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"Linguistic Analysis" as a Misnomer, or, Why Linguistics is in a State of Permanent Crisis

Аннотация

Показывается ошибочность общепринятого понятия лингвистического анализа как анализа естественного языка. Следствием соссюровского структурализма и философии объективного реализма является взгляд на язык как на вещь (код) – систему знаков, используемых как инструмент для коммуникации, под которой понимается обмен информацией. При таком подходе анализ в традиционной лингвистике представляет собой анализ вещей – письменных слов, предложений, текстов; все они являются культурными артефактами и не принадлежат сфере естественного языка как видоспецифичного социального поведения, биологическая функция которого состоит в ориентировании себя и других в когнитивной области взаимодействий. До тех пор, пока наукой не будет отвергнута кодовая модель языка, лингвистический анализ будет продолжать обслуживать языковой миф, удерживая лингвистику в состоянии перманентного кризиса.

1. The problem with linguistics as a science

There is a growing feeling of uneasiness in the global community of linguists about the current state of linguistics as a science. Despite a lot of academic activity in the field, and massive research reflected in the ever growing number of publications related to the study of the various aspects of language, there hasn't been a major breakthrough in the explorations of language as a unique endowment of humans.

Numerous competing theoretical frameworks and approaches in linguistic research continue to obscure the obvious truth that there is very little understanding of language as a phenomenon which sets humans apart from all other known biological species. Various methodologies and all kinds of analytic procedures, developed and used by linguists, have hardly been conducive to the unification of linguistics as a science, and the effect of linguistic research on the human praxis of the living has been negligible. An unbiased look at what is going on in the area of linguistic studies today doesn't leave any doubts as to what we see: a d e e p s y s t e m i c   c r i s i s.

The symptoms are all there to anybody who bothers to take an impartial look at the linguistic landscape:

(1) There is no consensus on the nature of language as an object of study and its essential properties [cf. Kravchenko 2007]. Different theoretical approaches highlight different "features" of language, depending on whether the starting point of analysis is language structure, as in structuralism, language function, as in functionalism, or the relationship between language and mind, as in cognitivism. But even these initial distinctions don't bear criticism from the point of view of their groundedness in solid empirical data as they lack methodological systematicity in defining language and mind. Having focused on texts rather than natural spoken language, structuralists find structure in how written words are built and organized into larger units, such as sentences and texts – forgetting that texts are cultural disembodied artifacts devoid of any real-time dynamics which drive natural linguistic interactions. Such notions as "word" and "sentence" are abstract constructs invented by linguists for the purpose of organizing and analyzing texts; in our daily routine interactions we seldom speak in "sentences", nor do we produce "texts" while communicating. The original meaning of the Greek word *grammar* is 'the art of writing', so it is not surprising that all attempts to build a "grammar of discourse" have invariably turned futile.

For functionalists, linguistics is the study of language functions, of which the central and most important one is communication. However, if linguistic communication is understood as exchange of information (a belief shared by the overwhelming majority of linguists, be they structuralists, functionalists, or cognitivists), and if natural language is viewed not as a system of arbitrary signs established by convention, but as distinctly human species-specific behavior, then we must ask the question, "What is the biological function of exchanging information?" The question itself doesn't make sense if information is understood in the Shannonian way, because there is no information pre-existing in the world [Reeke & Edelman 1988]. When linguists speak of exchange of information in communication, what they usually mean is knowledge. However, in communication knowledge, especially socially and culturally shared knowledge, most of the time is taken for granted; it is presupposed and therefore n o t expressed in talk or text [Dijk 2006]. Moreover, as a notion, knowledge doesn't seem to have a consistent definition in the literature [Kravchenko 2003a].

For cognitivists, the point of the matter is how language relates to mind, and because language, as a cognitive ability of humans, "is in the mind", linguistics, as the scientific study of language, is called upon to tell us important things about the architecture of the mind. However, cognitive internalism inherent in mainstream cognitive science – that is, the belief that mind has a locus in the brain – makes the whole cognitive enterprise thoroughly devoid of meaning, because mind is *reified*. Keeping to the Cartesian tradition of dualism and exploiting the computer metaphor, cognitivists see mind as a kind of software package sitting in the hardware of the brain, and language as an input-output process run by this software. By studying this process, cognitivists hope to find what's in the mind. However, the idea that the human brain works like a computer is not coherent. Mainstream cognitivism continues to overlook the obvious – that cognition is a biological phenomenon, and so is language as a functional feature of the human biological setup [Maturana 1970; 1978]. This is the main reason why cognitivism is incapable of offering a comprehensible account of cognition, both as a process and as a function, in general, and of human cognition in particular. Unless the biological nature of cognition and language has been understood, discussions of *how* they work, and how language relates to mind, are pointless: *gigni de nihilo nihil*.

