

Sign languages

LING 200: Introduction to the Study of Language

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Outline

- 1 African American English
- 2 Sign languages
 - Myths vs. facts about sign language
 - Structure of ASL

Slides credit: Lauren Clemens, Kate Davidson

African American English (AAE)

Morphological features

Possessives:

- One way to form a possessive in SNAE is to add the suffix -s to the possessor.
 - The president's clothing
- AAE does not use this morpheme
 - The president clothing

African American English (AAE)

Morphological features

3rd person agreement:

- In SNAE the agreement morpheme -s is added to the verb when the subject is third person.
 - The president's clothing looks expensive
- AAE does not use this morpheme
 - The president clothing look expensive

African American English (AAE)

Morphological features

Regularization of reflexive pronouns:

- SNAE uses possessive pronouns in reflexives:
 - **Myself** (my hat)
 - **Yourself** (your hat)
 - **Ourselves** (our hats)
- SNAE also uses some object pronouns in reflexives:
 - **Himself** (*him hat vs. I saw him)
 - **Themselves** (*them hats vs. I saw them)
- AAE only uses possessive pronouns in reflexives:
 - **Hisself** (his hat)
 - **Theirselves** (their hat)

African American English (AAE)

Syntactic features

Negative Concord:

- He don' do nothin'.

'He does nothing'

➡ This is *not* double negation: the meaning is of a single negation.

- This is in fact common cross-linguistically:

- (1) On ne delaet nicego.
he not does nothing

'He does nothing.'

*On delaet nicego.

Russian

- (2) Hu lo ose klum
he not do nothing

'he does nothing'

*Hu ose klum

Hebrew

African American English (AAE)

Syntactic features

- | | | |
|-----|-------------------|---------------------|
| (3) | a. She workin' | <i>null copula</i> |
| | b. She be workin' | <i>invariant be</i> |

- (3a) means she has a job; she works in general (intrinsic property).
- (3b) means she is working right now
i.e. a good response to “Where is she?”
(situation-dependent property, habitual)

Spanish

- | | | |
|-----|---------------------------------------|--------------|
| (4) | a. Soy de Israel.
I.am from Israel | <i>ser</i> |
| | b. Estoy cansada.
I.am tired | <i>estar</i> |

African American English (AAE)

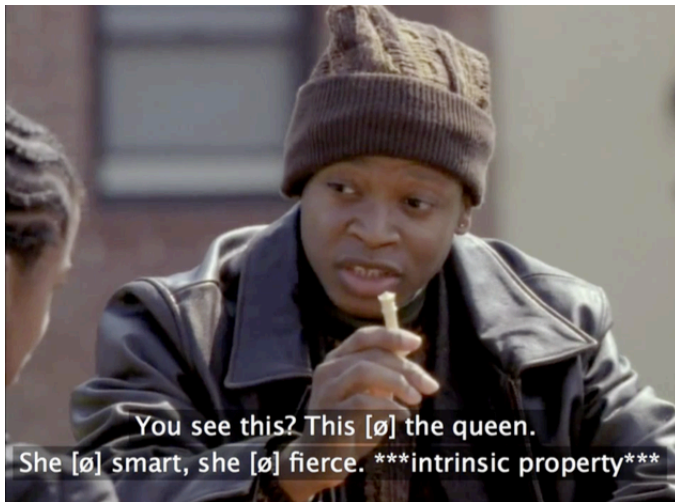
Video:

The chess scene from *the Wire* (season 1, episode 3)

