# Language is what makes us human

Linguistics, Language Acquisition

Language is what makes us as humans unique; it differentiates us from primates. Generally it is acquired in childhood and is developed throughout our lives. Yet what would happen if language was not acquired in childhood? Lennberg (1967: as cited in Grimshaw, Adelstein, Bryden & MacKinnon, 1998).) claims that there is a critical period for when language must develop, (after infancy and before puberty) otherwise it will never reach its potential. Using this as a basis for the question can language be developed after puberty, I intent to argue that although language comprehension can be acquired after puberty, complete language development can not be achieved; using case studies such as Genie (Fromkin, Krashen, Curtiss, Rigler & Rigler, 1974) and E. M (Grimshaw et al, 1998). Genie's (Grimshaw et al, 1998) background is extremely tragic. From around the age of 20 months until her rescue at the age of 13 years and nine months (the entirety of the critical period) she was isolated in a box type room (Fromkin et al, 1974). She was physically punished if she made any noise and received no communication other than the occasional bark from her father or brother. When admitted to hospital, Kent (1972; as cited by Fromkin et al, 1974) Genie was described as a mute and totally unresponsive, but within a short space of time, Genie not only began to respond but also to imamate others, this indicates that Genie understood that language could be used as a way of communication. Despite intensive therapy Genie never managed to detect phonological (differences in words such as hair and hare) and syntactic (speech patterns) relationships (Fromkin et al, 1974.) Lennenberg claimed that it is language which allowed our brain to become lateralised. (Grimshaw et al, 1998) Studies such as Papcun, Krashen, Terbeek, Remington, &

Harshman, (1974) show language is more associated with the left hemisphere. This could suggest that the left hemisphere has to be linguistically stimulated within a specific amount of time (20 months – puberty) in order for normal language development to happen. Results from dichotic listening tests (Fromkin et al, 1974) show that Genie's brain had not lateralized, instead showing that there was a right – brain dominance (language generally is derived from the temporal lobe in the left hemisphere) suggesting that this as a reason why Genie could / did not acquire language. Mason, (1942; as cited in Fromkin et al, 1974) provides further support for the critical period with his case study of Isabella. When found aged 6 (within the critical period), she had never experienced language. Within twenty-two months she had progressed enormously from single words (ball, bat) to asking complex questions, (why does the paste come out of the jar?) reaching the same standard in her language skills as other children of the same age. When Genie (Fromkin et al, 1974) was tested on her cognitive ability by being asked to point to the correct picture (including balloon, nose and horse) rather than spoken; the results showed that up until 1972 her responses were no better than chance. However after 1972 they were 100% accurate. This improvement matches with others that she made, such as having a larger vocabulary than others at the same age. Curtiss, (1973; as cited in Fromkin et al, 1974) showed that Genie was learning language as her speech was using fixed- word order and became rule governed showing a systematic way of expressing syntactic and semantic relations. However, although Genie's progress in semantic development seamed promising, (Fromkin et al, 1974) her language over all was not typical of a person the

same age. For example the difficulties that Genie had with understanding verb tense (the mountains are tall and white.), word order (Bill, I can see, compared to, I can see Bill) and pronouns (in this example.) (Curtiss, 1977; as cited in Fromkin et al, 1974) have never disappeared. Another way of exploring weather the critical period hypothesis is true is looking at Grimshaw, et al (1998) case of E. M. Unlike Genie (Fromkin, et al, 1974) he did not live in social isolation only silent isolation. Up until the age of 12 had no contact with the deaf community and until the age of 15 (when E. M. had a hearing aid fitted) had no hearing ability. Despite being deaf this did not stop E. M. (Grimshaw, et al 1998) from communicating using his own homo-sign language. Goldin-Meadow & Mylander, (1984; as cited in Grimshae et al, 1998) show that this form of communication is similar to other deaf children of hearing parents. This could account for why his cognitive ability was low-level (Grimshaw et al, 1998) rather than non-existent (as E. M. still had some form of communication.) However when tested on his language ability such as simple negation, E. M scores where never above chance level (Grimshaw et al, 1998) suggesting that E. M. had not fully developed language. E. M. (Grimshaw et al, 1998) did make progress in the written form of assessment. Yet this was only the case when there was one pro-noun in the sentence, (e. g. she is feeding the boy) rather than two (e. g. he is feeding her.) So although making progress in his language ability, it is obvious that E. M. is not reaching the standardized level to be classified as normal. Like Genie (Fromkin et al, 1974) E. M. (Grimshaw et al, 1998) experienced similar linguistic impairments such as their difficulty understanding pro-nouns. Unlike Genie, however, E. M did not experience her abusive upbringing,

suggesting this was not the main cause for Genie's lack of language. Instead one can suggest that language is perhaps innate (Chomsky, 1959 as cited in Grimshaw etal, 1998.) and that if not developed within a critical period the impairments will ensure that language is not developed fully. Both Genie (Fromkin et al, 1974) and E. M (Grimshaw et al, 1998) developed low- level linguistic skills. The ability to comprehend basic sentences (he is feeding her) is no doubt an improvement in language ability. However language fundamentally allows us as humans to communicate effectively with one another. Neither Genie nor E. M can be described as effective communicators. When compared with Isabella (Mason, 1942; as cited in Fromkin et al, 1974) who was found within the critical period and recovered language to a normal standard it only strengthens the case for Lennenberg's theory as it shows in individuals who have been deprived can develop language. One can suggest from this, that these case studies support Lennbergs Critical Period hypothesis; as both were found after the puberty and did not reach the expected standardised norms in their language ability. References Fromkin, V., Krashen, S., Curtiss, S., Rigler, D., & Rigler, M. (1974). The Development of Language in Genie: a Case of Language Acquisition beyond the " Critical Period." Brain and Language, 1, 81-107 Grimshaw, G. M., Adelstein, A., Brynden, M. P., & MacKinnon, G. E. (1998). First Language Acquisition in Adolescence: Evidence for a Critical Period for Verbal Language Development. Brain and Language, 63, 237-225 Papcun, G., Krashen, S., Terbeek, D., Remington, R., & Harshman, R. (1974). Is the left hemisphere specialized for speech, language, and/or something else? Journal of the Acoustical Society of America. 55, 319–32