



Journal of Arts & Humanities

Volume 08, Issue 09, 2019: 100-110

Article Received: 08-09-2019

Accepted: 29-09-2019

Available Online: 02-10-2019

ISSN: 2167-9045 (Print), 2167-9053 (Online)

DOI: <http://dx.doi.org/10.18533/journal.v8i9.1737>

Communion and the Evolution of Human Language

Zhongxin Dai¹, Jun Liu²

ABSTRACT

The past two decades has witnessed some revival of controversy revolving around the issue of human language evolution, leading to the emergence of two schools of thought: the biolinguistic school and the sociocultural school. The former maintains that the human faculty of language is characterized by the innate recursion which stems from the neurobiological foundation of language. The latter argues that it is the social communication that accounts for the evolution of human language. This article attempts to scrutinize the beginning point of human language evolution and production, the “communicative notion” (blended as “communion”), within human social communication, and explore therein human language faculty of recursion with respect to the infinite hierarchical structures of human language. Human language, as a tool of serving to express human communication, has evolved for what is to be expressed and communicated, and developed from and with the communion, the notional entity that our ancestors had in mind at the moment of social communication and tried desperately to express. The crucial transition from the non-verbal communion to verbal expression has long been ignored in linguistics. This article argues that human language has evolved for, from and with the communion of humans. As the target to be expressed, the well-structured elements of the communion eventually wed with vocal sounds and give birth to the “verbal notion” --- a binary code for human language. Human language develops with the development of the communion in the course of serving the purpose of expressing it with the vocal sounds. The human faculty of language with respect to the innate and creative recursion of the infinite hierarchical structures is in reality the faculty of the verbal manifestation of the hierarchically structured elements of the communion.

Keywords: Communion, communication, language evolution, verbal notion.

This is an open access article under Creative Commons Attribution 4.0 License.

1. Introduction

The past two decades has witnessed a growing interest in the investigation of human language evolution. Two schools of thought can be easily identified. One school, led by Chomsky and his

1 Professor, School of Foreign Languages, Guangdong University of Science and Technology, Dongguan 523668, China. Email: zhongxindai@126.com

2 Associate professor, School of Foreign Languages, Guangdong University of Science and Technology, Dongguan 523668, China. Email: liuj59@126.com

colleagues (e.g. Hauser et al., 2002; Berwick & Chomsky, 2016, 2017; Chomsky 2017; Everaert et al., 2017; Yang et al., 2017), is committed to the biolinguistic perspective, trying to detect every evidence possible for the innateness and basic properties of human recursion faculty, which, they argue, is critical in human language faculty. The other, represented by David-Barrett & Dunbar (2016), Corballis (2017a, 2017b), Steels (2017) and others, is dedicated to the sociocultural perspective, arguing that human language, acting as a coordinating tool between group members, originated in, from, and for human social communication.

Chomsky (2017) claims that the human faculty of language is a biological system, and we should construct accounts of the faculty as “a biological object, internal to an individual, with particular internal languages – I-languages in current terminology – as manifestations of FL (faculty of language).” The basic property of the faculty of language is its capacity to provide “the means for a language to yield a digitally infinite array of hierarchically structured expressions with systemic interpretations at the interfaces with two other internal systems, the sensorimotor system for externalization and the conceptual system for inference, interpretation, planning, organization of action, and the other elements of what is informally called ‘thought’.” “The general approach to language adopting these guidelines has come to be called the biolinguistic program. The fundamental task of the study of language is to capture the very basic property of human faculty of language.

Corballis (2017a, 2017b) argues that language can be viewed as a device for sharing thoughts and experiences rather than as a vehicle for the mental contents themselves, and that the idea that human language appeared suddenly and uniquely in humans as a byproduct for human social communication runs counter to the theory of evolution, which implies that the evolution of complex structures is incremental. He believes that human language derives from mental processes with gradual evolutionary trajectories, which enable humans to communicate the mental experiences along with knowledge gained from them.

The whole issue of human language evolution seems to center on two points. One is the human faculty of recursion in the evolution and production process of human language, and the other is the human social communication where human language is supposed to originate. A challenging task for further investigation is to present a complete and plausible scenario where human ancestors could have been compelled and impelled to create a symbolic tool that could function in social communication, and where the alleged basic property of the faculty of language can be detected and identified in the developmental and shaping process of the communicative idea or notion, henceforth referred to as communion, a conception formulated by Dai (2019).

