Journal of Conscious Evolution

Volume 16 Articles from an Art and Consciousness Class

Article 6

11-7-2020

An Exploration of Linguistic Relativity Theory for Consideration of Terence McKenna's "Stoned Ape Theory" on the Origins of Consciousness and Language: Implications for Language Pedagogy

Nicole Lopez California Institute of Integral Studies

Follow this and additional works at: https://digitalcommons.ciis.edu/cejournal

Part of the Clinical Psychology Commons, Cognition and Perception Commons, Cognitive Psychology Commons, Critical and Cultural Studies Commons, Family, Life Course, and Society Commons, Gender, Race, Sexuality, and Ethnicity in Communication Commons, Liberal Studies Commons, Social and Cultural Anthropology Commons, Social and Philosophical Foundations of Education Commons, Social Psychology Commons, Sociology of Culture Commons, Sociology of Religion Commons, and the Transpersonal Psychology Commons

Recommended Citation

Lopez, Nicole (2020) "An Exploration of Linguistic Relativity Theory for Consideration of Terence McKenna's "Stoned Ape Theory" on the Origins of Consciousness and Language: Implications for Language Pedagogy," *Journal of Conscious Evolution*: Vol. 16, Article 6. Available at: https://digitalcommons.ciis.edu/cejournal/vol16/iss1/6

This Article is brought to you for free and open access by the Journals and Newsletters at Digital Commons @ CIIS. It has been accepted for inclusion in Journal of Conscious Evolution by an authorized editor of Digital Commons @ CIIS. For more information, please contact ksundin@ciis.edu.

An Exploration of Linguistic Relativity Theory for Consideration of Terence McKenna's "Stoned Ape Theory" on the Origins of Consciousness and Language: Implications for Language Pedagogy

Nicole Lopez¹

California Institute of Integral Studies

Abstract: The "linguistic turn" from the early 20th century created a shift in the ontological underpinnings of various disciplines within the social sciences. Several key figures asserted that much of what we think of as reality is constructed based on a system of social institution that we call *language*. Language shifted to becoming a fundamental aspect of the ontological realities within a given discipline in the social sciences. Most significant to my understanding of the relationship between language, its origins, and the emergence of higher forms of human consciousness is Terence McKenna's *Stoned Ape Theory*. In this article, an exploration of McKenna's theory will be addressed as it relates to the emergence of human language and consciousness while including a brief introduction to linguistic relativity in order to demonstrate how many great thinkers and scholars reasoned that language has indeed shaped our worldview. Finally, a reflection on the implications of McKenna's theory be deemed worthy of in-depth consideration within the field of Consciousness Studies as it seems to offer a valuable lens to the current discourse on consciousness.

Keywords: Entheogens, human evolution, consciousness, linguistics, language pedagogy

Introduction

There are some fundamental questions about the human predicament that have puzzled great thinkers since the dawn of time. Why do we exist? How did life begin? Is there only one reality? However, even more interesting is how humans evolved from an archaic state of consciousness with no evidence of language, writing, art, or mythology to a highly sophisticated cosmology and linguistic systems that envelop both transactional and sacred forms of communication. Terence McKenna's theory on the origin of consciousness and language offers a look into the "real missing link" as it relates to the gap in the human evolutionary record. He argues a very convincing case for consciousness and language as an emergent property. Through food scarcity and dietary changes, the archaic man (precursor to the modern human) discovered an abundance of entheogens, primarily *Stropharia cubensisic* (Psilocybin also known as "magic mushrooms")

¹ Correspondence - NLopez@mymail.ciis.edu

which was the catalyst that gave rise to modern man as we know today. Additionally, when examining the linear and nonlinear *cultural* ontologies that followed, there is an interesting argument that attributes this to brain functions of the left and right hemispheres and Broca's area within the neocortex of the brain. The argument for entheogenic origins of consciousness can be found among many Indigenous and ancient cultures around the world. Furthermore, the idea that brain functions of the left and right hemispheres have shaped holistic worldviews found in many partnership models of society (as opposed to dominator models of society as proposed by Riane Eisler [1987] in her book *The Chalice and the Blade*) is supported by both the *strong* and *weak* versions of linguistic relativity theory, whose credit is attributed to Edward Sapir and Benjamin Whorf and inspired by Albert Einstein's theory of General Relativity.