(2) A plethora of "linguistics" with their specific subject fields of study peacefully co-exist, and their number keeps only growing, including, but not limited to, psycholinguistics, sociolinguistics, anthropolinguistics, ethnolinguistics, neurolinguistics, biolinguistics, ecolinguistics, 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, the methodological foundations of these disciplines do not essentially differ in that they all view language as a tool, the use of which is specified or affected by a certain factor highlighted in the name of the discipline. At the same time, taken together, all these disciplines 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. But as soon as we do this, prefixes such as *anthropo-*, *socio-*, *ethno-*, *psycho-*, *neuro-* etc. become superfluous.

(3) It is hard to see what practical value many of the existing linguistic theories possess, or how they might, possibly, change the very praxis of the living as other sciences have done over a very short period of time – good examples being chemistry, physics, computer science, or genetics. As the saying goes, "there is nothing more practical than a good theory", and if a theory fails to noticeably affect our life, maybe this theory is not good enough and needs a serious reassessment [Kravchenko 2009a].

There are clear signs that something is very wrong with traditional linguistic science, which shows all the symptoms of a crisis; but what could be its possible

causes? There are, at least, three, and they all bear on the foundational principles of the science of linguistics, that is, its m e t h o d o l o g y.

First, there is not a clearly formulated ideal project of linguistics that would address, and provide coherent answers to, the question: "What, and why, should linguistics study, as a science?" The ousting of the ideology of holism from scientific research, especially in the humanities, and the persisting infatuation with analytism have led to an extreme fragmentation of our knowledge of the world, and of language as a specific mode of human existence in this world – even though it is a commonality to observe that the big is best seen from a distance. 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], orthodox linguistics m i s c o n s t r u e s i t s   o b j e c t   o f   s t u d y.

Second, the spread of Saussure's views on language and semiotics in the 20th c. was, perhaps, the final touch in institutionalizing the language myth – a belief that a language is a finite set of rules generating an infinite set of pairs, in which material 'forms' are combined with immaterial 'meanings', used to exchange thoughts in accordance with a prearranged plan determined by those rules [Harris 1981]. The language myth is the product of two interconnected fallacies: the telementational fallacy and the determinacy fallacy, which are at the basis of construing language as a fixed code.

Third, the fixed-code fallacy, institutionalized in an education system, accounts for the publicly shared illusion that language is a tool for the transfer of thoughts. In this case, both language and thought become ontologically independent. Yet, this seeming ontological independence is nothing more than the result of an 'epistemic cut' between what is observed (language as a kind of human recursive behavior, or l a n g u a g i n g) and the observer (a languaging human describing language). Unlike in physics, where such epistemic cut may be necessary between the measuring device and what it measures, in the study of human cognition it becomes highly problematic.

2. "Linguistic Analysis"

Orthodox linguistics is largely based on philosophy of external realism – a belief that there exists a real world that is totally independent of human beings and of what they think or say about it. To an external realist, the function of the mind is to build mental representations of the aspects of the world; these mental entities constitute the content of our thoughts, which are expressed in linguistic form in communication. Consequently, language is also seen as representational. However, the notion of representational system obscures many essential dimensions of

cognition, including the understanding of perception and language, as well as the study of evolution and life itself [cf. Varela, Thompson & Rosch 1991].

The representational approach to language may be briefly summed up as follows:

(i) cognition consists in processing mental representations of 'external reality',

(ii) mental "images" (schemata) are further represented in linguistic form (physical words and utterances),

(iii) writing represents spoken (natural) language; spoken and written language stand in one-to-one correspondence to each other.

This leads to reification of language (a system of signs as material objects) and identification of its function as that of a tool (for the transfer of thoughts in communication) – the hallmark of orthodox approaches to the study of language. This orthodoxy sets the main vectors in the study of language as a sign system whose unity is sustained by the relationships between its hierarchically organized constitutive components. The employed notion of linguistic sign as a bilateral entity with a representational function becomes the very theoretical construct whose deficiency results in the epistemological, conceptual, and terminological inadequacy of the general theory of language built on this notion [Kravchenko 2003b; Кравченко 2012a].

The written-language bias in linguistics [Linell 2005], that is, substitution of languaging (species-specific socially driven behavior of complex dynamics) as the natural object of study by writing as a cultural artifact p r e v e n t s   l i n - g u i s t i c s   f r o m   d e f i n i n g   i t s   s u b j e c t   f i e l d   i n   a   c o n - s i s t e n t   a n d   a r t i c u l a t e   m a n n e r. As a result, its object of study is misconstrued, and extrapolation of 'data' from the study of disembodied texts to languaging as embodied behavior integrated in the socio-cultural environment clearly shows that these data cannot be accommodated by the reality of natural language [Kravchenko 2009b].

