LNGT 0250
Morphology and Syntax

Lecture #13
March 30th, 2015

Announcements
• No class on Wed April 8 of next week. As an (optional) make-up class, I will hold a 75-minute session this Thursday April 2, at 4:30-5:45, to answer any questions, particularly related to the midterm exam. Location: Library 201.
• HW3 score average: 22½ Median: 24
• HW4 score average: 22 Median: 23
• Take advantage of my office hours for questions on problem sets.

Announcements
• Midterm is now posted. It is due Monday April 6 either as a hard copy in class, or by e-mail no later than 2pm.
• Do NOT procrastinate! There are 8 questions with several subparts. You do need to start working on this as early as this evening. Come to the Thursday session with questions.
• The midterm is worth 20% of your overall grade.

Summary and transition
• Syntax is the study of the rules that regulate sentence structure in human language.
• The building blocks of sentence structure are syntactic categories (aka parts of speech).

Syntactic categories (aka parts of speech)
• Syntactic categories are not semantically defined. Rather, we define them in terms of their morphological form and their syntactic distribution.
  - Revived ferry sale fears dog islanders.
  - Treasury eyes wider prescription charges.

Syntactic categories (aka parts of speech)
- Revived ferry sale fears dog islanders.
- Treasury to eye wider prescription charges.
Syntactic categories (aka parts of speech)

- Two main types: **Lexical** vs. **Functional**.
- Lexical: N, V, Adj, and Adv.

- Each syntactic category combines with other categories to form larger units, called **constituents**. But what evidence is there for constituency?

A sentence ≠ just a sequence of words

- The same string of words can give rise to ambiguity.
  - The boy and the girl’s uncle left.
  - How many people left?
  - [The boy and the girl]’s uncle left, didn’t he?
  - The boy and [the girl]’s uncle left, didn’t they?

A sentence ≠ just a sequence of words

- The students wondered how cheap textbooks could be obtained.
- The students wondered how cheap textbooks could be.
- The students wondered how [cheap textbooks] could be obtained.
- The students wondered [how cheap] textbooks could be.

A sentence ≠ just a sequence of words

- Black cab drivers went on strike.
- Black [cab drivers] went on strike.
- [Black cab] drivers went on strike.

Constituency

- Intuitively, we “know” that certain words “hang together” in a sentence to the exclusion of others. And we can actually determine constituency by means of (generally reliable) “objective” diagnostic tests.
- There are four constituency tests: **substitution**, **movement**, **coordination**, and the **stand-alone test**.

The substitution test

- If a string of words can be replaced by one word and the result is a grammatical sentence while preserving the original meaning, then it must be that this string of words comprises a “constituent”.

The substitution test
(2) a. [The linguist] has drawn a tree.
   ✓ He has drawn a tree.
b. The linguist has drawn [a tree].
   ✓ The linguist has drawn it.
c. The [linguist has drawn a tree].
   *The ???
d. [The linguist has] drawn a tree.
   *??? drawn a tree.
e. [The linguist has drawn a] tree.
   *??? tree.
f. The linguist [has drawn a tree].
   The linguist has. (in response to "Who has drawn a tree?")

The movement/preposing test
• If a string of words can be moved together in a sentence keeping the same meaning intact, then this string of words comprises a “constituent”.
(4) a. We will hold the meeting [in Sam’s office].
   In Sam’s office we will hold the meeting.
b. We will hold [the meeting in Sam’s office].
   *The meeting in Sam’s office we will hold.

The movement/preposing test
• I read [this book by Chomsky] several years ago.
• [This book by Chomsky] I read several years ago.
• *[This book by] I read Chomsky several years ago.
• *[Book by Chomsky] I read this several years ago.

The clefting test
• Clefting (It is X that …) may also be used as a constituency diagnostic:
  This linguist drew these trees on the board.
• Apply clefting to some strings:
  It is this linguist that drew these trees on the board.
  It is these trees that this linguist drew on the board.
  It is on the board that this linguist drew these trees.
  *It is trees on that this linguist drew these the board.
  *It is linguist drew that this these trees on the board.

The stand-alone test
(aka the sentence fragment test)
• If a string of words can stand alone as an answer to a question, then it is a constituent, e.g.,
  Q: What will John eat?
  A: A whole pizza./*A whole.

  Q: What will John do?
  A: Apply for a new job./*Apply for.

The coordination test
• We met [the students] and [the professors].
• She is [very nice] and [extremely helpful].
• I’ll [get back home at 7] and [have dinner at 8].
A constituency exercise

- Use constituency tests (stand-alone, movement, clefting, substitution, and coordination) to determine if the bracketed string in each sentence is a constituent.

Kim wrote [that book with the blue cover].
Kim bought [that book with her first paycheck].

The stand-alone test (aka the sentence fragment test)

- What did Kim write?
  - That book with the blue cover.

- What did Kim buy?
  - *That book with her first paycheck.

Movement

- That book with the blue cover Kim wrote.

Clefting

- It is [that book with the blue cover] that Kim wrote.
- *It is [that book with her first paycheck] that Kim wrote.

Substitution

- Kim wrote it. (preserves meaning)
  - Compare: *Kim wrote it with the blue cover.

- Kim bought it. (does not preserve meaning)
  - Compare: Kim bought it with her first paycheck.

The coordination test

- Kim wrote [that book with the blue cover] and [this book with the yellow cover].

- Kim bought [that book with her first paycheck] and [this book with her second paycheck].

- hmmm .... What’s the deal?
- See the extra credit question on the midterm.
Phrase structure rules

• The next question to ask is: How are constituents formed in syntactic structure?
• Syntactic categories are the building blocks for phrase and sentence structure.
• Structures are created from these building blocks via re-writing rules, technically known as phrase structure rules.

The phrase structure rule notation

• The \( \rightarrow \) indicates ‘consists of’:
  \[ A \rightarrow B C \]
• Parentheses indicate optionality:
  \[ A \rightarrow (B) C \]
• + indicates multiplicity:
  \[ A \rightarrow (B+) C \]
• The slash indicates an ‘either-or option’:
  \[ A \rightarrow (B) C (U/W) \]

Types of phrases

• NP
• VP
• AdjP
• AdvP
• PP
• TP
• CP

Phrase structure rules

63) a) \( CP \rightarrow (C) TP \)
   b) \( TP \rightarrow [NP/CP] (T) VP \)
   c) \( VP \rightarrow (AdvP+) V (NP)((NP/CP)) (AdvP+) (PP+) (AdvP+) \)
   d) \( NP \rightarrow (D) (AdjP+) N (PP+) (CP) \)
   e) \( PP \rightarrow P (NP) \)
   f) \( AdjP \rightarrow (AdvP) Adj \)
   g) \( AdvP \rightarrow (AdvP) Adv \)
   h) \( XP \rightarrow XP conj XP \)
   i) \( X \rightarrow X conj X \)

Drawing trees

• Carnie’s textbook exercises: pp. 107-109.
• GPS2: # g
• GPS4: # g
• GPS6: # a and p

References

• Several of the data examples on these slides are from: Tallerman, M. 2011. *Understanding Syntax*. Hodder Education.
Next class agenda

• Structural relations: Finish reading Chapter 4 if you haven't already.
• X-bar Theory: Read Chapter 6.