

THE ROLE OF COGNITIVE LANGUAGE DEVELOPMENT IN TEACHING ENGLISH AS A SLA

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Abstract

We as human beings are exposed to a certain language from childhood. This determines our cultural, national or ethnic identity. The way we acquire language is different because we are different in nature. Nevertheless, language is a special tool that makes people unique in using it as a mean of communicating with each other.

Obviously, we as human beings are genetically programmed to acquire any language in the world - even though this language may be fundamentally difficult - if we are exposed to it from our early years. But if something goes wrong in the cognitive process of language acquisition, a person risks losing their speaking skills for the rest of their life. This is still an issue debated by linguists and is a part of dynamically developed language research study. As a matter of fact, educated teachers of English as an SLA should be aware of such changes in linguistics and may apply their knowledge in their practice to make their students knowledgeable, and to remain motivated in whichever profession they then choose.

Keywords: language, cognitive process, research, linguists, teachers, communication.

1. INTRODUCTION

Language is a complex system of communication that distinguishes people from other species. People may have difficulty understanding language and may have problems in producing accurate sounds and building correct sentences for different reasons: a language disorder perhaps, or the result of some kind of maltreatment in their lives. Children and adults equally can have one or several language disorders, and those problems can be innate or the result of trauma or an accident. If specific disorders such as feral child phenomenon, deafness in children, and aphasia are diagnosed at an early age, the possibility for the recovery of language ability is more likely than if diagnosis is reached after a certain period.

2. BODY

The nature of this phenomenon is termed the critical period hypothesis (CPH). Eric Lenneberg claims that if language input does not occur during this time, the individual will never achieve proficiency in the system of language, especially in grammar. Noam Chomsky and Jean Piaget support the critical period hypothesis and believe that the mother tongue can only be learned if children are exposed to language during their early years. If such circumstances fail for whatever reason, it may result in a language disorder. Severe language disorders such as feral child phenomenon, deafness and aphasia shed light on many secrets of language acquisition with respect to the critical period hypothesis.

"An influential explanation of the CPH has been that proposed by Lenneberg (1967). Lenneberg's account was based on neurological development. He claimed that as the brain gradually matures, it loses its plasticity. The maturation process, called cerebral lateralisation, is a process of specialisation of the hemispheres. Once this process is completed, Lenneberg argued, the brain would no longer be able to take up a new language system. The completion of the lateralisation was believed to coincide with the start of puberty" (Kees de Bot, et al., 2005). Noam Chomsky and Jean Piaget support Lenneberg's CPH.

According to Noam Chomsky, a prominent linguist, humans are biologically programmed to acquire language. The brain and cognitive system of a young child is especially suited to learning language. He proposed that "each person has an individual Language Acquisition Device (LAD) that is activated by verbal input" (Machado, J.M., 1995). Chomsky also figured out that this device has several sets of language systems rules common to all known languages. Therefore little children can utter complicated sentences they have never heard before (Freeman, D.E., & Freeman, Y.S., 2004). Lenneberg's sensitive period hypothesis supports this idea. He proposed that languages are most easily acquired between birth and puberty. "Children had to be surrounded by a speaking community, so language development depends on more than innate factors" (Freeman, D.E., & Freeman, Y.S., 2004). Nevertheless, his work strongly supported the innatist position that children are born with a special ability to learn language.

According to Jean Piaget, cognitive development and language acquisition are life-long active processes. "Children's thinking abilities followed a consistent developmental pattern beginning early in their life and continuing until maturity" (Spodek, et al., 1991). He proposes that children develop their native language as they build a sense of identity in reference to their environment, and he describes phases of general cognitive development. These processes are changing systematically with age. Piaget assumes that language acquisition is a part of this complex cognitive development, and that these developmental phases are the bases for a sensitive period for language acquisition in childhood. It means that after puberty, language ability declines, coinciding with declines in other cognitive abilities. Thus, he supported Lenneberg's critical period hypothesis.

