LNGT0101
Introduction to Linguistics

Lecture #4
Sept 21st, 2011

Any questions?

Any questions on homework 1?

Announcements

- If interested in more discussion of language modularity, you may want to have a look at Fodor's 1983 book *The Modularity of Mind*.
- Also, Pinker's *The Language Instinct* is a good source. As is Jackendoff's *Patterns in the Mind*, of which we read the first three chapters.
- Looks like no Mr. D. Advocate today. Nice!

Summary of what we discussed so far

- Language is a system of communication that has design features that set it apart from other communication systems.
- One explanation for the distinctiveness of human language is to assume that we are biologically endowed with a *language faculty*.

Summary of what we discussed so far

- Evidence for the biological basis of language comes from multiple sources: the poverty of the stimulus, specific language impairment cases, uniformity of language acquisition by children, evidence for a critical period, and the neurophysiological representation of certain linguistic abilities in certain areas of the brain as shown by cases of aphasia as well as experimental methods.

But, …

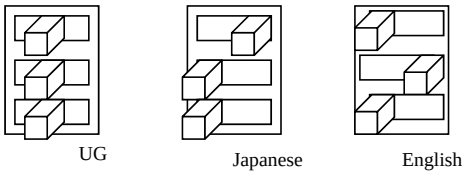
- Mr. D. Advocate interrupts:

  "*If we are all born with the same language faculty, how is it that we come to speak dramatically different languages? There's got to be at least 1000 languages in the world, right?*"
- Actually, there's at least 7000 documented languages (check Ethnologue), not to mention the languages that went extinct.

Universality

- This is indeed an excellent and important question: How does diversity arise out of sameness?
- The answer is that the language faculty is a system of general principles, call it ***Universal Grammar*** (UG), that interacts with the specific linguistic experience of a child to give rise to a particular language.
- Acquiring a language is thus the result of the interaction between nature and nurture (cf. the Jackendoff's chapters).

UG + Linguistic Experience → Particular Languages



Universality

- Contrary to common belief, then, linguists believe that languages are fundamentally the same, and not fundamentally different. Cross-linguistic variation is all but a "surface" phenomenon.
- As the course goes on, you will see how the space of variation among human languages is very limited and is constrained by general principles of grammar in all human languages.

Rule-governedness

- Also, if language is viewed as a system of knowledge, then it makes no sense to say that a language "has no grammar." Every language has a sound system, rules for word formation, rules for sentence formation, as well as systematic meanings for words and sentences. Every language is a ***rule-governed system***.

Parity

- Notice further that if language is an internalized system of knowledge, then it does not make sense to talk about one language being "better than" or "superior to" another language.
- Linguistically, all languages are equal. Thus, there is no such thing as a "primitive language," for example.

Parity

- The same extends to dialects: There is no sense in saying that one dialect is better than another, either. All dialects are linguistically valid systems of knowledge.
- And so-called standard dialects have no linguistic merit over nonstandard dialects. The difference is actually sociopolitical than anything else.
- We will revisit this issue in detail in the second half of the term, but it is important to bear this in mind.

A different kind of linguistic knowledge

- Notice, crucially, that if our linguistic knowledge is the result of interaction between nature and nurture, then we are actually talking about a different kind of linguistic knowledge than the "***prescriptive***" rules you learned in your English classes, such as
  - "*Don't say 'It's me;' say 'It's I.'*"
  - "*Don't end a sentence with a preposition!*" or
  - "*Don't split the infinitive!*"

  (rules that English speakers disregard on a daily basis, much to the chagrin of school teachers, but for the delectation of linguists).

Prescriptive vs. descriptive grammar

- It's important therefore to understand that linguistics is not ***prescriptive***, but ***descriptive***.
- Linguists do not concern themselves with telling people how to use the language. Rather, linguists assume that people already know their language, and set out to describe the different kinds of knowledge that people have of their language.

Goals of linguistic theory

- There are three main questions that linguists are primarily concerned with:
  a. What is it that we know when we know a language?
  b. How does this knowledge arise in the mind of the native speaker?
  c. How is this knowledge put to use?

