The place of language among sign systems: Juri Lotman and Émile Benveniste

Remo Gramigna

Department of Semiotics, University of Tartu
Jakobi 2, 51404 Tartu, Estonia
e-mail: gramigna@ut.ee

Abstract. This paper seeks to shed light on an unwritten chapter in the history of Tartu semiotics, that is, to draw a parallel between Juri Lotman and Émile Benveniste on the status of natural language among other systems of signs. The tenet that language works as a 'primary modelling system' represents one of the trademarks of the Tartu-Moscow school. For Lotman, the primacy assigned to natural language in respect to other systems of signs lied in the fact that the former functions as a 'model' for the latter thus regarded as 'secondary modelling systems'. Yet how does language carry out its function of being a model for other sign systems? Is language the only primary modelling system? This paper seeks to foster the abovementioned claim of the primacy of natural language and argues that this issue deserves a closer inspection. In order to follow this route, it suggests a parallel between Lotman and Benveniste arguing that there exist several points in common that lead to a convergence of positions between these two remarkable scholars. The paper explores such a possibility, arguing that Lotman's and Benveniste's positions open up an interesting debate with specific reference to the relations laid down between language and other system of signs.

Keywords: primary and secondary modelling systems, natural language, Juri Lotman, Émile Benveniste, metalinguistic faculty of language

Semiotics as a systemic science

In the context of a typological description of "Slavic Semiotics", Carlo Prevignano recognized two main directions. Beside a "taxonomical semiotics" (which deals

with taxonomy and typology of signs, rather than systems and signs processes, and is typical of a philosophical and epistemological wing), the author identified a "systemic semiotics". The latter interpretation, which is characteristic of the Tartu-Moscow group, can be succinctly formulated as follows: "[i]f we understand semiotics not only as a theory of *sign* systems, but also as a theory of sign *systems*, then it falls into the family of systems theory" (Prevignano 1979a: 19).

According to this position, "systemic semiotics", in addition to being the theory and analysis of sign systems, is the theory and analysis of models, even of modelling itself: "as sign systems are ascribable to the class of systems, so signs are to be referred to the class of models, and sign systems can accordingly be considered as systems of models, or modelling systems" (Prevignano 1979a: 18).

The set of goals-problems that constitute the programmes of theoretical and applied research classified as "systemic semiotics" can be identified as follows: "identifications, analysis, modelling and typologization of sign processes and sign systems, their intersystemic and intrasystemic properties (functions) and their interactions" (Prevignano 1979a: 19).

Modelling theory:
from models to modelling systems

Modelling theory is, without a doubt, the trademark of the Tartu-Moscow school. It represents a strength of the group and, at the same time, is the object of criticism by its opponents. Modelling theory is "the most objectionable aspect of Tartu semiotics" writes Marzio Marzaduri (1979: 373) and, according to Peter Grzybek, "the concept of model has been applied quite successfully by practically all Moscow-Tartu semioticians over the years, although it has never been the topic of an explicit theoretical discussion" (Grzybek 1994: 286).

In order to have a better understanding of the use of the term "model" in the semiotics of Tartu and Moscow, let us recall some interpretations that the word had in the Soviet culture of the 1960s. As Marzaduri pointed out, two kinds of models could be distinguished between, the analytic and synthetic. The former, proposed by O. S. Kulagina went from a set of sentences to the system of rules; the latter, derived from Noam Chomsky, followed the opposite path: in the one, texts produced the model; in the other, on the contrary, the model created the texts (Marzaduri 1979: 371). Then there was the cybernetic-mathematical notion, according to which a model is an arrangement characterized by the order of the elements and not by their nature. Alongside these notions of "model", there was the philosophical concept of model as "image". For Viktor Shtoff the model is "a certain way of reflecting reality", it is "similar to the modelled object" and simultaneously "distinct

from that". "The gnoseological functions of the model" would derive precisely from this dialectical relationship (Shtoff 1963: 49).[1]

When the term appears among semioticians in the introduction of Vyacheslav Ivanov at the Moscow conference of 1962, "model" is defined as a forms reflecting objects, "composed of a finite number of elements". Despite some ambiguous terms such as "forms" and "reflecting", Ivanov's definition follows that of cybernetics:

> Like other sciences related to cybernetics, semiotics is concerned primarily with models, i.e. with forms reflecting (modeling) objects, forms composed of a finite number of elements and relations between these elements. (Ivanov 1962[1978]: 201)

After referring to the problem of the relationship between "models" and "modelled objects", Ivanov (1962[1978]: 201) stated that "the construction of models of the world is effected by means of semiotic modeling systems with varying degrees of modeling capacity (i.e., a varying number of elements and relationships corresponding to the elements and relationships of the modeled object)", relating the "modeling capacity" to the "pragmatic point of view", which is certainly not historically invariant, "of a given user" (*ibid.*).

