

Language: The most human thing about us

Module 1 [LE321L Introduction to linguistics], JNU Monsoon Semester 2020

Yangchen Roy

What do you use language for

- to tell someone you love them, to tell someone you hate them, to build relationships, to harm them.

we use it to socialise

- To learn everything in school – language, maths, all subjects really

to gain knowledge

- To talk to yourself

to think

“It underpins social relationships and communities; it forges the emotional bond between parent and child; it’s the vehicle for literature and poetry. Language is not just a part of us; language *defines* us.” (O’Grady et al. 2017)

What about animal communication?

- Can animals do any of these things – can they socialise, gain knowledge or think?
- What about dogs barking at each other?

Socializing – maybe

Gaining knowledge – maybe

Thinking – ?

- If they do these, is it language?

Language and form

- Is there anyone here who does not speak at least one language?

Not one person!

- And by language we don't mean communicating or talking using sounds alone.
- We can talk using “special gestures”----- which are called sign languages.

Language and the human brain

- So nobody is born without language ----- rather nobody with a typical human brain is born without a language.
- All humans are born with language.
 - But are we the only ones with language?
 - What about animals?
 - The way they are communicating --- is it language ?

Human's specialisation for language

- Evolution has created a special capacity for language in human beings by providing the following:
 - i. huge brains
 - ii. a lowered larynx (voice box), leading to a long vocal tract that facilitates speech production

Does any other species have one or both?

How important is having a vocal tract for producing language?

An easy specialisation?

- you have to be **taught** how to tie shoe laces, or drive a car, or add numbers:

1

$$1 (+1) = 1 + 1$$

$$1 + 1 (+1) = 1 + 1 + 1$$

$$1 + 1 + 1 (+1) = 1 + 1 + 1 + 1$$

1

$$1 + 1 = 2$$

$$2 + 1 = 3$$

$$3 + 1 = 4$$

251 + 43 = ? can you do this without being taught how to write these numbers

- Adding numbers is something we learn through **formal instruction**.
- Now look at something similar in natural language, which speakers of a language can do (**no formal instruction needed!**)

An easy specialisation?

- *[Maria thinks that [Rajni saw that [Noor said that [Ankita found out that Sheela was stealing money]]]]*

Sheela was stealing money

Ankita found out that Sheela was stealing money

Noor said that Ankita found out that Sheela was stealing money

Rajni saw that Noor said that Ankita found out that Sheela was stealing money

Maria thinks that Rajni saw that Noor said that Ankita found out that Sheela was stealing money

Maria thinks that [Rajni saw that [Noor said that [Ankita found out that...this sentence can be infinitely long

But how can we learn an infinite system if the space in the human brain is finite? If little children are doing this without any formal instruction, the system (of language) must be finite underneath this infinity. We will revisit this question during the remainder of the course.

Example from child language (Pérez-Leroux, 2014, p. 23):

“The one on the one on the crocodile’s eyes that was in the water” (child aged 5 years 3 months)

Recursion

- This property, by which a thing is defined using itself, or its type, is called **recursion**. It is recursion which allows sentences to be of infinite length.
- Recursion is part of the natural world.
- It is found in the structure of snowflakes, vegetables, flowers, etc and as we have now seen, in mathematical functions and natural language.



Recursion in the fractal structure of a broccoli (image from Wikimedia Commons, Sullivan, Jon https://commons.wikimedia.org/wiki/File:Fractal_Broccoli.jpg)

This easy specialization is creative...

- The property of infinity that language has, allows us to use language to say new things all the time — think about how many novels, newspapers, conversations etc. have been written and spoken, and are being written and spoken now.
- A human brain is producing and comprehending language every time it engages with other humans. You are listening to me speak and your brain is doing the job of understanding me, and then you are responding verbally. All of this is happening in real time.
- **So, language is creative, while also being easy.**

But this creativity is constrained

- **WhatsApp (noun)** - “WhatsApp is a free mobile messaging application, massively used for international messaging and voice calls.” (dictionary.com)

(1) We have asked students to **whatsapp** us any doubts they may have.

