LANGUAGE AND HUMANITY: IS IT MORE THAN MERE INSTINCT?

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Abstract. Noam Chomsky and Steven Pinker have brought to the linguistic arena the terms Universal Grammar (UG), Generative Grammar (GG) and Language Instinct. UG/GG are based on the premise that human babies are born with an intact, generalized language instinct – language somehow is already preconfigured in their brains – so that much of the complex structures of human language is encoded in the human genetic inheritance. In this paper I look at the theories of language instinct, UG and GG to determine if these theories have a grounding in empirical science brought about by new technologies and new research. I also ask the question: If we indeed do have a language instinct, should it have an impact on how we view languages and teach them?

Key words: Language Instinct, Universal Grammar, Generative Grammar, Chomsky, Pinker, Innateness of Language, Language Acquisition Theories

INTRODUCTION

In 1997, Michael Traber wrote an article for the *New York Times* in which he asks these questions: 'One of the philosophical questions, which has occupied thinkers for centuries, is that of human authenticity. What are the essential characteristics of the human being? What distinguishes us from other mammals? What is authentically human?' (Feb. 10, 1997). Traber concludes that the one and only distinction, the lone characteristic of being authentically human, is simply language. Language in all of its complexities, in all of its intricacies, and in all of its universals according to Traber is what makes us truly human.

Language is the common condition of the human species. As Tabor says, 'We live in the house of language' (2009: ix). No group of people, nor tribe, has ever been discovered that did not have a highly complex and highly developed language system – regardless of their linguistic differences. Darwin said, 'There is no such thing as a simple language; all languages are complex' (1871/2006: 116).

However, the innateness of language is a constant debate within linguistic and cognitive science circles these days. Demands for empirical research and scientific evidence have made the theory of language instinct (LI) appear to be an abused step-child among the international academic community (Sampson, 2005). Scores of both popular and professional articles, books, and conference papers have focused on disproving, or discrediting, Chomskian-inspired concepts of generative grammar, language universals, and genetic impulses to speak – in

other words a language instinct (Sampson, 2005; Harley, 2010; Cowley, 2001; Corballis, 2009). These attempts, though earnest, have not been convincing.

In this paper I will look at and discuss three important concepts about the language instinct that simply will not go away regardless of the demand for empirical evidence and the attempt to discredit this linguistic theory. Firstly, language is mysterious and just because science cannot explain it, does not mean that certain facets do not exist. Secondly, there are specific manifestations in first language acquisition that are scientifically, and provably, evidenced across linguistic diversity (universals). And thirdly, if we rely solely on empirical research (that which is testable) and scientific evidence (that which is seeable) within the academic community, how then do we ever understand, describe, or explain evolution's black holes, the origins of language or other intrusive phenomena? The understanding and exploration of the innateness of language is vital to the world of science and the academic community as a whole, because only through an investigation into the language instinct can we truly begin to understand what it means to be human. To begin, I want to look at an exceptional human being who demonstrates the human instinct to communicate, even when one is born into a vacuum.

THE FORBIDDEN EXPERIMENT

Helen Keller (1880-1968) was born with exceptional intelligence. However, she contracted scarlet fever at 19 months and it left her both deaf and blind. With only a few simple signs that she herself invented to communicate with her parents, (rubbing her cheek meant Mother), Helen was isolated from the world. The little girl eventually became uncontrollable. Fits of temper, irritable tantrums and her strong will kept the Keller home in constant turmoil.

Helen's Mother read an article which described Samuel Gridley Howe's work with a deaf and blind student at Perkins School for the Blind in Massachusetts, USA. The Kellers, out of desperation, wrote to the school for help. The school recommended class of 1886 valedictorian Annie Sullivan as Keller's governess and teacher.

Sullivan grew up as an orphan in a poorhouse. Trachoma had left her nearly blind. She struggled with her eyesight all of her life. Through a turn of events and the meeting of a prominent political figure, Annie was removed from the poorhouse and enrolled at Perkins School for the Blind. She eventually graduated head of her class. Worried that she would be unable to find work, she gladly took the job with the Kellers grateful for the opportunity to teach.

