INTD0111A

The Unity and Diversity of Human Language

Lecture #12
March 18th, 2009

Announcements

- The LAP is officially assigned today. Please refer to the course website for the guidelines for the LAP report.
- A one-page LAP proposal is due April 6th. Mark your calendar for that. In your proposal, please mention the language and aspects of morphological and syntactic diversity of interest. You also do need to provide a list of available references that you'll be using.

Announcements

- Midterm is due Friday by 11:30am. I'll be in the office, but if I'm not there for any reason, please slide your exam under the door of my room (#206).
- Any questions on the midterm?

Mid-course evaluation

- Suggestions? Criticisms? Hate mail? Send it my way. Anonymously if you want.
- You can leave that in my mailbox.

Parameterizing anaphor binding

- Another instance of cross-linguistic variation has to do with the behavior of anaphors in human languages.
- Recall that anaphors are subject to Binding Condition A, which says that an anaphor must be bound within the minimal clause (= AuxP) it is in:

  a. John$_i$ likes himself$_i$.

  ("*himself*" has to refer to "*John*")

  b. John$_i$ says that [Barry$_j$ likes himself$_{*i/j}$].

  ("*himself*" has to refer to "*Barry*," not to "*John*")

And Japanese yet again!

- As it turns out, the Japanese anaphor "*zibun*" behaves differently:

Satoo$_i$-ga [Tanaka$_j$-ga zibun$_{i/j}$-o nikunde-iru] koto-o hanasita
Satoo-SU Tanaka-SU self-OB hates fact-OB said
"Satoo$_i$ said that Tanaka$_j$ hates him$_i$/himself$_j$."

And Chinese as well

- As it turns out, Chinese "*ziji*" behaves exactly like Japanese "*zibun*":

  Zhangsan$_i$ renwei Lisi$_j$ hai-le ziji$_{i/j}$
  Zhangsan think Lisi hurt self
  "Zhangsan$_i$ thought that Lisi$_j$ hurt him$_i$/himself$_j$."

The anaphor domain parameter

- One way to capture this difference between English on the one hand, and Japanese and Chinese on the other is by means of a parameter, which we may call the ***anaphor domain parameter*** (ADP):

  "An anaphor must be bound by an NP in the minimal clause it is in (English).

  or,

  An anaphor must be bound by an NP in the entire sentence it is in (Japanese/Chinese)."

The anaphor domain parameter

- English setting:

  [$_{\text{sentence}}$ NP$_i$ … [$_{\text{minimal clause}}$ NP$_j$ … self-pronoun$_{*i/j}$]]

- Japanese setting:

  [$_{\text{sentence}}$ NP$_i$ … [$_{\text{minimal clause}}$ NP$_j$ … zibun$_{i/j}$]]

The anaphor domain parameter

- A learnability question for you (future homework question ALERT ☺):

  If you are a child learning English, Japanese, ***or*** Chinese, on the basis of "positive evidence" only, how would you go about setting the ADP? In other words, how can you find out what the setting for the ADP is in your language, based on positive evidence only?

Note on the status of the ADP

- The ADP parameter not only seems independent of other parameters, such as the head directionality parameter, but it also differs from all other parameters that we discussed in being sensitive to a certain class of "words" in human language (i.e., anaphors like *–self* pronouns in English and *zibun/ziji* in Japanese/Chinese).

The status of the ADP

- A possible way to account for this case of variation in human languages, then, may be to attribute it to a difference, not in the grammar, but in the lexicon.
- In other words, Japanese and Chinese are different from English in that they have different types of reflexive pronouns that English does not have.
- If this is the case, then the ADP is actually a "lexical" parameter, rather than an instance of "grammatical" parameterization.