(2) Please **whatsapp** the shopping list to me .

(3) Sheila is **whatsapping** people all day long.

(4) Raneem has **whatsapped** you her location!

- But can we say any of the following?

(5) *all day long is **whatsapping** Sheila

(6) *Raneem **whatsapped** you has her location

This means that while language is creative, and capable of producing infinite words and sentences there are still rules that have to be followed. In other words, human language has systematic rule-governed creativity. This is what allows this infinity producing system to reside in a brain of finite space.

Is the communication system of any other species creative/productive?

What does it really mean to KNOW a language?

Linguist Alert! Noam Chomsky

- When we know a language, we can
 - i. Speak/sign it and be understood by others who speak/sign it i.e. we can understand and produce infinite utterances, including many that are absolutely new.
 - ii. We can recognize utterances that are not acceptable
- knowledge of these two is called **linguistic competence**

Linguistic competence is a subconscious knowledge. But there are ways we can observe this knowledge at work.

Terminology alert! When a speaker has linguistic competence in a language, and they acquired the language as children in a natural setting (say at home, rather than in a classroom), they are called **native speakers**.

Linguistic competence at work

- If you are a French native speaker, when you speak English, it is highly likely that you will replace many English sounds that are not there in French, with French ones.

Example: **this** may become **zis**

that may become **zat**

The English th- (/ð/) sound is not there in the French language, so the speakers replace it with a French sound.

- If you are a native Hindi speaker, when you speak English, it is likely that you will replace many English sounds that are not there in Hindi, with Hindi ones. In fact that's how we get Indian English!

Example: **bit** may become **bit**

take may become **take**

It is not just “mispronunciations”, the native French and native Hindi speakers speaking English may take borrow entire sentence structures from French and Hindi and use them in English.

Linguistic competence at work

Knowing a language also means knowing which sounds may start a word, end a word, and follow each other. Let's look at an example from Hindi

Can a word in Hindi begin with nk?

NO!

Can a word in Ghanaian begin with nk

A Ghanaian speaker will say ``**YES**”

Nkrumah – the name of a former Ghanaian president.

If our language doesn't have words beginning with **nk**, we may pronounce this **Enkrumah** or **Nekrumah**.

Linguistic competence at work

Linguist Alert!
Ferdinand de Saussure

- Knowing a language also means knowing that certain sounds signify certain concepts or meanings.
- Speakers of Malayalam would know what the word *kili* means, and that this meaning is different from the word *ankutti*, which is different from the word *penkutti*.
- If we do not know Malayalam, there is no way the pronunciation or shape of the word *kili* can help us determine that the word means 'bird'.
- This tells us that the relationship between the form of a word i.e. the way the word is pronounced or signed, and the meaning of the word, is **arbitrary**.
- There is nothing cat-like about the written word c-a-t, or the spoken form /kæt/.
- There is nothing tree-like about the written word t-r-e-e, or the spoken form /tri:/.

As speakers of a language, we have knowledge of arbitrary form-meaning relationships.

Studying linguistic competence

- Investigating linguistic competence (as many linguists do!) involves looking into **the mental system or a set of rules** that allows human beings to form and interpret sounds, words, and sentences of a language.
- Linguists call this mental system a **grammar**. Grammar can be broken down into the following components:
 - Phonetics – how we articulate and perceive human speech sounds
 - Phonology – how human speech sounds pattern in the given language
 - Morphology – how words are built
 - Syntax – how sentences are built
 - Semantics – how words and sentences are interpreted
- We study grammar in order to understand what language is and what it means to know a language.

Read Chapter 1 “Language: A preview” from the O’Grady textbook

helpful videos:

[Crash Course Linguistics’ What is Linguistics?](#)
[Evolution’s great mystery: Language](#)

We next meet on 13 October!