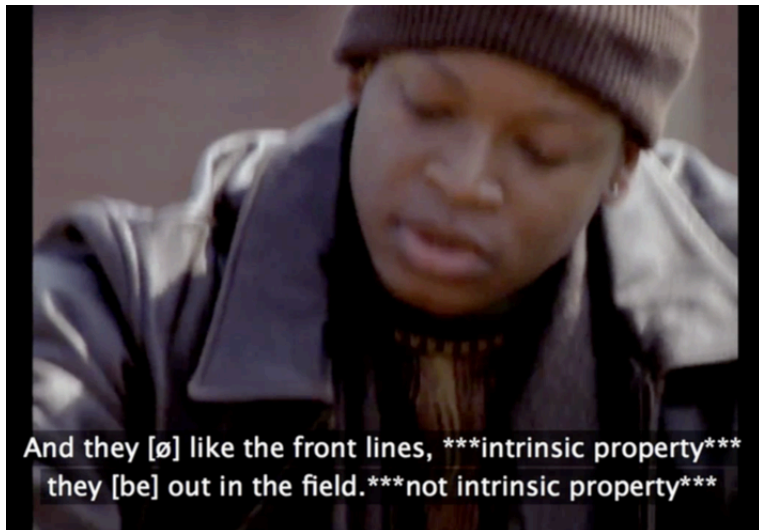
<https://www.youtube.com/watch?v=y0mxz2-AQ64>

▶▶ listen for *null copula* and *invariant be*.

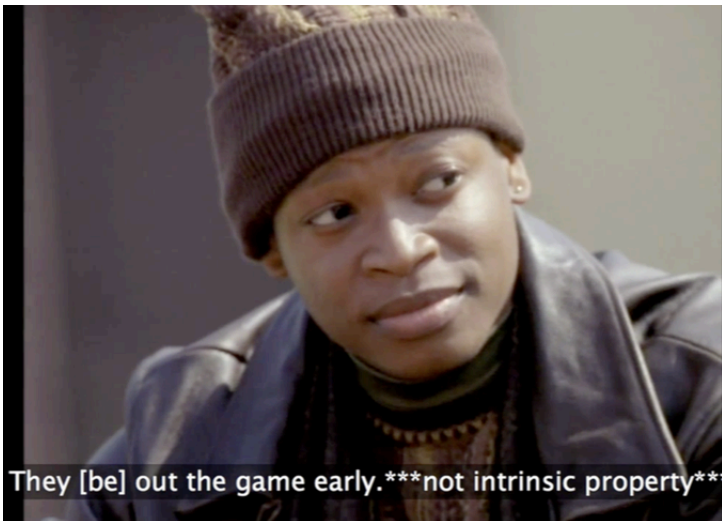
African American English (AAE)



African American English (AAE)



African American English (AAE)



African American English (AAE)



They [\emptyset] like the front line. [$\emptyset \rightarrow ser$]
They [be] out in the field. [be $\rightarrow estar$]

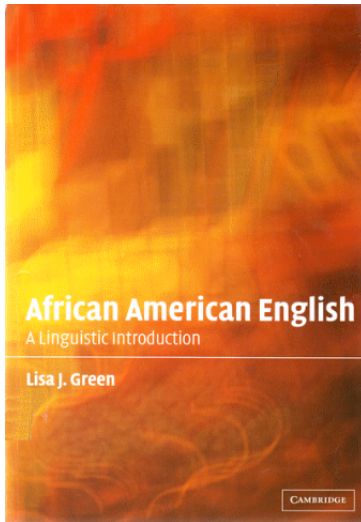
African American English (AAE)

Part of a rich tense/aspect system that includes:

- 1 Present progressive:
He **runnin'**. ('He is running')
- 2 Present habitual progressive:
He **be runnin'**. ('He is usually running').
- 3 Present intensive habitual progressive:
He **be steady runnin'**.
(‘He is usually running in an intensive, sustained manner.’)
- 4 Present perfect progressive:
He **bin runnin'**. ('He has been running but isn't now.')
- 5 Present perfect with remote inception:
He **BIN runnin'**. ('He has been running for a long time (and still is).')

... and more!

African American English (AAE)



African American English (AAE)



The point of this (part of the) lecture

Differences in grammar

- (5) a. ✓ Ben is done with his dinner.
b. % Ben is done his dinner.

What this really means. . .

- | | |
|----------------------------------|----------------------------------|
| (6) SOME SPEAKERS: | (7) OTHER SPEAKERS: |
| a. ✓ He is done with his dinner. | a. ✓ He is done with his dinner. |
| b. ✓ He is done his dinner. | b. * He is done his dinner. |

- **Wrong conclusion:** Speakers of different/non-standard dialects of English are just speaking *badly/wrong/ungrammatically*, etc.
- **Wrong conclusion:** ~~Speakers of different/non-standard dialects of English are just speaking *badly/wrong/ungrammatically*, etc.~~
- **Instead:** No dialect is better/more useful/more expressive/more correct, etc. than any other.