Integrating Linguistic Relativity Theory for Consideration of Terence McKenna's *Stoned Ape Theory* on the Origins of Consciousness and Language

Thinking about human evolution ultimately means thinking about the evolution of human consciousness. What, then, are the origins of the human mind? (McKenna, 1992, p.18)

What is Linguistic Relativity Theory?

While varying in degree and depth, strong versus weak, linguistic relativity hypothesizes that the structure and meaning of a language determines, influences, or shapes its speakers' worldview or cognition. Thus, an individual's perception of reality is relative to their language. Since its inception, linguistic relativity theory has been revisited throughout history. Commonly and yet inadequately referred to as the Sapir-Whorf hypothesis, it has made its way through several academic fields from philosophy, psychology, and cognitive sciences to anthropology. Because the theory refuses to lay dormant and whose early proponents (Benajamin Lee Whorf and Edward Sapir) both drew from Albert Einstein's breakthrough theory of General Relativity, various theories have been formulated throughout history about the degree to which language shapes thoughts and reality. This theory holds great significance when examining the origins of language according to McKenna because it sets the foundation of our very own ancestral lineage as a species. The distinction about whether language "shapes/molds" thinking or simply "reflects/mirrors" our thinking is the essence of the debate within linguistic relativity theory.

What is the Origin of Language?

According to American philosopher John Searle (1978) of the University of Berkeley, the discipline of the Philosophy of Language concerns itself as "a subject matter within philosophy" addressing problems such as, "how do words relate to reality? What is the nature of meaning? What is truth? (Philosophy Overdose, 1978). Kierkegaard argued that the future of philosophy should move forward with a "conscious focus on language" (Kanu, 2012) due to the significant role that language plays on cognition. The shift in the future of philosophy was called the "linguistic turn" and came to dominate the circles of analytic philosophy. It is important to note that inquiry into the origins of language has dominated much of the history of philosophy within the Euro-Western tradition with roots dating back to the 5th century by thinkers such as Plato, Socrates, Aristotle, and the Stoics. In our most recent history, Glotlob Frege and his seminal paper, *On Sense and Nominatum* (1892), influenced the work of Bertrand Russell, whose writings, *On*

Denoting (1905), not only influence the philosophy of language but also the field of Semantics. Ludwig Wittgenstein, who has made a significant impact in my understanding of language and reality through his seminal work, *Tractatus Logico-Philosophicus* (1921), wrestled with the nature and origins of language in such a way that his work became a pivotal piece in shaping the direction of important thinkers such as Peter Strawson, *On Referring* (1950), Saul Kripke, *On Naming and Necessity* (1980), Alfred Tarski, *Theory of Truth* (1935), and John Searle, *Indirect Speech Acts* (1979). Willard Van Orman Quine, *Word and Object* (1960), Jacques Derrida, *Of Grammatology* (1967), and semioticians Charles Peirce, *On Signs* (1991) and Ferdinand de Saussure, *Course in General Linguistics* (1916), have all eloquently and painfully plunged in to the depths of the language phenomenon but yet none have argued a case on the origins of language as persuasively as Terence McKenna, *Food of the Gods* (1992).

What is Consciousness?

