Sign language Semantics Day 5: Gesture, classifiers, and quotation

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Section 1

Introduction

Gesture and speech

A game

Three sentences to gesture.

A game

Three sentences to gesture.

(1) I was drinking out of a large bottle, and spilled all over my shirt.

A game

Three sentences to gesture.

(2)   This one is good. That one is bad.

A game

Three sentences to gesture.

(3)   Macron is the youngest president of France.

A game

Three sentences to gesture.

(1) I was drinking out of a large bottle, and spilled all over my shirt.

(2) This one is good. That one is bad.

(3) Macron is the youngest president of France.

Which meanings are easy? Which ones are hard?

Different categories of gesture

- Beat gesture
  - Think politicians.
- Emblems (conventionalized gesture)
  - OK, thumbs up, money, fuck you, peace
- Indexical gesture
  - Pointing
- Iconic gesture
- Facial expressions

Different categories of gesture

- Beat gesture
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- Indexical gesture
  - Pointing
- Iconic gesture
- Facial expressions

Section 2

Iconic gesture

Examples of iconic gesture

(4) There are two columns in the entrance.
   column gesture

(5) My dad helped me up in the tree.
   lifting gesture

(6) He was wearing a huge button.
   circle gesture

(7) Chloe Kim went zooming up and down the halfpipe walls.
   zigzag gesture

▸ Gesture describes...
  what an object looks like or *how an event happened*.

Iconicity in the grammar
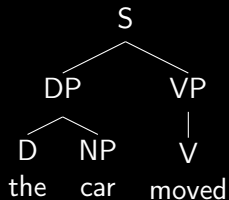
Symbolic meaning

```
              S
          ／     ＼
        DP         VP
       ╱  ＼        │
      D    NP       V
     the   car    moved
```
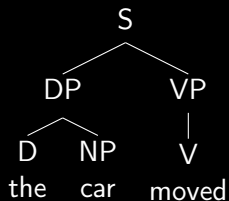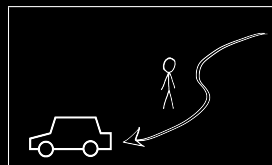
Iconic meaning

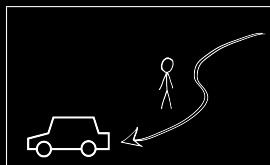# Iconicity in the grammar

Symbolic meaning

Iconic meaning

Iconicity in the grammar
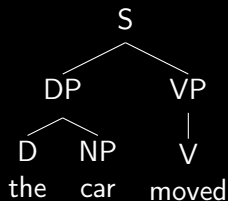
Symbolic meaning   **Iconic meaning**
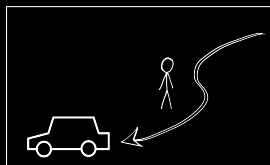
- An iconic mapping defines a **set of individuals or events**. Thus, add an iconic predicate **directly into the logical form**.

Linguistic meaning

- We can describe the meanings of constituents using sets.

- Nouns:
  $\llbracket$detective$\rrbracket = \{$holmes, poirot, clouseau, gently, ...$\}$

- Verb phrases:
  $\llbracket$buttered the bread$\rrbracket = \{$event$_1$, event$_2$, event$_3$, ...$\}$
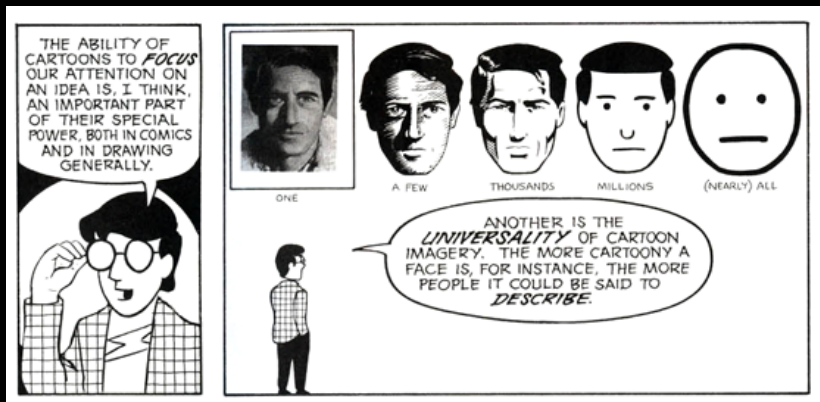
Iconic meaning