Grammar is a "mental" entity

- The answer to the first question is to study language as a system of knowledge, or to use a familiar term, though in a rather different way, a *grammar*.
- Linguists typically break down a grammar into subcomponents and work on each:

Components of a mental grammar

- **Phonetics**: The study of the articulation and perception of speech sounds.
- **Phonology**: The study of the sound system in a language.
- **Morphology**: The study of word structure.
- **Syntax**: The study of sentence structure.
- **Semantics**: The study of meaning of words and sentences.

Other subfields within linguistics

- The answer to the second question is in the study of **first language acquisition**.
- When language is put to use, other phenomena arise that are equally worthy of investigation.
- So, linguists raise questions for the mutability of linguistic knowledge, i.e., the fact that language changes over time. This is the domain of **historical linguistics**.
- Linguists also raise questions for how we come to use language in social contexts and how people's forms of speech vary (the so-called *dialects*). This is the domain of **sociolinguistics**.

Other subfields within linguistics

- **Psycholinguistics**, on the other hand, studies the cognitive processes that we engage in in the production and perception of language.
- **Neurolinguistics** deals with how language is physiologically represented in the brain.
- **Computational linguistics** is concerned with ways to model natural languages so they can be used by machines.

Course plan henceforward

- We will cover most of these (check your syllabus), though you have to remember this is a course in the "formal" study of language, so all of the first half of the semester and perhaps a lecture or two in the second half will be devoted to the study of the five main components of linguistic knowledge.
- Importantly, though, understanding these is crucial to understanding other areas of linguistics, hence the way the syllabus is organized.

Beyond learning about language

- **Problem-solving skills**:
  - How to uncover underlying patterns in a set of familiar or unfamiliar data.
  - How to formulate a generalization to explain a regularity in a set of data, and how to revise that generalization once presented with further data that challenges your first generalization.
  - How to make predictions and test if they are borne out.

Beyond learning about language

- **Argumentation skills**:
  - How to formulate arguments for and against a certain view based on objective evidence.
  - How to question certain claims or beliefs (no matter how popular they are) based on objective evidence.

Beyond learning about language

- **Formalization**:
  - How to state informal generalizations in concise 'formal' representations (e.g., rules, diagrams, etc.).
  - How to choose between two 'formal' analyses based on notions such as economy and simplicity.
- Mr. D. Advocate whispters: "Glad I'm not taking this class for credit."

Goal 1: Studying language as a system

What is it that we know when we know a language?

Phonetics

Phonetics

- Phonetics is the study of speech sounds in human language.
- In this class we'll be mainly concerned with ***articulatory phonetics***.

Spelling and speech

The one-l lama,
He's a priest.
The two-l llama,
He's a beast.

And I will bet
A silk pajama
There isn't any
Three-l lllama.

Ogeden Nash

Spelling and speech

- Even though alphabetic spelling is meant to represent the pronunciation of words, it is not always reliable in figuring out how a word is pronounced. Why?
- Different letters may represent the same sound:
  to too two through threw clue shoe

Spelling and speech

- A single letter may represent different sounds:
  dame dad father call village many.
- A combination of letters may represent a single sound:
  ship chrome phonetics
- Some letters have no sound at all in certain words:
  know numb sword

Spelling and speech

- Spelling may also fail to represent sounds that are actually pronounced:
  futility university
- Also, one letter may represent two sounds:
  box Xerox
- Also, the majority of human languages do not have a writing system, which makes spelling completely irrelevant for pronunciation in these languages.

Introducing the IPA

- If we cannot rely on spelling, then what do we do?
- Linguists rely on a special alphabet to represent speech sounds in human language: The ***International Phonetic Alphabet*** (IPA).
- The IPA represents speech in the form of individual sounds like [p], [s], [a], etc.
- There is a Link to the chart and another link to an interactive chart to insert symbols on the class website. There is also a fun website for the IPA chart.

Next class agenda

- On Wednesday we talk about articulatory properties that phoneticians use to describe consonants and vowels.
- Continue to read Chapter 6 on Consonants and Vowels, and prosodic features.