In *Consciousness Studies: An Overview*, Combs (2016), relates the discipline of physics as a modern influence to our current understanding of the field of Consciousness when he states that in 1931, Max Planck observed the phenomenon of "consciousness as fundamental. I regard matter as a derivative from consciousness. We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing, postulates consciousness" (p.10). Since consciousness is not a thing and can be attributed to as experience, according to Baruss (2009), there are three particular ways or perspectives for thinking about consciousness: physiological, cognitive and experiential (p.5). Furthermore, since "the meaning seems rather impossible to conceptualize" (p.7), Baruss (2009) describes it as "a feeling of existence associated with being oneself that accompanies the contents of one's experience" further clarifying that this feeling of being is "a precursor for the possibility of there being any experience at all" (p.7). This "precursor for the possibility of experience" is what interests me. Did self-reflection and higher ontological awareness exist within the early *Hominid* prior to the *Homo sapien*? We have no record of this.

Although, it would appear that consciousness (as viewed also in Plato's Realm of Forms) is an objective process or experience, it seems to only be accessed and understood subjectively. Even the attempt to experience one's "Self" objectively, even in an altered state of consciousness, is still nevertheless a subjective experience. Therefore, in a dialogue between Gregory Bateson and his daughter Mary Catherine Bateson, Combs (2016), illustrates how even the choice to be objective still renders subjective and concludes that all experience is subjective (p.59). How did ancient worldviews and cosmologies emerge within such a rapid evolutionary time frame from modern man's precursor? For this reason, I argue that consciousness, as the awareness of being, cannot be fully explored if one has not been willing to venture into the realm of shamanism, entheogenic research, and Indigenous epistemologies stretching as far as back as antiquity.

As I write, I think of what Alfred North Whitehead said about understanding, that it is *apperception* of pattern as such. This is also a perfectly acceptable definition of consciousness. Awareness of pattern conveys the feeling that attends understanding. There presumably can be no limit to how much consciousness a species can acquire, since understanding is not a finite project with an imaginable conclusion, but rather a stance toward immediate experience. This appears self-evident from within a world view that sees consciousness as analogous to a source of light. The more powerful the light, the greater the surface area of darkness revealed. Consciousness is the moment-to-moment integration of the individual's perception of the world. How well, one could almost say how gracefully, an individual accomplishes this integration determines that individual's unique adaptive response to existence. (McKenna, 1992, p.31)

Terence McKenna, American Ethnobotanist and author of *Food of the Gods* (1992)



Figure 1. Ramos, T. [Terence McKenna: Artists are the Way- Ep.156], 2018. Retrieved May 9, 2020, from <u>http://www.arthouse43.com/arthouseradio/2018/12/8/terence-mckenna-artists-are-the-way-ep-156</u>

What I think happened is that in the world of prehistory all religion was experiential, and it was based on the pursuit of ecstasy through plants. And at some time, very early, a group interposed itself between people and direct experience of the 'other'. This created hierarchies, priesthoods, theological systems, castes, rituals, and taboos. Shamanism, on the other hand, is an experiential science that deals with an area where we know nothing. It is important to remember that our epistemological tools have developed very unevenly in the West. We know a tremendous amount about what is going on in the heart of the atom, but we know absolutely nothing about the nature of the mind. (1992, p.242)

McKenna's theory of evolutionary adaptation posits that food scarcity led to the discovery of entheogenic substances which allowed for self-reflection of the human condition and higher forms of consciousness. The key areas of his theory will be addressed as they relate to language and consciousness which are: human evolution, food scarcity, the "missing link", the appearance of archaic art and writing, and shamanism as the gateway to the origins of language.

Human Evolution



Figure 2. Observation Deck [image of the missing link according to evolutionary theory], n.d. Retrieved May 8, 2020, from <u>https://observationdeck.kinja.com/evolution-101-the-missing-link-faq-1528464011</u>

Throughout the course of human evolution, some thoughtful observers have questioned the scenario that physical anthropologists present us. Evolution in higher animals takes a long time to occur, operating in time spans of rarely less than a million years and more often in tens of millions of years. But the emergence of modern humans from the higher primates-with the enormous changes effected in brain size and behavior-transpired in fewer than three million years. Physically, in the last 100,000 years, we have apparently changed very little. (McKenna, 1992, p.17)

Given that the absence of a theoretical model is evident and explanations about the missing link are rarely accounted for, McKenna (1992) argues that because we lack evidence for the evolution of the upright posture and expansion into a grassland niche of the early hominid (p.17), it is most likely that this transition and migration was the result of food scarcity.

