

INTD0112 Introduction to Linguistics

Lecture #2
Sep 9th, 2009
(aka 09/09/09)

Announcements

- I put two movie series on reserve: *The Human Language Series* (three parts on VHS), and *The Writing Code* (three parts on DVD).
- Textbook website:
<http://mcgregor.continuumbooks.net/>

Summary of last class

- Linguistics is the scientific study of human language.
- Language is a communication system of signs.
- Signs can be iconic or symbolic.
- Signs can stand in a ***syntagmatic*** or ***paradigmatic*** relation to other signs in the system.

Summary of last class

- Human language shares certain features with other communication systems: mode of communication, semanticity, pragmatic function.
- Crucially, though, human language has a set of distinctive “design features” that set it apart from other animal communication systems:
 - Interchangeability,
 - cultural transmission,
 - arbitrariness,
 - discreteness.

Duality of patterning

- Signs in human language can be decomposed into individual “meaningless” units, which in turn can be recombined to create new signs with different meanings.
 - spot [s-p-o-t]
 - tops
 - opts
 - pots

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/Productivity

- 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 (also known as recursiveness) 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](#)

The dances of bees: An exception?

- Bees interact via a “dance” signaling system whereby they communicate to one another the distance, direction, and quality of a food source. [WATCH](#).

Bees

- But why is this challenging?
- Displacement?
- Or maybe not.
- For one thing, even if it does have displacement, it is definitely restricted to a particular domain. It is frozen and inflexible.

Bees

- Also, we can represent the bees' messages in a number of ways. It could be that the signal is "*There's a food source 40 feet from the hive at a 45° angle from the sun,*" in which case it does exhibit displacement.
- But the signal could also be represented differently, e.g., "*Fly 45° for 2 minutes.*"

Bees

- The bees' communication system also lacks *creativity*. An experimenter showed that by forcing a bee to walk to the food source. When the bee returned, it indicated a distance 25 times farther away than the food source actually was. The bee had no way of getting "creative" to communicate the special circumstances under which it found the food location.

So, why is human language special?

We talk about this on Monday.

Next class agenda

- More about language and linguistics. Chapters 1 and 10 cont.
- Make sure to read Jackendoff's chapters available online.