Generative Grammar

Lecture notes based on Carnie, Andrew. 2013. Syntax: A Generative Introduction. Wiley Blackwell

Syntax lecture course 2021 Spring

Tamás Halm, PPCU

0. Preliminaries

- Language: a psychological or cognitive property of humans, gettting from sounds to meaning
- Phonetics: how sounds are produced and perceived, articulation and acoustics
- Phonology: how to organize sounds into patterns and syllables, what are the possible and impossible combinations, *bluve* vs. *Bnuck*
- Morphology: organizing sounds into meaningful units: morphemes and words (*dancer* = d*ance* + *-er*)
- Syntax: organizing words into phrases and sentences
- Semantics: translating phrases and sentences into thought and ideas

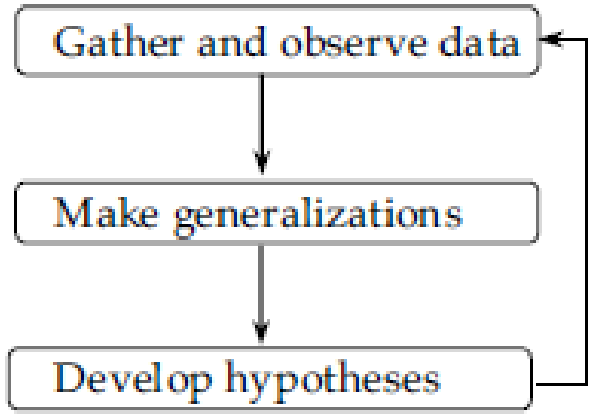
1. Syntax as a Cognitive Science

- Cognitive science: describing and explaining human beings' ability to think.
- Language plays an important role in how we think and communicate ideas.
- Language distinguishes us from other animals.
- Linguistics is a subdiscipline of cognitive science (along with psychology, neuroscience, communication, philosophy and computer science).

2. Modeling Syntax

- Generative Grammar:
- Sentences are generated by a subconscious set of procedures (like computer programs).
- The procedures are part of our cognitive abilities
- The goal of syntactic theory is to model these procedures through a set of formal grammatical rules
- These rules generate the sentences of language

3. Syntax as Science – The Scientific Method



- Hypotheses make predictions.
- Hypotheses are falsifiable
- Hypotheses are rules.
- Descriptive rules (not prescriptive rules).

3.1 Scientific Method in Syntax - Example

- Anaphora, reflexives:

2) a) Bill kissed himself.
   b) *Bill kissed herself.
   c) Sally kissed herself.
   d) *Sally kissed himself.
   e) *Kiss himself.

- Rule: anaphor must have an antecedent and agree with antecedent in gender.

3.1 Scientific Method in Syntax - Example

- Testing the hypothesis against more data:

4) a) The robot kissed itself.
   b) She knocked herself on the head with a zucchini.
   c) *She knocked himself on the head with a zucchini.
   d) The snake flattened itself against the rock.
   e) ?The snake flattened himself/herself against the rock.
   f) The Joneses think themselves the best family on the block.
   g) *The Joneses think himself the most wealthy guy on the block.
   h) Gary and Kevin ran themselves into exhaustion.
   i) *Gary and Kevin ran himself into exhaustion.

- Refined rule: an anaphor must agree in gender and number with its antecedent.

3.1 Scientific Method in Syntax - Example

- Testing the refined hypothesis against yet more data:

6) a) People from Tucson think very highly of themselves.
   b) *I gave yourself the bucket of ice cream.
   c) I gave myself the bucket of ice cream.
   d) *She hit myself with a hammer.
   e) She hit herself with a hammer.

- Further refined rule: an anaphor must agree in gender, number and person with its antecedent.

3.1 Scientific Method in Syntax - Example

7)	Nominative		Accusative		Anaphoric	
	Singular	Plural	Singular	Plural	Singular	Plural
1	I	we	me	us	myself	ourselves
2	you	you	you	you	yourself	yourselves
3 masc	he	they	him	them	himself	themselves
3 fem	she		her		herself	
3 neut	it		it		itself	

3.3 Competence vs. Performance

- Garden path sentences:

14) *#Cotton shirts are made from comes from India.*

3.3 Competence vs. Performance

- Garden path sentences:

14) *#Cotton shirts are made from comes from India.*

-> Cotton [pause] shirts are made from comes from India.

-> Cotton that shirts are made from comes from India.

- Sentence (14) is grammatical (as far as competence is concerned), but difficult to parse (which is a matter of performance)

4 Where do the rules come from?

- The knowledge of Language is subconscious
- It is acquired, not learned
- Some of this knowledge appears to be innate: Universal Grammar (UG):
  - The logical problem of language acquisition: productive systems are (possibly) unlearnable, because you never have enough input to be sure about the relevant facts.
  - Underdetermination of the data

4.5 Explaining language variation

- If part of language is innate (Universal Grammar), how come we still have language variation? -> Parameters!
- Consider word order:

5 Explaining language variation

- Consider word order:

Oversimplifying slightly, most languages put the elements in a sentence in one of the following word orders:

31) a) Subject Verb Object (SVO) (e.g., English)
b) Subject Object Verb (SOV) (e.g., Turkish)
c) Verb Subject Object (VSO) (e.g., Irish)

A few languages use

d) Verb Object Subject (VOS) (e.g., Malagasy)

No (or almost no)[10] languages use

e) Object Subject Verb (OSV)
f) Object Verb Subject (OVS)

- Input: *Mommy loves Kirsten.*

5 Choosing among theories of syntax

- Levels of adequacy (Chomsky 1965)
- Observationally adequate grammar: it can account for the data in a given corpus.
- Descriptively adequate grammar: it can account for corpus data plus native speaker judgments about well-formedness.
- Explanatorily adequate grammar: it can account for corpus data plus native speaker judgments about well-formedness plus how children acquire their language.

5 Homework

- Homework:
  - GPS3 (Page 34)
  - GPS7 (Page 35)
- Send your solutions to halm.tamas@gmail.com until next Wednesday.