Discuss the evidence that humans are born with an inbuilt capacities for language

Language acquisition is a crucial part of any child’s life and is important in order for children to achieve socially, intellectually, linguistically and aesthetically (Lindfors, 2008). Human language is acquired in children quite rapidly and naturally. There is much evidence to suggest that human babies are born with innate and inbuilt capacities for language acquisition. Although babies may be born with an untaught orientation towards human language, it has been suggested that this window of opportunity may slowly be closing and eventually babies will pass through this “sensitive” (Bornstein, 1989) period of time. Much biological and behavioural evidence exists today that support the innateness hypothesis of language acquisition.

Before they are able to speak babies begin to babble in their own unrecognisable sounds. In their babbling, a seven month old child would usually mirror sounds that are commonly found in the parents’ first spoken language (Blakemore and Frith, 2005). From this, it can be determined that this untaught babbling using relevant sounds is a “useful mechanism” (Blakemore and Frith, 2005, p.43) for a baby to begin learning how to make the sounds of their primary language. This informed babbling is not taught and thus it is recognised that children must be born with some form of in-built capacity for language. Babbling also appears to occur in deaf babies. Laura-Ann Petitto and colleagues at McGill University in Toronto discovered that deaf babies with deaf parents copied elements of hand gestures that appear in the hand gestures of sign language produced by their deaf parents (Blakemore and Frith, 2005), much similar to the imitation of relevant sounds of the parents’ spoken language that we see in hearing babies. Furthermore, the same group went on to find that hearing babies with deaf parents also babble with their hands (Blakemore and Frith, 2005). These findings suggest that babbling is a strong indicator that babies are discovering the path of language, be it seen or heard, and are forging the journey towards language production. Chomsky contended that humans are born with this innate knowledge of language constructs and that this was universal in all human beings (Brown, 1987, p. 27). This is clearly evident in the two situations of both deaf and hearing cases and is further reinforced in cases where different languages become relevant.
There is much biological evidence to suggest that humans possess inbuilt capacities for language. The left angular gyrus, which is a language area within the brain is shown to be activated in two and three month old babies upon being exposed to language (Blakemore and Frith, 2005). This evidence suggests that the brain appears ready to develop an understanding of sounds and language immediately. By the end of their first year of life the ability to distinguish between sounds which babies are not exposed to is lost. The period through which this takes place is known as a sensitive period. Further evidence to suggest that humans are born with an inbuilt capacity for language is given in a pioneering experiment undertaken by a French research team lead by Stanislas Dehaene and Ghislaine-Lambertz in Paris. The researchers scanned babies’ brains as young as three months of age while asleep and listening to speech. It showed that the active parts of the babies’ brains were the same as that of an adult. This experiment suggests that brain organisation doesn’t have to wait years for experiences to be learned and collected. It is clear that humans already physically possess the biological tools to learn and understand language.

Evidence to suggest that humans are born with in-built capacity for language can be found in a study undertaken at the University of Washington in Seattle in the 1980s by Patricia Kuhl. Having acquired the knowledge that Japanese people cannot distinguish between ‘r’ and ‘l’ sounds, Kuhl revealed that Japanese babies could in fact make the distinction between the two sounds (Blakemore and Frith, 2005). Owing to the fact that the Japanese language does not expose children to these particular sounds, these babies will eventually lose this ability to distinguish between the two, thus moving out of the sensitive or “meaningful” (Bornstein, 1989) period. Although sensitive periods are seen as the ideal or “closing window” (Blakemore and Frith, 2005, p.40) time for learning, given effort and persistence learning in areas where the sensitive period has passed can still occur. Similarly, an investigation was undertaken by Janet Werker and Renée Desjardins and their colleagues in Canada during which they exposed babies, children and adults to two very similar sounds such as “da” and “ba” and trained them to indicate when they could hear a difference between the two sounds. When each group succeeded in this, the researchers then exposed them to two very similar sounds common in the Hindu language. From this the children and adults could not detect any difference between the two sounds, however the babies under the age of 12 months were able to distinguish between the two (Blakemore and Frith, 2005). From these investigations, it can be concluded that between the ages of 8 to 12 months (Blakemore and Frith, 2005), babies have a clear in-built capacity for language acquisition as the difference is not and could not possibly be taught to a baby.
Furthermore, innate hypotheses gain support from many theorists. In 1967, Eric Lenneberg claimed language as a “species-specific” (Brown, 1987, p.19) behaviour, suggesting that certain abilities such as perception, categorising abilities and other language-related biological mechanisms are biologically built-in to the human brain (Brown, 1987). Similarly, Noam Chomsky, in 1965, proposed the existence of innate characteristics of language to explain the child’s mastery of their first language in such a short time, given the clear complexities of the rules of language (Brown, 1987). Further evidence to suggest that humans are born with an innate capacity to obtain and develop their language skills is babies’ “inbuilt preference” (Blakemore and Frith, 2005, p.38) towards human speech over other sounds. Additionally, given babies’ are brought up in an environment where language is spoken; they will gravitate towards human speech and develop speaking quite smoothly and effortlessly (Crystal, 1976). Supplementary evidence suggests that not only are human babies born with an inbuilt capacity for language but that this innately determined predisposition to language begins in the womb (Blakemore and Frith, 2005), where newborn babies are able to make the distinction between sentences spoken in their parents’ first language and sentences in another language. This is presumed to be on the basis of prenatal experiences of maternal speech (Brown, 1987). Another piece of evidence to suggest that human babies are born with an innate capacity for language is that when babies are only a few days old, upon hearing the sounds “a” and “e” they are able to make the corresponding mouth movement to these individual sounds. This evidence suggests that human babies are almost “programmed” (Blakemore and Frith, 2005, p. 38) with knowledge of language and its complexities.

It is a natural and effortless process that young babies are able to acquire a sound knowledge of language in order to be understood and become a significant and present member of society. Linguistics is complex and it is with an inbuilt capacity for language that human babies are able to articulate sounds and eventually lead to words and sentences. Babies are not specifically taught the complexities of human communication yet they are able to accomplish the intricacies of language, thus human babies do clearly possess some in built or innate capacity for language development.
References