In this article, we argue, mainly from the sociocultural perspective, that human language originated from the communion, something that was kindled in the mind of humans and that they were impelled (“selective pressure” in the theory of evolution) to communicate with each other in the course of social labor. The term “labor” used here means social and collective activities of work. The very point at the outset of the social communication of both animals and humans is the sudden emergence of the “communion” when a communicator recognizes a communicative situation. For instance, when a husband sees his wife, he talks with her about the gift they are going to buy; when he sees his boss, he discusses his unfinished work; when your pet dog sees you come home, he pleases you for food. The communion is whatever occurs in the speaker’s mind that is to be communicated to the intended listener in the process of communication. It becomes the target of vocal or gestural expression under the pressure of anxiety and keenness for external explicit expression.

It can be metaphorically called the “seed” or “gene” of human language, and its verbalization or “transcription” via repeated verbal expression eventually makes the two elements fused into the “verbal notion”, the binary code for human language evolution. The verbalization of the communion is influenced by intra-notional (the function and structure of the elements in the notion) or extra-notional (the social and cultural conventions on the transcription of the communion) factors. As the “gene” of human language, the communion contains the designing instructions or messages for the materialization and development of human language.

The toolness of the verbal expression lies in its usefulness and serviceability for the unity of the goal aimed at while humans begin to utilize it. If the verbal expression is viewed as an intended tool for the materialization and verbalization of the communion, then it suggests that other primates

undoubtedly have been incapable of evolving anything like human language since this tool, much more intangible, complex and flexible than the physical and tangible tools for the solution of problems in the external world, serves the purpose of expressing the intended communion in the internal mental world.

In what follows, we first discuss the approaches to the investigation of human language evolution, attempting to argue for the legitimacy of the sociocultural perspective on the evolution of human language. This argument naturally leads to the question of how human language evolved from human sociocultural communication. The answer to this question is that human sociocultural communication impels and prompts humans to develop communion, and that it is the evolution and verbalization of the communion that underpins the human evolution. In the fourth part, we elaborate on the development of human language from the initial point of human communion. The hierarchical syntactic structures of human languages were evolved from the genotypic hierarchical structures of the elements of the communion, plus development of the conventional observable phenotypic properties of particular human languages created in the course of the communicative use of the different languages. The fifth part addresses the concept of “verbal notion,” the merger of language and notion through mental association between vocal sounds and notional elements in the communion.

2. On the approaches to human language evolution

In a recent exchange of letters between Everaert et al. (2017) and Corballis (2017b), Everaert et al. identifies two approaches to the investigation into human language evolution. One is from the past to the present, and the other from the present to the past. They propose the latter, from investigation into the established properties of the phenotype of language to the search for otherwise speculative historical unknowns, and disapprove of the alternative used by Corballis. They state clearly that the nature of the human language phenotype is not communication, and argue that “communication in the sense of transfer of propositional meaning is facilitated by language, and that our manipulation of meaning is systematic and relies on an ingrained ability to recognize structure in language. They point out that Corballis has overlooked the fact that meaning builds on a computational system that is sensitive to structural factors leading to hierarchical structure.

Corballis contends that human language is increasingly regarded as a device for communicating thought rather than as thought itself, with the structure of thought emerging gradually according to neo-Darwinian principles, and that there is a connection between spatiotemporal imagination and grammar because language evolved primarily as a means of communicating about the nonpresent, with the property of displacement providing “the road into language.”

In order to resolve the dispute over the evolution of human language, it is necessary to pinpoint their respective argument. One of the key concepts that is repeatedly stressed in the literature of the authors from the biolinguistic school is the term “recursion,” which actually refers to the ability to yield an unbounded array of hierarchically structured expressions, permitting infinite use of finite means (Everaert et al., 2015; Berwick & Chomsky, 2016). The concept is introduced to highlight the underlying human faculty of the finite-infinite phenomenon.

If evidence can be found to prove that humans demonstrate the faculty of recursion in all their activities, it means that this faculty of humans is not language-specific. If researchers can show that the superficial operation of hierarchically structured language is actually the operation of the communion, which is developed from the social communication, then the identity of language in the traditional sense would be questioned.

