

**Subject: Anthropology**

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**Paper No. : 01 Physical / Biological Anthropology**

**Module : 06. Hominization Process**



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<b>Subject Name</b>	Anthropology
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## Interesting facts

- The hominization process may be viewed as the evolutionary transformation of a hominid population into full hominid status in the early stages of human evolution.
- The Hominization process consists of evolutionary transformation of hominoids into Hominids
- The earliest evidences of hand manipulations different from apes and sufficiently similar to Homo can be found in *A. afarensis*
- Apes are characterized by larger, thick enameled teeth large jaw and jaw muscles, large canines, high cusped molars and a higher ratio of cheek teeth area to body weight of Australopithecines.
- Earlier Palaeoanthropologists believed that evolution of human brain occurred after bipedalism and changes in the dentition were complete.
- The Hominization process that involved evolution of hominid brain can be said to have resulted during this period, between 2 to 1.5mya.
- The speech apparatus of humans consists of two physiological components: the subglottal system and the larynx
- The area of brain specialized for language and speech are in the region surrounding the sylvian fissure of left hemisphere
- Language is an adaptation unique to humans but its biological basis is very difficult to define.

## Glossary

- **Aromorphosis:** The hominization process may be viewed as the evolutionary transformation of a hominid population into full hominid status in the early stages of human evolution.
- **Anagenis or Hominization Process:** The Hominization process consists of evolutionary transformation of hominoids into Hominids. It is a process that has occurred in the hominoid-line since its divergence from the last common hominoid ancestor shared with any living ape.

- **Bipedalism:** According to Stanford (1995). *A. ramidus* was a biped; its lower body was clearly adapted for walking on the ground, though they may have continued to use trees for gathering fruits and for shelter at night.
- **Encephalization process:** Earlier Palaeoanthropologists believed that evolution of human brain occurred after bipedalism and changes in the dentition were complete. Recent endocranial cast or endocast studies indicate that encephalisation process progressed along with other changes that characterize Hominids. In the latter stages of hominid evolution, the brain evolution consisted more of relative growth of brain and body size i.e. allometric growth rather than simple reorganization.
- **Speech:** The speech apparatus of humans consists of two physiological components: the subglottal system that includes lungs and associated muscles which provide the power for speech production, the larynx which communicates the subglottal system to upper supralaryngeal tracts itself which modulates acoustic energy generated by first two system.
- **Language:** Language is an adaptation unique to humans but its biological basis is very difficult to define. The American linguist Noam Chomsky has proposed that a unique language organ or language acquisition device (LAD) evolved within the human brain. Although there is no anatomical evidence for a new organ it is clear that there exist certain areas such as Broca's area and Wernicke's area for language.

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