INTD0111A/ARBC0111A

The Unity and Diversity of Human Language

Lecture #3
Sept 19th, 2006

Brief comments on questionnaire feedback

➢ Thanks all for filling in the questionnaire, with many interesting suggestions and comments.

Brief comments on questionnaire feedback

➢ Topics for discussion that you suggested:
Accents, life span of languages, language families, how language helps us understand how the mind works, evolution of language, history of writing and why some languages have it, others don't, syntax , history of languages, foreign sounds are hard to learn by adults, aboriginal linguistics, sociology of language, history of words (or etymology), politics of language , extinction of languages , sign languages , native languages of Latin America, Creoles, code-switching, diglossia, indigenous and minority languages , language acquisition.

Brief comments on questionnaire feedback

➢ Suggestions for the class conduction:
More discussion, draw on students' knowledge of foreign languages, speak louder, and Mr. D. Advocate.

Summary of what we discussed so far

➢ It's not the case that "anything goes" in human language. There are constraints on what is possible in linguistic systems.
➢ Typological universals represent one kind of such constraints. They can be either *absolute* or *implicational*.
➢ Implicational universals are interesting because they regulate the co-occurrence of certain linguistic properties in human languages, hence predicting possible and impossible patterns in linguistic systems.

Just out of curiosity, where's Mr. D. Advocate?

Speaking of the "D"

> "Hi, Mr. Linguist. I'm Mrs. Advocate. D. is feeling under the weather today, so I'm here to take notes for him … I mean, of course if you don't mind."
> Oh …Yes, yes, sure. Please have a seat.
> "In that case, could you please talk about word order in human languages? D. told me you promised him to do that today."
> Actually, this is what I'm planning to do for the first part of the class. But thanks for the reminder, though.

Basic word order

> Even though languages may allow several word orders in their sentences, each language typically has one order that is used in "neutral" contexts. This is what is called "basic word order".
> Consider English, for example: Which of these do you think represents the "basic" word order in English?

Seafood I like.	(OSV)
Believe you me.	(VSO)
John plays the piano.	(SVO)

Basic word order

> Now, the question that Mr. D raised last time is how many basic word orders there are in human languages.
> To answer this question, we'll confine ourselves here to transitive clauses with three elements: Subject, Verb and Object (S, V, O).
> How many orders should in principle exist?

Basic word order

> In principle, we should expect six possible basic word orders in human language: SVO, SOV, VSO, VOS, OVS, OSV.
> Do we find these attested in natural languages? Actually, we do. Consider:

Basic word order

> SVO: English (Germanic)
>   John loves Mary.

> SOV: Japanese (Japanese-Korean)
>   John-ga Mary-o   butta
>   John-SU Mary-OB hit
>   "John hit Mary."

Basic word order

> VSO: Welsh (Celtic)
>   Darllenais I   y   llyfr
>   read   I   the   book
>   "I read the book."

> VOS: Malagasy (Austronesian)
>   manasa   ni   lamba   ny   vihavavy
>   wash   the   clothes the woman
>   "The woman is washing the clothes."

Basic word order

➢ OVS: Hixkaryana (Carib)

    Kanawa   yano toto
    canoe   took   person
    "The man took the canoe."

➢ OSV: Nadëb (Maku)

    samũũy   yi   qa-wùh
    howler-monkey people   eat
    "People eat howler-monkeys."

Distribution of basic word order types in the world's languages

➢ As it turns out, typological studies reveal preferences for certain word orders than others.

➢ Consider the frequencies reported in Tomlin's (1986) language sample, for example:

Distribution of basic word order types in the world's languages

Word order	# of Languages	%
SOV	180	45
SVO	168	42
VSO	37	9
VOS	12	3
OVS	5	1
OSV	0	0

Distribution of basic word order types in the world's languages

➢ With greater than chance frequency, then, SVO and SOV orders indicate a clear preference for word order in natural languages.

➢ But what's even more interesting is that each order has a set of *correlates* that go with it, again suggesting a constrained space in the same manner we discussed earlier.

Word order correlates

To see what this means, let's compare English and Japanese (examples from Baker: 58):
The child might think that she will show Mary's picture of John to Chris.

Taroo-ga Hiro-ga   Hanako-ni zibun-no
Taroo-SU Hiro-SU Hanako-to self-POSS
syasin-o   miseta   to   omette iru
picture-OB showed that   thinking be
"Taro thinks (literally, is thinking) that Hiro showed a picture of himself to Hanako."

Word order correlates

Element A	Element B	English	Japanese
Verb	Direct Object	A precedes B	A follows B
Verb	Pre-/post-position phrase	A precedes B	A follows B
Verb	Embedded Clause	A precedes B	A follows B
Pre-/post-position	Related Noun Phrase	A precedes B	A follows B
Noun	Pre-/post-position phrase	A precedes B	A follows B
Complementizer	Embedded Clause	A precedes B	A follows B
Auxiliary	Main verb	A precedes B	A follows B

Basic word order variation

Questions arise here at once:

- Why are some basic word orders (SOV and SVO) significantly more frequent than others?
- Why are the rare orders rare?
- How can we explain word order correlates?

Explaining linguistic unity and diversity: formalism vs. functionalism

- There are two major schools of thought regarding the account of universals and variation in human languages: the *functionalist* approach and the *formalist* approach.

Explaining linguistic unity and diversity: formalism vs. functionalism

- Functionalists appeal to "external" explanations, that is, explanations external to the language system, e.g., discourse factors, history, processing considerations, economy, etc. Traditionally, typological research has been tied to functional explanation. See Whaley Chap. 3, pp. 46-51, for a brief discussion of this approach.

