

Lec 8

Laminar Semiotics



Cogs 102A * Distributed Cognition

Semiotics

- **Semiotics = Meaning Making**
 - When some researchers study meaning-making with language, they only look at the WORDS
 - Often assume that meaning is “looked up” in memory,
 - Used to decode auditory input and encode vocal output

BUT...

Words *live* in Conversation

- The word’s ecology includes multiple types of **semiotic resources** with which they must coordinate
 - Gesture, Gaze, Facial Expression, Intonation, etc.
 - As well as Cognitive Artifacts & Participants’ History

Conversation

From our view...

- **Conversation** is a collaborative reconfiguring of these semiotic resources

- Meaning is generated anew in each conversation
 - This is NOT to say that memory does not play a part, only that what is remembered is not “meaning”
 - Instead, memory is one more resource for the current, online, context-specific & collaborative meaning-making process

Conversation

- So, meaning is not something you look up, match to the other guy's...



- Meaning is something you do!
- A word is an act, for which you have learned a complex set of contingencies for its use to accomplish various ends...



Semiotic Resources

- Semiotic resources are layered together in complex displays, creating public structures, transformed by the interlocutors
- We can document these configural transformations by tracking changes in, and relations between, observable media
- What are the media of information flow in this dynamic, distributed system?
 - Lexicon
 - Affect
 - Gesture
 - Attention
 - Material environment

Lexicon

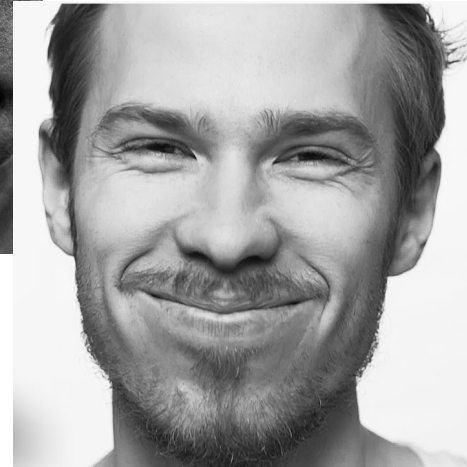
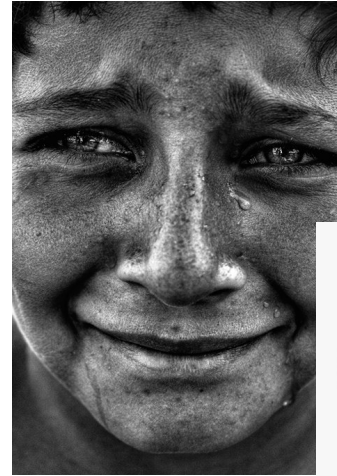
- The morphemes of a language
 - Includes affect terms ("happy" "horrible" "no")



- Among the resources that enable speakers to take an **"Evaluative Stance"** toward a topic

Affect

- Our displays of emotion & arousal
- Visio-spatial
 - Facial expressions
 - Posture, Movement
 - Used as true, exaggerated, or inhibited evaluative displays
- When simultaneous w/lexical, modifies meaning
 - Serious words/silly face
 - Positive words/doubtful face, etc.



Affect

- Our displays of emotion & arousal
 - Auditory / Vocal
 - Intonation
 - Prosody
 - Amplitude



- e.g. Emphasis can highlight, disambiguate, implicate:
 - “*He insulted **her***” vs. “He *insulted* her”

- e.g. Cultural norms of the duration of a pause between turns
 - Can lead to inter-subject or cross-cultural inferences
 - Too slow, seem stupid, resistant, require prompting
 - Too fast, seem aggressive, impatient, disinterested



Gesture

- Traditionally divided into categories (Mac Neil, 1992)

- Emphatic
- Iconic
- Emblematic
- Metaphoric
- Indexical



- These categories are not always mutually exclusive, depending on both particular action and context
- Note that they are dynamic, so TIME is a critical component

