Introduction to the Study of Language

Part 2

Today

- Review of the last time & the reading
- Language & Thought (brief)
- Morphology
- Syntax

Last time

- Why are we interested in language?
  - Is human language special?
  - Innateness hypothesis
- Prescriptive vs. descriptive approaches to language

Home assignment

- "A wolf is able to express subtle gradations of emotion by different positions of the ears, the lips, and the tail. There are eleven postures of the tail that express such emotions as self-confidence, confident threat, lack of tension, uncertain threat, depression, defensiveness, active submission, and complete submission. This system seems to be complex. Suppose there were a *thousand* different emotions that the wolf could express in this way. Would you then say that a wolf had a language similar to a human's? If not, why not?" (FRH, p. 31)

- Why are dolphins and Snowball so special?

Reading (Pinker)

- What are his main points?
  - Language is uniquely human and innate (similar to other instincts)
  - Arguments?
    - Induction problem
    - Constant re-invention by children
    - Dissociation between language and intelligence (cognitive abilities)

Induction problem

- **Test:** Take a series of numbers such as 3, 9, 21. Determine what is the common property of these numbers. Which number belongs to the series, 17 or 18?
- **Rule 1:** 3, 9 and 21 are all odd numbers. 17 is too, 18 isn't. Hence 17 belongs to the group.
- **Rule 2:** 3, 9 and 21 are all multiples of 3. 18 is too, but 17 isn't. Hence 18 belongs to the group.
- Based on this data, *there is no way to decide between Rule 1 and Rule 2 unless we already have the rule*.
- What's Pinker's example of the induction problem?

Children re-invent languages

- Sign Language in Nicaragua
- Deaf children of hearing parents
- 'Normal' children
  - are not taught language
  - generalize beyond the evidence available to them
    - subject-auxiliary inversion in questions
    - -s marking
- Despite surface variability, languages ARE similar
  - E.g. markedness universals such as if a language has CCV, it also has CV syllables

Language ≠ intelligence

- Presumably deficient languages are just as good as 'standard' languages
  - AAVE, creoles, languages of indigenous people
- Unimpaired intelligence with impaired language
  - -Broca's aphasia
  - -Special Language Impairment
- Impaired intelligence with unimpaired language
  - Denyse
  - Williams syndrome

Characteristics of language

- Complexity
- Systematicity (on various levels)
- Variation (often unconscious)
- Common properties of languages despite huge differences
- Spontaneous acquisition
- Creativity/productivity
  - Infinite use of finite means
  - Speakers know rules for combining them
- Displacement
- Arbitrariness
- Discreteness

Language and thought

- Question: Is our thinking independent of the language we speak?
  - Some popular notions suggest that the answer is NO. That is, some people think that we 'think in words'.
    - Eskimo words for snow
      - Arctic people have up to 40 words describing snow. Hence, their perception of world must be different from other people
    - Hopi notion of time
      - 'Hopi may be called a timeless language'. [...] It 'does not distinguish between present, past, and future of the event itself (...)'.
    - Color perception
      - codability of color affects their recognizability. Languages differ in codability, => recognizability is a function of the individual's language

Sapir-Whorf hypothesis

- Strong: Language determines thought (≈ language you speak determines the way that you will interpret the world around you)

- Weak: *some* aspects of language might determine *some* aspects of thought (≈ language merely influences your thoughts about the real world)

The 'strong' version is implausible

- Debunking popular beliefs
- Patients with Broca's aphasia or SLI
- Translation would not be possible
- Constant self-correction in language use would not make sense
- Thought w/o language
  - The case of rotating letters (Pinker, Ch3)
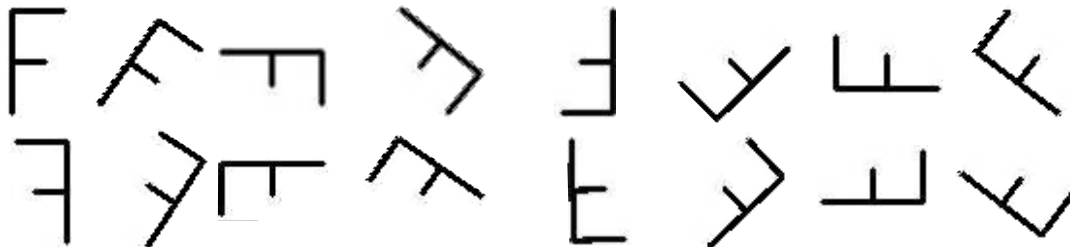
The weak version is still an open debate