Food Scarcity

The strategy of the early hominid omnivores was to eat everything that seemed food-like and to vomit whatever was unpalatable. Plants, insects, and small animals found edible by this method were then inculcated into their diet. A changing diet or an omnivorous diet means exposure to an ever-shifting chemical equilibrium. An organism may regulate this chemical input through internal processes but, ultimately, mutagenic influences will increase and a greater than usual number of genetically variant individuals will be offered up to the process of natural selection. The results of this natural selection are accelerated changes in neural organization, states of consciousness, and behavior. No change is permanent, each gives way to yet another. (McKenna, 1992, p.18)

The discovery of entheogenic plants led to a dietary regularity due to the abundant nature of their habitat and the cognitive benefits that ensued. Visual acuity in low dosage aided in survival and increased hunting skill, an expanded awareness and sense of community, and a heightened awareness of the interdependence and interconnectedness of all things contributed to the development of tribal societies. As a result, it can be argued that the cosmologies that resulted in the ancient world were the primary consequence of entheogenic ingestion.

The Missing Link



Figure 3. Du, A. (n.d). [New Study Reveals How Our Brain Evolved to be so Amazingly Huge]. Mcrae, M. (2018). Retrieved May 8, 2020, from <u>https://www.sciencealert.com/increased-endocranial-volumes-human-ancestors-evolved-gradually</u>

"Because scientists were unable to explain this tripling of the human brain size in so short a span of evolutionary time, some of the early primate paleontologists and evolutionary theorists predicted and searched for evidence of transitional skeletons. Today the idea of a "missing link" has largely been abandoned. Bipedalism, binocular vision, the opposable thumb, the throwing arm-all have been put forth as the key ingredient in the mix that caused self-reflecting humans to crystallize out of the caldron of competing hominid types and strategies. Yet all we really know is that the shift in brain size was accompanied by remarkable changes in the social organization of the hominids. They became users of tools, fire, and language. They began the process as higher animals and emerged from it 100,000 years ago as conscious, self-aware individuals." (McKenna, 1992, p.19)

There are many ideas about how this could have happened. From genetic hybridization to traditional Lamarckian views. However, none can account for the rapid shift or the sudden emergence of evidence of higher forms of consciousness through the appearance of art, written language, mythologies, and highly organized societies.

Appearance of Archaic Art and Writing



Figure 4. Piper, A. photograph. [Detail, bull and mushroom pictographs from The Selva Pascuala mural, Villar del Humo cultural site in Cuenca, Spain],n.d. Retrieved May 7, 2020, from <u>http://en.psilosophy.info/a</u> prehistoric mural in spain depicting neur



Figure 5. Wikipedia. [Comparative evolution from pictograms to abstract shapes, in Mesopotamian cuneiforms, Egyptian hieroglyphs and Chinese characters], n.d. Retrieved May 12, 2020, from <u>https://en.wikipedia.org/wiki/Writing system</u>

Visual acuity, language use, and ritual activity through the use of psilocybin represented new behaviors. One of these new behaviors, language use, previously only a marginally important trait, was suddenly very useful in the context of new hunting and gathering lifestyles. Hence psilocybin inclusion in the diet shifted the parameters of human behavior in favor of patterns of activity that promoted increased language; acquisition of language led to more vocabulary and an expanded memory capacity. The psilocybin-using individuals evolved epigenetic rules or cultural forms that enabled them to survive and reproduce better than other individuals. Eventually the more successful epigenetically based styles of behavior spread through the populations along with the genes that reinforce them. (McKenna, 1992, p.20)

It is this emergent property of behavioral patterns that can be uniquely attributed to entheogenic usage in ways that no other theory can account for. From the everyday modes of survival, hunting and gathering, a keenness and sensitivity to one's environment would naturally contribute to better functioning of tribal behavior. This sensitivity to the ecology of the system resulted in an

integration of spirit, the animal world, a deep respect for the living and non-living, and for the essence of mankind's existence.