Explaining linguistic unity and diversity: formalism vs. functionalism

- Formalists, by contrast, rely on explanations "internal" to the language system. For them, universal principles exist because they are "pre-wired", a biological given, while variation exists because this biological system has a set of options (typically binary) whose different settings could lead to a dramatic diversity on the surface.

Explaining linguistic unity and diversity: formalism vs. functionalism

- This course will look at cross-linguistic similarity and diversity from a formal perspective. Mark Baker, the author of your textbook, is a formalist, and so is "yours truly".
- Later in the term, after we introduce the concepts of the formal approach and look at some of its analyses of unity and diversity in human language, we'll get back to the formalist-functionalist debate for an evaluation.
- With that in mind, let's now introduce the formalist linguistic theory.

Introducing the formalist approach: Language as a biological system

- Here's the linguist's dilemma:

    "We just seem to know so much, even though the evidence around us is so little."

- This is the so-called *Plato's Problem*, as named by Noam Chomsky.
- Mrs. Advocate: "Excuse me, but who's Noam Chomsky? I need to know because D will ask me when I get back home."

Introducing the formalist approach: Language as a biological system

➢ Well, Noam Chomsky is … this man.

Introducing the formalist approach: Language as a biological system

➢ Mrs. Advocate: "So, how are Chomsky, Plato, biology, and language related exactly? You lost me here."

➢ Well, things might sound a little bit complex now. But as it turns out, language itself is such a complex object. It seems that we know a lot of stuff about our language without even knowing that we know it.

➢ "Huh?"

➢ Let's see how.

Stuff that you know, but don't know that you know it. So, how did you know it?

➢ Consider:
    I took my shirt off.
    I took off my shirt.

➢ But:
    I took it off.
    *I took off it.

(Note that a star is linguists' convention to indicate that a language form is bad.)

Stuff that you know, but don't know that you know it. So, how did you know it?

➢ We know:
    If "John gave money to the children", then we can also say that "John gave the children money."

➢ But we also know:
    If "John donated money to the children", we cannot say that "*John donated the children money."

    So, how do we know that?

Stuff that you know, but don't know that you know it. So, how did you know it?

➢ We know:
    Who did John say that Mary saw?
    Who did John say __ Mary saw?
So, maybe the complementizer "that" is optional.
➢ But now consider:
    Who did John say __ saw Mary?
    *Who did John say that saw Mary?

    So, what's the deal?

Stuff that you know, but don't know that you know it. So, how did you know it?

➢ Consider:
    John hurt himself.   (himself = John)
    John hurt him.   (him ≠ John)
➢ But now consider:
    John said that Bill hurt himself.
                            (himself = Bill, but ≠ John)
➢ Now consider further:
    John said that Bill hurt him.
                            (him ≠ Bill, but may = John)

Stuff that you know, but don't know that you know it. So, how did you know it?

➢ But wait, there's more:
   John said he ate the sandwich.
   <div align="right">(he may = John)</div>
➢ But:
   He said John ate the sandwich.
   <div align="right">(he ≠ John)</div>

➢ Maybe a pronoun can only refer back, not forward. Hmm, how about:
   While he was playing soccer, John broke his leg.
   <div align="right">(he may = John)</div>

Stuff that you know, but don't know that you know it. So, how did you know it?

➢ We know this is good:
   Who did you see Mary with?

➢ But we also know this is bad:
   *Who did you see Mary and?

   Mrs. Advocate: "But how …"
   Mr Linguist: "Doesn't really matter how now. The fact is we just KNOW this stuff."

Stuff that you know, but don't know that you know it. So, how did you know it?

➢ And it gets interesting:
   Who did Mary meet at the party?
   Who did John say that Mary met at the party?
   Who did Sarah believe that John said that Mary met at the party?
   Who do you think that Sarah believed that John said that Mary met at the party?
   …..
➢ Where do we stop? Infinity?

Stuff that you know, but don't know that you know it. So, how did you know it?

➢ But compare with these now:
   *Who do you believe the claim that Mary met?
   *Which book did Mary talk to the author who wrote?
   *Who did Mary talk to John without meeting?

➢ So, why are these bad? You probably don't know why, but there's no doubt that you "know" they're bad.

Stuff that you know, but don't know that you know it. So, how did you know it?

➢ One more:
   In a potluck dinner gathering, you may ask:
      Who brought what?
   But not:
      *What did who bring?

   Mrs. Advocate: "What did who bring? That sounds pretty odd."
   Yes. And you know it even though nobody ever told you about this before. I mean, not until I mentioned it today, right?

Different kind of linguistic knowledge

➢ In other words, there's a different kind of linguistic knowledge than the "prescriptive" rules you learned from your school teacher (like "Don't end a sentence with a preposition", or "Don't split the infinitive," rules that we disregard on a daily basis, much to the chagrin of school teachers, but for the delectation of linguists).
➢ As a matter of fact, you acquire this knowledge pretty early in your life (around the age of 5), i.e., even before you go to school.
➢ So how do you know all this?

How do we come to know what we know about our native language?

➢ That's the big question, though unfortunately we ran out of time. But maybe that's a good thing. Take some time to think about the question and some possible answers.

➢ Mrs. Advocate: "I will discuss this with D for sure. It's a nice class, even though there are a few things I couldn't understand. Maybe you'll explain these puzzles on Thursday, I hope."

➢ Indeed I will, Thursday and after. Hope to see you again. And please say hi to Mr. D for me.

Next class agenda

➢ What it means to say that language is a biological system.

➢ Evidence for the biological basis of language.

➢ Discussing some universal principles of grammar.

➢ Accounting for linguistic diversity within the formalist tradition: Introducing "parameters".