Just because human language and human faculty of language are unique to humans, it does not necessarily follow that human language or human faculty of language themselves are biological or language-specific. Human culture is largely the creation of humans, and we do not attribute it to humans’ biological foundation. The process of the creation of the language tool is, in nature, the same as that of any other human tool in that humans resort to a third party for the solution of an urgent problem they encounter. The uniqueness of human language to other tools lies in that the problem they meet this time is not in the outside physical world, but in the internal mental and psychological world.

Inquiry into the evolution of human language entails the inquiry into the human faculty of tool making and use. The uniqueness of the human faculty of the language tool making and use lies in the faculty of humans to resort to a third party to solve the urgent problem of expressing the mental ideas and psychological feelings under the pressure of social communication, collectively called the “communion,” paired with vocal sounds or gestures to form a tool for communication. In some situations (e.g. foraging), animals also demonstrate the capacity to make and use tools (Sanz et al., 2009; Auersperg et al., 2012), but their ecological niches have confined them from further evolution and accordingly lacks the selective pressure to form societies to arrange social labor. It is social labor that necessitates tool making and use (Engels, 1876). It is also social labor that necessitates the creation of language for social communication. Investigation into the evolution of human language should be directed to the historical period in human evolution when “the men in the making” were forced to communicate with each other. The study of the evolution of human language should follow the principle of evolution: No pressure, no selection and no evolution.

This is the sociocultural perspective approach this article adopts, starting from the emergence of communion to the creation of verbal expression.

3. On the communion

There is no significant difference between the basic views in the recent publications of the biolinguistic school and those held more than 50 years ago, when Chomsky (1965) introduced the concept of “linguistic competence.” For over 50 years, he has never seriously illuminated the ontology and relationship of the three elements: the sensorimotor system, the recursion and the thought. Logically, it seems legitimate to start the inquiry into the human faculty of language from the “thought”, which, phylogenetically, the humans were motivated to create a language tool to express, and, ontogenetically, an infant is impelled to show to the adults around and learn to express in hierarchically structured symbols.

When, more than 140 years ago, discussing the part played by labor in the transition from ape to man, Engels (1876) attributed the need for language to the social communication in labor. Labor is not only the source of all wealth, but it created man himself. Our simian ancestors were gregarious. They were the most social of all animals. The development of labor necessarily helped to bring the members of society closer together by increasing cases of mutual support and joint activity, and by making clear the advantage of this joint activity to each individual. “In short, men in the making arrived at the point where they had something to say to each other (emphasis in the original text). Necessity created the organ; the undeveloped larynx of the ape was slowly but surely transformed by modulation to produce constantly more developed modulation, and the organs of the mouth gradually learned to pronounce one articulate sound after another.”

Engels made it clear that man himself was the product of labor, more exactly the by-product of labor. Labor was not intended to create man himself. Man did not even intend to labor. The intention of labor came from the necessity for survival and existence. With the development of labor, the members of the society were brought closer together as they came to realize the advantage of joint activity. At this stage of human evolution, men in the making arrived at the point where “they had something to say to each other.” This part of the sentence was italicized by Engels himself in his thesis. The reason for the emphasis might be that this was the critical point when and where human language began to evolve.

Then what is the SOMETHING that the men in the making had to “say” to each other. Here quotation marks are put to the word “say” as it is clear that they could not say by using vocal sound at this point of time. More exactly, they have something that they “want to express.” This is the urgent problem the men in the making faced and that was needed to be solved immediately. This SOMETHING is also the very thing that impels a child to express in the process of communication with adults, and the very thing that lingers in the mind of each and every one of us, the evolved human beings, desperately begging for a means to get expressed.

When discussing the relationship between thought and speech, Vygotsky (1986: 251) made a vivid description of the heterogeneous relation between the communion and linguistic expression:

Thought, unlike speech, does not consist of separate units. When I wish to communicate the thought that today I saw a barefoot boy in a blue shirt running down the street, I do not see every item separately: the boy, the shirt, its blue color, his running, the absence of shoes. I conceive of all this in one thought, but put it into separate words. Speaker often takes several minutes to disclose one thought. In his mind the whole thought is present at once, but in speech it has to be developed successively. A thought may be compared to a cloud shedding a shower of words. Precisely because thought does not have its automatic counterpart in words, the transition from thought to word leads through meaning. In our speech, there is always the hidden thought, the subtext. Because a direct transition from thought to word is impossible, there have always been laments about the inexpressibility of thought.

