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The linguistic sign from inside-out. Remarks on the formalist-functionalist debate: Noam Chomsky, Ronald Langacker and Daniel Dor[1]

ABSTRACT

The paper examines three theoretical approaches to Ferdinand de Saussure's linguistic sign represented by Noam Chomsky, Ronald Langacker and Daniel Dor. The choice of these authors is not accidental: using Frederick Newmeyer's (1998) division of all linguistic theories into formalist (generative) and functionalist theories, one can claim, based on the examination of the relationship between the Saussurean signifier and the signified, that linguists of various linguistic persuasions exploit, in their actual linguistic practice, different areas of this relationship. Thus it seems, for instance, that the linguistic explanation in Noam Chomsky's syntactocentric Standard Theory and the Government and Binding Theory should primarily be associated with the signifier-related area of the linguistic sign, whereas, because it concentrates on conceptualization and meaning-related aspects of the linguistic sign, Ronald Langacker's model of Cognitive Grammar should be seen as "gravitating" toward the signified – rather than signifier-related – area of the sign. Then there is Daniel Dor's (2016) linguistic theory. Because for Dor, language is

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a *communication technology*, where the linguistic sign provides an instruction for imagination and serves as a linguistic medium, so to speak, for closing the experiential gaps between language users, Dor's theory, while firmly embracing the Saussurean concept of the sign, appears to go beyond the confines of the signifier-signified relationship. The question is: how far beyond? The answer we would like to give here is that, while these three theories are crucially based on the Saussurean conception of the linguistic sign, in order for them to be meaningfully compared and evaluated, we have to find a common theoretical ground for such an evaluation. Such a ground can be offered, it seems, by Merlin Donald's (1991, 2001) External Symbolic System theory (ESS), which, we claim, is part of *semiosphere*, a symbolic network structure, initially introduced to culture studies by Yuri Lotman (1990, 2005).

1. INTRODUCTION

In his study devoted to the evaluation of the differences between the formalist (that is, the generativist) enterprise and the functionalist programme, Frederick Newmeyer makes the following comment:

> As many readers are no doubt aware, I have a reputation as an ardent defender of formal linguistics [...]. In one sense, that ardor has not diminished one iota. My commitment to the "generative enterprise" [...] is as firm as it ever has been. [...]. But I have also in recent years become convinced that there is an ultimately self-destructive narrowness of outlook on the part of many generative grammarians. Put simply, they refuse to consider the possibility that anything of interest might have been uncovered in the course of functionalist-oriented research. I could not disagree with them more. On the contrary, I have found a wealth of interesting generalizations and suggestive avenues of research in the work carried out in that tradition. And significantly, I believe that what it will take to incorporate many of these generalizations into a comprehensive theory of language challenges important conceptions held by most mainstream formal linguists. While, crucially, this can be accomplished without abandoning the essential core of generativist theory, dealing with such generalizations involves, to say the least, broadening one's vision about what is going on in language and how best to deal with it. (Newmeyer 1998: xi)

The broadening of one's vision while remaining committed to the generative enterprise is also on the minds of Cedric Boeckx and Constantina Theofanopoulou (2014) when they write:

> Traditionally speaking, linguists working under the banner of "biolinguistics" have approached language in modular terms, studying it separately from other cognitive domains. This one-dimensional approach has undoubtedly led to significant progress within linguistics, but it is equally unquestionable that this approach has had the collateral effect of isolating

linguistic research from the rest of cognitive science, to the point that the field of linguistics now occupies a fairly marginal place in the context of cognitive studies. (Boeckx & Theofanopoulou 2014: 405)

In conclusion, the authors state:

We think that this has the (so far) under-appreciated consequence of bringing into contact two linguistic traditions, one ("Chomskyan") seeking to reduce linguistic complexity to a set of elementary primitives, and the other ("Cognitive") seeking to account for linguistic processes in terms of general "cognitive" mechanisms. The challenge ahead is to marry these two traditions, showing that elementary primitives used by Chomskyan linguists to explain various linguistic phenomena can be understood in terms of generic processes that in turn can be translated into what we know about how the brain works [...]. (Boeckx & Theofanopoulou 29014: 406-407)[2]

Certainly, by placing the concept of *syntactic generativity* at the centre of scientific inquiry, the adherents of generative linguistics seriously neglected other, no less important linguistic issues. Daniel Dor (2015) comments:

[In accordance with Noam Chomsky's general theory of language,] syntax is where the essence of human language lies. The patterns of syntactic generativity should be figured out on the basis of native speakers' grammaticality judgments, not on the basis of their actual usage of language: linguistic *performance* is full of mistakes, hesitations, repetitions, and repairs (and reflected in judgment). Through the analysis of speakers' judgments, the linguist discovers the principles that govern them – those innate principles that make up the human capacity for language. These principles are abstract and formal, which means that the analysis cannot, and therefore should not, attempt to relate them to the meanings of the sentences, or to the communicative intents of their speakers, or to the context of conversation. In this challenge of distillation, everything that does not directly relate to the foundations of generativity is moved aside. Other issues may be interesting, even important, but they are not essential: performance, meaning, communication, context, and also general cognition, and social learning, and language change (the linguist's task is that of *synchronic*, not

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2   Let us note in passing that generativists' attempts at rapprochement with the "cognitive, functionalist camp" were, it seems to us, the only way out of the predicament generative grammar found itself in before the emergence of biolinguistics, an important movement within Noam Chomsky's Minimalist Program, which gave a new impetus to generative research. The Program enabled the adherents of generative grammar to address a number of questions central to linguistic studies, including the following (cf. Stroik & Putnam 2013: 3):
1. What is the knowledge or Faculty of Language (FL)? (Humboldt's Problem);
2. How is this knowledge or Faculty of Language acquired? (Plato's Problem);
3. How is this knowledge put to use? (Descartes' Problem);
4. How is this knowledge implemented in the brain? (Broca's Problem);
5. How did this knowledge emerge in the species? (Darwin's Problem).

diachronic analysis), and society, culture, semiotics, rhetoric, literature – virtually everything that the non-linguist might consider relevant for linguistic research. *Generativity deserves to be investigated in isolation*. (Dor 2015: 7-8; italics added)

Although the focus on generativity, as Dor notes, "brought about a huge revolution in our understanding of language," still

> [t]here was [...] something deeply paradoxical in the way it did that: the theory itself, as it continued to be developed by Chomsky and his colleagues of the generative camp, developed into an exceedingly esoteric discourse, baroquely complex and deeply abstract, often interested more in the internal relationships between its terms, definitions, and hypotheses than in the strings of interpretation that were supposed to anchor the whole theoretical machinery to the plane of observation. With time, even the judgements lost their importance. (Dor 2015: 8)

The "esoteric and baroque" character of generative grammar scientific discourse notwithstanding, the idea of syntactic generativity itself, Dor believes, should not be dismissed entirely. Chomsky, Dor says, "was actually right in his insistence on the autonomy of syntax from general, individual cognition – but for the wrong reason: *syntactic complexity is not a matter of individual cognition; it is socially constructed, prescriptive, and specifically suited for the instruction of imagination*" (Dor 2015: 15; italics added).

