LNGT 0250
Morphology and Syntax

Lecture #1 – Part 2
Feb 9th, 2015

Announcements

• Any questions on the syllabus document?
• Change in office hours tomorrow: 4:00-5:00pm.
• I will post HW assignment #1 later this evening. I will send a message once it’s uploaded on the website.
• Very often, you’ll see a lot of phonetic symbols in the datasets (we’ll explain what these symbols mean on Monday). If you want to type these symbols, an easy way to do it is via this webpage: http://westonruter.github.io/ipa-chart/keyboard/

Some ideas from Monday’s discussion

• Language as a means of communication.
• Language as a means to express thoughts.
• Language as a system of symbols.
• Language as a creative system.
• Language as a recursive system.
• Language as something that separates humans from nonhumans.
• ‘Written’ vs. ‘spoken’ language. Sign language.
• Body ‘language’ and other extended uses of the word ‘language.’

Some other possible ideas

• Language as a system of rules.
• Language has sounds, words, and sentences.
• Language as a means for literary expression.
• Language as a cultural product.
• Language as an identity marker.

Why so much fighting over this?

• Ferdinand de Saussure (1916): No subject has generated “more absurd notions, more prejudices, more illusions, more fantasies” than the study of language. (cited in Isac and Reiss 2013: 57)
• Why?
A formalist approach to language

- But what evidence is there that such a thing as l-language exists?
- For one thing, we seem to know way more about our language than our linguistic experience could have given us.
- The simplest (even most trivial) linguistic facts turn out to raise some of the most complex and non-trivial questions about language.
- Let’s look at a few examples from English.

More than meets the eye!

- Sally saw the man with the telescope.
- Bill hit the elf on the table with the hat.

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? ☹

(Note a * is linguists’ convention to mark ungrammaticality.)

Co-reference (or lack thereof)

- Consider:
  3. a. John hurt himself.   \((\text{himself} = \text{John})\)
     b. John hurt him. \((\text{him} \neq \text{John})\)
  
- But now consider:
  4. John said that Bill hurt himself. \((\text{himself} = \text{Bill}, \text{but} \neq \text{John})\)
  
- Now consider further:
  5. John said that Bill hurt him. \((\text{him} \neq \text{Bill}, \text{but} = \text{John})\)

Co-reference (or lack thereof)

- But wait, there’s more:
  6. John said he ate the sandwich. \((\text{he} = \text{John})\)
  
- But:
  7. He said John ate the sandwich. \((\text{he} \neq \text{John})\)

- Maybe a pronoun can only refer backwards, not forward? Hmmm ... what about:
  8. While he was playing soccer, John broke his leg. \((\text{he} = \text{John})\)
  
- Or let’s make this even more interesting:
  9. His wife thinks that John is having an affair. \((\text{his} = \text{John})\)

Good questions vs. bad questions

- Despite what some educators and prescriptive grammarians say, stranding prepositions is the norm in spoken English:
  10. Who did you see Mary with?
  
- But you cannot strand ‘and,’ even though the meaning of (11) is very close to that of (10):
  11. *Who did you see Mary and?
Good questions vs. bad questions

- At a potluck dinner gathering, you may ask:
  12. Who brought what?
- To which the answer could be something like:
  *Sally brought the pizza; Bill brought the salad; and Mary brought the ice cream.*
- But you may not ask the question like this:
  13. *What did who bring?*

So, what does this tell us?

- For one thing, we know far more about our language than we could have possibly learned via our linguistic experience. But if so, how did we come to know these things?
- At the same time, our linguistic knowledge is for the most part subconscious, and it comes to us easily as children and stays with us for the rest of our lives. What makes language comes to us so easily?

Linguistic knowledge

- Formal linguists are fascinated by these two ‘mental’ aspects of our knowledge:
  — First, the fact that our linguistic knowledge seems to be complex, abstract, and subconscious.
  — Second, the fact that we do not seem to have trouble acquiring that knowledge as children.

Research questions

- Under this approach, the research project for the study of human language is motivated by two fundamental questions to investigate these mental aspects of language:
  1. What do we know when we know a language?
  2. How does this knowledge arise in our minds?

Research goals

- Under this approach, then, studying language as a cognitive capacity is part of our pursuit to understand the human mind, hence the term ‘mentalism.’
- The answer to Question 1 requires the construction of a formal model of our linguistic knowledge (with symbols, rules, principles, etc.), hence the term ‘formal linguistics.’

Studying language as a formal object

- As a formal object, we can think of language as having two components:
  (1) **building blocks** (BBs), and
  (2) a **computational system** (CS), which takes these BBs as input, operates on them, and returns linguistic outputs. These linguistic outputs can, in turn, become BBs for other operations of the CS, and so on and so forth.
Studying language as a formal object

• But how do we figure out this CS? Same as with any other object of study: We apply the scientific method.
  
  Collect data
  ↓
  Identify patterns in the data
  ↓
  Develop hypotheses to explain the patterns
  ↓
  Test our hypotheses by going back to step 1

In this class we will focus on those aspects of the CS of human language that regulate word structure and sentence structure.

• For the rest of this class, we'll engage in some basic 'formal linguistic analysis.'

Dataset 1. Hyderabadi Telugu (India)
1. pilla ‘child’
2. puwu ‘flower’
3. fíli ‘ant’
4. doma ‘mosquito’
5. godugu ‘elephant’
6. fíire ‘sari’
7. annagaaru ‘elder brother’
8. pillalu ‘children’
9. puwulu ‘flowers’
10. fílimalu ‘ants’
11. domalu ‘mosquitoes’
12. godugulu ‘elephants’
13. fííreulu ‘saris’
14. annagaarulu ‘elder brothers’

Dataset 2. Kewa (Papua New Guinea)
1. ada ‘house(s)’
2. pora ‘path(s)’
3. yana ‘dog(s)’
4. nu ‘net bag(s)’
5. adanu ‘group(s) of houses’
6. poranu ‘group(s) of paths’
7. yanana ‘group(s) of dogs’
8. numu ‘group(s) of net bags’

Dataset 3. Southern Barasano (Colombia)

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. kuhea ‘eye’</td>
<td>4. kahe ‘eyes’</td>
</tr>
<tr>
<td>2. biíta ‘bead’</td>
<td>5. bìti ‘beads’</td>
</tr>
<tr>
<td>3. kí ‘cassava tuber’</td>
<td>6. kì ‘cassava tubers’</td>
</tr>
</tbody>
</table>

Pronominal stress is not indicated.

Dataset 4. Swahili (Uganda)

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. mtoto ‘child’</td>
<td>5. watoto ‘children’</td>
</tr>
<tr>
<td>2. mtu ‘person’</td>
<td>6. watu ‘people’</td>
</tr>
<tr>
<td>3. mpifí ‘cook’</td>
<td>7. wapifí ‘cooks’</td>
</tr>
<tr>
<td>4. mgeni ‘stranger’</td>
<td>8. wageni ‘strangers’</td>
</tr>
</tbody>
</table>
Can you guess which language this is?

1. Kona sat á bëkk, woman sat on bench
   A woman sat on a bench.
2. fëg këpty skënnmtëlega bëkk i morgun, I bought interesting book this morning.
   I bought an interesting book this morning.
3. Olafr er professor,
   Olafur is professor.
   ‘Olafur is a professor.’
4. Paëd er mënhur í gárdömmun, there is man in garden, the
   ‘There is a man in the garden.’

Next class agenda

- A crash course in phonetics and the IPA.
  Follow the link on the class schedule table for the reading.