McCloud (1993), *Understanding Comics*

Iconic meaning

- The meaning of a picture is a set of individuals or events.
  (Zucchi et al. 2012, Schlenker et al. 2013, Davidson 2015)

- A set of individuals:

$$\left[\!\!\left[\raisebox{-0.5em}{} \right]\!\!\right] = \{john, bill, steve, ...\}$$

- A set of events:

$$\left[\!\!\left[\raisebox{-2em}{} \right]\!\!\right] = \{event_1, event_2, event_3, ...\}$$

Iconic meaning

How does gesture enrich a linguistic meaning?

- ▶ They may **illustrate** a specific DP meaning
- ▶ They may **exemplify** a typical NP meaning

  (Lascarides & Stone 2009, Ebert et al. 2020)

(8) My living room has only $\overline{\text{one window}}^{\text{rectangle}}$.

(9) $\overline{\text{Windows}}^{\text{rectangle}}$ are usually made of glass.

Gesture and speech (again)

Gesture and speech (again)

(10) $\overline{\text{You know, they can text message now}}$ texting gesture
      – like $\overline{\text{typing a li... quick 'Hi Mom, I'm here.'}}$ typing gesture

A question

How do you negate gestural information?

- ▶ Speech only

    (11) A: Mike went up to the attic using the spiral
          staircase.
          B: No, he climbed the rope ladder.

A question

How do you negate gestural information?

- ▶ Speech only

  (11) A: Mike went up to the attic using the spiral staircase.
        B: No, he climbed the rope ladder.

- ▶ Co-speech gesture

  (12) A: Mike $\overline{\text{went up to the attic.}}^{\text{spiral gesture}}$
        B: # No, he climbed the rope ladder.

Non-at-issue meaning

Assertive (at-issue) meaning:

(13) a. Emma ate an apple. $\rightarrow$ Emma ate a fruit.
      b. Did Emma eat an apple? $\not\rightarrow$ Emma ate a fruit.
      c. Emma didn't eat an apple. $\not\rightarrow$ Emma ate a fruit.

Presupposed (not at-issue) meaning:

(14) a. Chris stopped smoking. $\rightarrow$ Chris used to smoke.
      b. Did Chris stop smoking? $\rightarrow$ Chris used to smoke.
      c. Chris didn't stop smoking. $\rightarrow$ Chris used to smoke.

Non-at-issue meaning

▶ *Cornelia Ebert:* Gestural meaning is typically *not at-issue*.

                    <u>   spiral gesture   </u>
(15)   Mike didn't go up to the attic.

                    <u>   spiral gesture   </u>
(16)   Did Mike go up to the attic?

                    <u>   spiral gesture   </u>
(17)   Mike might have gone up to the attic.

                    <u>   spiral gesture   </u>
(18)   Nobody went up to the attic.

        $\rightarrow$ The way up to the attic is a spiral staircase.

At-issue gestural content

- Can gestural content be made at-issue?

At-issue gestural content

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- Demonstrative pronouns:

  (19) John didn't move $\overline{\text{like this}}$.

  wiggle

  (20) If the book is $\overline{\text{this thick}}$, I'm sure I won't finish it.

  size gesture

Demonstratives

Demonstratives bring contextual information into at-issue content.

- Previous linguistic content

  (21) Sam saw a car outside. Emily also saw that car.

- Indexical information

  (22) I want to buy $\overline{\text{that}}^{\text{pointing}}$ house.

- Extra-linguistic content

  (23) Right now, you all look like this:

Subcategorizing for gesture

- English has one degree modifier that *requires* a gesture.
  - *yay* / *yea* : 'to this extent'

(24) The book is about yay thick.

(25) I've known him since he was yay tall.

(26) The box is about yay wide and yay long.

  - These sentences are deviant without a gesture.

- Unlike *this/that/so*, strict requirement for gestural argument.