But what exactly is meant by *socially constructed syntactic complexity*? In Dor's view, socially constructed scientific facts relating to syntactic complexity (and syntactic generativity) can be characterized relative to scientific theory understood as a *spatial network of terms*. Dor quotes Carl Hempel, a philosopher of science, as saying that

> [a] scientific theory might therefore be likened to a complex spatial network. Its terms are represented by the knots, while the threads connecting the latter correspond, in part, to the definitions and, in part, to the fundamental and derivative hypotheses included in the theory. The whole system floats, as it were, above the plane of observation and is anchored to it by the rules of interpretation. These might be viewed as strings which are not part of the network but link certain points of the latter with specific places in the plane of observation. By virtue of these interpretive connections, the network can function as a scientific theory: from certain observational data, we may ascend, via an interpretive string, to some point in the theoretical network, thence proceed, via definitions and hypotheses, to other points, from which another interpretive string permits a descent to the plane of observation. (Hempel 1952: 36; in Dor 2015: 4)

In this paper we go a step further and enquire about the very conception of the "spatial network" and of the network's "floating" nature. Specifically, we will claim that the Hempelian "derivative hypotheses included in the theory" do not "float (in the air)," but actually are part of the *External Symbolic System* in the sense of Merlin Donald (1991, 2001), which, we claim, is part of semiosphere itself. All theorizing, including the theorizing about the linguistic sign, is of this nature, and in order for a linguist to participate in the exchange of ideas about the "derivative hypotheses" concerning the linguistic sign, s/he must be able to access this symbolic system.

The general layout of the paper is as follows. In Section 2 we will make an attempt to "locate" both Chomsky's "classic" generativist model of grammar and Langacker's cognitive-functionalist theory in the signifier-signified relation area of the linguistic sign. In Section 3 we discuss Ronald Langacker's linguistic sign-based latest model of grammar, which we will call for the purpose of this paper *Cognitive Grammar Structure and Function* model: CGSF. Section 4 presents Daniel Dor's theory of language, which while being firmly based on the Saussurean linguistic sign conception, goes beyond (as cognitive models do, albeit in a different way) the strict confines of the signifier-signified relationship. Finally, Section 5 is devoted to what "lies beyond these confines." The answer we would like to give is this: beyond the linguistic sign lies the External Symbolic System – a subsystem of semiosphere, a symbolic network structure. Specifically, we claim that the ESS system, proposed by Merlin Donald, contains the "derivative hypotheses" about the signifier-signified relationship as defined by the network of "interpretive connections" pertaining to this relationship.

2. LINGUISTIC THEORIES AND THE LINGUISTIC SIGN

In order to see how the linguistic sign's signifier-signified relationship can help us to qualify a theory of grammar as being either formalist (generative) or functionalist, let us juxtapose Noam Chomsky's generative model of grammar with Ronald Langacker's theory of grammar. In doing so, we must first establish what we mean by grammar. For Chomsky, (generative) grammar is "a system of rules that in some explicit and well-defined way assigns structural descriptions to sentences. [...] [E]very speaker of a language has mastered and internalized a generative grammar that expresses his knowledge of his language" (Chomsky 1965: 8).

In particular, as defined by Robert Radford, in the context of language acquisition by the child, grammar is

(i)   a set of *syntactic* rules which specify how sentences are built up out of phrases, and phrases out of words;

(ii)   a set of *morphological* rules which specify how words are built up out of morphemes (i.e. grammatical units smaller than the word);

(iii)   a set of *phonological* rules which specify how words, phrases, and sentences are pronounced;

(iv)   a set of *semantic* rules which specify how words, phrases, and sentences are interpreted (i.e. what their meaning is). (Radford 1988: 18-19)

If so, Chomsky's model of grammar as defined above – the so so-called Standard Theory (ST) – can be presented as in Figure 1.[3]
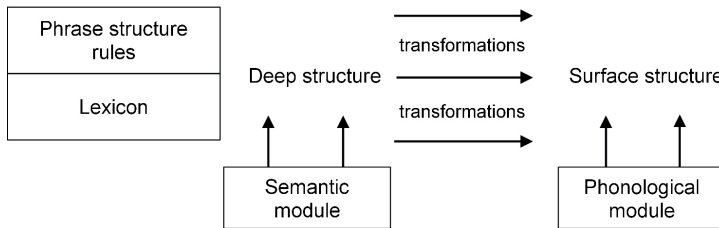

Figure 1. Noam Chomsky's (1965) Standard Theory of grammar

A characteristic feature of ST is its modularity. The module that generates sentences is syntax, consisting of (recursive) phrase structure rules that "rewrite" linguistic units (phrasal categories and sentences), deep structure, transformations, and surface structure. It is a syntax-centred model, while the other two modules, semantic and phonological, are merely interpretive. The semantic module interprets deep structure, while the phonological module interprets surface structure. The lexicon contains words, which are introduced into *phrase markers* (syntactic "trees") by means of *lexical insertion rules*, so that the sentence's deep structure is produced. Deep-structure markers are transformed into surface-structure markers and then surface structure is interpreted by the phonological module. The phonological module contains phonological rules that derive phonetic manifestation from phonological representation.

If generative grammar and all its subsequent versions assign a progressively more central role to syntax – see, for example, Noam Chomsky's (1981) Government and Binding Theory and his Minimalist Program (Chomsky 1995) – the model proposed by Ronald Langacker is, in the main, "semantically-oriented."

Commenting on the role of semantics in grammar, Anna Wierzbicka, in her study under the telling title *The Semantics of Grammar*, makes the following remark:

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3   As a starting point for any discussion on the nature of grammar, it is convenient to adopt Noam Chomsky's distinction between (i) grammar as a knowledge of a set of rules of language (competence), (ii) a particular model of this knowledge, i.e. a grammar of (i), (iii) pedagogical grammar (handbook of (English, Polish, French, etc.)) and (iv) universal grammar (UG). In this paper we are interested in the nature of (ii), i.e. in the model of our knowledge of language and, *contra* Chomsky, how this knowledge is used in an actual speech situation.

The basic idea behind the notion of "grammatical semantics" is this. Every grammatical construction encodes a certain meaning, which can be revealed and rigorously stated, so that the meanings of different constructions can be compared in a precise and illuminating fashion [...].

Grammar is not semantically arbitrary. On the contrary, grammatical distinctions are motivated (in the synchronic sense) by semantic distinctions; every grammatical construction is a vehicle of a certain semantic structure; and this is its *raison d'être*, and the criterion determining its range of use. (Wierzbicka 1988: 3)

A few pages later, we read:

Meaning is conveyed by grammatical constructions as much as by words, and is conveyed jointly by all levels of linguistic structure. There is no such thing as "grammatical meaning" or "lexical meaning." There are only lexical and grammatical *means* of conveying meaning – and even here no sharp line can be drawn between the two. (Wierzbicka 1988: 8)

This signified-oriented, semantic view of grammar, in which "meaning is conveyed jointly by all levels of linguistic structure," is manifestly evident in Ronald Langacker's model of Cognitive Grammar.

In Cognitive Grammar, both linguistic units and morphological or syntactic patterns are bipolar: they consist of the *phonological pole* (p), which corresponds to Saussure's *signifiant* (signifier) and the *semantic pole* (S), which corresponds to Saussure's *signifié* (signified).[4] The relationships between the semantic and phonological poles include *composition* (c), *integration* (i), and *symbolization* (s) – in want of a better term, the C-I-S relationship. Consider for instance the expression *jar lid*. At the semantic pole, JAR and LID are linked through integration, as are jar and lid at the phonological pole. JAR LID is linked to both JAR and LID through composition at the semantic pole, as is *jar lid* to *jar* and *lid* at the phonological pole. Symbolization, in turn, obtains between the two poles, i.e. between JAR and *jar*, LID and *lid*, as well as JAR LID and *jar lid*.