Shamanic Origins of Language



Figure 6. Kabil, A. [Still from María Sabina — Spirit Woman, 1978], 2017. Retrieved May 12, 2020, from <u>https://timeline.com/with-the-help-of-a-bank-executive-this-mexican-medicine-woman-hipped-america-to-magic-mushrooms-c41f866bbf37</u>

Language is an ecstatic activity of signification. Intoxicated by the mushrooms, the fluency, the ease, the aptness of expression one becomes capable of are such that one is astounded by the words that issue forth from the contact of the intention of articulation with the matter of experience. The spontaneity the mushrooms liberate is not only perceptual, but linguistic. For the shaman, it is as if existence were uttering itself through him. (Munn, 1973)

A primary example that tends to be given within the debate of linguistic relativity is the Hopi language. The Hopi have no past or future concepts or tense aspects, therefore how can their world be like ours (McKenna, 1992, p.13)? Additionally, the Inuit have no first person pronoun (I), consequently, how can the egoic concept of "self" exist in their world? This is a key aspect I have discovered as a language educator. English learners from Saudi Arabia have a very difficult time with using complex and abstract forms of time that are found in the English language. For example, the *present perfect continuous* (At 3:00, I will have been writing for ten hours) is a time concept that does not exist in Arabic. Furthermore, English learners who are native Chinese speakers find it very challenging to know when to use articles (a, an, the) *and* verb changes because these two grammatical concepts do not exist in Chinese. Common sense assumes that, though languages are always evolving, the raw stuff of what language expresses is relatively constant and common to all humans (p.12), yet from these examples we can conclude that this is clearly not the case. Maybe there is something profound we can learn about the diversity of human thinking. Moreover, much of what we try to understand about "others" languages is understood from a Western paradigm.

From the perspective of the discipline of linguistics, "the grammars of languages and their internal rules have been carefully and systematically studied and yet not enough attention has been given to the careful examination of how language creates and defines the limits of reality" (p.12). Our human environment is conditioned by biological and physical constraints and also the social constructs put into place by symbols and language. Our entire ontological framework is conditioned by meaning, which, according to McKenna, ultimately lies in the collective mind of the group (1992, p.15).

Language as Magic



Figure 7. Grey, A. [The Visionary Origin of Language]. 1991-98. Retrieved September 27, 2020, from <u>https://www.alexgrey.com/art/paintings/soul/alex_grey_the_visionary_origin_of_language</u>

Perhaps language is more properly understood when thought of as magic, for it is the implicit position of magic that the world is made of language. If language is accepted as the primary datum of knowing, then we in the West have been sadly misled. Only shamanic approaches will be able to give us answers to the questions we find most interesting: who are we, where did we come from, and toward what fate do we move? These questions have never been more important than today. (McKenna, 1992, p.12)

The novel concept of language as magic is worth examining because when experience is embodied, the act of articulation renders a whole other mechanism at play. Forcing an utterance to concretize the experience and then transferring this experience to another, thus creating meaning of the utterance, is truly a magical occurrence. It is the "word" that gave birth to life, to existence. It was sound that has been attributed to the formation of the human experience according to many cultures around the world.