- Spatial reasoning
- Counterfactuals
- …

Summary

- Chomsky/Pinker view: language is universal, innate, govern by Universal Grammar
- Sapir-Whorf: some aspects of language are connected to the culture of its users

Morphology

- Last time:
  - we know that words are composed of parts and we know some rules of how to combine these parts
    - What's an <u>unrewritable</u> CD
  - Words have hierarchical structure
- Types of morphemes
- Puzzle-solving ☺ exercises

Roots & stems

- Morpheme: smallest unit of meaning
  - Easy cases: cat, -s, un-, -ness, ugly,…
  - Not so easy: ceive (perceive, receive), cran- (cranberry), phon (telephone, phonetics, symphony), or luke- (lukewarm)
- Free vs. bound morphemes
- Word = (Root + affix)$_{stem}$
- Back to: [[[un[[system]atic]]al]ly]

Fixes…

- Affixes: preffix, suffix, infix, circumfix
- Infixes: not common in English
  - Colloquial style: -fucking-
    - Abso-fucking-lutely, unbe-fucking-lievable
    - But not *ab-fucking-solutely, or *unbelieve-fucking-able
    - What's the rule?
- Circumfixes
  - In languages such as Tagalog or German
    - lieb   *love*
    - geliebt   *loved*, *beloved*

- Test: Write down how many instances of the letter F are there:

  FINISHED FILES ARE THE
  RESULT OF YEARS OF SCIENTIFIC
  STUDY COMBINED WITH THE
  EXPERIENCE OF YEARS

- Function vs. content morphemes
  - Function words are a closed set
  - Could be also free or bound

Derivation

- Derivation creates new words with new meanings
  - Sometimes changing grammatical category, sometimes not
  - N➔A: -ish, -ous, -an, -esque, -ate, -ful, -ic, -like
  - V➔N: -al, -ance, -ation, -ence, -er, -ist, -ion, -dom
  - A➔ Adv: -ly
  - N➔V: -ize, -ate, -(ish, en)
  - A➔N: -ness,, -ity, -ous
  - V➔A: -able, -ive, -ory
  - N➔N: -ship, -ity
  - V➔V: un-, re-
  - A➔A: -ish, in-

Inflection

- Inflection marks the relationship of a word with other words in a sentence
  - English: -s, -ed, -ing, -en, -ed, -er, -est

Productivity

- Morphological processes are variably productive
  - -able vs. un-
- Lexical gaps
  - E.g. blik, snorpad,…
  - uglify, ungood, reget,…

Morphological types of languages

- Analytic
  - One word one morpheme, e.g. Mandarin Chinese

    [wɔ mən tan   tçin   lə]

    I   plural play   piano past

    We played the piano.

- Synthetic
  - Agglutinative
    - Each affix generally conveys one meaning
      - Hungarian, Turkish, Swahili
  - Fusional
    - Slovak
  - Polysynthetic
    - Verbs are combined with subjects/objects into a single word

Divide the following words by placing a / between their morphemes. (Some of the words may be monomorphemic and therefore indivisible.)

Example: replaces   re / place / s

a. retroactive
b. befriended
c. televise
d. margin
e. endearment
f. psychology
g. unpalatable
h. holiday
i. grandmother
j. morphemic
k. mistreatment
l. deactivation
m. saltpeter
n. airsickness

Match each expression under A with the one statement under B that characterizes it.

