





THE ORIGINS OF LANGUAGE



Engl 160: Intro to Language




Overview

- Where did language come from?
 - Did all humans always speak?
 - When did language evolve?
 - Why?
 - Was there more than one original language?
 - What is the Language Acquisition Device?
 - Did it evolve as humans evolved?
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The Theories

- Divine source
 - Natural sound source
 - The natural sound source
 - The social interaction source
 - The physical adaptation source
 - The tool making source
 - The genetic source
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Divine Creation of Language

- Many societies throughout history believed that *language is a gift of the gods to humans*:
- “Adam gave names to all living creatures.” Humans were created from the start with an *innate* capacity to use language.
- This capacity is complex – there are **NO PRIMITIVE LANGUAGES!!** Nor have there ever been – even among the most remote tribes today or of stone-age hunter-gatherers!

- Psammetichus and the babies raised by goats. Ba-ba?
- King James of Scotland and the Hebrew-speaking babies.
- But **empirical evidence** from children raised without exposure to language shows that these children grow up with ***no language at all***. Exposure to language before the age of 7 is critical to language development. This is called **The Critical Period** for **language acquisition**

(natural sound source)

- “Ding-Dong” – humans named objects, actions and phenomena after a recognizable sound associated with it. The first human words were a type of **ICON**, a sign whose form is an exact image of its meaning:

Boom = explosion (English)

Tun-tun = heart (Chinook Indian)

Ai-ai = knife (Basque, literally “ouch-ouch”)

Cont..

- “**bow-wow**” – human vocabulary developed from animal noises, e.g., *Moo, hiss, quack, meow*, etc.
- **Onomatopoeia**: lit. “name-sound” the imitation of a sound in naming.
- **Drawbacks**: Limited part of vocabulary. Different from language to language: Russian **ba-bakh** = bang; **bukh** = thud

Cont...

- “**pooh-pooh**” **Hypothesis**: humans’ first words were derived from spontaneous expressions of dislike, hunger, pain, or pleasure.
- **Ha-ha-ha, wah-wah**
- Problems: Very small part of any language.
- Differ from language to language:
English *ouch*; Russian *oi*; Cherokee *eee*, Basque *ai*
Made with intake of breath, which is the opposite of normal talking.

- Renditions of animal sounds differ considerably from language to language, even though the animal makes essentially the same sound:
- **Dog:** *bow-wow*; Chinese *wu-wu*; Jap. *wan-wan*; Russian *gaf-gaf* or *tyaff-tyaff*
- **Cat:** *meow*; Russian *myaoo*; Chinese *mao*; Japanese *nya-nya*
- **Rooster:** *cocka-doodle-do*; Japanese *kokekoko*; Greek *kikuriku*, *kikikiriki*
- **PROBLEM:** Where do names for natural *noiseless* concepts come from: rock, sun, sky, love????

- **“ta-ta” Hypothesis.** Charles Darwin theorized that speech may have developed as a sort of mouth pantomime – the organs of speech were used to imitate the gestures of the hand. The first words were lip icons of hand gestures.
- **Same problem as for onomatopoeia** – different gestures in different cultures: crossing fingers for good luck in English versus Russian “fig” gesture; nodding “no” in Greek versus “yes” in English
- Even Darwin himself thought this was a little implausible.

Necessity Hypotheses

- *"Necessity is the mother of invention"*
- **Warning Hypothesis.** Language evolved from the warning signals used by animals. Perhaps language started with a warning sound to others, that signified "HELP!" or "RUN!" to alert other members to the approach of a lumbering hairy mammoth or hungry saber-tooth tiger.
- Other first words could have been hunting instructions.

