

Investigation 6 Student Sample

Many species have risen and fallen through the history of Earth, but all species have variances that set apart their species from others. Humans are just one species living on Earth, but we are different from even our closest relatives, Chimps and Bonobos. Humans are set apart from many species because humans are bipedal, but the Homo Sapien's ancestors, from Australopithecus onward, walked on two legs. The Homo Sapien is a unique species through the complex language and communication that is missing in other animals. Human communication is much more complex than other animals because of the complex syntax and the ability of humans to quickly learn.

The human language is much more precise and exact than the ways in which other animals communicate. Almost all forms of life communicate, Stephen Anderson proved even bacteria have specialized receptors allowing them to sense other nearby bacteria, through quorum sensing (Anderson). According to University of Edinburgh professor James Hurford no animal, other than man, communicates through a system where several small parts have one meaning (Hurford). While many animals may be able to communicate, they cannot convey anything more than one thing to another at a time. Jane Goodall has been around chimps for the majority of her life, she observes how they communicate through calls, postures, and gestures, but none of their communication is verbal (Goodall). Stephen Pinker, a Harvard Professor, calculated that the number of possible sentences that could come out of a speaker's mouth, and still make grammatical sense, was more than a hundred million trillion (Pinker). The calls that a chimp can make do not communicate anywhere near the information of the complex language of humans. No other type of language has ever been able to communicate such complex statements as the human language.

No other animal can learn a language as complex as the human language in only a few years. One of the Bonobos most famous and acclaimed for learning the human language has only learned 400 symbols in his 26 years of age (Deutscher). James Hurford also claimed no other animal communication system requires learning every symbol in the lifetime of an individual (Hurford). Even the best of the learners of a complex language cannot learn at anywhere near the speed at which the humans learn. After many years of living and learning Alex the Parrot passed away, Alex learned more than 200 words and names over his entire life, and had the intelligence of a five year old ("Alex the African Grey"). According to James Hurford humans must learn more than 10,000 words in just a few years of their life time (Hurford). The human brain is much more complex and therefore able to learn a much more complex style of communication compared to other animals. The complexity of the human brain, as well as the complexity of the language sets human communication apart from the other animals.

The impressive ability to learn new thing in a short period of time, as well as the complex syntax of the human language, is what sets apart humans from other animal in communication. Other animal communication is nonverbal, and much of which only include simple gestures and calls. Even those who spend their entire lives teaching chimps and parrots are able to give only the basics of communication to

those animals. Although it would be extraordinary to communicate verbally with other animals, this will not happen, unless a species evolves to have greater communication skills.