From the Sacred to the Transactional



Figure 8. ["Holy Cows"- India], n.d. Retrieved May 17, 2020 from https://www.pinterest.co.kr/pin/493073859188025972/"

The first encounters between hominids and psilocybin-containing mushrooms may have predated the domestication of cattle in Africa by a million years or more. And during this million-year period, the mushrooms were not only gathered and eaten but probably also achieved the status of a cult. But domestication of wild cattle, a great step in human cultural evolution, by bringing humans into greater proximity to cattle, also entailed increased contact with the mushrooms, because these mushrooms grow only in the dung of cattle. As a result, the human-mushroom interspecies codependency was enhanced and deepened. It was at this time that religious ritual, calendar making, and natural magic came into their own. (McKenna, 1992, p.17)

Cattle worship is found throughout all of antiquity and many reasons for the veneration of cattle have been given. In India and Egypt specifically, not only did cattle represent fertility and the embodied Divine, but also provided a key component in their spiritual practices beyond the symbolic. The entheogenic substance found in the dung of the Zebu cattle is commonly known as *Psilocybe cubensis* and has been known throughout the ancient world in China, Thailand, Mexico, Algeria, Central and South America among other places. Over time, cattle not only served for religious purposes but also agricultural, which is of great importance to agrarian societies and even today in modern times.



Figure 9. [Apis, the living bull-God of Memphis], 2016, Retrieved May 10, 2020 from https://templeofathena.wordpress.com/2016/08/18/god-of-the-month-club-apis-the-living-bull-god-of-egypt/

Language and Worldview

Languages appear invisible to the people who speak them, yet they create the fabric of reality for their users. The problem of mistaking language for reality in the everyday world is only too well known. Plant use is an example of a complex language of chemical and social interactions. Yet most of us are unaware of the effects of plants on ourselves and our reality, partly because we have forgotten that plants have always mediated the human cultural relationship to the world at large. (McKenna, 1992, p.15)

In considering that McKenna makes a strong case for the influence that plants have had on shaping human consciousness, and specifically language, it is difficult to refute linguistic relativity as a viable framework for language and worldview. The degree of influence is what is questionable but it seems rather obvious when observing various cultures around the world and how their languages interpret the world around them. If language is integral to culture, then linear and non-linear functions of the brain can offer another lens in viewing how culture and language have shaped more holistic societies found among Indigenous and ancient cultures.

Language and the Brain

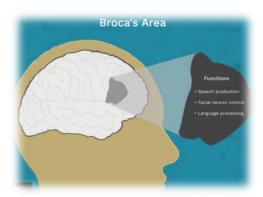


Figure 10. Bailey, R. [Discover the mysteries of Broca's area and speech: the parts of the brain that work together for language processing], 2020. Image by Ferster, G. Retrieved May 10, 2020, from <u>https://www.thoughtco.com/brocas-area-anatomy-373215</u>

Our language-forming ability may have become active through the mutagenic influence of hallucinogens working directly on organelles that are concerned with the processing and generation of signals. These neural substructures are found in various portions of the brain, such Broca's area, that govern speech formation. In other words, opening the valve that limits consciousness forces utterance, almost as if the word is a concretion of meaning previously felt but left unarticulated. This active impulse to speak, the *going forth of the word*, is sensed and described in the cosmogonies of many peoples. (McKenna, 1992, p.32)

Given that Broca's Area and the neocortex are the most recently evolved areas of the human brain, it is no surprise that they are responsible for the control of symbol and language processing. Cultures with highly sophisticated writing systems, such as hieroglyphs and traditional Chinese, contain a linguistic capacity that differs from the West. The neural structures within Broca's area and the neocortex "are concerned with conceptualization, visualization, signification, and association are highly developed in our species" (McKenna, 1992, p.32), however as a learner of both of the mentioned ancient systems of writing, symbolism, signification, conceptualization, and phonology function under unique processes that differ from languages where letters mean nothing and are constructed for phonetic awareness. It seems very logical that language and its writing systems had to emerge in a highly signified and integral manner. If we are to consider McKenna's theory as it relates to entheogenic use and shamanism as the gateway to highly specialized manifestations of evolved consciousness such as language, art, and religion, then symbolism and utterance hold an even greater significance than the West can comprehend.