Among the types of models, the "models of the universe" (or "models of the world"), that is, semiotic systems "employed as a model of the entire world", are the ones to be taken into account according to Ivanov. From the point of view of Thomas A. Sebeok, who reinterprets Ivanov's definition, a "model of the world" is "a program for the behavior of the individual, the collectivity, the machine, etc., since it defines its choice of operations, as well as the rules and motivations underlying them. A model of the world can be actualized in the various forms of human behaviour and its products, including linguistic texts" (Sebeok 1985: 23).

As is well known, Juri Lotman reinterprets artistic phenomena and works of art as types of models. Since his *Lectures on Structural Poetics* Lotman defines the work of art as "a unique model", and artistic creation as "one of the various forms of modelling of reality" (Lotman 1964: 27). Later Lotman, conceiving art as a secondary modelling system, defines a model as "an analogue of an object of perception that substitutes it in the process of perception" (Lotman 1967[2011]: 250).

With their modelling theory the scholars of the Tartu-Moscow group identified the modelling functions performed by sign systems and, at the same time, shifted

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[1]   Ann Shukman distinguished two notions of "model": "logical model" – used in logic, cybernetics and linguistics, "composed of axioms and strict procedural rules" (Shukman 1977: 48) – and the "epistemological model" – "a conventional image, a representation, schema, or description of any object or systems of objects" (Gastev cited in Shukman 1977: 48).

the notions of the modelling function and modelling as such from an atomistic interpretation, relating it to the level of systems. If, until then, Soviet epistemology had mainly provided an atomistic theory of modelling, according to which a "model" was intended as an "analogue" or an "image" indeed atomistic of the object of knowledge (in the USSR of the 1960s typologies of models were proposed, for instance, by Glinsky et al 1965; Shtoff 1966, and, in relation to linguistics, by Apresjan 1973; Denisov 1973; Revzin 1962), the novel contribution of Ivanov, Lotman and his colleagues was giving an interpretation of the concept of "model" which was both semiotic as well as systemic (Prevignano 1979b: 78).

Codifying relationships between semiotic modelling systems

As we have seen above, modelling systems, interpreted as "models of the world", are invested with a programmatic function for behaviour (e.g. a programme for the behaviour of the individual, the collectivity, the machine). In two articles dating back to 1962, Ivanov and his colleagues gave directions, *in nuce*, for the identification of another function beside this function carried out by modelling systems that can be reformulated as *intersystemic codification*.

As Ivanov pointed out:

> Various semiotic modeling systems form complex hierarchical series of levels where the system of the lowest level (for instance, natural language), serves to codify the signs which enter into the systems at a higher level (for instance, the semiotic systems of art and science). (Ivanov 1962[1978]: 201)

Having interpreted the synchronic multiplicity of semiotic modelling systems as organized in "complex hierarchical series", Ivanov identified the multilevelledness not only as an intra-systemic fact (in natural languages), thus assuming as another parameter of analysis for modelling systems their "level" in the context of "levels of modelling", in which the system of the lowest level serves to codify the signs which enter into the systems at a upper rank (Prevignano 1979b: 76–77).

Tackling the issue of the recognition of religious systems as modelling systems Ivanov *et al.* (1962[1969]) seem to move in the same direction. By interpreting the systems of class S_l (linguistic systems) as a function of the coding of systems of class S_r (religious systems), Ivanov *et al.* presupposed relationships of codification between modelling systems and, in particular, they placed, although not explicitly, natural language as a codifying system, thus a primary system. In this way, it was indirectly recognized as another function of sign systems: the codifying of other sign systems at an intersystemic level.

The primariness and secondariness of modelling systems were clearly established on the basis of what above was called the relationship of codification between sign systems, according to which a *codifying system* was called "primary" and a *codified system* "secondary". In what follows we can see how this view, deeply rooted in the Tartu-Moscow semiotics, is also evident in the modelling function of language envisaged by Émile Benveniste. Before setting forth this parallel let us quickly recall some well-known ideas.