At age 21, Sullivan instinctively developed her own methods of teaching. Firstly, she separated Helen from her overprotective indulgent parents and moved with her to an isolated cottage. Sullivan was a firm disciplinarian. She used American Sign Language from the very first day with Helen and spelled words into Helen's hands. She constantly named whatever drew the little girl's attention, just as one would speak with a pre-verbal hearing child. She believed that Helen would learn through repetition and context. (Her techniques are still fundamental in deaf/ blind education today).

Helen Keller was six years old when Annie Sullivan became her teacher. After just five weeks with Annie Sullivan, Helen Keller connected the sensation of water running over one hand with w-a-t-e-r spelled into the other. Suddenly Helen understood that everything had a name and that there was a system of language she could use to communicate.

Keller wrote in her autobiography,

I was like a ship without compass or sounding-line, and I had no way of knowing how near the harbor was. 'Light! Give me light!' was the wordless cry of my soul, and the light shone on me in that very hour. Suddenly I felt a misty consciousness as if something forgotten – a thrill of returning thought; and somehow the mystery of language was revealed to me. I knew then that 'w-a-t-e-r' meant the wonderful cool something that was flowing over my hand. That living word awakened my soul, gave it light, hope, joy, set it free! I learned a great many new words that day [...] mother, father, sister, teacher were among them – words that were to make the world blossom for me. It would have been difficult to find a happier child than I. It had brought me – and this for the first time – a longing for a new day to come. (1903/1998: 5)

Helen Keller learned over 600 words that very first day. She went on to publish 12 books and dozens of articles. She learned five languages: English, French, German, Greek and Latin. She travelled to 39 nations and in 1904, at 24, Helen Keller became the first deaf/blind person in the world to earn a Bachelor's degree. She graduated from Radcliffe University.

As linguists we must ask the question, 'What does a deaf, blind American girl born over 100 years ago have to do with language and philology?' Helen Keller is The Forbidden Experiment. We cannot raise children in isolation, but in the case of Helen Keller we almost have that. Neither hearing, nor speaking, nor seeing she was in a biological isolation of sorts and once she was introduced to sign language the innate language instinct was activated. From this we can see as researchers and language experts that indeed, dormant though it was, a facility for language was present. We may study her life and her relationship to language as a way to better understand the human inclination to communicate.

I agree with Traber's and Tabor's premise that language is the one common condition of the human species. To have language is to be human.

THE LANGUAGE INSTINCT

Steven Pinker coined the term Language Instinct (LI) in his book of the same name (1994). A Chomskian-based theory, Pinker explains it this way,

Language is not a cultural artifact that we learn the way we learn to tell time; it is a distinct piece of the biological makeup of our brains[...] For these reasons some cognitive scientists have described language as a psychological faculty, a mental organ, a neural system, and a computational module. (Pinker, 1994: 18)

The LI theory is a generative-based theory that presupposes a neurophysiological reality for language. The LI theory states that much of the complex structures of human language are encoded in the human genetic inheritance. Today, because of new technology and specialized equipment, things we could not have imagined 15-20 years ago are now giving us new insight and empirical evidence that there is indeed a genetic connection to language in the human brain. Cathy Price, University College London, explains,

Twenty years ago I was taught that the brain was not relevant to language, but scanning and new technology show us just how complicated the brain functions involved in language really are. The left side of the brain is for language; the front for speaking; the back section is for understanding. We even see in those with brain injuries from strokes that prepositions can be lost in the right hemisphere. People lose process of memory and motor control - yes, we always knew that. But a storage space for verbs? This is changing what we know about the brain/language connection. (Price, 2012: 814)

Price's study of brain injuries in stroke victims illustrates how, when shown pictures, some patients can recall all the nouns in the picture, but cannot give the verbs to describe what is taking place. Others struggle with prepositions. They can tell you by looking at a picture all the nouns, and verbs, but they cannot express simple sentences like, 'The pencil is ON the table.' Or 'The cat is sitting UNDER the chair' (Price, 2012: 820).

Researchers like Gary Morgan, City University of London, see the wonder of language in autistic adult language savants who have a supernatural gift for language. Morgan describes his subject, 'Christopher is a savant, someone with an island of startling talent in a sea of inability' (Smith et al., 2010, Kindle Location 15). Morgan has spent the past ten years studying Christopher Taylor and his unique gift. Taylor, whose mother tongue is British English, is autistic, cannot tie his shoes, and yet he has mastered 20 languages: reading, speaking, writing and listening. He can learn a foreign language in about ten minutes – its basics at least. From the study of Taylor, Morgan and his team write, 'We [see] that a significant part of the language faculty is innately determined, comprising a lexicon and a computational system or syntax. We refer to it as the "computation for human language" (CHL)' (ibid.: 660-662).