Through Language We Have Shaped Our Reality

Our unique and feverish love of word and symbol has given us a collective gnosis, a collective understanding of ourselves and our world that has survived throughout history until very recent times. This collective gnosis lies behind the faith of earlier centuries in "universal truths" and common human values. Ideologies can be thought of as meaning-defined environments. They are invisible, yet they surround us and determine for us, though we may never realize it, what we should think about ourselves and reality. Indeed they define for us what we can think. (McKenna, 1992, p.30)

As the world is actively shifting its paradigm to one that encompasses our global reality today, the need for socio-ecological frameworks that seek to find patterns, connections, relationships, and novelty are of great significance for finding solutions to complex problems. As a language educator and learner, the experience I draw innately validates complexity theory as a foundational

theoretical framework for understanding the variability within the world of language use and development.

Research Inquiry and Reflection



Figure 11. Lopez, N. [Teaching symbols, meaning, and culture for communication: English as a Second Language Teacher, 2013present], 2019.

In conclusion, if language is, indeed, a complex adaptive system that emerged from entheogenic plant sources and is culture-dependent, contributing to the shaping of ontological realities and worldview, what can be said for research in adult language acquisition? By imposing colonial languages onto subjugated peoples, the West has systematically orchestrated the destruction of the vast epistemological foundations of truth about the very questions that guide the sciences such as, why do we exist? How did life begin? Is there only one reality?

With the propagation of linguistic imperialism and English language education policies, the human species is evolving into a unified global entity that eventually will share the same ontological reality of what is. While a unified language has great advantages for the sharing of knowledge and community, it also cuts off our unique ancestral heritages and ways of seeing the world. As a research inquirer, I have situated myself as a language educator who is fascinated by the deeper layers of language and consciousness. Why do adults shift in identity and self-perception when learning a second language? Can self-actualization be realized in a second language? Can prayer be authentic in an unknown language? For example, Muslims around the world are required to recite the Qu'ran and pray in Arabic yet do not speak or understand the language. How can prayer then be authentic? What is happening in each system of a language learning environment that either contributes or inhibits acquisition? Where is the body in all of this? Is there a somatic element missing from this complex dynamic system?

A paradigm shift is also occurring within the field of Applied Linguistics. Its sub-field, Second Language Acquisition (SLA) has now experienced the emergence of a complex systems perspective as a solid position on language learning and teaching (Ortega & Han, 2017, p.2). The article *Research Methodology on Language Development from a Complex Systems Perspective* is a consideration "of ways to research language development" by adopting complexity theory as its framework due to the nature of language use and development with the hopes of the creation of a "new ontology" (2008, p.200). This new ontology must shift from the Western traditional

Cartesian lens (Lafleur, 1950) to an integrative and holistic lens that encompasses all variables that contribute to how we understand language. From Eastern and Western paradigms, as well as plants, shamanism, and other ways of knowing we will obtain a more complete picture of this fascinating phenomenon. We must consider the significance of language not only for humankind but also every other species existing within our ecosystem with which we share interdependence and relationship.

References

Baruss, I. (2009): Alterations of consciousness. Washington D.C: APA Publications.