The concept of "primary modelling system", introduced by Ivanov, Toporov and Zaliznjak (1962: 36; Ivanov, 1962: 6), finds its more precise formulation in an editorial note that appeared in the second issue of *Trudy po Znakovym Sistemam* (*Sign Systems Studies*), which reflects the conclusions of the debate of the Summer School of 1964, where the term "secondary modelling systems" also appeared. In this note we can read:

> It was agreed to understand by "secondary modelling systems" those systems which, arising on the basis of language (the primary system), receive a secondary and complementary structure of a particular type. In doing so, the nature of the secondary modelling systems include, inevitably, the entire complex of relationships inherent in linguistic structures, supplementing them with more complex constructive relations, of a second order. It follows, inevitably, that for the study of secondary modelling systems it is essential to define their relationship with the linguistic structures. It is therefore necessary to agree on the meaning of the concept of linguistic structure. There is no doubt that every sign system (and therefore also the secondary one) can be considered a language of a particular type. Therefore, the simplest elements (the alphabet of the system) and the rules of their combination must be identified. We can deduce the conviction that every sign system can, in principle, be studied with linguistic methods, hence the particular role of contemporary linguistics as a methodological discipline.[2]

The expression "arising on the basis of language" can be interpreted and specified with Juri Lotman as the function of natural language is revealed more clearly, which is simultaneously the model on which the entire semiotic universe is formed and the basis for studying it. As Marzaduri (1979: 368) pointed out, "different semiotic systems (natural language, artificial languages, literature, folklore, music, dance, myth, ritual, architecture, etc.) are unified by their common linguistic nature" and in all these cases, "we are faced with at least two properties: an array of elementary units, or vocabulary; a body of rules for their combination, or grammar". However, Marzaduri (1979: 368) continues critically, "if this justifies the extension of linguistic methods to semiotics, it certainly does not clarify the relationships that

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[2]   *Trudy po Znakovym Sistemam 2*(1965): 6 as cited in Marzaduri 1969: 368.

would be established between the primary system and the secondary ones, let alone their modelling nature".

Émile Benveniste and semiotic modeling of language

The *vexata quaestio* of the primacy of language as compared to other semiotic systems is an issue that has attracted the attention of many scholars, and rightly so (Anderson, Merrell 1991; Birnbaum 1990; Chang 2003; Sebeok 1991; Sebeok, Danesi 2000; Segre 1978). Concerning the semiotic biplanarity (or double articulation) of culture, whose first level is interpreted as exclusively linguistic and cultural codes are intended as informational superstructures compared to natural languages, we may remember several parallels between the positions of Lotman and those of other scholars.[3] There is, I hold, a convergence of positions between the tenets expressed at the first Summer School in Kääriku and the view on the semiotic modelling of language expressed by Émile Benveniste. This point is acknowledged by Lotman himself:

> [...] in 1969, in his article "Sémiologie de la langue" [...] Émile Benveniste wrote: 'Every semiology of a non-linguistic system must use language as an intermediary, and this can only exist in and through the semiology of language'. The same position was held by the participants of the first Summer School at Kääriku (1964), who accepted B. A. Uspenkij's definition for the whole complex of supralinguistic semiotic systems – 'secondary modelling systems'. (Lotman 1992[2012]: 9)[4]

In comparison with the view coming from the scholars of the Tartu-Moscow group, Benveniste's position on language is more consistent and clear, although his stance might be easily charged with logocentrism. In asking what the status of language is

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[3]   Some, for instance, draw a parallel between Roland Barthes's view on language and the Tartu-Moscow School (Prevignano 1979b: 80-81).

[4]   The reference to B. A. Uspenkij is not accurate here. It was, in fact, Vladimir Uspenkij, the mathematician (Boris Uspenkij's brother) who coined the term. With reference to the label "Summer Schools on Secondary Modelling Systems" Vladimir Uspenskij commented: "For me, this title had the following important values: (1) it sounded very scientific; (2) it was completely incomprehensible; (3) if really needed, it could be explained: primary modelling systems that model reality are natural languages, and all the rest that build upon them are secondary. [...] I did not hide from Lotman the mocking and hooliganish character of my suggestion, but to my surprise he became immediately attached to it. He explained that incomprehensibility is not a property of parody, as I mistakenly believed, but a characteristic of a sophisticated science" (V. Uspenskij, cited in Salupere 2012: 304).

among the system of signs, Benveniste starts from afar and arrives at conclusions that in some ways converge with the positions of the Tartu-Moscow school and, in other ways, remain distant from them.