- ➡ “Standard” dialects are called “standard” because they are spoken by the people with power/money/prestige, etc.—that’s it.
 - Biases against dialects are rooted in the biases against the people who speak these dialects.
 - Dialect variation is *rule-governed*; follows from the more general observation that *language* is rule-governed.

One last note on what counts as language...

● **Myths about Sign Languages**

- ~~Sign language is pantomime.~~
 - ~~Sign language is universal.~~
 - ~~Sign language is finger-spelling.~~
 - ~~Sign languages represent spoken language.~~
-
- While Sign Languages have some *iconic* gestures, most are not.
 - Sign languages around the world are *not* mutually intelligible.
 - Sign languages are not gestural “translations” of spoken languages.
 - ▶ A speaker of ASL who reads English is *bilingual*.

More on this on next!

Recap

- When we talk about “language” we are talking about **linguistic properties that are shared** by all the languages of the world.
 - All languages and all dialects: no language or linguistic variety is superior to any other in any scientific way.
 - Every language has words.
 - Every language has rules for making new words.
 - Every language has rules for combining those words into sentences.
 - Every language has rules for assigning meaning to sentences.

Sign languages

- ▶▶ Every language displays an arbitrary relationship between form and meaning.
 - In spoken languages, form = sound
 - In signed languages, form = gestures
- Just like you can't know a priori that *tarnegol* means “chicken” unless you've learned Hebrew, you can't understand the gestures of a person communicating in a sign language.

Sign languages

Background

- 1 in 1000 babies is born deaf.
- 2 million profoundly deaf people in the U.S.
- 15 million hearing-impaired people in the U.S.
- 90% of deaf babies are born to hearing parents.
- 100,000-500,000 ASL users in the U.S.

➡ Is (American) Sign Language a 'true' language?

Sign languages

➡ Yes! Like spoken languages, signed languages are...

- Naturally-occurring (not invented).
- Complete and expressive.
- Rule-governed (there is a “right” and “wrong” way to say things).
- Governed by the same kinds of principles governing spoken languages.
- Not the same world-wide.
- Not mere pantomime.
- Not parasitic on spoken language.

Sign languages myths

MYTH 1:

Signed languages are not 'true' languages because lack writing, speech

- Writing is a derivative of language.
- A great proportion of the world's languages are unwritten.
- Historically, languages have been spoken long before they have been written down.
- The main difference between spoken and signed languages is mode of communication (vocal-auditory vs. manual-visual)

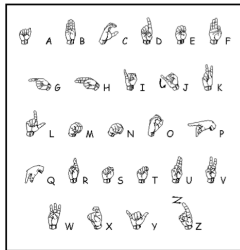
Sign languages myths

MYTH 2:

Sign language is universal

- Many different signed languages.
- They are mutually unintelligible.

American Sign Language (ASL)



British Sign Language

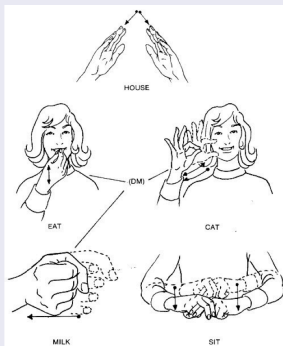


Sign languages myths

MYTH 3:

Sign language is pantomime

- Some signs *are* **iconic**.
 - “house”, “eat”, “cat”, “milk”, “sit”
- But: A person who knows a sign language is capable of creating and comprehending an unlimited number of new sentences.
- Imagine trying to mime:
 - *The fact that it's supposed to snow later this week, even though it's April already, is something that I am aware of, but it is nonetheless difficult for me to fully accept.*



Sign languages myths

MYTH 3:

Sign language is pantomime, continued...