- Björkman, L., Wedeen, L. & Hawkesworth, M. (2019). Interpretive methods. American Political Science Association Organized Section for Qualitative and Multi-Method Research. Working Group Final Reports. Report III.2
- Combs, A. (2002). The radiance of being. St. Paul, MN: Paragon House.
- Combs, A. (2010). Consciousness explained Better. St. Paul, MN: Paragon House.
- Combs, A. (2016). Consciousness studies An overview. *CONSCIOUSNESS: Ideas and Research for the Twenty First Century, 1* (3).
- Combs, A. (2016). Consciousness: The damnedest thing- A young person's guide to the roots of experience. *Cosmos and History: The Journal of Natural and Social Philosophy*, 12 (2).
- Freeman, D. L., & Cameron, L. (2008). Research methodology on language development from a complex systems perspective. *The Modern Language Journal*, 92(2), 200–213.
- Kanu, A. (2012). The role of language in the socio-political philosophy of John Locke. *International Journal of Humanities & Social Science*, 2(14).
- Laufleur, L. (1950). Discourse on method [translation]. The Liberal Arts Press. Retrieved from <u>https://laulima.hawaii.edu/access/content/user/ppatters/scanned%20primaries/Descarte%</u> 20Discourse%20on%20Method%20img_0005.pdf
- McKenna, T.K. (1992). Food of the gods: The search for the original tree of knowledge- a radical history of plants, drugs, and human evolution. New York: Bantam Books.
- Munn, H. (1973). "The mushrooms of language" in Harner, M. (1973). Hallucinogens and Shamanism, Oxford: Oxford University Press.
- Ortega, L. & Han, Z. (2017). *Complexity theory and language development: In celebration of Diane Larsen-Freeman.* Philadelphia: John Benjamins.
- Philosophy Overdose. (1978). The Philosophy of Language with John Searle [Video file]. Retreived from <u>https://www.youtube.com/watch?v=SMA1G6Mb0Y0&vl=en</u>

De Saussure, F. (1959). Bally, Charles; Sechehaye, Albert (eds.). Course in general linguistics (PDF). Translated by Wade Baskin. New York: The Philosophical Library.

Image References

Figure 1. Ramos, T. [Terence McKenna: Artists are the Way- Ep.156], 2018. Retrieved May 9, 2020, from <u>http://www.arthouse43.com/arthouseradio/2018/12/8/terence-mckenna-artists-are-the-way-ep-156</u>

Figure 2. Observation Deck [image of the missing link according to evolutionary theory], n.d. Retrieved May 8, 2020, from <u>https://observationdeck.kinja.com/evolution-101-the-missing-link-faq-1528464011</u>

Figure 3. Du, A. (n.d). [New Study Reveals How Our Brain Evolved to be so Amazingly Huge]. Mcrae, M. (2018). Retrieved May 8, 2020, from <u>https://www.sciencealert.com/increased-endocranial-volumes-human-ancestors-evolved-gradually</u>

Figure 4. Piper, A. photograph. [Detail, bull and mushroom pictographs from The Selva Pascuala mural, Villar del Humo cultural site in Cuenca, Spain],n.d. Retrieved May 7, 2020, from <u>http://en.psilosophy.info/a_prehistoric_mural_in_spain_depicting_neur</u>

Figure 5. Wikipedia. [Comparative evolution from pictograms to abstract shapes, in Mesopotamian cuneiforms, Egyptian hieroglyphs and Chinese characters], n.d. Retrieved May 12, 2020, from https://en.wikipedia.org/wiki/Writing_system

Figure 6. Kabil, A. [Still from María Sabina — Spirit Woman, 1978], 2017. Retrieved May 12, 2020, from <u>https://timeline.com/with-the-help-of-a-bank-executive-this-mexican-medicine-woman-hipped-america-to-magic-mushrooms-c41f866bbf37</u>

Figure 7. Grey, A. [The Visionary Origin of Language]. 1991-98. Retrieved September 27, 2020, from

https://www.alexgrey.com/art/paintings/soul/alex_grey_the_visionary_origin_of_language

Figure 9. [Apis, the living bull-God of Memphis], 2016, Retrieved May 10, 2020 from <u>https://templeofathena.wordpress.com/2016/08/18/god-of-the-month-club-apis-the-living-bull-god-of-egypt/</u>

Figure 10. Bailey, R. [Discover the mysteries of Broca's area and speech: the parts of the brain that work together for language processing], 2020. Image by Ferster, G. Retrieved May 10, 2020, from <u>https://www.thoughtco.com/brocas-area-anatomy-373215</u>

Figure 11. Lopez, N. [Teaching symbols, meaning, and culture for communication: English as a Second Language Teacher, 2013-present], 2019.