Benveniste's starting point is Ferdinand de Saussure, who had glimpsed the nature of language as a social institution and foreseen the birth of semiology as "a science that studies the life of signs within society". From Saussure, Benveniste inherits the "systemic" orientation, so to speak, and identifies as a "condition of *significance*" that "each sign must be included and articulated within a system of signs" (Benveniste 1969[1981]: 6), proceeding: "We have to establish several systems of signs, and among these systems, make explicit the relationship of difference and analogy". In this way "no less than systems of signs, the *relationships* between these systems will constitute the subject of semiology" (Benveniste 1969[1981]: 10). This premise casts light on the first convergence of positions between Benveniste and the Tartu-Moscow group: the emphasis of Benveniste on studying *relationships* between systems goes hand in hand with what in the introduction has been called "systemic semiotics" of the Tartu group whose object of study was identified in the *Theses* of 1973 (1.0.0) as the "functional correlation of these sign systems".

Within the hierarchy of relationships that bound sign systems with one another, Benveniste assigned a primary position to natural language thought of as the "interpreting system (interpretant) of all other semiotic systems" (Benveniste 1969[1981]: 18), and ultimately the sole system which possesses a "metalinguistic faculty".

Lotman seems to agree, at least partially, with Benveniste's position on the metalinguistic faculty of language, but he is not in agreement with the prerequisites that established it as a function. Lotman's criticism of Benveniste is evident in the following passage co-authored with Uspensky:

> Recently Benveniste has emphasized that only natural languages can fulfill a metalinguistic role and that, by virtue of this, they hold a distinct place in the system of human communication. More questionable, however, is the author's proposal in the same article to consider only natural languages as strictly semiotic systems, defining all other cultural models as semantic, that is, not possessing their own systematic semiosis but borrowing it from the sphere of natural languages. (Lotman, Uspensky 1978: 212)

At best, this extract is "quite puzzling" (Chang 2003: 4). Needless to say, there is a mismatch of scientific metalanguages used here. Benveniste in his article does not even mention "cultural models" nor does he identify them as solely "semantic" as the authors claim. This issue deserves further scrutiny for it is the base for the understanding of how language can fulfill its metalinguistic role, a point on which Lotman and Uspensky overtly agreed.

First of all, we must bear in mind that Benveniste singled out two domains or modalities of meaning which he called the *semiotic* domain and the *semantic* domain. In his view, "semiotics designates the mode of signification proper to the linguistic *sign* that establishes it as a unit" (Benveniste 1969[1981]: 19). Elsewhere, in an interview with Pierre Daix, Benveniste explains this distinction:

> The linguistic sign is in reality a semiotic unit, – the unit that is recognized as having meaning. All words that you can find in a French text, all those that are French, have meaning. However, it is not important for us to know what this meaning is. At the semiotic level, it is just this: to be recognized as having meaning or not. It is a simply a matter of 'yes' or 'no'. The semantic domain, that's the "meaning" resulting from the linking up, from the appropriation of context and from the modification of different signs when they come together. This is completely unpredictable. It is the opening up to the world, while the semiotic domain is enclosed meaning and in a certain sense self-referential. (Benveniste 1968: 55–57)

With semantics, according to Benveniste (1969[1981]: 19), "we enter into the specific mode of meaning which is generated by *discourse*". This is the realm of the manifestation of language in living communication and language as a producer of messages. For Benveniste, semiotics and semantics relate to the two different faculties of recognition and comprehension: "semiotics (the sign) must be *recognized*; semantics (the *discourse*) must be understood" (Benveniste 1969[1981]: 20).

Returning to our original problem we can now understand on what ground Benveniste attributed a primary role to natural language:

> Language is the only system whose meaning is articulated this way in two dimensions. The other systems have a unidimensional meaning: either semiotics (gestures of politeness, *mudras)* without semantics; or semantics (artistic expressions) without semiotics. It is the prerogative of language to comprise simultaneously the meaning of signs and the meaning of enunciation. Therein originates its major strength, that of creating a second level of enunciation, where it becomes possible to retain meaningful remarks about meaning. Through this metalinguistic faculty we discover the origin of the interpreting relationship through which language embraces all other systems. (Benveniste 1969[1981]: 20)

It is in virtue of this *double significance*, with which language is invested, that it aquires its supremacy within the systems of signs. This is why for Benveniste language is envisaged as the "preeminent semiotic organization" and he explains the semiotic modelling that language practices by conferring on other groups the rank of the

signifying system by acquainting them with the relationship of the sign (Benveniste 1969[1981]: 19).