It should be stressed that the C-I-S relationship obtains not only in compounds like *jar lid* but also holds in the case of larger syntactic units like

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4   John Taylor comments on the "Saussurean roots" of Cognitive Grammar as follows (Taylor 2002: 39): "Cognitive Grammar is driven by a view of language that arguably does have much in common with certain aspects of Saussure's thought. I refer to Saussure's insistence that the basic object of linguistic inquiry is the linguistic sign, and his characterization of a language as a system of signs." Then he quotes Langacker: "Language is symbolic in nature. It makes available to the speaker – for either personal or communicative use – an open-ended set of linguistic *signs* or *expressions*, each of which associates a semantic representation of some kind with a phonological representation. I therefore embrace the spirit of classic Saussurean diagrams [...], with the understanding that explicit, substantive characterization is required for the elements they depict" (Langacker 1987: 11; in Taylor 2002: 39).

phrases and sentences. In fact, Cognitive Grammar and, indeed, all cognitivist models of language assume that linguistic units form a continuum. Langacker says:

> If we wish to make a distinction, we can do no better than follow the tradition of drawing the line at the level of the word. Morphology is then described by schematic assemblies (like *N+less*) whose instantiations are no larger than words, and syntax by assemblies (like *N1+less N2*) with multiword instantiations. Even so the boundary is fuzzy, if only due to expressions (such as compounds) that are intermediate between single words and multiword sequences. (Langacker 2008: 24)

Let us add that the continuum of linguistic units functions within semantic-conceptual structure. This is so because, as Langacker notes, in contrast to the generativist view of grammar, in the cognitivist approach,

> grammar is meaningful. [...] For one thing, the elements of grammar – like vocabulary items – have meanings in their own right. Additionally, grammar allows us to construct and symbolize the more elaborate meanings of complex expressions (like phrases, clauses, and sentences). It is thus an essential aspect of the conceptual apparatus through which we apprehend and engage the world. And instead of being a distinct and self-contained cognitive system, grammar is not only an integral part of cognition but also a key to understanding it. (Langacker 2008: 3-4)

Now, if "the elements of grammar [...] have meanings in their own right," then the question arises as to where exactly the signifier-signified boundary is to be placed – in the middle of the sign (as all depictions of the Saussurean sign found in the linguistic literature indicate) or perhaps, as we wish to claim, one should speak of the signifier "floating" in the ocean of the signified, as shown in Figure 2?
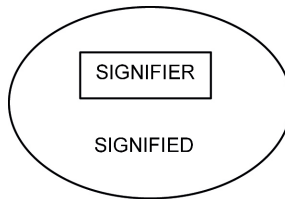

Figure 2. The signifier "floating" in the signified expanse

The idea of the signifier "floating" in the "expanse of the signified" appears to lie at the heart of the latest model of Langacker's Cognitive Grammar, the CGSF model, which, while looking at the linguistic sign from "inside-out," rejects the function-structure division. We turn to this model directly below.

3. STRUCTURE AND FUNCTION IN COGNITIVE GRAMMAR

Ronald Langacker describes the structure-function relations holding in language as follows: [5] "Structure is often identified with grammar, and function with meaning. Or structure with lexicon, morphology, syntax, and phonology, and function with things like semantics, pragmatics and discourse functions. This is really a kind of disguised metaphor. It's a manifestation of the substance/activity distinction which I think is ultimately wrong" (Langacker 2016: 16). The substance-activity distinction is "wrong" because "the 'formal' elements are substantive only metaphorically [and because] [p]honological, lexical, and grammatical structures consist in patterns of processing activity, just as meanings do" (Langacker 2016: 17). Since, as Langacker observes, "a structure of any size consists in organized activity," where the structure-function relation is "really just a matter of perspective" (2016: 17), it is precisely the organization of this activity that ensures some measure of stability. The author comments: "A pattern of activity can be *stable* in the sense of being 'entrenched' and able to recur: an *established processing routine* (a *unit*, in CG terms) [which] to some extent [...] decomposes into subpatterns – parts within the whole" (Langacker 2017: 17).

The subpatterns in question, "connected in various ways [by] association, temporal sequencing, partial overlap" (Langacker 2016: 17), give rise to the structure's configuration. In order to describe structures at all levels of conceptual organization, we "are implicitly describing [their] functions: we are describing lower-level structures, and we're describing how they map onto aspects of higher-level structures, and this amounts to characterizing the functions" (Langacker 2016: 17).

But what does Langacker mean by "structure"? For the linguist, structure is a configuration in which the elements from which it is composed are linked to each other by means of the following three types of connections (Langacker 2016: 20):

(i)   overlap in the activity comprising the connected elements;
(ii)   association, such that one structure tends to activate another;
(iii) operations (e.g. comparison, categorization, assessment of relative position in some field),

where the same elements can be connected in many different ways, yielding different structures that can be further augmented by other elements and/ or connections. Connection creates a new higher-order structure, in which

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5   All quotations and figures from Langacker (2016), presented in Section 2, have also been cited in Kardela (2019a).

(i)   the higher-level entity has emergent properties, minimally including the nature of the connections and any adjustments the component elements undergo;

(ii) a component of a higher-level entity may participate individually in further connections;

(iii) a higher level entity (being a structure in its own right) can also participate as a whole in further connections. This is so when the connections depend on emergent properties;

(iv) when this happens at successive levels, the result is hierarchy. (Langacker 2016: 21)

When the potential of a higher-order entity created by connected elements to function in some other higher-level structure is realized, we can speak of a *grouping*, in which "the elements are grouped into what counts as one entity for this higher-level purpose" (Langacker 2016: 23). The process of grouping is shown in Figure 3.
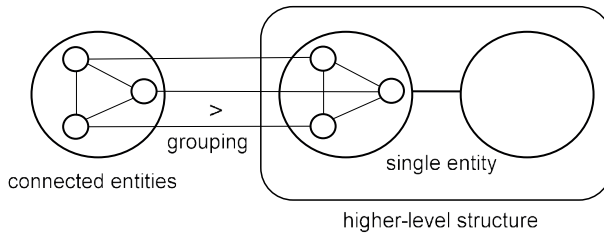

Figure 3. Grouping according to Langacker (2016: 23, Figure 11). © Maria Curie-Skłodowska University Press; published with permission

Functions, Langacker notes, "require structures for their implementation," which are "a vast assembly of semantic and phonological structures connected by relations of symbolization, categorization, and composition" (2016: 25). For Langacker, the structure-function is "a shorthand for symbolic structure/function vs. semantic structure/function" (2016: 27), where the *semantic pole* of an assembly (i.e. its semantic structure/function) is part of symbolic structure/function. If so, an assembly of semantic and phonological structures such as stem-affix configurations can be seen in a different light.

Consider, for instance, three [er]-derivatives: the [er]-agentive derivative *worker*, the [er]-instrumental form *tranquilizer* and the [er]-purpose locative form *container*. We can distinguish between the three [er]-suffixes by appealing to the notion of *system*, defined by Langacker (2016: 28) as "a set of elements that fulfill a certain function […]." This set of elements, called by him *exponents* or *members* of the system, are *mutually exclusive*; they are, as Langacker puts it, "in opposition to one another in neural terms [and being] connected by *inhibitory* (rather than *excitatory*) links." Drawing on Saussure's practice of defining a sign in negative terms, the exponents of a system, Langacker notes, "are partially defined by what they are *not* – their

place in a system of opposition. [Thus] in the system [i]–[a]–[u], [i] is partly defined by not being [a] or [u]" (2016: 28). This means that, seen in Cognitive Grammar terms, exponents of a system such as the agentive, instrumental and purpose locative [er]-suffixes should be treated as "contrasting instantiations" of the more general [er]-suffix schema. The function/schema-related categorizing relationship between the three senses of the English [er]-suffix can be presented as in Figure 4 ([er]-AG = *worker*; [er]-INS = *tranquilizer*; [er]-LOC = *container*; see also Kardela (2019a) for discussion).