Gesture

- **Emphatic**
 - (AKA “Beat”) Simple, often rhythmic
 - Void of propositional or topical content
 - Used to add emphasis
 - Especially when synchronized w/other modalities



Gesture

- **Iconic**
 - Bears perceptual similarity the object or event to which it refers
 - Can be mapped to new media (e.g. use hand to rep human), or be portion of actual activity referred to (reach part of carry)



Gesture

- **Emblematic**

- Culture-specific ritual, may/may not be derived from above, but now only conventional
- Can be used in place of words, with established associations



Gesture

- **Metaphoric**
 - Create image of object, space, movement, etc.
to map across domains, or refer to an abstract topic



e.g. Point forward for future, behind for past

(or reverse, if from Aymara culture – see Nunez & Sweetser, 2006)

Gesture

- **Indexical**

- (AKA “Deictic”) Pointing (w/hand, chin, head, etc)
 - Also use Gaze (Eyes/Head orientation); Body Orientation
- Can accompany deictic terms (here, there, you, this, that)
 - Plus nonverbal: Attention-getting noise; Gasp of discovery-like surprise
- Usually environmentally-coupled, with object, place, or person.



Relations between Gesture and Lexicon

“She’s, you know . . . pretty”



- Gestures can augment (convey same info)
complement (convey additional, related info)
or contradict the other resources



These distinctions will be critical in today’s LAB . . .

(“I’m taking this from you, but is all in fun”)

Gestures can Create Spaces

These spaces then become semiotic resources:

- e.g. Speaker from Laos
- Describes rules governing marriage
- Names kin roles while pointing to different areas of space
- He & wife at mid height (R & L), their older siblings aligned above, younger aligned below, then...
- "Draws" connections between spaces/people who are (parallel) vs. are not (diagonal) allowed to marry



FIG. 18. "But—the one who is—my wife,"



FIG. 21. "(for him) to marry (her)—is not possible."

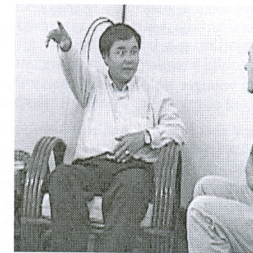


FIG. 19. "she has an older sister—right!"

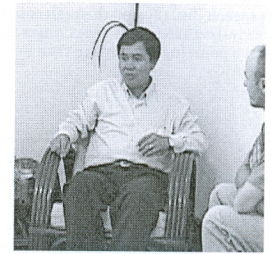


FIG. 22. "If my younger sibling"



FIG. 20. "But [I] have a younger sibling—"



FIG. 23. "would marry the younger sibling of my wife ... (that's) possible."

Attention

- Acts/displays that procure, share sensory information
 - Eye direction, head & body re-orientation, reaching, pointing, etc.
 - Communicate focus of speaker's attention
 - Help coordinate attention across interlocutors



e.g. Gaze following

Material Environment

- Including Objects (in-/animate, artifacts), Substrates, and Ambient Stimuli (lights, sounds, smells, etc)
- Objects are handled, pantomimed, pointed to, named
- Substrates used as “canvas”
- Ambient stimuli named, imitated, etc.



Laminar Semiotics

- The above semiotic resources are laminated by a speaker into a multi-modal display



e.g. A lexical layer + a gestural layer

"...a hybrid service..." +
form wedge with 2 hands

"...you went to do service..." +
move 1 hand away & back

"...you went to learn..." +
move other hand away, back



VIDEO: Wedge

Laminar Semiotics

Plus, in conversational exchanges, interlocutor may transform certain layers of other's output, while retaining others

TONY: "Why don't you get out of my yard?!"

CHOPPER: "Why don't you *make me* get out of the yard?!"

JOHN: "I am going to the store"

MARY: "Which store are you going to?"

