INTD0111A

The Unity and Diversity of Human Language

Lecture #3
Feb 16th, 2009

Announcements

➢ The Linguistics talks start this Wed. You are encouraged to go to all of them, but required to go to at least three.
➢ Questions on homework assignments will relate to the content of these talks.

➢ ANY QUESTIONS?

Today's plan

➢ Discuss diversity in basic word order in human languages.
➢ Discuss how human language is different from other communication systems.

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 Advocate 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 built-in within this system; they're part of the nature of language.
➢ Cross-linguistic variation, on the other hand, exists because this "universal" language system provides a finite set of options from which particular languages choose, thereby leading to a dramatic diversity on the surface.

Explaining linguistic unity and diversity: formalism vs. functionalism

➢ Mark Baker's book is written within the formalist tradition.

➢ Payne's book, however, talks more about the role of communication in explaining linguistic phenomena, hence is in the functionalist tradition.

Explaining linguistic unity and diversity: formalism vs. functionalism

➢ This course will look at linguistic unity and diversity mainly from a formalist perspective.
➢ Later in the term, after we introduce the concepts of the formalist 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 basic concepts in the study of language.

First question: What is language anyway?

➢ Language is obviously a communication system. Yet, it does have a set of "design features" that make it *qualitatively* different from other animal communication systems. Let's see how.

Communication systems

- All communication systems have some features in common:
- A mode of communication: vocal-auditory (humans and most animals), visual (apes), tactile (bees), or even chemical (moths).
- Semanticity: Signals have meaning.
- Pragmatic function: Signals have a purpose, e.g., helping the species survive or influence others' behavior.
- But communication systems exhibit other features as well.

Interchangeability

- Interchangeability: Humans can both send and receive messages. This is not always the case with animals, e.g., *bombyx mori* (silkworm) moth uses a chemical communication system that is available only to females, but not to males.

Cultural transmission

- Cultural transmission: For humans to learn language, they have to be exposed to it. No exposure means no language will be learned. For most organisms, by contrast, the actual signal code itself is innate or genetically programmed.

Arbitrariness

- Arbitrariness: The relationship between form and meaning is arbitrary in human language, but typically iconic in animal communication systems.

Discreteness

- Discreteness: Each signal in human language be divided into discrete units (what we call sounds), but this is generally not the case with signals in other communication systems.

Displacement

- Displacement: Humans can use language to talk about things not present in space or time. Animal communication systems are tied to the "here and now."

Creativity

➤ Creativity: Humans are creative with language. We can always add new words and expressions, eg., *e-mail, youtubification.*
➤ We are also able to produce and understand an infinite number of sentences.
➤ Well, how many of the sentences on these slides have you seen before? How many of them have you been able to understand?

Discrete infinity

➤ Human language also exhibits the so-called discrete infinity property: In theory, we can have signals of an infinite length.
  John loves Mary.
  Bill says that John loves Mary.
  Sue believes that Bill says that John loves Mary.
  Harry claims that …
➤ Where do we stop?

Spiders

➤ Animal communication systems lack creativity. For instance, spiders use a complex system of gestures for courtship, but the system is invariant. One never finds a "creative" spider changing or adding to the particular courtship ritual of the species. Link

Fiddler crabs

➤ The same is true of fiddler crabs' "claw-waving" movement, which is typically used to signal to another member of its "clan." Whatever the signal means, it is fixed and cannot be decomposed into smaller elements. Link

So, why is human language special?

➤ So, why is human language different from other communication systems?
➤ Next time we will give an answer to this question, and also discuss an animal communication system that seems to represent a challenge to the assumption that language is qualitatively different from other systems.

Next class agenda

➤ More on language as a communication system.
➤ Show how complex our knowledge of our language is.
➤ Role of "nature" versus "nurture" in human language.
➤ Discussing some universal principles of grammar.
➤ Continue reading Baker Chapters 2 and 3.