- If all signs were iconic...
 - Non-signers would understand sign language.
 - All deaf people would have same signs.
 - Wouldn't be able to sign abstract concepts.
- Recall: Iconicity occurs in spoken languages to some degree (onomatopoeia, animal sounds).
- ASL has *dialects*.

Sign languages myths

MYTH 4:

Sign language is a signed version of spoken language

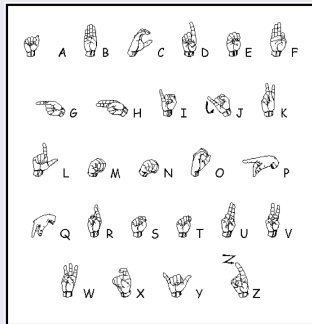
- Sign languages are not gestural translations of spoken language.
- Chinese Sign Language is not Chinese.
- American Sign Language is not English.
 - ASL is *one* sign language, the way English is *one* spoken language.
 - A speaker of ASL who reads English is *bilingual*.

Sign languages myths

MYTH 5:

Sign language is finger spelling

- Manually Coded English (MCE)
 - translation of English in 1-to-1 encoding
 - used to teach English to the Deaf
- Fingerspelling
 - used for words for which there is no sign in ASL, e.g. foreign words, names, abbreviations, etc.
- However, most of the vocabulary of sign language is signs, which are produced differently than finger-spelled words.



The structure of ASL

Location

- ASL is a visual language: **eye-contact** is key.
- Signs are made from the top of the head down to the torso.
- Imagine a rectangle being drawn from your head down to your torso.
- Signs are made within this rectangle, otherwise they become difficult to see and meaning can be lost.
- The location of the sign contributes to its meaning.
 - Approximately 75% of signs are formed in the head and neck area, so they can be easily seen.
 - Many signs that denote feelings are formed near the heart. Signs that relate to cognitive concepts are formed near the head.

The structure of ASL



Figure B. 'One_{spec}'



Figure D. 'One_{non.spec}'

Figure 1

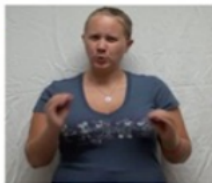
(Barberà 2012)

The structure of ASL

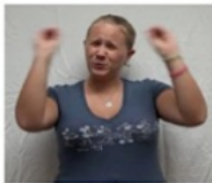
(6) Context: Signer is asked if anyone in her family is deaf beside herself. She replies:

a. 'None, only me.'

b. 'None at all (no extended family members), only me'



a. NONE_{LOW}



b. NONE_{HIGH}



Figure 2

(Davidson and Gagne 2013)

The structure of ASL

Modality

- Simultaneity vs. sequentiality:
- English is sequential: phonemes (as well as morphemes and words in a sentence) are linearly ordered.
- In signed languages, several meaning-bearing units can be produced simultaneously.

American Sign Language

The structure of ASL

- Every language has five components:
 - **phonology** (how sounds are organized and used)
 - **Morphology** (how words are structured and what they mean)
 - **Syntax** (how words are put together to form sentences)
 - **Semantics** (how sentences are interpreted)
 - **Pragmatics** (how sentences are used in context)

➡ All five of these are relevant for ASL, too!

American Sign Language

The structure of ASL

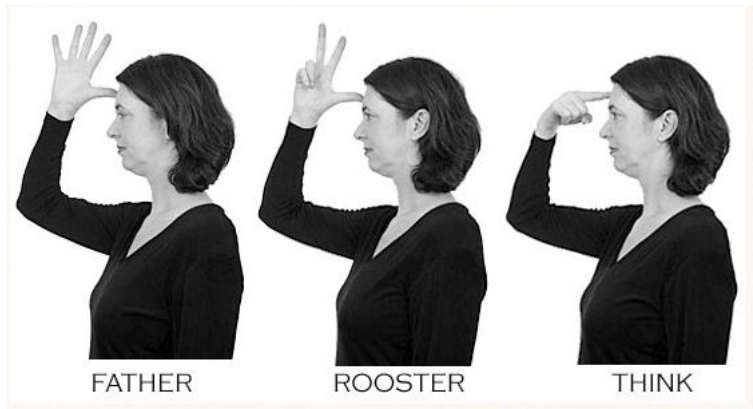
- <https://www.facebook.com/mallory.malzkuhn/videos/592237599923/>
- Pay attention to
 - the shape of her hands
 - the movement of her hands while maintaining a single shape
 - the orientation of her palms
 - the position of her hands relative to her body
 - facial expressions