In conclusion, it seems that Lotman agrees with Benveniste's stance – language possesses a metalinguistic faculty – but he does not share the prerequisites from which this claim stems – only language has a double significance, both semiotic and semantic. Albeit Lotman partially agrees with Benveniste on the passage reported above, they follow different paths. For the former "in their actual historical functioning, languages are inseparable from culture" (Lotman, Uspensky 1978: 212), whereas for Benveniste, the relationship is reversed.

Nature and possibilities
of relationships among semiotic systems

The problem of the place of language in the system of sign systems and the question whether natural language was the only primary modelling system, are issues that haunted the scholars of the Tartu-Moscow school. Suffice it to mention, in this regard, the proposals for the programme of the "IV Summer School on secondary modelling systems" where the problem of the unity of culture was investigated. In these proposals, which define "semiotics of culture" (already before the *Theses* of 1973) as "the science of functional correlation of different sign systems" important questions were raised:

> The problem of the correlation between primary and secondary cultural languages should be subjected to a specific analysis. Is such a double level really required for the construction of culture, and what does its functional necessity consist of? Is only the natural language a primary system? What properties must a system have in order to be able to act as the primary system, and what properties must it posses to fulfil the function of a secondary system? (Lotman 1970[1979]: 191–192)

Elsewhere, it seems that Lotman indicated a way of answering to these questions by identifying the possible existence of a second primary modelling system different from natural language:

> Genetically speaking, culture is built upon two primary languages. One of these is the natural language used by humans in everyday communication. Its role in all secondary cultural constructions is evident and does not require any clarification […] The nature of the second primary language is not quite as clear. This language is the structural model of space. (Lotman 1992[2012]: 9)

Lotman goes on to write that "any human activity is related to classificatory models of space", that is, the language of spatial relations in its division into own/ other, cultural/non-cultural, life/death, sacred/profane, and so forth (Lotman 1992[2012]: 9). At this point Lotman states:

> In order for a system to be able to perform a broad range of semiotic functions, it must possess a mechanism for duplicating (actually repeatedly multiplying) the object that constitutes its meaning. The world of natural language duplicates the world-object, and can itself be duplicated in more complex verbal texts and literary languages. […] The duplication of the world in the word and the human being in space form the initial semiotic dualism. (Lotman 1992[2012]: 10)

For Lotman, a "cultural text" is conceived as "the most abstract model of reality from the position of a given culture", that is the "*world view* of a given culture" (Lotman 1969[1975]: 101). In this regard Lotman specifies that "one of the universal peculiarities of human culture, possibly connected with the anthropological features of human consciousness, is the fact that the world view invariably acquires features of spatial characteristics" (Lotman 1969[1975]: 101). Thus between metalanguage and object language there is an homeomorphic relationship: "spatial models act as a kind of metalanguage, while the spatial structure of the world view acts as a text in this language" (Lotman 1969[1975]: 101). Having said that, it must be noted that, since the first Summer School of 1964 ("Summer School on extra-linguistic modelling systems"), it seems that natural language was privileged, if not exclusively acknowledged, as the primary modelling system. As rightly pointed out by Prevignano, the proposal of the double dividing of semiotic systems or modelling systems into *linguistic* and *extra-linguistic* and *primary* and s*econdary* should be reconsidered. The first typological pair (linguistic / extra-linguistic), in fact, does not seem to coincide with the second one (primary / secondary). Their intersection can indeed be interpreted according to a matrix from which both linguistic and extra-linguistic primary systems result, as well as secondary systems anchored on those primary linguistic codes (= "supralinguistics"), but also on the primary extra-linguistic ones (Prevignano 1977b: 80). A similar proposal for revision can therefore be summarized as depicted in Fig. 1.

SUPRALINGUISTIC SECONDARY SYSTEMS	OTHER SECONDARY SYSTEMS	SECONDARY MODELLING SYSTEMS
LINGUISTIC MODELLING SYSTEM (NATURAL LANGUAGE)	EXTRALINGUISTIC MODELLING SYSTEMS	PRIMARY MODELLING SYSTEMS

Figure 1. A typology of modelling systems.