It is not difficult for us to see the identical nature of the “something” in the mind of the men in the making, the “thought” that Vygotsky wishes to communicate, and the “notion” that a child has in mind before he can speak and that sometimes causes him to cry for an adult to do something for him due to lack of means of verbal expression. The “something,” the “thought” and the “notion” are what the term “communion” means in this article. It is a mental non-verbal entity (in the sense that it is something real in our mind, no matter where it is stored) that one feels impelled to get it out by means of external explicit expression. The anxiety caused by the lack or devoidness of an expressing tool becomes the pressure for a detour effort to resort to a third party. The usefulness of vocal sounds or gestures becomes the intended target for the creation of the expressing tool.

When we metaphorically compare the communion to the “seed” or “gene” of human language, we mean that it contains the blueprint message for the design of all the basic properties of human language. In order to elucidate this point, we shall consider again the social situation described by Engels, where the men in the making had something to say to each other. Suppose that some of them had seen some lions chasing some deer. Any type of primates could keep this scene in mind if they happened to experience it. Let’s suppose that one or some of the men wanted to tell it to some others who had not seen it. The “something” in the mind of the men could be expressed by demonstration of physical movement or by simple pictures drawn on the ground, of course, undeniably accompanied by sounds produced from the vocal organs. The human capacity of producing sound or crying by virtue of the respiratory tract might have evolved earlier than their capacity of language (Oller et al., 2013). When uncomfortable, unattended, or hungry, infants would cry. It is quite natural that when the men had something to say to each other, but could not find any means to do it, they resorted to the vocal sounds.

Our ancestors were intelligent enough to follow the universal principle of “pragmatic values,” or “values of usefulness.” According to Frings (2003), pragmatic values are those values of something that are used to help judge whether it is useful or not. These values occur with the use of things and tools. We also share these values with animals. Humans are different from other animals in that humans have more pressure from their living environment to make and use tools. With the pressure caused by the expression of the communion in the process of social communication, the men in the making felt impelled to select a better tool for the expression of the communion. The principle of pragmatic values is: whatever turns out to be useful is adopted, and whatever turns out to be not useful is discarded. The pressure of the selection of an expressing tool for the communion and the human faculty of pragmatic values combined together eventually resulted in the selection of sounds produced from the respiratory tract as the tool of expression for the communion. Once the sounds from the respiratory tract were selected and directed at resolving the problem of expressing the communion, the communion and the vocal sounds are merged or fused to “verbal notion,” and the realization of the verbal notion in vocal form becomes the verbal expression, which is composed of meaning and form, or “signified” and “signifier” termed by Saussure (1983).

Both humans and animals can keep experience in mind, and both have the faculty of exercising the pragmatic values. Then why have animals not developed anything like humans’ language. The memory of the experienced scene alone cannot constitute the pressure for language. The pressure for language comes with the communion, which in turn comes from the desperate intention anxiety to communicate. Engels (1876) stated that “the little that even the most highly-developed animals need to communicate to each other does not require articulate speech.” “In its natural state, no animal feels handicapped by its inability to speak or to understand human speech. It is quite different when it has

been tamed by man. The dog and the horse, by association with man, have developed such a good ear for articulate speech that they easily learn to understand any language within their range of concept.” Hence, there are two factors that affect the development of the communion: the personal experience that determines what to express, and the intended goal of communication which shapes the pressure for communication.

With this interpretation of the issue of “why” and “what” in the study of human language evolution, we shall turn to the issue of “how.” The communion is the message about the experience gained from the interaction with the outside world, which the speaker intends to share with others. In human experience, things unveil their own nature to humans. In the case of the lions chasing the deer, humans came to know what “lions”, “deer” and “chase” were by experiencing the event, even though they did not have names for them. It is much easier to conceive things in experience. A child knows what a table, a spoon, chopsticks, a bowl and bread are by experiencing them once. Infants know what things are by understanding their value, i.e. by knowing what they are used for. The knowing of what the things they have experienced are also means the knowing of the relationship between them and the attributes attached to them. All the things are “on” the table, the rice is “in” the bowl, and the spoon is used to put the rice in the mouth.