American Sign Language

The structure of ASL

- <https://www.youtube.com/watch?v=g0MGsqB8IXs>
- Parameters of sign language
 - hand shape
 - movement
 - location
 - palm orientation
 - facial expressions

Different hand shapes



<http://www.talkinghandsbook.com/americansl.html>

Different movement



COFFEE



WORK



YEAR

<http://www.talkinghandsbook.com/americansl.html>

Different location



SUMMER



UGLY



DRY

Different location

- Note: those were all **minimal pairs** in the visual domain!
- The signs we saw were identical in every way except one: they differed just in the hand shape, or just the movement, or just the location of the sign.
- It's also possible to have more than one difference between two signs.

Different movement and location



LOOK-AT



SIZE-UP



LOOK-AT-INTENTLY

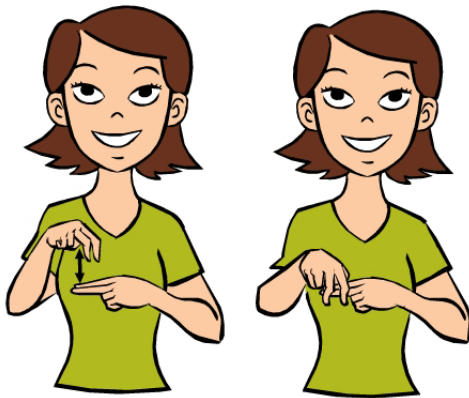
<http://www.talkinghandsbook.com/americansl.html>

ASL morphology

Reduplication

- Just like spoken languages, ASL is a rule-governed system.
- The study of morphemes and their systematic organization into words is called **morphology**.
- One ASL morphology rule: Repeated movement turns a verb into a noun.
 - sit + repeated movement = chair
 - fly + repeated movement = airplane
 - get + repeated movement = acquisition

ASL morphology



signed once = sit; repeated twice = chair.

ASL morphology

Reduplication

- **Reduplication** in morphology is the repetition of a morpheme
- In ASL, the reduplication of the gesture for “sit” yields “chair.”
- In Hebrew, repetition of a color morpheme creates the “light” color:
 - kaxol = blue; kxalxal = light blue
 - adom = red; adamdam = light red
 - tsahov = yellow; tsehavhav = light yellow
 - yarok = green; yerakrak = light green

ASL morphology

Reduplication

- We can also find reduplication in English, but affecting a larger domain of a whole word or phrase:
 - I'm DONE done. (as opposed to almost done)
 - Did you eat GRILLED CHEESE grilled cheese? (as opposed to fake grilled cheese)
 - Did you GO TO WORK go to work? (as opposed to sit at work wasting time, for example).
- Here, reduplication seems to indicate that the meaning is literal or exact.

ASL Syntax

Wh-questions

English statement

Anna bought a book

English *wh*-question: obligatory movement

What did Anna buy?

Anna bought what? (← only as an *echo* question)

Chinese statement

Ana maile yi benshu
Ana bought a book

Chinese *wh*-question: no movement

*Shenme Ana maile?

Ana maile shenme (← a true question!)

What did Ana buy (lit: Ana bought what?)

French statement

Ils ont vu Pierre
They saw Pierre

French *wh*-question: optional movement

Qui ont ils vu?

Ils ont vu qui? (← a true question!)

Who did they see

ASL Syntax

Wh-questions

- ASL has *wh*-words
- ASL *wh*-words can replace a noun and stay in that position.
- ASL *wh*-words can also replace a noun and move to the beginning of the sentence.
- An important difference in facial expression:
 - Eyebrows go *down* in *wh*-questions.
 - Eyebrows go *up* in yes-no questions.
 - https://www.youtube.com/watch?v=TrhP1_p7Se4