it will be obvious that some features occur at multiple levels (e.g., empty speech can be a word like "thing" or an utterance that is general and vague). It will also be obvious that an illustration of one feature may include illustrations of other features (e.g., jargon may include neologisms, circumlocutions may include empty speech and paraphasias).

These are intended to be brief examples of features. Indepth explanations and case examples of aphasia are available at the <u>AphasiaBank Grand Rounds</u>. For more context surrounding these examples, AphasiaBank members can go to the <u>Browsable Database</u> to find the transcripts that correspond to these ID numbers.

Word-level Feature	CC Code	Notation	Description	Video examples
Anomia	\$ANO		Word-finding problems which may be manifested in a variety of ways including long pauses, word fragments, fillers, trailed-off/unfinished utterances, sighs and other signs of frustration	latency8 anomia8 thompson05a williamson18a
Circumlocution	\$CIR	[+ clr]	Indirect, roundabout language to describe a word or concept	bu09a tucson04a wozniak01a wright202a
Conduit d'approche	\$CDA		Successive attempts at a target word; the attempts approximate the target phonetically; final production may or not be successful	kurland01a williamson06a wright203a
Jargon	\$JAR	[+ jar, xxx]	Fluent, prosodically correct output, resembling English syntax and inflection, but containing largely meaningless speech; sometimes it is intelligible (and can be transcribed), sometimes it is unintelligible	adler06a kansas05a MSU08b tap09a

# Teaching Tool #4 – AphasiaBank Classroom Activities

The Classroom Activities link downloads a Word file with multiple classroom assignments contributed by various people or developed by the TalkBank team.

### Assignments involve:

- assessment
- treatment planning
- aphasia classification
- language sample analysis
- cross-disorder comparisons
- and more ...

### Teaching

**Grand Rounds -- students** 

Grand Rounds -- videos only

**Examples** 

Classroom Activities

From the TalkBank webpage, click on FluencyBank.

There, you will find a Teaching section with useful links.

#### **TalkBank**



#### **FluencyBank**

FluencyBank is a shared database for the study of fluency development. Participants include typically-developing monolingual and bilingual children, children and adults who stutter (C/AWS) or who clutter (C/AWC), and second language learners.

Access to the research data in FluencyBank is password protected and restricted to members of the FluencyBank consortium group. Data in the Teaching section of the FluencyBank site is open access and does NOT require membership or a password.

Researchers and clinicians studying fluency who are interested in joining the consortium should read the <u>Ground Rules</u> and then send email to nratner@umd.edu with contact information and affiliation.

Please include a brief statement about how you envision using the data in your research. Students interested in using the data should ask their faculty advisors to join as members. We can also be reached by phone at 301-405-4217.

For 2016-2021 FluencyBank was supported by NIH NIDCD grant R01-DC015494 to Brian MacWhinney (CMU) and Nan Bernstein Ratner (UMD).

This <u>CLARIN interview with Nan Bernstein Ratner</u> describes the overall motivation for FluencyBank and its functionality.

If you stutter or clutter and would like to help our research by voluntarily contributing an anonymous speech sample, please consult **these contribution guidelines**.

System	Database	Programs
**Ground Rules**	**Index to Corpora**	CLAN - Tutorial Screencasts
Contributing New Data	Browsable Database	Chatter XML creator and validator
IRB Principles	TalkBankDB database search	SLP Tutorial Screencasts
FluencyBank mailing list	Hints on Downloading	
	<u>Database Versioning</u>	
Resour	Teaching	Manuals
Fluency Web Sites	Teaching with FluencyBank	CHAT Transcription Manual
FluencyBank Protocol	Fluency Web Sites	CLAN Program Manual
ASHA 2018 Presentation		SLP's Guide to CLAN
CLARIN interview		Japanese Guide

There are multiple outstanding resources here.

### **FluencyBank**



Teaching with FluencyBank

This page provides links to materials for teaching about stuttering:

Voices of Adults Who Stutter

Voices of Adults Who Clutter

Voices of Children Who Stutter

Teaching Videos from Glen Tellis (password protected)

Teaching Activities from Shelley Brundage

Vivian Sisskin's OpenStutter You Tube channel

Erin Wilson's assessment skills practice assignment

#### Voices of Adults who Stutter

- Curated transcripts and video clips that you can view and download
- Contributed by members of the National Stuttering Association to help students learn more about the behaviors and affective/cognitive features of living with stuttering as an adult
- Suggested classroom activities based on these materials, for example:
  - practice with fluency assessment
  - practice with scoring instruments
  - discuss how listeners may agree or disagree on behaviors
  - contrast performance on reading to conversation