A

a. noisy crow
b. scarecrow
c. the crow
d. crowlike
e. crows

B

1. compound noun
2. root morpheme plus derivational prefix
3. phrase consisting of adjective plus noun
4. root morpheme plus inflectional affix
5. root morpheme plus derivational suffix
6. grammatical morpheme followed by lexical morpheme

Write the one proper description from the list under B for the italicized part of each word in A.

A

a. terror*ized*
b. un*civil*ized
c. terror*ize*
d. *luke*warm
e. *im*possible

B

1. free root
2. bound root
3. inflectional suffix
4. derivational suffix
5. inflectional prefix
6. derivational prefix
7. inflectional infix
8. derivational infix

Playing a linguist: morphological exercise

- Consider the data from Turkish. Give Turkish form for each morpheme (except articles), and 'say' in Turkish *of our little hands*.

|			
[deniz]	*ocean*	[elim]	*my hand*
[denize]	*to an ocean*	[eller]	*hands*
[denizin]	*of an ocean*	[diʃler]	*teeth*
[eve]	*to a house*	[diʃimizin]	*of our tooth*
[evden]	*from a house*	[diʃlerimizin]	*of our teeth*
[evdʒikden]	*from a little house*	[eldʒike]	*to a little hand*
[denizdʒikde]	*in a little ocean*	[denizlerimizde]	*in our oceans*
[elde]	*in a hand*	[evdʒiklerimizde]	*in our little houses*

What's a language again?

- What does it mean to know a language?
  - Examples of mental knowledge
    - All houses are red.   The houses are all red.
    - Three houses are red.   *The houses are three red.
- What does it mean to have flu?
- Language and flu are fundamentally similar: they don't exist as such!
  - To study them we need to look at the pieces of knowledge that we have (for language) and symptoms (for flu) and how they interact

What's a language again? (cont'd)

- Another potential answer: Language is a translation engine between the sound and the meaning
- How is this translation achieved?
  - Morphemes as learnt sound-meaning associations
    - Last time we discussed how they combined and relate to meanings
  - Sentences as "gluings" of new meaning from words
    - This is uniquely human

Examples
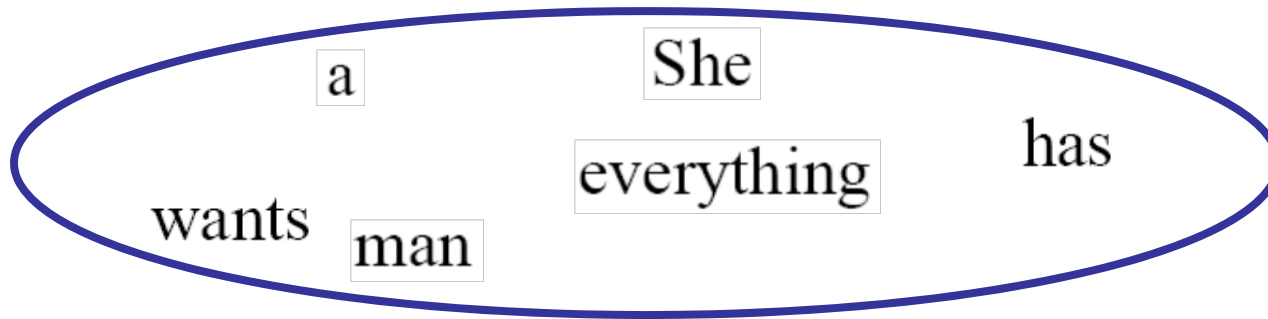
    – She has everything a man wants.

    – She wants everything a man has.

    – *Wants a man everything she has

- Bill hit John and he kicked him.

- I ate halušky

What glues with what?

- The girl found the puppy
  - What are the constituents?
  - Why 'the puppy' and not 'found the'?

Gluing tests

- Replacement (e.g. with a pronoun)
  - Where did you find the puppy? I found *it* in the garden.
  - *What* did the girl find?
- Coordination
  - The girl found *the puppy and the doll*.
- Movement
  - *The puppy* was found in the garden
- Answer to a question
  - What did the girl find? She found *the puppy*.