The hierarchical structures of human language claimed by the biolinguistic school are in fact the structures of things in human experience, or more exactly the structures of things in the communion when the intention occurs at the presence of social communication. Human conception of things is always situated in the event that engages them. Therefore, the formation and development of human concepts are always situated in and based upon human experience. The communion “a group of lions are chasing a group of deer” is an episode of an event from the experience of humans. In this episode, the “lions” are the ones doing the chasing, and the “deer” are the ones being chased. From their own experience, humans must have known the meaning of the chasing-and-being-chased event. From that moment on, they knew that there existed among them something like lions which could chase something like deer. Although they did not have names for them, they had already “known” these animals, as the “lions” and “deer” had different appearances, different body shapes, and different roles in the chasing-and-being-chased relationship.

The scene is ubiquitous; the experience is ubiquitous; and the communion is ubiquitous. If there is anything universal, it is the relation between the elements in the communion. All kinds of Homo sapiens lived in the same world; all experienced similar episodes in the world; all faced the similar social situations in labor where they were impelled to communicate “something” with each other; and all had similar communions. The scene in the outside world, the personal experience of the scene, and the communion shaped in the mind under the pressure of communication are identical. The identity transition from the physical scene to the mental notional entity accomplishes the task of displacement, one of the critical design features of human language.

It can be imagined that with the increase of social communication, different communions would become the targets of verbal expression, and specific concepts would be cut off from the integrated whole of the communion and become discrete and distinct concepts. These concepts were situated in the net of the relations between the elements in the communion and in the attributes of things. For instance, the lions have different features from deer. They are large, have yellow fur and long hair; the deer have long legs, and eat grass. The lions are the chasers and deer are the chased.

When linguists analyze the syntax of a particular language, they do it from the surface structure to the deep structure, especially in the study of syntax in Chomskyan tradition, but they rarely reverse the analytical process and ask why and how the communion comes up. Only when we go beyond the description of the linguistic features to the interpretation of the syntactic structures and the meanings these structures are used to express, can we have a better understanding of the evolution of human language, as human language has evolved from the communion and all basic structures stem from the communion. Evans (2009) formulates a theory (called LCCM theory, the theory of Lexical Concepts and Cognitive Models) for the meaning construction of words. The meaning of a word comes from its lexical concept, which resides in the cognitive model of personal experience.

4. On the development of human language

Phylogenetically, once humans developed the mechanism of consciousness and intentionality to direct the tool of the vocal sounds at the communion in the hope of expressing it, they were well on their way to the evolution and development of their language. Ontogenetically, once a child develops the consciousness and intentionality to direct his vocal sounds at his communion, he is well on his way to his language development.

Here the consciousness and intentionality are used to mean that human beings consciously, intentionally and purposefully utilize the toolness of vocal sounds to represent the intended communion. We are conscious of the directedness or reference of the vocal sounds produced through our deliberate operation of our speech organs. The process of the evolution of this mechanism of consciousness and intentionality might be slow, but with increasing cases of social communication, the mechanism would certainly take shape in due time.

Human language was born with, from and for the communion. The first function of language is its referential function. The vocal sounds are intended and designed to signify the communion, and the moment the communion is signified by the vocal sounds, the sounds become the verbal expression. The desire and anxiety for clear articulation and elaboration of the communion impel humans to cognitively and functionally disjoint the communion. As a result of this process, two basic components in the communion of “lions chasing deer” might be separated and marked out by two signifiers, say, the sound “la” for the lions and “di” for the “deer.” These two things are obviously the most prominent and salient in the scene. The verb “chase” might have developed later, as the meanings of actions are more difficult to grasp. Just like children learning a language, the first words they learned are usually nouns, names for people or things. In actual fact, all words are nouns of names. When we distinguish between such grammatical terms (parts of speech) as nouns, verbs, adjectives, and prepositions, we actually refer to the semantic or functional aspects of the names. For instance, when we teach language, we often resort to demonstrations which provide access to the learner’s experience. We often say, this is called “chase”, and this is called “above” or “in”. So in nature, the vocal sounds are symbolic names for the elements in the communion. The vocal sounds have only one function, i.e. the symbolic function.

On the one hand, the evolution of human language proceeds with development of the consciousness and intentionality to aim the vocal sound or gestural movement at the communion, and with the increasing dissection of the communion. On the other hand, human language is a created tool of humans and its development must have taken on cultural and conventional features. These features manifest themselves not only in the dissection of the communion (e.g. different conceptions), but also in the sequential order of the basic elements in the communion and rules for the connection of the discrete parts dissected from the communion.