<table>
<tr><td>

Figure 4.
The function/
schema-related
categorizing
relationship
(based on Lan-
gacker 2016: 29,
Figure 20). ©
Maria Curie-
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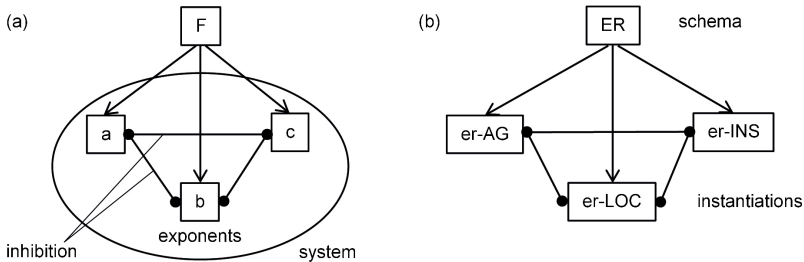
Note now that in light of the C-I-S relationship, the grouping process (Figure 3) and the function/schema relationship (Figure 4), the traditional representation of the Saussurean sign as divided into two-halves should be revised and perhaps replaced by a graph of the sort given in Figure 2. This brings us to Daniel Dor's theory of language.

4. DANIEL DOR'S CONCEPTION OF LANGUAGE AS A SOCIAL COMMUNICATION TECHNOLOGY

According to Dor, language is

> a property of the community, of the social network, the product of a collective process of invention and development. It resides *between* speakers, not *in* them, at the level of organization and complexity that transcends the individual mind – and cannot be reduced to it. The place to look at for the essence of language is not the mind-brain. It is social life. […] [I]t is essentially a *communication technology*... [It] has to be ontologically classified together with the other communication technologies humans have invented, such as the book, fax, telephone, computer games, and Facebook – not together with social institution (such as government or the family), or cognitive capacities (such as vision or rationality). (Dor 2015: 1)

This conception of language as a social communication technology goes back to Ferdinand de Saussure's view, according to which language is

> the social side of speech, outside the individual who can never create nor modify it by himself; it exists only by virtue of a sort of contract signed by the members of a community. Moreover, the individual must always serve an apprenticeship in order to learn the functioning of language; a child assimilates it only gradually. [...] It is a system of signs in which the only essential thing is the union of meanings and sound-images, and in which both parts of the sign are psychological. (Saussure 1986 [1916]: 14-15)

Language "is a system of signs that express ideas, and is therefore comparable to a system of writing, the alphabet of deaf-mutes, symbolic rites, polite formulas, military signals, etc. But it is the most important of all these systems" (Saussure 1986 [1916]: 16).

The importance of the linguistic system as a *linguistic technology* is to provide an instruction of bridging experiential gaps between the users of that technology. Language is "a scaffold for experiential imagination" (Dor 2015: 25), an "instruction of imagination" that allows one to share (to an extent) and even to influence the experience of others, declares Dor.

Linguistic technology consists of the so called *symbolic landscape* and *communication protocol*, the two basic components which "allow speakers to *channel* coded instructions for imagination [...] into their interlocutors' minds" (Dor 2015: 25). That instruction, Dor says, should not be identified with experience, because linguistic technology *does not convey experience* in the sense of the speaker communicating: "*this* is my experience"; rather, it says: "my experience is of *this type* – try to *imagine*" (2015: 25). In this kind of "instructive communication," the point is not for the hearer to directly share the experience of the speaker; it is rather to make sure that the hearer is able – based on utterances in a given code – to "create an independent experience [...] within his or her own experiential world – in isolation from the experiential world of the speaker" (2015: 25).

This independent experience arises in the hearer as a result of two kinds of communication: *linguistic communication* and *experiential communication*, i.e. non-verbal communication of our emotions (frowning for disapproval, a raised voice for irritation, a clenched fist for anger, etc.). Dor describes the relationship between these two kinds of communication as follows:

> There is [...] a wide variety of *inner experiences* that are very difficult to show – and are thus experientially incommunicable. To be sure, experiential communication is exquisitely suitable for the communication of emotions, especially social emotions – in humans and other animals. Beyond the emotional level, however, there is much that remains un-showable. The fact that I am worried, for example, may show itself on my face, but nothing in my perceptible behavior can tell you *why* – unless what I am worried about is present for perception in the here-and-now of the communication event. If I am worried about something that happens elsewhere, or some-

thing that is about to happen in the future, the object of my concern will remain a secret as long as we do not use language. All of us live through a never-ending experiential dynamic in which we perceive, organize, and evaluate our perceptions, compare what we perceive with everything we have experienced before, try to understand what the new bits of knowledge mean, think about the implications of what we understand, try to figure out how to react, what to do, and then plan the action… The essence of language, then, lies in the fact that it allows for the communication of exactly these types of experiences. The instructive strategy makes them communicable. […] Language works best where experiential communication is hopeless, and is quite useless where experiential communication is most effective and efficient. (Dor 2015: 29)[6]

Both linguistic and experiential communication is intentional, the difference between them being that if linguistic communication is an *instruction* for our imagination, experiential communication is *presentational* or *re-presentational*. Dor points out that a great majority of cognitive systems used by humans (and animals) are presentational (a smile, a hug, a threatening posture, etc.). This kind of communication takes place "here and now"; it is visible in the sender's behaviour and becomes part of the receiver's experience without delay. In re-presentational systems (maps, drawings, paintings, musical recordings, photographs, films), experience is "frozen in time" or "delivered from the here-and-now of the communicator's experience into the here-and-now of the receiver" (Dor 2015: 24). Re-presentational systems "transfer (drag, if you will) the experiential intent of the communicator, across space and time, into the experiential world of the receiver" (Dor 2015: 24). They are iconic systems: their products acquire meaning through similarity to their *presentational counterparts*, the corresponding direct experiences that they represent.[7]

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6   An example of ineffective experiential communication is the verbal instruction on how to tie a necktie (http://www.krawaty.cba.pl/instrukcja.html, accessed 28 Aug, 2017; cf. also Dor (2015: 30) on how to tie a figure-of-eight, following Aitchison (1996)): "Hold the longer end of the tie in your right hand. Make sure that the other, "left" end is at the level of your navel. Cross your hands, the right one on top. Hold both ends with your right hand; pass your left hand below. Now change the hands so that your left hand holds the longer end. Hold both ends with your right hand and move it away from you just a little. Pass your left hand below your right, winding the tie around its shorter end. Bring together the index and the ring finger of your right hand, so that you can easily slip the longer end. Move your right hand away from your body and pull the tie between your chin and your right hand. Make it somewhat loose so that there is room to pass the thick end. Tuck in the thick end with your left hand, controlling it with your right hand so that the whole does not come untied. Pull the tie with your left hand to the very end. Remove the slack by pulling the narrower end down. Adjust the knot by pulling it to your neck.

There is, I believe, no denying that a practical instruction (a series of drawings or a video clip) would be much more effective than the verbal description here."

7   If, then, a snarling dog is a presentational message of the direct experience of (the dog's) anger, a picture of a snarling dog is a re-presentational (iconic) form of conveying experience.