The so-called linguistic analysis has always been an analysis of linguistic "units" as things – phonemes, morphemes, words, phrases, sentences, texts – which possess specific structure and display certain regularities in their conjoint "behavior"; to know the structure of linguistic units and the rules that govern their "behavior" is to know "linguistic facts", and identification, description, and classification of these "facts" inform the structuralist approach to language as a system of signs organized in a certain way (lexicon plus grammar) and possessing a certain function ("expression and exchange of thoughts"). Rather than naturalizing language, linguists rationalize it, trying to identify its essential properties by analyzing texts using the conceptual apparatus of logic and mathematics. However, language is not mathematics, while logic as the science of making correct inferences is derivative from language in which these very inferences are made. It should not, therefore, be surprising that official theoretical grammars often possess little practical value either for native speakers of

a particular language, or for those who want to learn it as a foreign language; because of the language myth and the representational fallacy that define their epistemological assumptions, they draw an inadequate, if not distorted, picture of linguistic reality.

3. "Linguistic Facts" and "Linguistic Units"

The two primary senses in which the word *fact* is typically used are 'that which is known to have happened', and 'that which is known to exist'. A linguistic fact as something known to have happened happens in the spatio-temporal context of languaging which, as human complex behavior, incorporates speech as its salient feature. The physical nature of speech, its embodiedness (that is, its inseparability from the human organism in its constantly changing emotional and somatic states) disallows its analysis as something 'existing' outside the continuous chronological flow of situations *hic-et-nunc*. At the same time, linguistic interactions constitute a cognitive domain in which an organism's inductive behavior depends not only on the current situation, but on the entire developmental history of the organism as a structure determined system. By inference, natural linguistic interactions cannot be meaningfully described or interpreted in terms of atemporal linear relationships between the components of syntactic structures, such as phrases or sentences, singled out when analyzing texts.

A linguistic fact as something that "exists" is, by definition, an abstract notion since its referent is not a component of the spatio-temporal context in which languaging occurs; therefore, it is inadequate. On the neuronal level, a linguistic 'fact' exists – that is, it persists in time – as a relative state of neuronal activity caused by an organism's (linguistic) interactions with other organisms. It is strictly subjective and is not accessible to observation; thus, it cannot be an object of analysis, classification, and systematization. Such procedures are applicable to abstract linguistic 'facts' only by associating them with some conventional forms, such as graphic images/signs, or a writing system. Yet, because direct "translation" of relative states of neuronal activity into graphic images is not possible, writing systems encode only components of speech events, such as sounds or syllables, depending on the language type. Writing, as a kind of socially sanctioned code, allows humans, after special training, to relate concatenations of graphic images (inscriptions) to components of p o s s i b l e speech events such as separate words and word sequences (utterances). To read aloud a text is to r e c o n s t r u c t t h e s o u n d m a t t e r o f a p o s s i b l e s p e e c h e v e n t; it is not a reconstruction of a natural linguistic event as such.

If we view letters as signs which stand for (denote) certain sounds, then, at a given stage in the historical development of a given culture, this relationship of

denotation (the meaning of the letter) remains relatively stable and unambiguous regardless of the conditions of its use, thus making letters a kind of code-like system. The denotation of a letter cannot be voluntarily changed by its user; if it were, it would disrupt the one-to-one correspondence between the letters and the sounds they denote, making recognition and interpretation of sequences of letters as graphic encodings of physical words impossible. Yet this is precisely what we find in language: usually, there is no stable and unambiguous correspondence between a spoken word and that which it denotes, because the meaning of a word is its use in the language [Wittgenstein 1959]. This linguistic fact is at the core of the problem of linguistic meaning, which cannot be resolved as long as orthodox linguistics fails to realize that an alphabetic writing system is, in fact, a technology that determines how we understand language and its units [Port 2010].

So, what are linguistic units? An answer to this question depends on how we answer the question "What is language?" The orthodox definition of language (a tool used for processing information), based on the representational fallacy and the written-language bias, sets a nomenclature of its units as kinds of signs (things) that differ in their structure and function. Linguistic units (morphemes, words, sentences), singled out by analyzing texts as disembodied cultural artifacts, are atemporal *a priori*, and their abstract nature accounts for their manipulability, allowing us to combine and re-combine them into various kinds of sequences. Such approach to language is inherent in the structuralist paradigm in linguistics as the study of language "in itself and for itself", whereby language is viewed as cultural artifacts (texts) that represent natural linguistic facts.