The relationships between the elements in the communion are universal, but the realization of the verbalization of the communion is conventional or culture-specific. One language might have a particular word for a concept, but another might not. For instance, Chinese has special words for the father’s brother and mother’s brother, but English has one word “uncle” for both and more relations. As for the example of the “white board eraser” in Everaert et al. (2017), the ambiguity of the phrase cannot occur in Chinese, where the word “eraser” cannot be separated from the word “board”. If the intended expression is “the white-board eraser,” then in Chinese, it should be “the white-board board-eraser.” One language might be characterized by the sentence order of Subject-Verb-Object (using the traditional grammatical terms), but another might have a Subject-Object-Verb order, or a Verb-Object-Subject order. Different cultures might have developed different means for the joints between components of the communion. In English, agreement in number is required when we say “some lions are chasing some deer.” The ending “s” indicates plurality, but “deer” without “s” also indicates plurality. The verb form “are” is in agreement with the plural form of “lions”. All these conventional rules are not the basic properties of human language. They are particular properties of particular languages.

It is legitimate to assume that different particular languages would develop different phonological, semantic, morphological and grammatical conventions. Moreover, they would develop different rules for the joints between components of the communion, rules for rhetorical devices, rules for the writing system, and even rules for a whole piece of writing like those for sonnets in English

and the special-style poetry of the Song Dynasty in China. Like any other tools in human culture --- buildings, furniture, paintings, and even music, the development of language tools would also go beyond basic functions to their superficial elaborated decorations for the sake of beauty, appreciation, and even entertainment.

Therefore, the traditionally called grammatical structures can be addressed from two perspectives: the notional perspective and the conventional perspective. The notional perspective sees the structures from the relationships of the elements of the communion; and the conventional perspective perceives the structures from the conventional rules for the materialization of the communion.

Again, let's take Vygotsky's example: I experienced an event in the street today, and at this moment I wish to communicate what I saw to you, the reader, with whom I feel impelled to share. At this very moment, I have developed the communion. It is now being suspended in my conscious mind, and my intentionality is being targeted and directed to the suspended communion, which is basically a mental visual image, and can be roughly rendered in English: "Today I saw a barefoot boy in a blue shirt running down the street." To me, the whole communion occurs to my mind all at once, but due to the linear nature of the vocal sounds, I have to deliberately arrange the components of the communion according to the notional structure which is conventionalized in English. It will take quite a while for me to verbalize my communion in English. (I can also render it into Chinese, my native language). Based upon the notional structure of the communion, I can render the image into one English sentence: "Today I saw a barefoot boy in a blue shirt running down the street." Or I can put it into several sentences: "I saw a boy today. He was barefoot. He wore a blue shirt. He was running down the street." Also I can use different wording or phrases: "a boy running barefoot in the street", or "a boy running barefoot down the street," or "a barefoot boy who was running as fast as he could along the street."

Furthermore, if you ask me to tell more about the event, I can provide you with more information as to the specific location of the event, the specific time, the circumstances, etc. For instance, the exact location is "in front of the supermarket where my father lost his bicycle a month ago;" the specific time is "about three o'clock in the afternoon when I was going home after my lecture;" the circumstance is "all the vehicles had stopped at the crossroad, and many pedestrians were watching." I can also tell you more about the boy. If all these can be rendered into one English sentence, it can be very complex sentence, and, in theory, it can be digitally infinite, but they are hierarchical structured. This is the so-called Basic Property of the human faculty of language by the biolinguistic school.

Chomsky (2002: Preface) claimed in his seminal work *Syntactic Structures* that his Transformational model for linguistic structures is more powerful than other models, and can account for such relations between sentences as the active-passive relation. The communion model for the analysis of the structures of human language is much stronger than his model. It can be applied not only to the account of the active-passive relations, but also to the interpretation of such relations between sentences as the relation between a compound sentence and a group of simple sentences, of the relations across modalities between vocal and gestural languages, of the relations between different human languages (the so-called Universal Grammar), and of the basic properties of human faculty of language, the hierarchy and recursion of human language.