Language, says Dor, is "radically different" from systems of this kind: the strategy involved here is that of *instructive communication*. Language is an instruction for imagination in the sense that the speaker usually does not attempt to convey their experience directly (through presentation), nor indirectly (through re-presentation). Rather, the speaker (Dor's term: the communicator) "provides the receiver with a code, a plan, a skeletal list of the basic coordinates of the experience, which the receiver is then expected to use as a *scaffold for experiential imagination*. Following the code, the receiver raises past experiences from memory, and then reconstructs and recombines them to produce a novel, imagined experience (Dor 2015: 24–25).

A fundamental role in instructive communication is played by the linguistic sign, a *discrete instructor of imagination* with its triad of (i) the *signified* (*signifié*) and the *signifier* (*signifiant*), (ii) the *neighbourhood* of the signified, and (iii) the *experiential cluster* (Dor 2015: 44). The relationships between them are diagrammed in Figure 5.
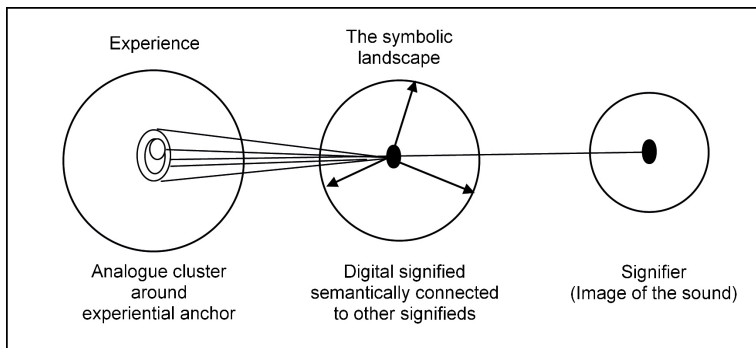

Figure 5. Experiential mutual-identification for language (based on Figure 3.1 in Dor 2015: 45); © Oxford University Press, reproduced with permission of the Licensor through PLSclear

Figure 5 shows what Dor terms *experiential mutual-identification for language*. In communication, experiential mutual-identification gives rise to the *symbolic landscape*, "the mutually identified model of the world that allows for the instruction for imagination" (Dor 2015: 34). The symbolic landscape consists of all the signifieds, where each of them "(i) points at a mutually identified cluster of experiences; (ii) is connected to other signifieds on the landscape by a web of *semantic relations*; (iii) is marked by a *signifier*" (Dor 2015: 34).

The symbolic landscape plays the crucial role in understanding and communication because each attempt to arrive at mutual experiential-identification does not only point to a new cluster of experiences but also relies on a reconfiguration of previously negotiated cognitive content that in one way or another links with the new sign.

The other component of language as a communication technology is the *communication protocol*. Because we experience the world around us in a variety of ways, we must, in constructing a common model of that world,

establish *norms* that underlie the use of the language technology, so that the listener can interpret the instructions from the speaker according to the latter's intentions. The communication protocol

> includes everything that pragmatics, sociolinguistics, anthropological linguistics, discourse analysis, and conversational analysis have taught us about the actual process of linguistic communication. At its core [...] the communication protocol includes a practical guideline for the actual production and comprehension of utterances – a set of ordered procedures which lead the speaker, step by step, through the process of experience-to-speech translation, and allows the listener to follow the same route backward, from speech to experiential interpretation. (Dor 2015: 49)

The protocol is a *set of conventions* that regulate linguistic behaviour in that they

> impose collective demands on individual speakers to behave in ways that very often contrast in their own communicative inclinations. This is why speakers have *judgments* to share with linguists: when a speaker follows all the norms of the language to the letter, the end product (the actual fragment of speech) is judged by the other members of the community as grammatical (or otherwise well-formed). (Dor 2015: 48)

When they engage in grammaticality judgments, the author continues,

> the members of a linguistic community are not actually interested in the fragment of speech itself. They ask themselves whether the *speaker* has followed the linguistic norm established by their community. They do not ask: "is this sentence grammatical?" They ask: "does the speaker obey our rule?" This is why, as the entire sociolinguistic literature shows, grammaticality judgments are always identity judgements. Eliciting grammaticality judgements from native speakers is always a *political* act, and grammaticality judgments are always methodologically complex, variable, and vague. (Dor 2015: 48)[8]

In Dor's understanding, what underlies instructive communication is the process of *conversion* of one type of inputs into another type of outputs.

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[8]   One would think that prescriptivism, in the sense of strict adherence to the norms established by a linguistic community, has disappeared with the emergence of contemporary linguistic theory focused on discovering and describing "deeper phenomena." This, however, is not the case: "We linguists [...] have become so used to the distinction between *descriptivism* and *prescriptivism* that we no longer see that the object of linguistics as a descriptive science is itself a system of prescription. [As linguists trying to elicit grammaticality judgments] [w]e often say to our native speakers: 'forget what they taught you at school about the way the language *should* be spoken; just tell us how this sentence sounds to *you*'. We think we are going beyond the norms, touching something much deeper. Actually, we are telling our native speakers: 'forget about the norms you have only *heard* about; pay attention only to those you have already internalized'" (Dor 2015: 49).

In the case of a telephone conversation, for example, sound waves are converted inside the device into electrical signals and are then, in the receiver, re-converted into sound waves. The telephone thus performs a single conversion act "on each side of the communication event" (Dor 2015: 50). This is what happens in all instances of presentational communication: there is conversion of individual experience to "perceptible" behaviour. Similarly, a single conversion act takes place in re-presentational communication, as in admiring a painting, when visual percept, initially only experienced by the painter, is transformed into another type of visual percept (on the canvas) and is internalized by the viewers.

In language, conversion is of a very different kind. It is usually believed, claims Dor, that language performs two conversions rather than one. In contrast to presentational and re-presentational systems, the intention with which a given utterance is produced is not directly transformed into perceptible behaviour but first into *formal structure* (words, morphemes, constructions), and only then into the stream of speech (which is perceptible behaviour). This is what happens in the speaker, but the same goes for the listener: what is perceived (the stream of speech) is first converted into formal structure, i.e. words along with the formal relations between them, which is then converted anew into interpretation.

But this traditional view must, in Dor's opinion, be seriously revised. For him, the use of language involves not two but *three* conversions. The first stage is a "meaning-to-meaning" type of conversion (not "meaning-to-formal structure"). It involves a conversion of the communicative intent into a *message*, of experiential and private meaning into the symbolic landscape, the instruction for imagination. The second conversion is that of the message (symbolic landscape) to *utterance*, that is, formal linguistic structures: words, constructions, and relationships between them (in short, the signifying elements). Finally, the third conversion is that of the utterance into perceptible linguistic behaviour, i.e., the stream of speech. When all these three types of conversion take place, then the process of instructive communication should be judged to be successful. "An instance of imagination-instruction is successful to the extent that the listener constructs an imagined experience that is similar to the speaker's intent," declares Dor (2015: 53). But what happens if this three-stage process of conversion is unsuccessful? The answer is simple: in such a case the instruction for imagination is unsuccessful.

Instructive success involves four kinds of *parameters*: physical, cognitive, linguistic, and two experiential parameters (Dor 2015: 54-55). As far as the physical parameter is concerned, it is obvious that the process will fail if the physical conditions are inappropriate; for example, its efficiency is reduced in noise. The cognitive parameter defines the interlocutors' ability to find, retrieve, and process information, the capacity of their memories, the ability to

draw conclusions, etc. The linguistic parameter is more complex: it pertains to the interlocutors' level of *proficiency*, which includes *competence* as one of its basic components (the "knowledge of normative rules and regulations of the protocol and the symbolic landscape" (Dor 2015: 54)). Generally speaking, the greater the linguistic proficiency of the speakers, the more efficient the instructive protocol and the greater the chances for communication. We are left now with two important experiential parameters:

(i)   Instructive success is inversely correlated with the width of the overall gap between speaker and listener. Other things being equal, the closer the experiential worlds of the interlocutors are to each other, the more successfully they will communicate.

