LNGT 0250
Morphology and Syntax

Announcements
- Groups for the Linguistic Diversity Project Presentations.
- Any questions on Part B of HW 4?

Transition from last class
- Syntax focuses on that aspect of our linguistic knowledge that relates to the rules regulating sentence structure in human language.
- Since our goal in syntax is the characterization of native speakers’ subconscious knowledge (so-called competence), we are not in the least interested in prescriptive rules.
- We also abstract away from external factors that affect our linguistic performance.

Garden path sentences
1. The prime number few.
2. Fat people eat accumulates.
3. The cotton clothing is usually made of grows in Mississippi.
4. Until the police arrest the drug dealers control the street.
5. The man who hunts ducks out on weekends.
6. When Fred eats food gets thrown.
7. Mary gave the child the dog bit a bandaid.
8. The girl told the story cried.
9. I convinced her children are noisy.
10. Helen is expecting tomorrow to be a bad day.

Garden path sentences
11. The horse raced past the barn fell.
12. I know the words to that song about the queen don’t rhyme.
13. She told me a little white lie will come back to haunt me.
14. The dog that I had really loved bones.
15. That Jill is never here hurts.
16. The man who whistles tunes pianos.
17. The old man the beat.
18. Have the students who failed the exam take the supplementary.
19. The raft floated down the river sank.
20. We painted the wall with cracks.
21. The tycoon sold the offshore oil tracts for a lot of money wanted to kill JR.

Syntax as a formal science
- To tap into speakers’ competence, we rely on two sources: corpora and grammaticality judgement tasks, each of which has limitations.
- The methodology is the familiar one from science: we collect data, formulate a hypothesis, then test the hypothesis against further data, and so on and so forth.
- A hypothesis has to be falsifiable: We have to be able to test it and prove it wrong.
- Hypothesis making exercise: Distribution of ‘any’ in English.
Source of our linguistic knowledge

- Syntacticians thus aim to build a model of native speakers’ syntactic knowledge.
- But where does our syntactic knowledge come from?
- The most obvious answer is: from the input around us.

Source of our linguistic knowledge

- It turns out, however, that we know far more about our language than could have possibly been learned via experience alone.
- Some aspects of our syntactic knowledge just do not seem be learnable from experience alone, forcing us to entertain other hypotheses.

The puzzle of ‘that’ in questions

1. a. I think that Mary saw Bill.
   b. I think Mary saw Bill.
   c. Who do you think Mary saw? ☹
   d. Who do you think that Mary saw? ☹

2. a. I think that Bill saw Mary.
   b. I think Bill saw Mary.
   c. Who do you think saw Mary? ☹
   d. *Who do you think that saw Mary? ☹

Ambiguity

- Anne hit the man with the umbrella.
- Visiting relatives can be a nuisance.
- We need more informed linguists.

Charge up!

- I charged up the battery.
- I charged the battery up. ☺

- I charged up the street.
- *I charged the street up. ☹

The poverty of the stimulus argument

- If something is not learnable from the input, then we hypothesize that it must be innate.
- The poverty of the stimulus \(\Rightarrow\) the innateness hypothesis.
- The innate component of our linguistic knowledge is what Chomsky calls Universal Grammar.
Syntactic structure is also recursive---in principle infinitely

- Embedding:
  - Who did John say that the company should hire?
  - Who did John say that Mary thought that the company should hire?
  - Who did John say that Mary thought that Harry suggested that the company should hire?
  - Etc.

Syntactic structure is recursive---in principle infinitely

- Center embedding:
  - The student talked for five minutes.
  - The student [the professor introduced] talked for five minutes.
  - The student [the professor [the president promoted] introduced] talked for five minutes.

UG: principles and parameters

- The theory of Universal grammar (UG) assumes that we come to the task of language acquisition already equipped with some pre-wired knowledge: general principles that hold of all languages, and a set of options that different languages choose from (called parameters).

A parameter for verb-object order

- Some languages have their objects before the verb (Japanese, Turkish, Basque), while others have their objects after the verb (English, Edo).
- English: John loves Mary.
- Japanese:
  - John-ga Mary-o butta
  - John-SU Mary-OB hit
  - "John hit Mary."

The null subject parameter

- Some languages require their subjects to be overt, while others allow their subjects to be null.
  - (1) John will leave. English
  - (2) Jean arrivera. French
    Jean will-arrive
  - (3) Gianni verrá. Italian
    Gianni will-come.

The null subject parameter

- (4) *Will leave. English
- (5) *Arrivera. French
  will-arrive
- (6) Verrá. Italian
  will-come.
UG: principles and parameters

• In Chomsky's words: “We can think of the initial state of the faculty of language as a fixed network connected to a switch box; the network is constituted of the principles of language, while the switches are the options to be determined by experience. When the switches are set one way, we have Swahili; when they are set another way, we have Japanese. Each possible human language is identified as a particular setting of the switches—a setting of parameters, in technical terminology.”

• Or, we can represent this graphically as follows:

UG: principles and parameters

• We can think of UG as an initial state $S_0$ that gets mapped onto a final state $S_F$ through exposure to primary linguistic data (PLD).

$$S_0 + \text{PLD} \rightarrow S_F$$

• $S_0$ is the general system that we are born with, and $S_F$ is what we end up referring to as English, Finnish, Tiwa, Khmer, etc.

UG: principles and parameters

• Under this approach, a child's job is to “set” the value of each parameter on the basis of the PLD in the linguistic environment around her.

• This should explain the role of the environment in language acquisition: If you're born in Beirut, then your PLD are different from the PLD of someone born in Moscow, hence the acquired system will be different.

• Language acquisition is thus the result of interaction between nature (principles and parameters) and nurture (PLD).

UG: principles and parameters

Parameters

• We will talk a lot about parameters in the rest of this term, but this should be a good enough background for now.

Next class agenda

• Constituency and tree structures. Finish reading chapter 3 and read Chapter 4.