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Two views on language ecology and ecolinguistics

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ABSTRACT

It is shown that the definition of the subject area of Haugenian ecolinguistics is methodologically inconsistent because of the implicit biomorphic metaphor, the language myth, and indiscrimination between the two different approaches to language known as cognitive internalism and cognitive externalism. A more consistent definition of language ecology is given, based on the biology of cognition as a theory of the living; consequently, the subject area of ecolinguistics is defined differently, with a focus on the nature and function of language as a mode of organization of the living system (society) and its role in the development of the brain, mind, and (self-)consciousness.

1. An epistemological turn

Historically, culturally, and developmentally, language is prior to science. Moreover, science itself is a construct of language, because scientists impose their language on what they assume is there to be named by that language (Harris, 2005); this, in effect, undermines science's presumption of objectivity and definitiveness (Damasio, 1994). In the case of language studies, when linguists try to explain language with the help of the very same language, the subjectivity of such explanations only grows. By adopting Saussure's maxim of synchronicity and describing language as an autonomous system of signs devoid of any previous history, traditional linguistics commits the error of overlooking the fact that, evolutionarily, language as a functional behavioral feature of humans has an *emergent architecture*[1] (Deacon, 2005) which cannot be understood outside the domain of biological organization.

Biologically, a human is a linguistic organism (Deacon, 1997; Jennings and Thompson, 2012). Failure to realize that language is a biological phenomenon is, probably, one of the reasons why the millennia-long study of language has not produced any remarkable effects on human life compared to the achievements in physics, chemistry, biology, or computer science. While the "hard" sciences have applications that have dramatically changed the way humans live, linguistics cannot boast of having had a similar impact. True, language studies in some literate cultures have led to the emergence of "linguistic correctness" doctrines (cf. Leonard, 1962) which may affect certain aspects of life for the people who don't speak or write proper, diminishing the degree of their social adaptation. But a doctrine as a specific ideology differs from scientific facts grounded in empirical evidence; moreover, becoming a dogma, it may impede scientific progress, averting the attention of researchers from really important issues – as in the case with theoretical linguistics aptly described by Talbot Taylor (1997) as "an

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[1] "Language has an emergent architecture to the extent that its structure is a product of spontaneous bottom-up self-organizing interactions, not top-down imposition of structure or constraint by any pre-existing template. This requires conceiving of basic linguistic units as differentiated end-products of a cognitive process rather than as fundamental atoms of analysis" (Deacon, 2005: 274).

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academically enshrined linguistic science which takes as its data a decontextualized, historical, and autonomous product, ignoring the voluntary, contextualized actions of individual agents in producing that data" (p. 149).

It may be argued that, just because of ongoing debate in academic language study about what its epistemological foundations should be, there isn't a unified discipline called "linguistics", but a range of linguistic subfields such as psycholinguistics, sociolinguistics, anthropolinguistics, ethnolinguistics, neurolinguistics, cognitive linguistics, and the like. As suggested by the first part in the name, these disciplines focus on particular aspects of language deemed important in understanding its nature and function. Yet these disciplines do not essentially differ in viewing language as a kind of tool, the use of which is specified or affected by a certain factor highlighted in the name of the discipline. Taken together, they clearly indicate that a really scientific study of language is impossible without addressing the various aspects of humanness. In other words, if we want to understand language as a phenomenon, we must realize that it is something uniquely characteristic of the human species as a socially organized living system made up of individual organisms. However, much of linguistic science practiced today is a set of beliefs, sanctioned by long tradition, about what it is to "do linguistics". As observed by Don Ross (2007), the domain of linguistics "is both the most transparent site of traditional errors about human peculiarity, and – for much the same reason – provides an ideal perspective from which to diagnose and correct those errors" (p. 2).