Fifer (2009) looks at infant cognition and language recognition. Fifer created a skull cap for newborns that places an array of electrodes on the heads of newborn infants in order to study their ability to recognize and differentiate

their mothers' voices from that of strangers or computer generated voices. Fifer's conclusion: 'Language and its facility start in utero; we are in tuned to language from the very beginning of our lives' (2009: 84).

For years we believed that the human apparatus which allows our species to speak was unique in the animal kingdom (Fitch, 2006). However, MRIs and other X-ray technology have shown us that most mammals have in place all they need to produce the sounds necessary for speech. This is significant because elimination of the vocal track as being prohibitive to other species' development of language, especially mammals, isolates speech and its uniqueness to the brain found in the human race. It is the brain that allows us to speak. Tecumseh Fitch, cognitive scientist at the University of Vienna, writes: 'Despite a long tradition of believing that human vocal production is somehow highly distinctive from that of other mammals, converging data demonstrate that humans are using a relatively ordinary mammalian VPS [vocal production system] to speak or sing' (Fitch, 2006: 115). Fitch goes on to say, 'Language is entirely a brain function and is exclusive to and in the human brain' (2006: 116).

LI THEORY AND THE CLASSROOM

I am first and foremost a teacher and as a teacher I am constantly asking the questions: How does this research benefit me? Why does it matter? What are the practical underpinnings that will impact teaching - the teaching of my field and my area.

I tell my graduate students: 'Delve into research and see how it applies to you and your daily living; do research as if it matters; research significant things things that will benefit the field and those teaching in your field. Contribute.'

So as a teacher who looks at research, and who also carries out research, I have had a long-term fascination with the Origins of Language and the theory of Language Instinct. 'Part of the job of the linguist is to reveal and make explicit knowledge about [language]' (Fromkin, Rodman and Hyams, 2011: 180). Embracing the language instinct and exploring the innateness of human language among our species brings a dimension and a facet to language teaching and language research that is too often side-lined and ignored. I am speaking of the beauty, mystery, and miracle of language. Our attitudes and worldview about language have an impact on us, those we teach, and our institutions as a whole.

The Moravian scholar John Amos Comenius stated it very clearly four hundred years ago: 'Languages are learned, not as forming in themselves a part of erudition or wisdom, but as being the means by which we may acquire knowledge and may impart it to others ... for it is men we are preparing, not parrots' (Comenius, 1910/1967: 203; Keatinge, transl.). We are not educating parrots. We are educating human beings and we must engage them - heart, mind, body and spirit. We must allow students to see the beauty and wonder of language; we must help them see that it is connected to their lives; that language has meaning and purpose for their existence and it has mystery.

Language is unique to our species. It is mysterious and beautiful and complex. And as the Nobel Prize nominee Kenneth Pike (1972) wrote, language identifies us,

Language directs and guides. Language should be used to help people express their personalities. Language identifies person. Language identifies us [...]. Language concentrates life's memories, truths and joys. It expresses them, and guides them, and concentrates them [...]. Words are like that [...] they concentrate truth and joys. (1972: 309-310)

David Smith, British scholar and professor of German, puts it this way: 'Starting, after all, from the premise that they [students] are not machines, not docile information-processing mechanisms, but living images, shaping, misshaping and reshaping themselves' (2007: 47). Because I teach at a pedagogical university and because I am teaching future language teachers I decided to find out what these future language teachers think about the LI theory and how belief or disbelief in it impacts, if at all, their approach to language teaching.

SURVEY OF LITHUANIAN ENGLISH PHILOLOGY STUDENTS (GRADUATE AND UNDERGRADUATE)