(ii)   Instructive success is inversely correlated with the width of the internal gap, within each speaker, between the realm of experience and the realm of language. Other things being equal, higher levels of compatibility between the interlocutors' experiential worlds and the language variations that they use will provide for higher levels of instructive success. (Dor 2015: 55)

Let us note that these parameters are responsible for *successful* instruction – because the real question is not why and how miscommunication happens but how it is possible for communication to work if language as "a bridge over the experiential gaps between speakers" is "inherently very shaky" and "breaks down very easily" (Dor 2015: 59). Errors, ungrammatical constructions, and misused words are handled through *repair*, an effort on the part of speakers to stop this fragile construction from collapsing.[9]

Let us take stock. For Dor,

(i)   Experience is individual, private.

(ii)   Language technology provides instruction on how to bridge *experiential gaps* between speakers, as well as influencing the experience of others.

(iii) What underlies communication is the process of *mutual-identification*

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9   Unfortunately, the role of repair in linguistic communication has been virtually neglected in general linguistic inquiry. Language has always been treated as a *perfect design* or, in Chomsky's terminology, as an *organ* for achieving "the best results." General linguistics, Dor says, has always been concerned with "the fully grammatical sentence, the totally understood utterance, the perfectly combined constituents, the most adequate interpretation. Everything that goes wrong is delegated to psycholinguistics, to be explained as a matter of cognitive processing – an altogether different thing. To be sure, processing mistakes have been used in the literature as linguistic evidence […], but the logic of inquiry here still follows the above presupposition: we can learn about language as an optimal system from instances where *other* causal elements prevent the speaker from achieving perfect execution. In this sense, general linguistics has never really detached itself from the prescriptive tradition within which it was born: the prescriptive discourse has simply camouflaged itself in the colors of 'legitimate scientific idealizations'" (Dor 2015: 56-57).

for language, with the emerging *symbolic landscape*, a model of the world negotiated by speakers as instruction of imagination.

(iv) Based on the symbolic landscape and the knowledge of the *communication protocol* (conventionalized pragmatic and sociolinguistic norms), the speaker moves from experience to the speech event, while the listener moves in the opposite direction: from the speech event to interpretation.

(v) At the foundation of linguistic communication lies a *three-stage conversion process* that includes:
Stage I: private, experiential meaning→symbolic landscape (message);
Stage II: symbolic landscape→formal structure of the utterance (words, constructions, and relations between them);
Stage III: utterance→the stream of speech.

(vi) In making grammaticality judgements, language users ask: "Does the speaker follow the rules/norms?", rather than "Is the sentence grammatical?"

In view of the above, the role of the linguistic sign as a "medium" (our term) for a "mutually identified cluster of experiences" — recall that the symbolic landscape consists of signifieds and is connected to other signifieds by a web of semantic relations and is marked by a signifier — can be diagrammatically presented as in Figure 6.
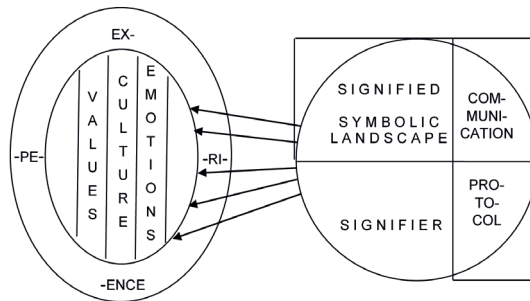

Figure 6. Linguistic technology, experience and the linguistic sign

Figure 6 represents the positioning of the linguistic sign, composed of the signified (the symbolic landscape) and the signifier, with regard to experience (cf. Figure 5), i.e. to the entire body of general knowledge of the world, cultural knowledge, language-entrenched values, and mental experience of emotions, in short – to the realm of encyclopedic knowledge. Says Dor:

> The context within which word meanings should be understood is social. […] [T]he lexicon is the symbolic landscape – the storage that was collectively mutually identified; the encyclopedia includes everything that emerges in private experience. What this means […] is that the distinction between the lexicon and the encyclopedia not only exists – it is a necessary func-

tional property of language as a social technology. [...] In this sense, [...] my theory sides fairly and squarely with the generative position, re-framed in one crucial sense: the lexicon-encyclopedia distinction does not reflect the autonomy of language from general cognition – but not because it is a cognitive capacity of a different kind, but because it is not a cognitive capacity at all. It reflects the autonomy of language, as a socially constructed tool, from the private experiences of its speakers. (Dor 2015: 62)

Clearly, Dor's claim about social context-determined word meanings set apart from (private) mental experience and (thus) his insistence on the preservation of the lexicon-encyclopedia distinction stand in opposition to the Cognitive Grammar treatment of meaning. Thus, while endorsing the structure/function approach to meaning (which appears to give support to our conception of the linguistic sign as shown in Figure 2), Langacker makes the following comment:

You can't isolate a linguistic meaning. It draws upon other conceptions that are often more fundamental or broader in nature. There is a substrate, a supporting substrate of an indefinite extent, and that is all part of an expression's meaning because the more focused meaning couldn't be arrived at without it. There is no particular dividing line.

And also, meanings are not contained in words or sentences, but they are mentally constructed by the interlocutors – the speaker and the hearer – based on all available conceptual resources. That includes the context. And all of that is part of the conceptual substrate. An expression and its acceptability – whether it is well-formed or ill-formed, grammatical or ungrammatical – depends on the situation described and how we construe it, with all of these factors coming into play. That is why grammaticality judgements never really work, because the notion of grammaticality, as conceived in generative grammar, presupposes that meanings are self-contained, but they are not. (Langacker 2017: 28-29)

It is clear that Dor's and Langacker's approaches to meaning, emerging from the above quotations, treat the nature of the linguistic sign differently. For Dor, the linguistic sign, and especially the signified, is a medium for, or a "pointer" of, a "mutually identified cluster of (mental) experiences". For Langacker, it is mental experience (world knowledge, beliefs, values, emotional content of experience, etc.) that is brought to bear on an expression's meaning residing in the sign. We thus have two different views on the (Saussurean) linguistic sign: the sign seen as a medium, as a pointer, and the sign as a "non-isolable, contextually determined basis" for the meaning of linguistic units.

Now, in order for such a statement to be made (irrespective of its validity), we have to appeal once again to Carl Hempel's vision of a scientific theory as a complex spatial network which includes derivative hypotheses in the theory (see Section 1). This spatial network, we would like to claim now, can assume the form of the External Symbolic System–ESS in the sense of Donald (1991, 2001), which, we hold, is part of the Semiosphere.

