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Human Language Origins: Icon for Evolution or a Higher Order?

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Human Language Origins:

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Language—what is it? The word has many implications. For instance, there is body language, written language, love language, and sign language just to name a few. However, these are simply expressions that describe the various forms of language. Language in its purest sense is a unique relationship between form (sound, sign) and meaning (concept). The relationship is unique in that a particular sequence of sounds will convey a particular meaning (Crystal 2006). This does not mean, however, that other sound sequences cannot convey the same meaning. The existence of different languages reveals an underlying principle of language. It is an arbitrary system. For example, imagine an animal that wags its tail and barks and likes to fetch things. English speakers represent this image with the word *dog*. Others can represent this same image with the words *perro* (Spanish), *hund* (German), or *mbwa* (Swahili). Language then is a learned function. Although learned, no individual can recall when he or she decided to “start” learning language. That is because language development is unconscious (Fromkin, Hyams, & Rodman, 2011). Often referred to as “first language acquisition,” this is truly a phenomenon of human convention. It should be noted that a *human* convention is distinguished here. Other variants of language like animal language are still highly extensive communicative systems, but human language contains certain properties that make it its own special entity. Evolutionary linguists (scientists of language) have attempted to bridge this gap between human and animal speech by supposing theories, which display the gradual trend of primal grunts to coherent colloquialism. These theories are said to be the start of a bright future for evolutionary linguistics, but a deeper look at these theories will show the apparent discrepancies in their application.

Before presenting and analyzing some of these theories, a basic overview of how language is processed would be useful. Language, like many other human faculties, is stationed in the brain. Where exactly in the brain has been a topic of some dispute. For a long time the dominating view was that the brain worked as one unitary control system. Franz Joseph Gall, however, proposed a theory that combatted this popular idea. His theory, often called the “theory of localization,” claimed that particular regions in the brain were responsible for specific functions. Thus, abilities like language could be isolated to certain areas of the brain (Wyhe, 2002).

To better understand this relationship between language and the brain, language disorders have been studied as a means to locate where the faculty of human language is managed in the brain. “Aphasia” is the general term used to denote language disorders caused by brain damage. French surgeon Paul Broca concluded from his research on aphasias that language capacity must be (at least in part) found in the left frontal region of the brain. A contemporary, Carl Wernicke, also concluded from his own observations that language must be lateralized to the left hemisphere after inspecting patients with lesions on their left temporal lobes. Later experiments proved Broca’s and Wernicke’s assumptions to be true, and the two regions from which these men isolated their data have been named after them. Aphasias are still studied today for shedding more light on the language-brain correlation, but the methods by which they are studied have advanced dramatically. Noninvasive techniques including magnetic resonance imaging (MRI) and positron emission tomography (PET scans) enable neurologists to pinpoint changes in brain activity and relate them to linguistic or nonlinguistic factors. This technological development alone has greatly expanded the world of neurolinguistics (Fromkin et al., 2011).

Now that specific language centers in the brain have been isolated, a brief look at neurolinguistic processing is in order. First, it must be reestablished that any form of language—spoken, written, or signed—is neurologically based. This foundational aspect of language is practically played out through a series of steps in which two different frameworks are harmoniously at work. They are known as the “conceptual-intentional” framework and the “sensory-motor” framework. Both of these systems are necessary for coherent communication. Take speech production, for example. Before one word is released, an initial motive to convey something meaningful is processed. The conceptualization of this motive is then transfigured into semantic (word meaning) and syntactic (sentence structure) structures simultaneously. This is the conceptual-intentional framework in motion. Then the structured concept is relayed to the motor organs responsible for producing the concept verbally. As the message is transmitted, auditory centers self-monitor the accuracy of the speech produced. This completes the cycle and the job of the sensory-motor framework (Crystal 2006). It has been debated over recent years whether these frameworks were specifically adapted for human language. No consensus on the matter has been established yet, but evolutionary linguists are still trying to figure out the answer to this highly anticipated question (Hauser, Chomsky, & Fitch, 2002).

