THE ORIGINS OF LANGUAGE

- We simply do not know how language ***originated***.
- We have no physical evidence relating to the speech of our ancestors and because of this absence of evidence, ***Hypotheses*** about the origins of human speech have been developed.
- We suspect that some type of spoken language must have developed between 100,000 and 50,000 years ago, well before written language (about 5,000 years ago).

The Divine Source

- In most religions there appears to be a divine source who provides humans with language.
- The basic idea of the theory is that : " **If infants were allowed to grow up without hearing any language, then they would spontaneously begin using the original God-given language.** "
- In an attempt to discover the divine source, the Egyptian pharaoh named Psammetichus, tried an experiment with two newborn babies. After two years of isolation except for the company of goats and a mute shepherd, the children were reported to have spontaneously uttered, not an Egyptian word.
- From this type of evidence, there is no "spontaneous" language. If human language did emanate from a divine source, we have no way of reconstructing that original language.

The Natural Sound Source

- The baby`s hearing ability to identify sounds in the environment, allows humans to make a connection between a **sound** and the **thing** producing that sound.
- Primitive words could have been imitations of the naturel sounds which early men and women heard around them " Examples : cuckoo, splash, bang, boom.
- This view has been called **" bow-wow theory "** of language origin and these words echoing naturel sounds are called " onomatopoeic words "
- A similar suggestion **(The Pooh-Pooh Theory)**: " The original sounds of language came from naturel cries of emotion such as pain, anger and joy. Examples : Ouch! , Ah!, Hey!, But these are produced when we inhale thus it is opposite to what normally happens in speech production as humans speak while exhaling air

The Musical Source

- Human infants can hear sounds early on, and then soon begin to produce sounds in a way that may provide some evidence as to how language developed.
- Children use intonation as a means of non-verbal communication. For some scholars, this agrees with the idea that **musical ability** developed before the ability to create words.
- It had been proposed that early men and women tried to charm each other with musical notes and rhythm but this idea may not match the typical image that we have of our early ancestors as rather rough characters wearing animal skins and certainly not very charming.
- Still, we do have evidence that **intonation**, hence **melody**, develops in the human infant before other aspects of language. **We might say that our first musical instrument was the human voice (vibration of the vocal folds).**
- Studies of newborn infants have found that they can recognize the voice and intonation of their mothers.
- Early humans may really have learned and used **melody** to express themselves before they added words to their songs. However, other creatures, from songbirds to humpback whales, also produce songs. We have to ask: what prompted humans to go beyond melody and develop words to refer to the world.

The social interaction source

Yo-heave-ho Theory

- The sounds of a person involved in physical effort could be the source of our language, especially when that physical effort involved several people and had to be coordinated.
- The appeal of this proposal is that it places the development of human language in a social context
- This theory does not, however, reveal the origins of the sounds produced. Apes and other primates live in social groups and use grunts and social calls, but they have not developed the capacity for speech.

The physical adaptation source

- This source involves the types **of physical features** humans possess, which may have supported speech production.

- At an early stage, our ancestors made a major transition to an upright posture, with bi-pedal (on two feet) locomotion. This really changed how we breathe. Among four-legged creatures, **the rhythm of breathing** is closely linked to the rhythm of walking, resulting in a one pace – one breath relationship.

- **The rhythm of breathing** in humans is not tied to the rhythm of walking, allowing long articulations on outgoing breath, with short in-breaths.

- Unlike an ape's teeth those of humans are **upright** which is quite helpful in producing such sounds as \f\, \v\ and \s\.

- **The human mouth** is rather small and can be **opened and closed rapidly**, human lips are more flexible than those of apes and can produce p and b sounds.

- **The human tongue is very flexible** and can be used to produce a large variety of different sounds such as l.
- Also the human vocal box (**larynx**) differs in position from other primates.
- Unlike other primates, humans have **pharynx**.

- By themselves, such features would not guarantee speech, but they are good clues that a creature with such features probably has the capacity for speech.

The Tool-Making Source

- By about two million years ago, there is evidence that humans had developed preferential right-handedness and had become capable of making stone tools using both hands, this is an evidence of a brain at work.

- **The Human Brain**

- The human **brain** is not only large relative to human body size, it is also **lateralized**, that is, it has specialized functions in each of the two hemispheres.
- Those functions that control the motor movements involved in complex vocalization (speaking) and object manipulation (making or using tools) are very close.

- It may be that there was an evolutionary connection between the language-using and tool-using abilities of humans and that both were involved in the development of the speaking.

The Gesture Source

- Our ancestors would have used their hands to do more than just bang rocks together. Eventually, they must have developed some use **of manual gesture,** a communicative resource that continues to accompany the everyday talk of modern humans.
- The use of **gesture** was almost certainly established before modern humans developed.
- (Unlike chimpanzees) At around ten months of age, human infants begin using distinct gestures, such as raising both arms asking to be picked up.
- Also, unlike chimpanzees, human infants accompany these developing gestures with a variety of vocalizations described as “babbling.” The sounds that are produced begin as repeated syllables, such as ba-ba-ba,
- For some scholars, this looks like evidence that the development of language was based on the **connection** that already existed between the **human brain** and the **human hand**.
- That close connection in the motor cortex between the muscles of the hand(s) and the muscles of the face used in articulation would at least support the idea that **human gesture and vocalization** shared a **physical source.**

The Genetic Source

- The physical changes taking place to humans brain, larynx and pharynx which is referred to as automatic set of developments and the complexity of the young child's language seem to indicate that **human infants are born with a special genetic capacity for language**.
- It is **innate**, no other creature seems to have it and it is not tied to only one specific variety of language.
- Is it possible that the language capacity is similar to a genetic **blueprint** already present in the newborn human?

The innateness hypothesis

- The **Innateness Hypothesis** suggests that the ability to acquire language is biologically hardwired into the human brain. According to this hypothesis, humans are born with an inherent knowledge (blueprint) of the structures and rules that underlie all languages.
- It also proposes that among the human genes, there are genes responsible for human language.
- **Language Acquisition Device (LAD):** The theory posits the existence of a "language acquisition device" in the brain, which helps children automatically develop the rules of their native language as they are exposed to it.