In this way, one might consider the hypothesis of the existence of multiple primary modelling systems, and thus assume the existence of "supralinguistic" secondary systems erected on natural language, as well as other secondary systems that find their basis and model not in natural language but in non-linguistic or extra-linguistic primary modelling systems.

The *Theses* of 1973, a summary of the Tartu-Moscow group's ideas, state:

> As a system of systems based in the final analysis on a natural language (this is implied in the term "secondary modeling systems", which are contrasted with the "primary system", that is to say, the natural language), culture may be regarded as a hierarchy of semiotic systems correlated in pairs, the correlation between them being to a considerable extent realized through correlation with the system of the natural language (*Theses* 1973: 6.1.3)

Clearly, the assumption of a "hierarchical structure of the languages of culture" (*Theses* 1973: 1.0.0) refers to the aforementioned statement of Ivanov (1962) for which the "different semiotic modeling systems form complex hierarchical series of levels".

However, some ambiguity remains in the *Theses*. On the one hand, secondary modelling systems are defined as "superlinguistic" [*vtorichnye nadyazykovye siste-my / secondary superlinguistic systems*] (3.2.2) in as much as are seen as "above" the natural language. On the other hand – in a passage that has been omitted from the first English translation of the *Theses* (Uspensky *et al.*, 1973) but is present in the Russian as well as the Italian version (Ivanov *et al.* 1973[1979]) – "parallel forms" to natural language such as music and painting[5] are admitted:

> For "secondary modeling systems" are understood those semiotic systems used to construct models of the world or fragments of it. These systems are secondary in relation to the primary natural language, and are built on top of it

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[5]   This passage is now present in the latest English translation of the *Theses*, published in the volume entitled *Beginnings of the Semiotics of Culture* (Salupere, Torop, Kull 2013).

directly (as in the case of the superlinguistic system of artistic literature), or as parallel forms to it (music and painting). (*Theses* 1973: 6.1.5)

Therefore, as noted by Prevignano, although also "parallel forms" to natural language such as music and painting are allowed, the respective non-linguistic primary systems of these forms are ignored, probably because only natural language is indicated as a primary system (Prevignano 1979b: 83). The silence of the *Theses* on this point, continues Prevignano, if connected with the "reduction", noted during the first Summer School, of extra-linguistic systems to secondary modelling systems, may indicate the existence of an unresolved typological problem. It could also indicate the intention not to extend the set of "primary systems" to non-verbal systems, which would lead the Tartu group to an endpoint of glottocentrism, unless music and painting are intended as forms without secondary primary systems, or forms built not on systems, but on "primary non-systems" (Prevignano 1979b: 83).

It is worth remembering that Benveniste posed a similar question, that is: are we allowed to consider systems such as art and music as language *stricto sensu*? Are those parallel forms to natural language? If so, on what ground are these systems to be regarded as language?

In outlining what Sebeok (1991: 327) called the "canonical delineation of modeling systems", Lotman writes:

> A *modelling system* is a structure of elements and rules of their combinations, existing in a state of fixed analogy to the whole sphere of the object of perception, cognition or organization. For this reason, a modelling system may be treated as a *language*. (Lotman 1967[2011]: 250)

Such a definition is attuned with Benveniste's essential traits belonging to every semiotic system:

> Every semiotic system based on signs must necessarily include: (1) a finite repertory of signs, (2) and rules of order governing its figures, (3) existing independently of the nature and number of the discourses that the system allows to be produced. (Benveniste 1969[1981]: 15)

What is common to both Lotman and Benveniste's definitions is that all semiotic systems are composed of units of meaning. The notion of "unit" is central to Benveniste in as much as every signifying system must be defined by its "mode of signification", that is, such a system must designate the units it brings into play in order to produce meaning and to specify the nature of the meaning produced (Benveniste 1969[1981]: 15).

In natural language the identification of units of meaning is possible. Units of meaning in language are signs. The identification of those units in systems such as art or music is certainly more vague. This point is highlighted by Benveniste when he asks whether plastic arts or music reproduce the model of language.