However, analytism as the cornerstone of theoretical epistemology seems to have exhausted its productive potential. No matter how hard we try to analyze something categorized as a whole, such as language, into its constituent components, or how good an idea we have about the structure and function of such components, it does not help us in our quest for new knowledge about this whole if we don't understand its nature and its relation to the world as a system of which it is a functional part; only by understanding something as a whole can we understand the function of its parts [Cornish-Bowden et al. 2004]. Orthodox linguistics cannot boast of having understood language as a whole, and the analytical procedures used by linguists are very similar to molecular analysis in chemistry, the chemical metaphor being part and parcel of the metalanguage of linguistics. But how can such analysis help understand the essential properties of language? The facts that a molecule of water consists of two atoms of hydrogen and one atom of oxygen (H_2O), each of which is a gas, and that hydrogen is a highly flammable substance, while oxygen is a component that makes combustion possible, do not of themselves help understand how a particular structural combination of the two elements yields a substance (water) so radically different in its properties as to be used to put out fires.

The profoundly erroneous understanding of the nature and function of language, characteristic of orthodox linguistics, brings us to an obvious conclusion that so-called linguistic analysis may not be viewed as analysis of language as a natural phenomenon [Kravchenko 2008] – just as a most thorough analysis of a bird's feathers cannot be very helpful in understanding the bird as a living system functionally integrated into the world as a whole. But what, then, should be the starting point in a scientific analysis of language?

First, it must be understood that language is neither a thing/substance, nor a tool; it is physically grounded, biologically, socially and culturally determined joint activity of humans. The word *language* refers to a heterogeneous set of artifacts and practices which enable us to exploit behavioral modalities in ways allowing the attribution of semiotic values [Kravchenko 2007]. As an object studied, described and analyzed by linguists, language is v i r t u a l [Kravchenko 2010]; it is the result of t a k i n g a l a n g u a g e s t a n c e [Cowley 2011].

Second, there may be no inner laws of language evolution/development apart from the evolution of *homo loquens* as a biological species: "The evolution of the living systems is the evolution of the niches of the units of interactions defined by their self-referring circular organization, hence, the evolution of the cognitive domains" [Maturana 1970: 4]. As humans, we become what we are through immersion in the flux of joint activity with others, and the uniquely characteristic feature of this activity is languaging. Language dynamics are processes of using and interpreting language as a person engages with the environment [cf. Kravchenko 2012]. These depend on the causal processes that constitute the cognitive dynamics occurring in and across several time domains–evolution, history, development, relationships, experiential time, various micro-domains.

Third, languaging is behavior in a consensual domain. To an observer (such as a cognitive linguist), this behavior serves as a description of the structure of the languaging organism as a living system at the moment its behavior is enacted, while the organism's structure is the outcome of the organism's history of fine structural coupling with the environment [Maturana 1970]. Because language extends our sensorium [Morris 1938], and because a human organism is a structure determined living system, linguistic interactions, as a specific cognitive dimension of an organism's cognitive domain, constitute a r e l a t i o n a l d o m a i n in which humans exist as unities of interactions. This relational domain becomes a rich ecological niche [Steffensen 2011; Kravchenko & Boiko 2014], without which humans may not be understood either biologically or socially.

Finally, the function of natural language as species-specific behavior in a consensual domain is t o o r i e n t o t h e r s a n d s e l f i n t h e i r c o g n i t i v e d o m a i n o f i n t e r a c t i o n s [Maturana 1978; 2014; Kravchenko 2011a], thereby setting up a system of values that define the existential trajectories of humans [Hodges & Baron 1992]. In other words, l a n g u a g e i s w h a t m a k e s u s h u m a n.

4. Conclusion

Based in the language myth and, therefore, lacking any noticeable practical value, orthodox linguistics continues to inform linguistic education in school and college curricular; it remains "how-linguistics", while any meaningful research should be driven by the question "Why?" There's an alarming growth of functional illiteracy in modern literate cultures [Kravchenko 2009c] as a result of the methodological inadequacy of traditional linguistics with its code model of language. There is sufficient evidence that, as a science, linguistics in its current state does not meet the criteria which sanction it as a kind of institutionalized praxis in modern society – such as acknowledged value and applicability of research results [Кравченко 2013].

Until language sciences forsake the code model of language and, instead, begin to analyze languaging as dynamically complex socially conditioned behavior in a consensual domain of interactions and its role in the development of the human brain, mind, and consciousness [cf. Kravchenko 2011b; 2014], linguistic analysis will continue to dance attendance on the language myth, keeping linguistics in a state of permanent crisis.

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