A subject of even more controversy—yet of equal importance—is the language origins debate. Glossogenetics, the study of human language formation and development, seeks to answer this question. Several theories have been proposed over the years, but no single theory has reached a place of prominence amongst the others. Danish linguist Otto Jespersen contributed to the study of human language origins by condensing the popularly held views of his day into four major categories, including a fifth of his own. Often noted by their nicknames, these theories include the “Bow-wow Theory,” the “Pooh-pooh Theory,” the “Ding-dong

Theory,” the “Yo-he-ho Theory,” and Jespersen’s very own “La-la Theory.” Each theory seeks to address which driving force is responsible for initiating the human convention of language. For example, the Bow-wow Theory supposes it was imitations of natural sounds in the surrounding environment that provoked human language formation. Jespersen himself hypothesized that language had its start due to romantic factors (Crystal, 2006).

More recent studies suggest that a set of successive bifurcations could be the cause for the emergence of human language. Wolfgang Wildgen, a research linguist at the University of Bremen, has performed studies on this topic and compressed his findings into three key steps. Each step relies on external forces. These include both climatic and social interventions. The first step in his theory involves a divergence from a predominantly manual mode of communicating to a predominantly phonic one. The transition from gestural to verbal communication was one of selective preference wherein higher apes (e.g. chimpanzees) found it more plausible to move towards a vocally dominant communication system. The next step is similar to the first, in that, it deals with a movement farther away from gestures and closer to phonics but this time in the context of referential signs. This change made communication more efficient across larger distances and in areas of low visibility. The last major bifurcation in Wildgen’s research concerns an even larger leap into the primitive formation of what is often called a “proto-language.” This transition involves a movement from a “trial-and-error” method via imitation to an increasingly competent use of word structures. The continual progression of these stages would, in turn, result in a permanent lexicon that humans would continue to elaborate upon over the years (Wildgen, 2012).

Whatever the cause, human language must have had a means by which it diverged into the various languages existing today. William Labov, an American linguist, brought lexical

diffusion, a medium conducive for language evolution, into linguistic prominence. His primary assumption that language progressed over time rested on his observations of language change in communities. Lexical diffusion, therefore, was his means. The basic idea behind lexical diffusion is one of gradualism. It starts with a few people using a different phoneme (sound segment) in replacement of the original one. This change then gets adopted into more words until it gains wide enough acceptance amongst speakers that it becomes a permanent change. The continuous progression of phoneme replacement should eventually give rise to an entirely new “species” of language. This concept is still considered a valid theory within the grand scheme of evolutionary linguistics today (Bybee 2002).

Although there is generous overlap concerning the stepwise processes involved in the emergence of human language, there is considerable debate amongst linguists over the onset of this emergence. The argument concerns whether human language arose entirely from a single mother tongue (i.e. “common ancestor”) or if it arose from a pool of mother tongues in separate geographic regions. The two theories that account for these opposing views are the monogenetic theory of language origin and the polygenetic theory of language origin. Both have their reasonable arguments, but only one is favored in the field of evolutionary linguistics—that is, the monogenetic theory. Before either theory can be understood, a couple of terms must be explained. The first term is *pidgin*. A pidgin is a reduced language form that develops out of a need to bridge the gap for trade or other similar purposes between two or more language groups. The second term, *creole*, or its verb form *creolization*, refers to a pidgin that becomes (through repetitive use or popularity increase) the newly accepted mother tongue of a community. Pidgins and creoles provide the raw material necessary for proving or disproving both the monogenetic and polygenetic theories of language origin (Crystal 2006).

For instance, the monogenetic theory claims there are common ancestral ties amongst all human language on the basis that there are apparent similarities in pidgins around the world. In relation to this assumption, the hypothesis of “relexification” explains how creoles were formed; and how, in turn, they provide the evidence for the evolutionary diversification of language. However, there are still problems with this theory that the polygenetic view supplements. Although there is a widespread appearance of lexical similarity within languages across the globe, some languages still stick out apart from the rest. This evidence makes it difficult for the monogenetic view to link all human languages under one common ancestral language. This has to do particularly with several Asiatic languages that differ quite significantly in structure from the many existing European languages. This is where the polygenetic view comes into play. Its foundation in diverse geographical origins makes it seem more promising, in that, variable language structures are more than a possibility; they are a prediction. Of course, people who travel around would eventually come into contact with other language speakers, and their languages would then influence each other. This is reasoning by which language commonalities are deduced within the polygenetic theory of human language origin (Crystal 2006).