At-issue gestural content

- Can gestural content be made at-issue?

- Quotative constructions:

  (27) John was all, 'wahhh I don't like loud music!'

Gesture and speech (again)

Indexicals under quotation

Another observation:

- 1st and 2nd person pronouns shift under quotation:

  (28) John told me, 'I love you.'

- 1st and 2nd person indexical gestures also shift!

Gesture and speech (once more)

Indexicals under quotation

Another observation:

- 1st and 2nd person pronouns shift under quotation:

  (28)   John told me, 'I love you.'

- 1st and 2nd person indexical gestures also shift!

  (29)   I go, 'If you can't do that, you will not go,
         or you will never go anywhere again.'

  point 2nd   point 2nd   swipe

Analysis sketch

Analysis sketch:

- ▶ Both demonstratives and quotatives are functions that ask for a contextually specified predicate as an argument.

- ▶ This predicate may (or must) be iconically specified.

Section 3

Sign language

Sign Language

- ▶ Sign language has several constructions that bring iconicity into the at-issue component of meaning.

- ▶ *Classifier predicates*: handshapes that illustrate movement and locations.
- ▶ *Role shift*: body shift that indicates taking some individual's perspective.

Frog Story

Classifiers as iconic predicates

- **Classifiers** have a specific handshape (for a given 'class'), and a movement that iconically indicates an event.
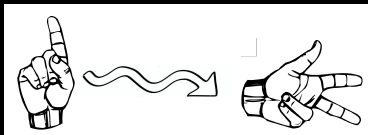
'The person moved to the car along a wavy path.'

- This iconic predicate preserves at least:
  - Location
  - Orientation
  - Classifier-internal structure

ASL/English bilingual kids

Evidence for iconic component from CODAs (Davidson 2015):

- ► Sound effects frequently accompany classifiers:

(30) GOLF CL-1(path of ball) BALL CL-1(path of ball)
      golf (sound-effect)   ball (sound-effect)
      'In golf the ball goes high up, the ball goes like this.'
      (3 year-old with Deaf father)

- ► Corpus search of 48 classifiers:
  - ► 20 accompanied by no speech (all w/Deaf interlocutor)
  - ► 14 accompanied by verb (12 w/hearing interlocutors)
  - ► 9 with sound effects (equal mix interlocutors)
  - ► 5 other/unintelligible

Gesture and speech (yet again)

Role shift

- In sign language, **role shift** is a perspective-taking construction, marked by shifting the body.

- **Attitude role shift:**
  - Very much like quotation in spoken language.
  - Entails the existence of a speech act.

  (31) JOHN IX-a $\overline{\text{IX-1 LIKE ICECREAM}}^{\text{RS-a}}$.

  'John said, 'I like icecream.''

- **Action role shift:**
  - No speech act entailed.

  (32) MARY-a $\overline{\text{1-WATCH-b}}^{\text{RS-a}}$.

  Mary was watching it (like this).

Role shift

- ASL, no Role Shift:

  (33) IX-b HAMMER.
        'He was hammering'
            #*Response:* No, he was hammering upwards

- ASL, Action role shift:

  (34) IX-b $\overline{\text{HAMMER}}^{\text{RS-b}}$
        'He was like hammering [like this]'
            Response: No, he was hammering upwards

Summary

- In spoken language, demonstratives and quotation bring iconic info into the at-issue component of meaning.
  - Can be modeled as a taking an iconic argument.
- In sign language, classifiers and role shift similarly yield at-issue iconicity.

Section 4

Further topics in sign language semantics

What we have discussed

- ► Pronouns
- ► Times and degrees (a bit)
- ► Event structure
- ► Plurality (nouns and verbs)
- ► Quantification
- ► Classifiers & role shift (a bit)

Some themes:

- ► Iconicity in the grammar
- ► Iconic biases on typology
- ► Gesture and sign

What we haven't discussed

Some important gaps!

- ▶ Non-manual signs
    - ▶ Their meaning and composition
- ▶ Pragmatics and information structure
- ▶ Cross-linguistic variation *within* sign languages

Thanks!

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