The status of the ADP

- In support of this view, Baker mentions that, in addition to *ziji*, Chinese also has a second reflexive pronoun *taziji*, which behaves like *himself* in English:

  Zhangsan$_i$ renwei Lisi$_j$ hai-le taziji$_{*i/j}$
  Zhangsan think Lisi hurt self
  "Zhangsan$_i$ thought that Lisi$_j$ hurt himself$_{*i/j}$"

Parameters List

- The head directionality parameter
- The subject placement parameter
- The verb attraction parameter
- The V2 parameter
- The subject side parameter
- The polysynthesis parameter
- The null subject parameter
- The optional polysynthesis parameter

Parameters List

- The serial verb parameter
- The Adjective Neutralization Parameter
- The Ergative Case Parameter
- The topic-prominent parameter
- The wh-parameter
- The anaphor domain parameter

Wrap-up: Why Parameters?

Wrap-up: Why Parameters?

- This is what Baker discusses in most of Chapter 7 (pp. 199-216).
- Main Question: Why is language that way?
- Two common answers: Cultural and evolutionary.

Language diversity as an aspect of cultural diversity

- Pretty much the view outside of formal linguistics, mainly in the humanities and social sciences.
- "Differences" are more emphasized and highlighted. Sameness is unexpected and ignored. If cultures differ, and language is part of culture, then languages have to be different.

But, …

- We have seen how totally unrelated languages are similar:

  Japanese, Basque, Turkish, Navajo, Quechua, Malayalam, Greenlandic Eskimo, and New Guinean languages, are all head-final.

  English, Edo, Arabic, French, Thai, Swahili, Zapotec, Russian, Indonesian, are all head-initial.
- Edo, Khmer, and Sranan all have serial verbs.
- etc.

Same culture, but different languages

- Also, culture may be the same, but the languages differ: Northern vs. southern tribes in Australia. Same culture, different polysynthesis properties.
- Some Mohawks speak their language, but others do not. Still, they all represent the same culture.

Linguistic variation is limited

- Edward Sapir: "Language is a human activity that varies without assignable limit."
- But we know now this is false. The range of variation available to human language is actually very limited, and can be expressed in terms of a finite number of universal principles and binary options that we called parameters.
- And you don't have to believe in UG to see that. Most typologists do not assume UG, but their work always emphasizes the limitedness of variation.

Linguistic variation is systematic

- Variation is also systematic, not random. Why would Mohawk go polysynthetic and exhibit the properties it does, even though the probably related Siouan languages would not do the same? Is this a cultural decision? How?

Language as a product of evolutionary biology

- Survival? Better life? Mastodon hunting?

  But, …
- How can a DNA sequence induce an abstract system like language?
- Why is it unique to our species?
- Is there a museum of fossilized verbs and complementizers that I can visit?

Language as a product of evolutionary biology

- Three kinds of humans:

  Homo rigidus, with a completely fixed grammar in their genome.

  Homo whateverus, whose genome did not specify any principles of grammar.

  Homo parametrus, whose genome specified many fixed principles but also left some options open.
- Who would have the advantage?

Language as a product of evolutionary biology

- *Homo whateverus* will probably be at a disadvantage and should eventually go extinct.
- *Homo parametrus* might look like it has an advantage of allowing a certain level of flexibility to accommodate to the variation in human environments and ecosystems.
- But we have already seen that this is false. Languages with same linguistic features exist in different environments and ecosystems.

Language as a product of evolutionary biology

- So, if there is no inherent difference in the biological value of potential languages, mathematically, there is a selection pressure to reduce the number of languages that can be learned. As a result, …
- *Homo rigidus* should have the advantage, and linguistic diversity is not predicted. ☹

Solidarity, kin identification?

- Maybe language evolved to promote "group solidarity".
- But do we need parameters for that? Wouldn't a difference in accent just do?
- And why do children like to learn language from their peers rather than their parents? No sense of "family"?

Ok, I know why parameters exist …

- Maybe parameters were just an accident, then?
- Maybe not!

So, …

- What's the answer to the question "*Why Parameters?*"?
- Something like,

  "We don't have a clue."

  But, …
- We will revisit this issue again when we discuss language change.

HAVE A GOOD BREAK, EVERYONE!