Furthermore, one question concerns the identification of units of meaning. Another question is to assess, in the systems where units of meaning are discernable, and whether a unit is a sign. "The sign is necessarily a unit, but the unit may not be a sign" (Benveniste 1969[1981]: 15). There are units that are signs, like in language, and units that are not signs, as in music. In this way Benveniste fixed a discerning principle between systems based on the notion of the unit: "the systems based upon units are divided between systems of signifying units and systems of nonsignifying units. Language is in the first category, and music in the second" (Benveniste 1969[1981]: 15). In the case of the figurative arts (painting, design and sculpture) the possibility of discerning a unit as such is even more rare.

Benveniste distinguished between three types of relationships that can take place between the semiotic systems: the *generative* relationship, the relationship of *homology* and the relationship of *interpretance* (Benveniste 1969[1981]: 17). The first type of relationship occurs when a system generates another system as, following the examples provided by Benveniste, when "ordinary language generates logical and mathematical formalization; ordinary writing generates stenographic writing; the normal alphabet generates the Braille alphabet" (Benveniste 1969[1981]: 17). The nature of the two systems involved in such a generative relationship must be of the same kind, and they must be distinct and contemporaneous so that the second system is constructed from the first one (Benveniste 1969[1981]: 17). He also distinguished "generative" relationship from the "derivative" relationship which "supposes evolution and historical transition" (Benveniste 1969[1981]: 17).

The second type of relationship ("homology") "establishes a correlation between the parts of two semiotic systems" and differs from the first type in as much as the relationship is not established, but it is found a posteriori based on the analysis of the correspondences that are discovered between the two different systems.

The "relationship of interpretance", the third type, is the relationship established between an interpreting system and an interpreted system:

> From the standpoint of language it is the fundamental relationship, the one which divides the systems into articulate systems, because they exhibit their own semiotics, and articulated systems, whose semiotics appears only through the grid of another mode of expression. Thus we can introduce and justify the principle that language is in the interpreting system (interpretant) of all other semiotic systems. No other system has at its disposal a 'language' by which it can categorize and interpret itself according to its semiotic distinctions, while language can, in principle, categorize and interpret everything, including itself. (Benveniste 1969[1981]: 17)

How the configuration of language patterns all semiotic systems is thus explained by Benveniste in virtue of this relation of interpretance. In conclusion, Benveniste's insights may be used to clarify some of the unresolved issues left open by scholars of the Tartu group, specifically as concerns the way in which natural language intermingles with other systems. We should always bear in mind that natural language is not only the model but also the codifying system for all the others, the sole system which can interpret and describe the whole semiotic universe.

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Место языка среди знаковых систем:
Юрий Лотман и Эмиль Бенвенист

Настоящая статья пытается пролить свет на ненаписанную главу в истории тартуской семиотики, – то есть, провести параллель между Ю. М. Лотманом и Эмилем Бенвенистом в вопросе о статусе естественного языка среди других знаковых систем. Тезис о языке как 'первичной моделирующей системе' является ключевым для тартуско-московской школы. Для Лотмана эта первичность естественного языка относительно других знаковых систем основывалась на том факте, что язык функционирует как 'модель' для 'вторичных моделирующих систем'. Но как язык выполняет эту свою функцию – быть моделью для других знаковых систем? И действительно ли язык является единственной первичной моделирующей системой? В поиске ответов на эти вопросы в статье рассматриваются точки соприкосновения Лотмана и Бенвениста и показывается, как в полемике между этими двумя замечательными учеными открываются новые грани проблемы соотношения естественного языка и других знаковых систем.

Keele koht märgisüsteemide seas:
Juri Lotman ja Émile Benveniste

Käesolev artikkel püüab heita valgust ühele Tartu–Moskva koolkonna ajaloo kirjutamata peatükile, tõmmata paralleele Juri Lotmani ja Émile Benveniste'i vahele küsimuses loomuliku keele staatusest teiste märgisüsteemide seas. Tees loomulikust keelest kui 'primaarsest modelleerivast süsteemist' on Tartu–Moskva koolkonna jaoks märgiline. Lotmani jaoks põhines see loomuliku keele primaarsus tõdemusel, et keel funktsioneerib omalaadse mudelina teiste märgisüsteemide jaoks. Kuid kuidas keel seda oma funktsiooni täidab? Ja kas loomulik keel on ainuke esmane modelleeriv süsteem? Nendele küsimustele vastuseid otsides peatutakse artiklis Lotmani ja Benveniste'i vahelistel kokkupuutepunktidel ja näidatakse, kuidas nende kahe tähelepanuväärse õpetlase poleemikas avanevad probleemi "loomulik keel ja teised märgisüsteemid" uued tahud.