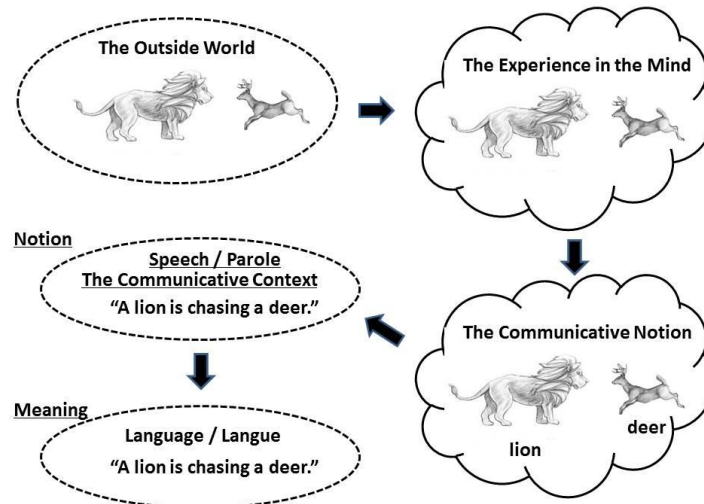
5. On the verbal notion

The verbal notion is a merger of language and notion through the mental association between vocal sounds and notional elements (construed and carved out from the human experience and presented in the communion). The verbalization of the communion ensues from the conceptualization of the communion. For instance, in our research (this is a special kind of social activity or labor), we perceived something and conceived it as something special, which we want to share with others. We named it "recursion." The word "recursion" originally refers to something in our experience, then to an element in our communion when we express it in our language production. As a result of the co-emergence of the elements in the communion and the vocal sounds to express them, mental associations between them are established through frequency effects (Behrens &

Pfänder, 2016), leading to the merged verbal notion, where the vocal sounds and the elements in the communion cannot be consciously disassociated. Whenever one occurs, the other appears with it.

A verbal notion may consist of several words, which together form the communion, but it can be a single word. A single word verbal notion is also a communion. The meaning of a word is different from the meaning of the one-word communion. The concept of word meaning belongs to “language” in its abstract conventional sense, but the meaning of a communion belongs to “speech,” which has a concrete and contextual meaning, expressing the speaker’s intention for communication.

The developmental process of the verbal notion can be graphically illustrated as follows:



In my conceptualization, the term “meaning” refers to the content of a vocal form (or vocal forms), or the concept(s) defined in dictionaries. The term “notion” refers to the message the speaker intends to express to a listener in a certain context of communication. A communion always carries the speaker’s certain intention with which he conducts the verbal communication. The meaning of a lion: a large wild animal of the cat family with yellowish brown fur which lives in Africa and southern Asia, and the communion of “Lion!” (note: a one-word sentence) might mean that “the thing called ‘lion’ is approaching us, let’s hide.”

Vocal sounds express the communion through the meaning of the concepts the sounds symbolize. The verbal notion is a binary code created through the mental association between the vocal sound and the concept in the communion, plus the intentional message. The intentional message can only be understood in the context of social communication. Through increased cases of communication, the mental association between the two facets becomes so strong that whenever the communion occurs, the names of the vocal sounds attached to the elements of the communion appear with it. This automatic feature and the cognitive habit of the conventional syntactic features combined together form the intuition of the language. The well-known example of “colorless green ideas sleep furiously” given by Chomsky (2002: 15) is in reality the speaker’s syntactic knowledge gained through repetition of the English syntactic pattern of the communion. Where Chomsky claims that “the notion ‘grammatical’ cannot be identified with ‘meaningful’ or ‘significant’ in any semantic sense,” every word in the sentence and every suffix are actually meaningful. They are authentic English words and they are ordered according to the convention of the English sentence patterns. This feature of the automation of language production belongs to the cognitive or sensorimotor habits.

6. Conclusion

The study of the evolution of human language is undoubtedly historical and should be conducted with reference to the source of communion. The word “evolution” implies the unrolling and developmental process of things. Hence, inquiry into language evolution should start with search for the mechanisms that underlie the operation of language use and learning, and trace the origin of these mechanisms with the evolution of humans themselves. Comparison with the existing explanations of the origin of language, this explanation is the only correct one. Human language is

experiential and mental, possessing the nature and quality of toolness. Comparative studies with animals and biolinguistic explorations can only serve as complements to this research, since animals have not yet developed to the stage of making and using intangible tools on a regular basis, and the biolinguistic aspect could not have been developed before the mental mechanisms of communion. The nature of the electric light does not exist in the nature of electricity or the nature of the electrical wires. Likewise, the nature of human language does not exist in the nature of the neurosciences.

The study of the evolution of human language from the perspective of the communion and the binary code, “the verbal notion,” opens up new research avenues for investigation into other language-related issues. For instance, the issues concerning the comparative approach to the evolution of human language, the nature of human language, child language development, second language acquisition, and, more specifically, the critical period for language learning, to name but a few.