It is a commonplace to observe that the big is best seen from a distance. The ousting of the ideology of holism from scientific research, and the persisting reliance on analytical methods have led to an extreme fragmentation of our knowledge of the world and language as a specific domain of human existence in this world which sets humans radically apart from all other known biological species. In biology, the more complex the level at which one seeks to explain a living system, the greater the need to examine the network of interactions that lie behind the genome (Cornish-Bowden and Cárdenas, 2001). As emphasized by Cornish-Bowden et al. (2004: 716), "the fact that a complex network of interactions connect genes to phenotypes emphasizes the idea that only through the understanding of the whole can we understand the function of the parts". And just because humans are linguistic organisms, to understand language as a whole language sciences must address the issue of its *biological function*—otherwise detailed analyses of small portions of so-called 'linguistic data' aimed at discovering underlying patterns, regularities or causes, may cloud our understanding rather than help it (Kravchenko, 2015a).

However, in traditional studies of language as a sign system used for communication, the question about the biological function of language does not seem to be of priority—perhaps because, as observed by Dennett (1996: vii), "finding better questions to ask, and breaking old habits and traditions of asking, is a very difficult part of the grand human project of understanding ourselves and our world". Overlooking the fact that humans are a biological species, and whatever unique features they possess must be explained from the point of view of biology as "the mother of all diversity" (Givón, 2009), linguistics often misconstrues its object of study by reifying language (cf. Pennycook, 2008). One could speak of a widely accepted *reification doctrine* — the view of language as something external to humans as cognizing agents, a thing or a tool (a code) used to transfer thoughts from one head to another. As an epistemological assumption, it underlies the ideology of education in the Western culture and goes hand in hand with the view of language as a means of communication, a kind of tool used to exchange information, knowledge, thoughts, etc. (for a critique, see: Kravchenko, 2007a; 2015b).

The reification fallacy is also an essential feature of *biolinguistics* (cf. Jenkins, 2000) as a theoretical extension of Chomsky's earlier ideas about the so-called 'language faculty', or 'language organ' that grows and develops naturally in the biologically normal individual on the basis of limited external linguistic input (cf. Anderson and Lightfoot, 2002). While what generativists say about language faculty as an evolutionarily conditioned genetic endowment of humans may be not such a wild shot, one cannot help being skeptical about their claims — which Postal (2004) describes as 'wide off the mark' — that generative grammar studies biology on the grounds that language is a 'mental organ'. As Everett (2005) sarcastically observes,

> [I]f Anderson & Lightfoot are correct, Chomsky deserves the Nobel Prize in Medicine, for single-handedly re-opening the apparently moribund science of anatomy and discovering an organ of the human body which has been overlooked in the history of studies of the human body. (page 160 ff)

Although biolinguistics claims to deal with the biological foundations of human language, its identification with internalist and essentialist accounts of language narrows its scope and hinders its acceptance by biologists (Bickerton, 2014).

Another major and fashionable brand of linguistics—cognitive linguistics—also internalizes language by upholding the view that a theoretical conception of language must be compatible with what is known about the organization and function of the brain which computes language and thought (cf. Feldman, 2006). However, such a view is out of sync with biological reality because "language, self-consciousness and mindedness are different forms of existing in the relational domain in which a living being lives, *not manners of operation of the nervous system*" (Maturana et al., 1995: 25; emphasis added). Although, argue Maturana and his colleagues, in our culture we do speak of mind to explain phenomena that the observer views as taking place in the relational space of the organism—intentions, purposes, concerns, etc.—and we speak as if we were referring to an entity that may have a location in the brain and may interact with other minds or the body, from the point of view of cognition understood as a biological function, it should be apparent that there is no such thing as 'the mind' in the operation of the nervous system, and that 'the mind' is nothing but an explanatory notion (Maturana et al., 1995).

The issue of the nature and function of language, and its relationship to mind, cannot be resolved within the Cartesian paradigm (Kravchenko, 2008). The picture of language drawn by proponents of the reification and communication-as-exchange-of-information doctrines, is permeated with dualism; the segregation, rather than integration, of language and mind impedes progress in the study of human linguistic behavior, which makes the species *Homo sapiens* so unique (Harris,