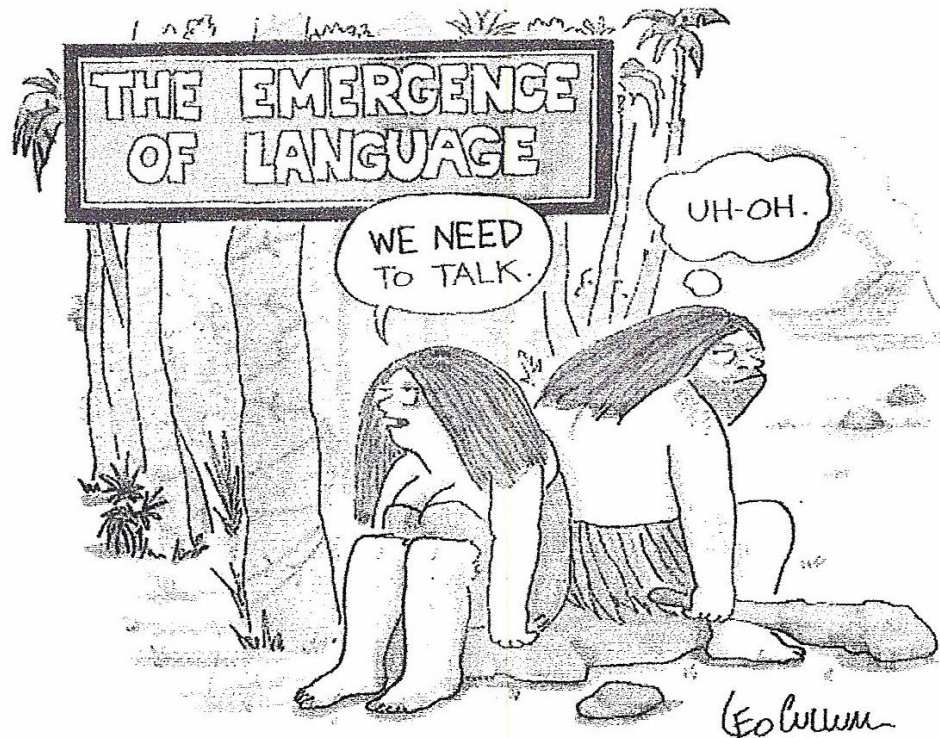
Necessity Hypotheses

- **“yo-he-ho” Hypothesis:** Language developed on the basis of human cooperation.
- The earliest language was *chanting* to stimulate collective effort, like moving a great stone to block off a cave entrance from roving carnivores, or *repeating* a war *phrase* over and over to inflame the fighting spirit.
- Poetry and song came to us this way – and we still have some “yo-he-ho” ones: the *Volga Boat Song*, Military drill chanting, the Seven Dwarves working song!

Necessity Hypotheses

- **The “Lying” Hypothesis:** Sturtevant argued that since all our real intentions or emotions get involuntarily expressed by gesture, look, or sound, *voluntary communication must have been invented in order to lie or deceive*. He believed that the need to deceive and lie – to use language in contrast to reality for selfish ends – was the social prompting that got language started.
- Seems pretty far-fetched.

The Real Reason For Language



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Other Sources of Language

- **Physical Adaptation.** Other primates, such as gorillas, do not have the same physical characteristics which make speech possible.
- **upright teeth** in humans (fricative sounds)
- **Intricate lip muscles** on humans
- Smaller, thicker more muscular **tongue**
- Humans **can close off the nose** to create more air pressure for sound in the mouth cavity.

Other Sources of Language

- The human *larynx*, or “voice box,” which contains the *vocal cords*, is in a lower position in humans than in primates, creating a longer cavity called the *pharynx*.
- The *pharynx* is like a big echo chamber above the vocal cords for volume and clarity of sound.
- Unfortunate outcome: we can now choke on food. Monkeys can both breathe and drink or eat at the same time – we can’t. So can babies until their larynx drops as they mature.

Other Sources of Language


- **The tool-making source:** As early humans' hands became occupied with tool use, they were less able to use hand gestures, so speech became a necessity
- **Preferential right-handedness**
- **Lateralized brain:** each hemisphere has its own functions
- **Speech and tool-making abilities** are very close to one another in the left hemisphere

Other Sources of Language

- **The Genetic Source:** a crucial genetic mutation arose which gave humans the unique ability to produce and understand language. This means that language is
 - *Innate*
 - **Hard-wired** like in a computer
 - **Pre-programmed**
 - **Universal** in form
- The *innateness hypothesis* states that language is endemic to all humans.
- *But only to humans? We will explore this next week.*




Hypotheses Regarding Language Diversity

- Was there one or more than one original language?
 - Was there one or more than one “invention” of language?
 - There are approximately 6,300 languages spoken on earth now, and an even greater number spoken in the past
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Discussion Questions

- What is the basic idea behind the bow-wow theory?
 - Why are interjections like “ouch” considered to be an unlikely source of language origin?
 - Where is the pharynx and how did it become an important part of human sound production?
 - What happened at the Tower of Babel, and why is it used in explaining language origins?
 - What is the connection between the innateness hypothesis and the idea of a Universal Grammar?
 - Why do you think that young deaf children who become fluent in sign language would be cited as a support of the innateness hypothesis?
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Discussion Questions

- What is the connection between language, tool-using, and right-handedness?
 - Why is it difficult to believe Psammetichus that Phrygian must have been the first language?
 - What is monogenesis and how does it explain the development of languages?
 - What theory of language diversity would explain having different families of languages?
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Discussion Questions

- Is there a connection between the Heimlich maneuver and the development of human speech?
 - What are the arguments for and against a **teleological** explanation of the origins of language?
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Homework

- Read Chapter 2, Animals and Human Language, including study questions.
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References

- Yule, George. 2010. *The Study of Language*. 4th Edition.
 - Vajda, Edward. Undated Manuscript. *The Origin of Language*.
 - Fromkin, et. al. 2009. *An Introduction to Language*.
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