### Teaching Activities from Shelley Brundage

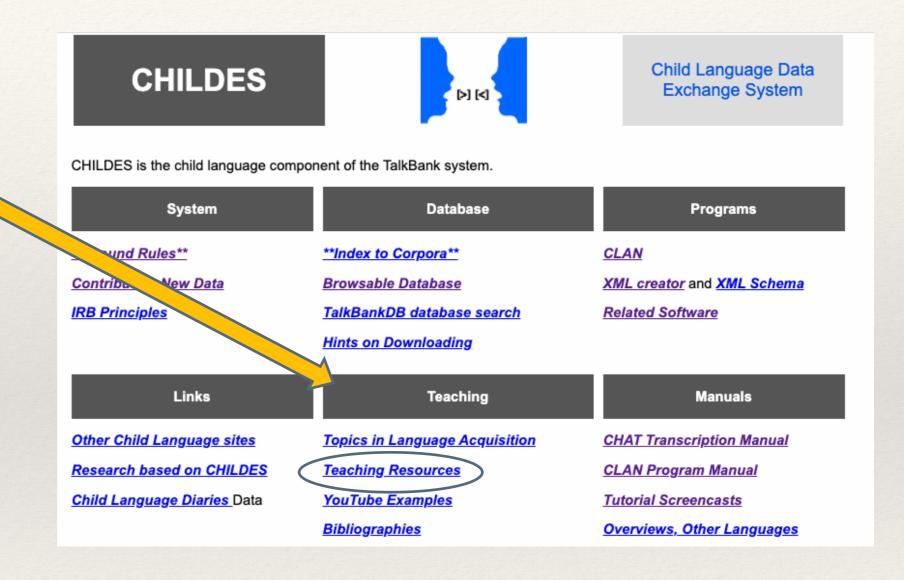
### 2 links that will download:

- An assignment for practice identifying stuttering behaviors and scoring the OASES
- An assignment on getting a feel for what stuttering is like by:
  - listening to particular sections of interviews with people who stutter
  - writing responses to 9 questions

### A sampling of the questions:

- What behavioral features do you see and hear? Write down some examples. Do the interviewees stutter all the time? If not, how does their fluent speech sound to you?
- What affective components are mentioned by the interviewees? Write down some examples.
- What cognitive components are mentioned by the interviewees? Give examples.
- Characterize the impact that stuttering has had on the interviewees' lives. Has the stuttering impact changed over time? In what ways?
- Are there aspects of stuttering that the interviewees seem to agree on?
   Provide some examples.

Last but not least, the CHILDES database also has a Teaching section with a variety of resources.



#### Resources



#### **CHILDES**



**Teaching with CHILDES** 

#### **Teaching Resources**

- 1. The CHILDES database.
- 2. The <u>CLAN</u> manual, MacWhinney, B. The CHILDES Project, 3rd ed. Volume I. There is an introductory Tutorial at the beginning of Part 2: The Programs, and a set of Exercises at the end.
- 3. The chapter by Judith Becker Bryant in Jean Berko Gleason (ed.), The Development of Language, which is followed by several suggestions for projects using CHILDES.
- 4. A list of non-documentary <u>films on language and language learning</u>. This list is derived from messages posted to info-childes in Fall of 2002.
- 5. <u>"Fun things children say"</u> collected from info-childes postings in 2013 by Bruno Estigarribia.
- 6. Questions on "The Wild Child" by François Truffaut from Isabelle Barriere.
- 7. Online materials illustrating concepts in language acquisition through actual sound files.
- 8. Links to web resources on dialects both here and here
- 9. Glossary of Linguistic Terms
- 10. Grammars
- 11. LSA list of language videos on the Web
- 12. A video of the wug test.



#### **Teaching Approaches**

CHILDES data and programs have been widely used to provide materials for teaching undergraduate courses in language development. The teaching options that have been used include:

### **Approaches**

**Teaching CHAT transcription:** Some people use classroom sessions to teach students about CHILDES transcription.

Catherine Snow says, "I display transcripts linked to videos so that students get a sense of how one translates interaction into analyzable text."

**Teaching CHAT transcription:** Some people use classroom sessions to teach students about CHILDES transcription.

Margaret Friend has had students carry out their own transcriptions. "My approach was to have students practice using the transcription system and complete two transcripts: one standard transcript which could be corrected for errors and on which they could obtain assistance from other students; and one transcript that they had collected and recorded themselves.

Students were assigned to groups of four and each group recorded narrative data from children of different ages. At the end of the semester, they compared their transcriptions, did a count of open and closed-class words and presented an in-class developmental analysis based on the data. I was impressed with students' insights at the end of the course."

**CLAN analyses on CHILDES data**. Some courses teach students how to use the CLAN programs to analyze CHILDES data.

Catherine Snow reports, "I have used CHILDES quite extensively in my course on child language to the extent of teaching the class while logged on to CHILDES so we could pursue particular issues (when does past tense first show up? what gets added when MLU goes from 1 to 2? what are the first words that kids say and to what extent are they the same across kids?). The students download the relevant files preparatory to doing the analysis right there and displaying the results.

I also give analysis exercises as homework that students can do pretty efficiently using CLAN, or less efficiently without it (since some don't want to learn to use the system).

I also provide CHAT formatted files as a basis for the longer analyses I assign for takehome essays. Again, the students can analyze the files using a word processor, or they can analyze with CLAN.

**CLAN analyses on CHILDES data**. Some courses teach students how to use the CLAN programs to analyze CHILDES data.

Michelle Barton systematically helps students develop skill using CLAN. Her experience has been that they like using the CHILDES system and "in several cases, having the skills has been a real plus for grad school applications and research assistant positions."

### Summary

- Grand Rounds AphasiaBank, TBIBank, RHDBank
- Collaborative Commentary in TalkBank Browser, all databases
- AphasiaBank Examples Videos
- AphasiaBank Classroom Activities
- FluencyBank Teaching Resources
- CHILDES Teaching Resources

## Contact Info for Membership

- All faculty and licensed clinicians are eligible
- Email Brian MacWhinney macw@cmu.edu
- Send contact information and professional affiliation
- Include a BRIEF general statement about how you envision using the data or the website

## The End

# Grateful for your interest and attention!

Let's discuss ...



email me with any questions: Davida Fromm - fromm@andrew.cmu.edu