5. Scientific theory, ESS and Semiosphere

In his *Origins of Mind: Three Stages in the Evolution of Culture and Cognition* (1991) and *A Mind So Rare: The Evolution of Human Consciousness* (2001), Merlin Donald develops a theory of human cognitive evolution, according to which humanity has undergone three major cognitive transitions, each of which has equipped the human mind with a new mode of representing reality via a new form of culture. Donald distinguishes four types of culture: mimetic, mythic, and theoretic. According to him, the cognitive transitions took place (i) from episodic culture to mimetic culture, (ii) from mimetic to mythic culture, and (iii) from mythic to theoretical culture. Following Sonneson (2012), who draws on Piaget (1945) and Donald (1991, 2001), we can describe the three cognitive-cultural transitions of humankind in terms of the so-called *sign function* (or *semiotic function*), i.e. "the ability to represent reality by means of a signifier, which is distinct from the signified" (Sonneson 2012: 86).[10]

The first transition (from episodic to mimetic culture) is associated with abilities such as the use of tools, miming and imitation. The second transition brings about language and the symbolic qualities of the linguistic sign, whereby the signifier becomes distinct from the signified. At this stage it becomes possible to create narratives or myths. Finally, the third transition, which is associated with *external storage memory*, brings about theoretic culture with its visuosymbolic invention (pictures), writing and scientific inquiry.

Whereas episodic, mimetic and mythic types of culture were intimately connected with the biological aspect of the development of human cognitive capacities, the theoretic culture is, according to Donald, a result of the

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10   As noted by Sonneson, sign function was initially defined by Piaget (1945) as "a capacity acquired by the child at an age of around 18 to 24 months, which enables him or her to imitate something or somebody outside the direct presence of the model, to use language, make drawings, play 'symbolically', and have access to mental imagery and memory" (after Sonneson 2007: 93-4; also mentioned in Kardela 2019b). It will be observed that the evolution of the cultural mind resembles the liberation of the child's signifier from the thing represented by the signified. Both the child's signifier and a scientific theory attain a complete autonomy: the child's signifier detaches itself — via the symbolization and signification process – from the thing perceived by the child and the theory proposed by a linguist-analyst starts living "its own life" in that the theory does not only explain "hidden facts" but also creates new facts. (For a discussion of so-called Progressive Research Programs, which create new theory-laden facts, see Lakatos 1978; also Kardela 1991.)

technological, not biological development; it is associated with the creation of new storage, information retrieval and processing possibilities. The manifestation of the theoretic culture is the so-called External Symbolic System (ESS), a "collective memory", which, according to Donald, underlies modern scientific theorizing done by scientists-monads linked to the system. Lastly, the ESS system itself is part of a larger picture: the cognitive-cultural complex of the human mind's *representational architecture linked to global electronic information environment* (Donald 1991: 359).

This entire cognitive-cultural complex of the human mind together with the global electronic information – we wish to claim now – form a kind of semiosphere, a symbolic network structure, initially introduced to culture studies by Yuri Lotman (cf. Lotman 2005 [1984], 1990).[11]

Seen from this perspective, the conception of semiosphere incorporating Donald's insights might be represented as in Figure 7.

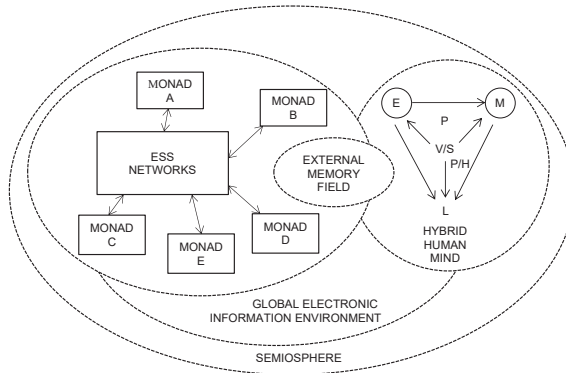*Figure 7. Semiosphere, based on Donald's (1991, 2001) theory of human cognitive evolution*

Figure 7 presents the idea of semiosphere that incorporates Donald's theory of human cognitive evolution involving the global representational architecture of the hybrid human mind linked to the ESS network and global electronic information environment. E stands for "episodic memory," M symbolizes "mimetic memory" and L stands for the so-called "linguistic controller," i.e. an *integrating language system*, which, according to Donald, constructs *narrative models*, indispensable for the development of mythic memory (and

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11   In his *Universe of the Mind*, Lotman makes the following remark: "Humanity, immersed in its cultural space, always creates around itself an organized spatial sphere. This sphere includes both ideas and semiotic models and people's recreative activity, since the world which people artificially create (agricultural, architectural and technological) correlates with their semiotic models" (Lotman 1990: 203; also quoted in Nöth 2015: 14).

Because, as Kotov and Kull note, following Lotman, "all semiotic systems are 'immersed' in a semiotic space" and "can only function by interaction with that space," a sign, they insist, "cannot make sense except in the context of other signs" (Kotov & Kull 2011: 180). If so, the import of this observation for the argument developed in this paper should be obvious: each theoretical term appearing in any scientific discourse concerning the linguistic sign makes sense only in relation to other terms appearing in this discourse and can only be analysed in this discourse.

culture). P ("pictorial path") and I ("ideographic path") yield, in the evolutionary development of mind and culture, the so-called *visuosymbolic* (V/S) codes, i.e. interpretive strategies for processing visual images. An important element of the development of the linguistic system falls to the formation of the *phonological* (PH) *path*, which has led to the development of the *external memory field* (EXMF) – an external working memory, indispensable for processing and refining visual symbols. The invention of the alphabet, the development of traditional media such as lectures, textbooks and scientific papers, all this has led to the development of both the EXMF and ESS networks. Coupled with the development of the global electronic information environment, ESS and EXMF have ultimately brought about the development of semiosphere, or "a 'thinking' system that is able to: (1) transmit available information; (2) to create new information that is not simply deducible according to a set of algorithms from already existing information, but which is to some degree unpredictable; (3) to preserve and reproduce information, that is, any semiotic system has its own memory" (Kotov & Kull 2011: 182).

6. In lieu of conclusion

The idea of language as a social communication technology represents, in Dor's own words,

> a long tradition of thought – a tradition that was expelled from the linguistic sciences by the *cognitive revolution*, fifty years ago, and is now being locally re-considered in certain quarters of the field: the human condition is deeply social, and language is a social entity. It is a property of the community, of the social network, the product of a collective process of invention and development. It resides *between* speakers, not in them, at a level of organization and complexity that transcends the individual mind – and cannot be reduced to it. The place to look for the essence of language is not the mind-brain. It is social life. (Dor 2015: 1)

With the concept of semiosphere at hand, we can replace now Dor's formulation "the place to look for the essence of language is social life" with the *dictum* "the place to look for the essence of a linguistic theory is the social life of science". Indeed, the rationale for the metatheoretical basis of this reformulation can be found in the conception of *scientific paradigm* in the sense of Kuhn: "a scientific achievement […], sufficiently unprecedented to attract an enduring group of adherents away from competing modes of scientific activity [while being] sufficiently open-ended to leave all sorts of problems for the redefined group of practitioners to resolve" (Kuhn 1996 /1962/: 10). It is precisely against the background of the "competing modes of scientific activity" that terms such as *linguistic sign, signifier, signified, semiotic landscape, deep*

structure, transformations, figure-ground arrangement, external memory, function/ schema-related categorizing relationship, etc. can become subject to "competing modes of scientific activity". Being meaningful only within a *semiosphere for linguistic sign research*, the above terms thus "transcend the individual mind", enabling a community of scientists – let us quote Hempel again – to "proceed, via definitions and hypotheses, to other points, from which another interpretive string permits a descent to the plane of observation" (1952: 36).