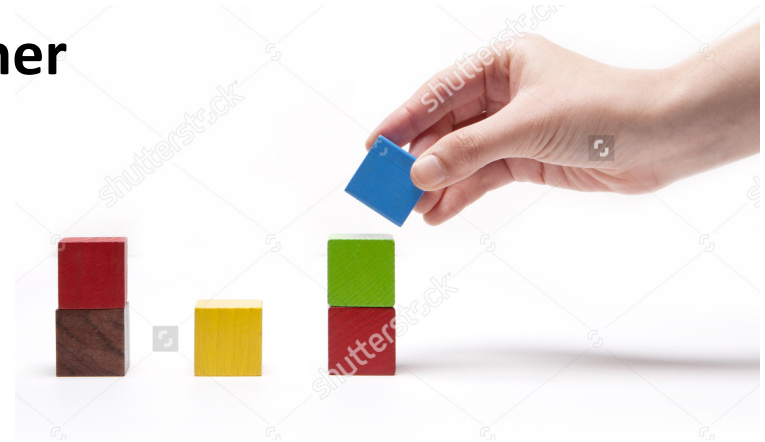
SUE: "There is a new Chris Pine movie coming out"

MARY: "Oooo! I loved him in Star Trek"

Transformations of Semiotic Resources

Transform from one medium to another

- e.g. A says “Pick up the blue one”,
 - B picks up the blue object
 - Transform from lexical to action



- e.g. Mimic of audible oscillation in a machine's operation converted to up/down motion



VIDEO: Rowww

Transformations of Semiotic Resources

Imitation

“Reported speech”

- Lexical copying, quoting other’s words or co-referring

e.g. “And so *she* says, ‘well I just don’t care!’ ”

e.g. “Dad said it was ok”

e.g. “They say it’s going to rain”

Transformations of Semiotic Resources

Imitation

- Social imitation/synchrony indicates attunement to other
- Promotes pro-sociality (e.g. people more helpful if imitated)



e.g. Excited friends imitate posture and to/from arm movements

VIDEO: RollingChairs

Transformations of Semiotic Resources

Imitation

- Can pantomime routines associated w/procedure or w/present (or imaginary) object;
- Used to refer, tease, teach, etc. etc.



e.g. She says “pitcher” to describe shape of bay,
He mimics pouring to ask if that kind of pitcher



VIDEO: Pitcher

Transformations of Semiotic Resources

Imitation

- Impersonate: Replay gestures, strike attitudes, etc.
- Used to refer to/comment on absent (or present) person or view

e.g. He changes voice, posture when he adopts the role of 'The Authority'



VIDEO: DoNotFlush

GOODWIN , 2000, 2013

- “Chil” suffered a left frontal lobe stroke . . .

Can produce 3 words (“Yes”, “No”, “And”),
nonverbal sounds, and
gesture with only his left hand

But, in collaboration with his interlocutors, he can
engage in coherent, meaningful conversation

Semiotic Resources include ...

Words, Intonation, Gaze, Hand shape, position & motion,
Facial expression, Orientation, Shared history

Transforms of configurations of these are done thru,
among others, the following co-operations...