There have been a few "experiments in nature" testing the critical period hypothesis, including the case of Victor of Aveyron. An ambitious French doctor, Jean Itard, came to support the Critical Period when failing to teach language to Victor the Wild boy of Aveyron, who was found in a forest at around the age of twelve in the first half of the nineteenth century. The boy had not been exposed to any language since childhood so he was not able to learn language after the Critical age period. "Victor improved, but he never approached normalcy. After five years he could read and speak a few words, demonstrated affection for his caretakers, and could carry out simple commands" (Itard, J.M.G., 1962). Itard was disappointed in this lack of progress, stating that he would have been more successful if Victor had been a few years younger.

Another case of a feral child, Genie, was discovered in the 1970s in the USA. This girl has been found deprived of exposure to language, unable to stand upright and speak at all. For thirteen years Genie has been kept in total isolation by her abusive parents with no language input during her first crucial years. Her father communicated with her only in dog-like barks. If she cried, she was beaten. "Genie had spent her whole life in a state of physical, sensory, social and emotional deprivation" (Yule, 2006). She was termed as a feral child due to loss of speech and any communicative skills. It was very important for scientists to carry out the relationship between language lateralisation and acquisition by doing some tests on Genie.

According to Susan Curtiss, Genie's carer, there were a lot of investigations and tests, including a dichotic listening test, "an experimental technique that has demonstrated a left hemisphere dominance for syllable and word processing" (Yule, 2006). This experiment has been done in order to determine whether Genie used her left hemisphere in producing language-like sounds, or if she used the right hemisphere.

"In Genie's case, tests demonstrated that she had no left hemisphere language facility" (Yule, 2006). Therefore, Genie used the right hemisphere of her brain for language functions. Perhaps as a direct result, she did not acquire language during the critical period. It proves that after the critical period, the left hemisphere is not able to function in language acquisition, allowing the right hemisphere to fulfill this function (Bellugi, U., & Klima, E., 2000).

Ursula Bellugi and Edward Klima presented cases of deaf children, these supporting the critical period hypothesis. Chelsea was born deaf and wrongly diagnosed as retarded by incompetent doctors. Her family refused to believe that diagnosis but wondered why Chelsea did not learn to speak like other children. They did not know that she was deaf. When she was thirty-one, a neurologist correctly diagnosed her deafness and she was fitted with hearing aids. Immediately after that "Chelsea received extensive language therapy and was able to acquire a large vocabulary, but like Genie, had not yet reached the syntactic level of even a

three-year old child" (Bellugi, U., & Klima, E., 2000). The cases of Genie and Chelsea support the view that early and middle childhood is the period in which human beings are biologically equipped to learn language effortlessly.

Another case is Isabelle, who lived with her deaf-mute mother until the age of six and a half. She also had no language skills, but, unlike Genie, quickly acquired language skills, firstly, through systematic training and, secondly, she received language input in CP, before puberty. The success of Isabelle as well as the lack of success of Chelsea and Genie support Linneberg's CPH (Barnby, E., retrieved November 8, 2014).

Turning to the question of language disorders, one can accept that severe language impairment such as aphasia is clear evidence of the existence of the Critical Age. Distinguished scientists such as Paul Broca and Carl Wernick investigate numerous examples of individuals who have suffered from aphasia in different periods of their lives, and have had parts of their brains surgically removed due to disease, accident or stroke. "If such cases occur in pre-puberty period or in early ages, the language will not be damaged due to the brain's plasticity" (Fromkin, et al., 2007). This means that the right hemisphere will take on many of the language functions of the left hemisphere. Therefore, nothing serious will happen in this case.

The procedure of surgical removal of parts of the brain is known as hemispherectomy. In cases of left hemispherectomy after language acquisition, children will be able to speak properly. But if surgical removal of the left hemisphere occurs in adulthood, there is the significant risk of being mute or having a severe loss of language function. It means that "the plasticity of the brain decreases with age with the increasing specialisation of the different hemispheres and regions of the brain" (Fromkin, et al., 2007).

3. CONCLUSION

In conclusion, one can accept that people have a definite period of time for language acquisition. The cases of feral children such as Genie and Victor of Aveyron, those of deaf children, Chelsea and Isabel, as well as aphasics support Lenneberg's CPH. But it is difficult to determine exactly the critical period years for each individual. It is clear that each person should be naturally exposed to language from childhood in a friendly, communicative environment created by parents and/or carers. If a person is not exposed to language from childhood or has a severe language disorder in puberty, there is the risk they will be mute for the rest of their life.

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