I wanted to know what the attitudes of Lithuanian students about the Language Instinct were. Fifty six students participated in the survey. They were studying to be teachers of English as well as translators. All 56 are polyglots (speaking three or more languages). Ten were graduate students and the remaining 46 were fourth year students. Five were Turk students and the remainder were Lithuanian. Of those surveyed, 92 percent said they believed in a Language Instinct. Only five out of 56 said they absolutely did not believe in a LI. Nearly 88 percent said that if they could tap into the LI, it might help their students learn languages better, but they were not certain that it would. While over 12 percent said that even if there was a LI, it would not impact their students' learning of language. Nearly 100 percent agreed that language is not purely for function and yet when asked if language is 'just for practical purposes', nearly 70 percent said they believed it was. While students did agree that language is beautiful (72 percent), they hesitated to agree that it is either mysterious or miraculous (16 percent and less than 20 percent respectively). Clearly this is not an in-depth study, but I think that these results can be generalized, at least in the nation of Lithuania. Students look at language teaching as a job and not much more than that. It is my opinion that student attitudes about language are greatly influenced by the university curriculum that sees language as merely functional and has not exposed students to the concept that there is a language instinct and that language is what makes

us human. Perhaps, if students were introduced to the concepts that language is innate, that it is a gift to humankind and that it is in our very nature to communicate, perhaps this would influence the students' worldview of language and even enhance their approaches to teaching. Of course, further research must be done, but I think the idea of language being inborn might help lead students of philology to become true 'lovers of language' and perhaps better teachers of language.

LANGUAGE AS MERELY A TOOL

Non-generativist approaches to language want to reduce language to merely a utensil. Everett (2012: xi) writes about language as 'an instrument created by hominids to satisfy their social need for meaning and communication'. Everett thinks of language as simply a device and describes it much like a stick that a chimp uses to dig for insects. According to Sampson (2005) and Kirby (2010) language is a tool developed by human beings in the course of evolution for the sole purpose of advancing and preserving the species. It seems that those who oppose a generativist view of language want to reduce language to merely a gizmo of man's creation - learned, culturally adapted, and inorganic. They investigate and research language as if it is not intertwined in our very human existence; separating it from the very human nature where language resides. Amputating language from the human soul and reducing it to an 'other' function annihilates the sui generis of this beautiful, unique, mysterious gift that belongs to human kind and no other species.

In fact, I believe reducing the human gift of language to mere tool status is like saying the Mona Lisa is simply a painting or that Bach knew how to play the organ. These statements are true, but they grossly neglect the dimensionality of the Mona Lisa and Bach. The Mona Lisa, as well as Bach's creativity, are so much more than those statements. The Mona Lisa is not *just* a painting. It is a moving, powerful, inspiring piece of art that actually changed the way people view art. The vagueness of her smile and the distinctive realism of the painting were innovative traits that have contributed to the art world since its unveiling. It has been called, 'the most magnificent, almost living work of art in the world' (1932: 45). Dylan Thomas writes,

Bach is best of all composers. Throughout Bach's long life, his achievement was staggering and is astounding in its size and ambition, and it is replete with masterpieces – works that stand like the peaks of a huge mountain range. Once you hear Bach you begin a journey of almost limitless reward. (Thomas, 1954: 91)

For any of us that have held a new born baby in our arms or struggled to say our last good byes to a loved one who is slipping into the darkness of death we know that language is much more than a tool. To classify it so is to take the heart

and soul and spirit out of man. It is to take that which is sacred and unique and powerful and cast it off as insignificant and common place. Reducing language – any language whether it is one's first language, second or third foreign language – to merely a device takes the exquisite sanctity out of language.

So why do we worry about language preservation if it is only a tool? Does it matter if a language is about to go extinct? Like any instrument, has it simply outlived its usefulness?

And if language is merely a tool, and humans are merely learning to use the instrument, then this reduces us to mere technicians. And technicians are more concerned with the mastering and refining of information than they are with challenging and influencing students and in turn 'transforming many of the basic cultural institutions and belief systems' (Purpel, 1989: 3).

If we fall into the trap of reducing our teaching to technical output, then we miss our main objective. Teaching any language without reflection on what it means to be human reduces the beauty and purpose of education to simply the technical. It reduces us to mere technicians.

CONCLUSION

Thoughts are expressed by language. Helen Keller is evidence that thoughts, actions, feelings, emotions, ideas, the human will – all of these are innate in our mind, innate in our human brain and language is the unique gift we use to communicate them. Language expresses the soul. Language is not commonplace. It is powerful. It is beautiful. It is effective. It is terrible. It is magical. It is enduring. It is identity.

So, why should any of us care if there is a genetic predisposition of our race to language? Because we are linguists, because many of us, including myself, are teachers of language. And teaching language and studying language means that we are doing something uniquely human.