Evolutionary theories of language development fall short in many areas. Even one of the most prominent linguists—Noam Chomsky—supposed that language was an inherent faculty of human biology. A noted agnostic, Chomsky still claimed in his linguistic theory that language was an intrinsic quality within human beings that separated us from the rest of the living world. He also surmised a “Universal Grammar” which deduced a number of shared traits among various languages. One of these traits is the indiscriminate nature of language acquisition. No division of race, social status, economic standing, or gender will affect this ability of first language acquisition. In fact, observations have proved time and time again that just about any

language can be learned with relative ease as long as a child is exposed to it during his critical development years (Higginbotham 1982).

The study of pidgins and creoles is significant to the evolutionary linguistic debate in a parallel way that the study of limb homology is significant to the evolutionary biological debate. Both argue the basis for similar structures (whether it be lexical components or anatomical components) as a means of supporting their own theory. Evolutionists, on one hand, say this is evidence of common ancestry; whereas, those on the other hand claim this similarity as evidence for an efficient design being carried out through nature or in this case, language.

Another argument in evolutionary linguistics is its supposed evidence for an evolving language system in the transitional stages of primate to human. However, this is really not a convincing case. A substantial gap still lies between the lexical capacities of humans and our nearest primate relatives. This is unarguably one of the biggest challenges evolutionary linguists face. The highly advanced social structures in the brain and vocal tract of humans far surpass those of any primate, and even more, any fish or bird. Moreover, the major lack of an observable, gradual hierarchy of language development amongst mammals creates a stumbling block for adamant evolutionists (Crystal, 2006).

By far the biggest hurdle evolutionary linguists must try to tackle is this concept of recursion. Human language is the only known language to have this property. It is the phenomenon by which human language can produce an infinite number of discrete (even novel) expressions from a finite set of constituents. This is also the mechanism by which we gain our sense of creativity. Music, poetry, and literature would not have the same artistic freedom we so enjoy if it were not for recursion. It is this capacity of human language that truly sets it above all the others, and far from the theorizing clutches of evolutionary linguistics (Hauser et al., 2002).

The basic fact of the matter is, language is complex; however, the important thing is language can always be studied. It is an inherent faculty of human identity. Although evolutionists say that the commonality of language in animals and humans is clear evidence for evolutionary origins, it simply lacks the necessary substance for explaining the exclusive features characteristic of human language (e.g. recursion). Language as an icon of evolution simply cannot stand against all of the linguistic data running against it. Evolutionary scientists would have to undergo a lot more research in order to explain some of the discrepancies aforementioned. In any case, language cannot be used as a tenable icon for evolution, but rather suggests a higher ordered system of design.

References

- Bybee, J. (2002). Word frequency and context of use in the lexical diffusion of phonetically conditioned sound change. *Language Variation and Change*, 14(3), 261-290. Retrieved from <http://search.proquest.com/docview/218181004?accountid=12085>
- Crystal, D. (2006). *How language works*. New York, NY: The Overlook Press.
- Fromkin, V., Rodman, R., & Hyams, N. (2011) *An introduction to language*. J. M. Flaherty (Ed.). Boston, MA: Wadsworth Cengage Learning.
- Hauser, M. D., Chomsky, N., & Fitch, W. T. (2002). The faculty of language: What is it, who has it, and how did it evolve? *Science*, 298(5598), 1569-79. Retrieved from <http://search.proquest.com/docview/213608564?accountid=12085>
- Higginbotham, J. (1982). Noam Chomsky's linguistic theory. *Social Research*, 49(1), 143. Retrieved from <http://search.proquest.com/docview/1297193165?accountid=12085>
- Wildgen, W. (2012). Language evolution as a cascade of behavioral bifurcations. *Estudios de Linguística Universidad de Alicante*, 26, 359-382. Retrieved from <http://search.proquest.com/docview/1430172539?accountid=12085>
- Wyhe, J. V. (2002). The authority of human nature: The Schadellehre of Franz Joseph Gall. *British Journal for the History of Science*, 35(124), 17-42. Retrieved from <http://search.proquest.com/docview/215743776?accountid=12085>