Translated by Adam Głaz

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Streszczenie

Znak językowy od podszewki. O debacie między formalistami a funkcjonalistami: Noamem Chomskym, Ronaldem Langackerem i Danielem Dorem

Artykuł omawia różne podejścia do Saussure'owskiej koncepcji znaku językowego, jakie reprezentują Noam Chomsky, Ronald Langacker i Daniel Dor. Wybór tych nazwisk nie jest przypadkowy: można stwierdzić, iż – zgodnie z proponowanym przez Fredericka Newmeyera podziałem teorii językoznawczych na podejścia formalne (językoznawstwo generatywne) i funkcjonalne, ci trzej autorzy wykorzystują różne aspekty relacji między elementem znaczącym a znaczonym w opisach znaku językowego.

W składniocentrycznych modelach Noama Chomsky'ego, takich jak teoria standardowa (*Standard Theory*) czy teoria rządu i wiązania (*Government and Binding Theory*), nacisk pada na obszar związany z elementem znaczącym, czyli formą językową. Według Chomsky'ego gramatyka (generatywna) jest systemem reguł, które tworzą struktury i przypisują je zdaniom. Tak rozumianą gramatykę, twierdzi Chomsky, posiada każdy użytkownik języka – jest ona wyrazem jego kompetencji językowej. Co ważne, teoria standardowa kładzie nacisk na modularność języka, co oznacza, iż struktury gramatyczne generowane są przed moduł składniowy dzięki rekursywnym regułom rządzącym kategoriami, takimi jak jednostki frazowe

i zdania. Moduł ten leży w centrum procesu generowania zdań, podczas gdy dwa pozostałe moduły, semantyczny i fonologiczny, mają jedynie charakter interpretacyjny. W późniejszych podejściach (teoria rządu i wiązania, program minimalistyczny) rola składni zwiększa się jeszcze bardziej.

W opozycji do tego podejścia stoi gramatyka kognitywna (*Cognitive Grammar*) Ronalda Langackera, która w centrum uwagi stawia semantykę, konceptualizację i znaczeniowy aspekt znaku językowego – ciąży tym samym w kierunku tego, co w ujęciu Saussure'a jest obszarem znaczonym. W gramatyce kognitywnej uznaje się, że zarówno słowa, jak i wzorce morfologiczne i składniowe są dwubiegunowe – składają się z bieguna fonologicznego (który odpowiada Saussure'owskiemu elementowi znaczącemu, *signifiant*) i bieguna semantycznego (Saussure'owski element znaczony, *signifié*). Zachodzi między nimi relacja symboliczna. Ponieważ mamy do czynienia z kontinuum jednostek językowych w ramach struktury semantyczno-pojęciowej, gramatykę uznajemy za znaczący (nasemantyzowany) obszar języka, w odróżnieniu od interpretacyjnej koncepcji modułu semantycznego w ujęciu Chomsky'ego. Notabene na semantyczny aspekt gramatyki zwraca także uwagę Anna Wierzbicka, mówiąc, iż znaczenie mają nie tylko słowa, lecz także wszelkie konstrukcje gramatyczne.

Gdzie zatem należałoby przeprowadzić granicę między obszarem znaczącym a znaczonym – czy przebiega ona między nimi, czyli „w środku" znaku, jak przedstawia się to w ujęciu Saussure'owskim? A może, jak twierdzi Autor, element znaczący zanurzony jest w tym, co znaczone? Tak właśnie pochodzi się do znaku językowego w najnowszym modelu gramatyki kognitywnej, który Autor artykułu określa tu jako model strukturalno-funkcjonalny – odrzuca się w nim ścisły podział na strukturę i funkcję znaku, uznając relację między nimi za zależną od przyjętej perspektywy. Opisując różne struktury na wszystkich poziomach organizacji pojęciowej, *de facto* opisujemy ich funkcje. Langacker traktuje zatem semantyczny biegun złożenia symbolicznego jako część jego struktury/funkcji symbolicznej.

Nieco inaczej patrzy na to zagadnienie Daniel Dor, który proponując koncepcję języka jako społecznej technologii komunikowania się, twierdzi, iż funkcjonuje on w obszarze *między* użytkownikami, a poziom jego złożoności wychodzi poza pojedynczy umysł. Jest to de facto pogląd Saussure'a, wedle którego język to społeczny wymiar mowy, istniejący poza pojedynczym użytkownikiem, ponieważ ten ostatni nie może go ani stworzyć, ani nim sterować – konieczna jest swoista umowa między członkami danej społeczności. Znak językowy, element języka jako społecznej technologii porozumiewania się, to instrukcja dla wyobraźni, pozwalająca domknąć różnicę doświadczeniową między użytkownikami języka. Nie jest ona tożsama z doświadczeniem, lecz jest zachętą skierowaną do odbiorcy, by spróbował wyobrazić sobie doświadczenie określonego rodzaju, jakie przeżywa nadawca komunikatu. Jest to

pewien schemat, szkicowa lista podstawowych współrzędnych doświadczenia. Odbiorca może jej użyć jako mentalnego rusztowania, dzięki któremu przywołuje z pamięci swoje własne doświadczenia i łączy je na nowe sposoby, konstruując w ten sposób nowe, „wyobrażone" doświadczenie.

Oba podejścia, Dora i Langackera, wyraźnie nawiązują do elementu znaczonego w Saussure'owskiej koncepcji znaku językowego. O ile jednak dla Dora jest to „wskaźnik" wspólnie konstruowanej wiązki doświadczeń mentalnych, o tyle według Langackera doświadczenie mentalne (wiedza o świecie, przekonania, wartości, emocje itp.) wpływa na znaczenie wyrażenia kodowanego jako znak językowy. Model Dora wykracza przy tym poza granice relacji między elementem znaczącym i znaczonym – pozostaje jednak do określenia, jak daleko.

Aby skutecznie porównać omawiane w artykule teorie, konieczne jest znalezienie przestrzeni pozwalającej na takie porównanie. Może nią być teoria zewnętrznego systemu symbolicznego (*External Symbolic System*) Merlina Donalda. Donald przygląda się ewolucji poznawczo-kulturowej człowieka i wyróżnia w niej kilka etapów: kulturę epizodyczną, mimetyczną, mityczną i teoretyczną. Wyłonienie się kultury teoretycznej (tzn. pozwalającej na konstruowanie teorii naukowych) jest sprzężone z powstaniem umysłu ludzkiego jako kognitywno-kulturowego kompleksu, w skład którego wchodzi także globalna informacja w formie elektronicznej. Jest to semiosfera, symboliczna sieć, którą (jako pojęcie) wprowadził do kulturoznawstwa Jurij Łotman – w jej ramach funkcjonuje hybrydowy umysł ludzki, połączony właśnie z zewnętrznym systemem symbolicznym i elektroniczną, globalną infosferą. Zgodnie z tym, co mówią Kaie Kotov i Kalevi Kull, jest to „myślący" system semiotyczny zdolny do przekazywania informacji już znanych, tworzenia nowych informacji oraz zachowywania ich (ponieważ dysponuje własną pamięcią).

Autor twierdzi zatem, iż można zastąpić poszukiwanie istoty języka w domenie życia społecznego, co proponuje Dor, poszukiwaniem istoty teorii językoznawczych w społecznym życiu nauki – zmianę tę motywuje koncepcja paradygmatu naukowego Thomasa Kuhna. Zarówno na ideę znaku językowego, jak i na pojęcia proponowane w teoriach Noama Chomsky'ego, Ronalda Langackera i Daniela Dora, można zatem spojrzeć jako na współzawodniczące ze sobą aktywności naukowe. Są one częścią, jak ujął to Carl Hempel, złożonej przestrzeni sieciowej, umożliwiającej stawianie różnych hipotez, w ramach której poszczególne konstrukty teoretyczne przekraczają granice pojedynczych umysłów.

Streszczenie przygotował Adam Głaz