References

- Auersperg, A. M. I., Szabo, B., von Bayern, A. M. P., & Kacelnik, A. (2012). Spontaneous innovation in tool manufacture and use in a Goffin's cockatoo. *Current Biology*, 22, 903-904.
- Behrens, H., & Pfänder, S. (eds). (2016). *Experience Counts: Frequency Effects in Language*. Berlin/Boston: De Gruyter, Inc.
- Berwick, R. C., & Chomsky, N. (2016). *Why Only Us: Language and Evolution*. Cambridge: The MIT Press.
- Berwick, R. C., & Chomsky, N. (2017). Why only us: Recent questions and answers. *Journal of Neurolinguistics*, 43, 166-177.
- Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge: MIT Press.
- Chomsky, N. (2002). *Syntactic Structures* (Second Edition with an Introduction by David W. Lightfoot). Berlin, New York: Mouton de Gruyter.
- Chomsky, N. (2017). Language architecture and its import for evolution. *Neuroscience and Biobehavioral Reviews*, 81, 295-300.
- Corballis, M. C. (2017a). Language evolution: A changing perspective. *Trends in Cognitive Sciences*, 21 (4), 229-236.
- Corballis, M. C. (2017b). Leaps of faith: A reply to Everaert et al. *Trends in Cognitive Sciences*, 21 (8), 571-572.
- Dai, Z. 2019. Theory of communion and the evolution of Chinese syntactic properties. *Advances in Social Sciences Research Journal*, 6 (3): 329-349. doi: 10.14738/assrj.63.6346.
- David-Barrett, T., & Dunbar, R. (2016). Language as a coordination tool evolves slowly. *Royal Society Open Science*, 3 (12), 1-10. doi:10.1098/rsos.160259.
- Engels, F. (1876). *The Part Played by Labour in the Transition from Ape to Man*. Retrieved from <https://www.marxists.org/archive/marx/works/1876/part-played-labour/>
- Evans, v. (2009). *How Words Mean: Lexical Concepts, Cognitive Models, and Meaning Construction*. Oxford: Oxford University Press.
- Everaert, M. B. H., Huybregts, M. A. C., Berwick, R. C., Chomsky, N., Tattersall, I., Moro, A. & Bolhuis, J. J. (2017). What is language and how could it have evolved? *Trends in Cognitive Sciences*, 21 (8), 569-571.
- Everaert, M. B. H., Huybregts, M. A. C., Chomsky, N.; Berwick, R. C., & Bolhuis, J. J. (2015). Structures, not strings: Linguistics as part of the cognitive sciences. *Trends in Cognitive Sciences*, 19 (12), 729-743. doi: 10.1016/j.tics.2015.09.008.
- Frings, M. S. (2003). *Lifetime: Max Scheler's Philosophy of Time: A First Inquiry and Presentation*. Dordrecht, Netherlands: Springer Science + Business Media B. V.
- 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, 1569-1579. doi: 10.1126/science.298.5598.
- Oller, D. K., Buder, E. H., Ramsdell, H. L., Warlaumont, A. S., Chorna, L., & Bakeman, R. (2013). Functional flexibility of infant vocalization and the emergence of language. *Proceedings of the National Academy of Sciences of the United States of America*, 110(16), 6318-23.
- Sanz, C., Call, J., & Morgan, D. (2009). Design complexity in the tool use of chimpanzees (*Pan troglodytes*) in the Congo basin. *Biology Letters*, 5, 293-296.

- Saussure, F. de (1983). *Course in General Linguistics*, edited by Charles Bally and Albert Sechehaye with the collaboration of Albert Riedlinger (Roy Harris, Trans.), London: Gerald Duckworth & Co. Ltd. (Original work published 1916).
- Steels, L. (2017). Human language is a culturally evolving system. *Psychonomic Bulletin & Review*, 24 (1), 190-193. doi: 10.3758/s13423-016-1086-6.
- Vygotsky, L. S. (1986). *Thought and Language* (newly revised and edited by Alex Kozulin). Cambridge, Mass. Massachusetts Institute of Technology Press.
- Yang, C., Crain., S., Berwick, R. C., Chomsky, N., & Bolhuis, J. J. (2017). The growth of language: Universal Grammar, experience, and principles of computation. *Neuroscience and Biobehavioral Reviews*, 81, 103–119.