VIDEO: Seven

Chil and Family Converse

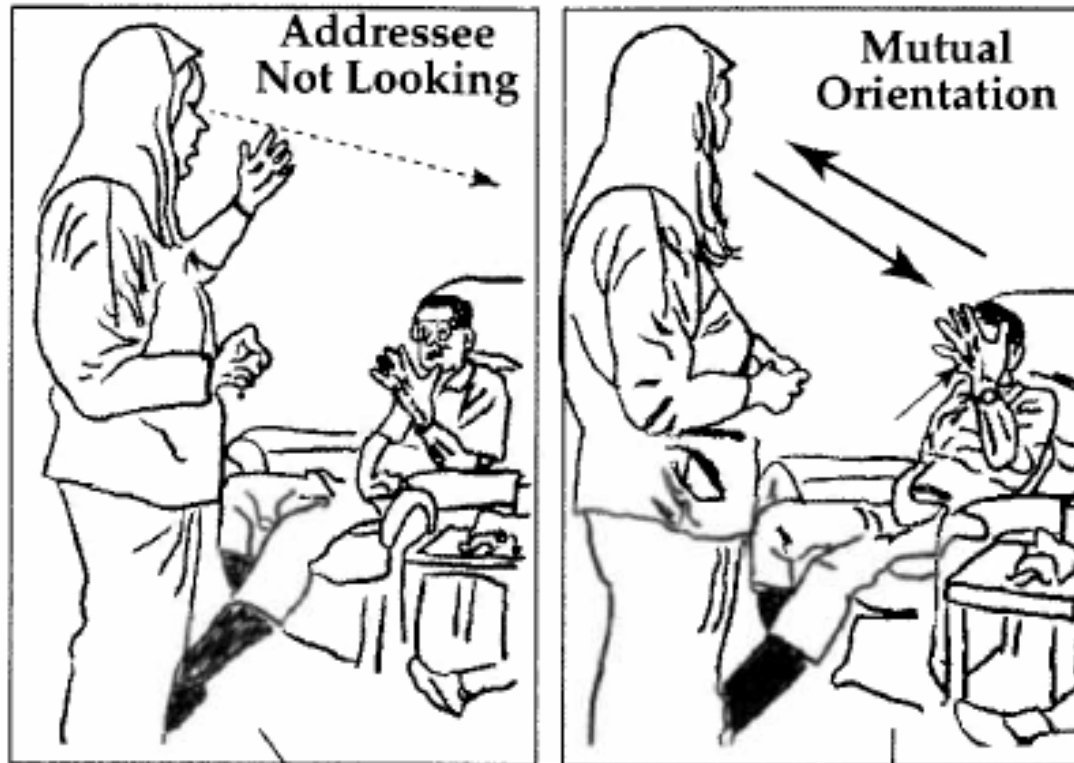


VIDEO: Seven

Some Co-Operations for Meaning Making

- Securing Orientation
- Parsing Activity
- Negotiating “Activity Frame”
- Taking an Evaluative Stance

Securing Attention



- 10 *hh We sat with them. (.)
11 -There. -En then we-
12 Chil: ^ommm. -Nih nih da duh Da duh.
13 Pat: So *five* of us can fit there.

Figure 4.2.

Securing Attention



VIDEO: [Linosite](#)

6 Chil: Da da:h.
 7 Pat: When we went with Mack and June.
 8 We- we sat at a table
 9 *just* as we came in the: fr-ont door.
 10 *hh We sat with them. (.)
 11 [There. [En then we-
 12 Chil: [°mmm. [Nih nih duh duh. Da duh.
 13 Pat: So *five* of us can fit there.
 14 (0.2)
 15 Pat: *Six* a clock.
 16 (1.0)
 17 Pat: *Five* people,
 18 Helen Sure.
 19 Pat: [Its::
 20 Julia: [Seven?
 21 Pat: Seven?
 22 a' clock?
 23 (0.2)
 24 Chil: No(h).



Parsing the activity

Establishes a "stage"
 by positioning hand signals
 In, and out of, area of space

Negotiating an Activity Frame

7 Pat: When we went with Mack and June.
8 We- we sat at a table
9 *just* as we came in the: fr-ont door.
10 *hh We sat with them. (.)

11 [There. En then we-
12 Chil: [°mmm. Nih nih duh duh. Da duh.



13 Pat: So *five* of us can fit there.
14 (0.2)



15 Pat: *Six* a'clock.
16 (1.0)



17 Pat: *Five* people,



18 Helen Two.

19 Pat: Its::

20 Julia: Seven?



21 Pat: Seven?

22 a' clock?



24 Chil: No(h).

Each speaker transforms and adapts to the resources presented by the other . . .