- Language is strictly a human endeavor.
- Language teaching is unique to our species.
- The idea of teaching communication through language is an exclusively human concept.
- Language is one of the most significant aspects of what it means to be human.

Pike proposed that '[l] anguage directs and guides' (1972: 309) and that language should be used to help people express their personalities, their identities, express memories, truths and joy.

Are we mere matter? I say we must be more. We have longings and desires; we have wounds and agonies. We fight wars not just to survive or for food or for dominance, but for freedom and for values. How many of us remember

the warmth of a grandmother's touch or the heartbreak of a lover's words of departure – these are not survival instincts, these are human instincts that separate us from the rest of the animal kingdom and, yes, elevate us.

For our teaching, for our institutions to have an impact on our culture and society we must teach for transformation and transformation can never look at any subject, especially language, as merely technical; as simply a tool; as simply a mechanical instrument.

In closing, I want to use this illustration: vocabulary and specific language is not inborn, but the capacity to acquire language and use it creatively seems to be inborn. Noam Chomsky calls this ability the LAD (Language Acquisition Device). So I would like to propose that the LI works like this:

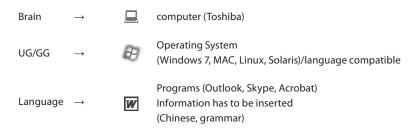


Figure 1 Model of how the language instinct works (T. McCarthy).

Perhaps, the innateness of language will continue to be debated among linguistic scholars and other cognitive scientists. The demand for empirical research and scientific evidence has been met by today's technology and new research in the field. Humankind seems to be constantly looking for the answer to what it means to be truly human. Significantly, the very object that makes us human is the very thing that allows us to investigate the question; for without language how could we as a species ever discover the answer? As Poythress writes, 'Language is not an alien imposition on the world but the very key to its being and its meaning' (2009: 24).

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APPENDIX 1

SURVEY SAMPLE

MA Students' and LTA 4th Year Students' Survey Vilnius Pedagogical University, Lithuania Department of English Philology

- 1. How long have you studied English?
- 2. What other languages do you know, including your Mother tongue?
- 3. I will be a teacher of English.
- 4. I will be a translator of English.
- 5. I believe language is instinctive.
- 6. I think I know the origin of language.
- 7. It is important to me to know the origin of language.
- 8. To me any language (foreign or Mother tongue) is:
 - Functional
 - Beautiful
 - Necessary
 - Practical
 - Mysterious
 - Miraculous
 - Important
 - Purely for function
 - Interesting
- 9. I do not think about the origin of languages.
- 10. I do not care about the origin of languages.
- 11. The origin of languages is not important.
- 12. If I could tap into the language instinct I would be a better language teacher.
- 13. There is no language instinct.
- 14. Universal Grammar is familiar to me.
- 15. Universal Grammar is vitally significant.
- 16. Universal Grammar is a fallacy (fairytale).

APPENDIX 2

SURVEY RESULTS

Research on English Philology Students (Graduate and Undergraduate) Attitudes about the Language Instinct

Participants:	56 students studying to be teachers/translators of the English language
Languages:	All are polyglots (speaking 3 or more languages)
Ranking:	10 graduate students
	46 fourth-year students
Nationality:	5 Turk students and the remainder are Lithuanian
Results	1) Beliefs about a Language Instinct:
	a) 52/56 believe in a LI (92%)
	b) 5/56 do not believe in a LI (8 %)
	2) Application:
	a) 49/56 said that if they could tap into a LI, it might help their students learn language (87.5%)
	b) 7/56 said even if there was a LI, it would not help their students learn language better (12.5%)
	3) Beliefs about Universal Grammar:
	UG is false; it does not exist:
	a) 10/56 – agree (18%)
	b) 46/56 – do not agree (82%)
	4) Language (1st/foreign) is purely for function:
	a) 1/56 agrees
	b) 55/56 (98%) disagree
	5) Language is just for practical purposes
	a) 39/56 (69%) agree
	6) Language is not just for practical purposes
	a) 15/56 (27.5%) agree
	b) 2/56 were not sure (3.5%) maybe yes/no
	7) Language is beautiful, mysterious, miraculous
	a) NONE of the above – 12/56 (21.4%) agree
	b) Beautiful – 40/56 (71.4%)
	c) Mysterious – 9/56 (16%)
	d) Miraculous – 12/56 (21.4%)

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