. . . as they work out whether appropriate frame is SUM (# of people) or TIME

Parsing Activity

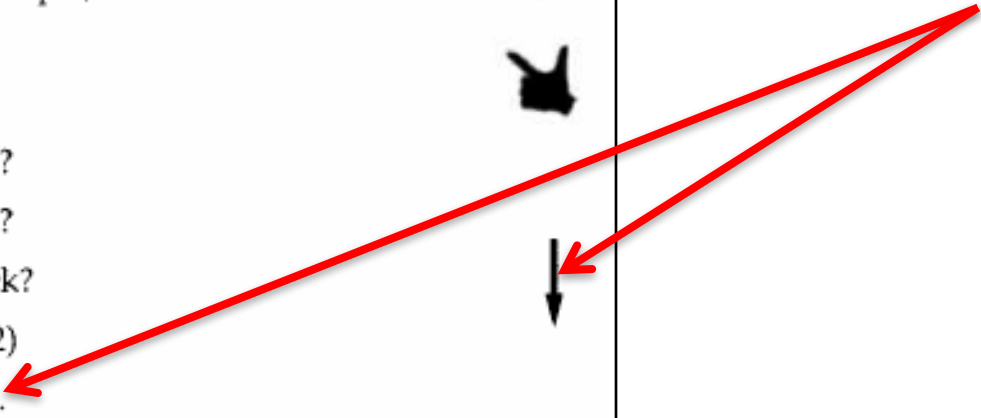


VIDEO: Frustration

6 Chil: Da da:h.
 7 Pat: When we went with Mack and June.
 8 We- we sat at a table
 9 *just* as we came in the: fr-ont door.
 10 *hh We sat with them. (.)
 11 There. En then we-
 12 Chil: [°mmm. Nih nih duh duh. Da duh.
 13 Pat: So *five* of us can fit there.
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 24 Chil: No(h).



Taking an
"Evaluative Stance"



Taking an Evaluative Stance



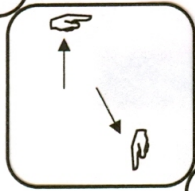
VIDEO: Ghandi

"Gandhi"

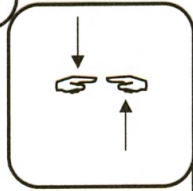
it's--



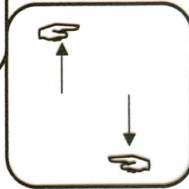
on a scale of like,



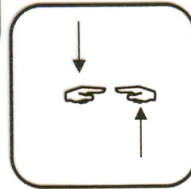
you know...



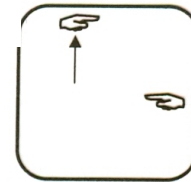
good to bad --



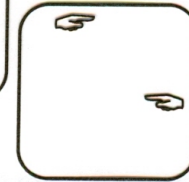
ok, like,



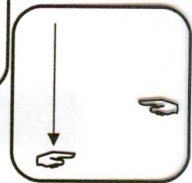
this is like,



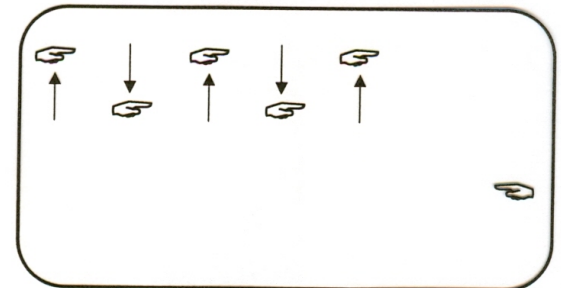
ng - Gandhi



and this is like,
uh, whatever -



you know, it's still



UP!

LAB 6:

How will YOUR subjects
lamine & transform their semiotic resources???

Lab 6

Submit your videos to the following link

NOTE: Link has been emailed to all...

<https://drive.google.com/drive/folders/1GzIYOY0hgscLNu7j6p57N0-lm3cabkiG?usp=sharing>