Yuri Lotman on metaphors and culture as self-referential semiospheres

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Abstract

Yuri Lotman describes metaphors and culture as semiospheres or 'semiotic spaces.' This account of metaphors is self-referential insofar as it is itself expressed in the form of a metaphor. Moreover, according to Lotman, cultures in general are self-referential systems insofar as they tend to define themselves and evince isomorphic semiotic spaces at mutually inclusive levels and metalevels. Lotman describes semiospheres on the basis of dualisms, levels, stratifications, and spatial opposites that exemplify the Tartu semiotician's theory of the duality of the discreteness of semiotic spaces and their verbal representations versus the continuity of physical space and of pictorial representation.

Keywords: semiosphere; metaphor; self-reference; culture; mental space.

> We are both a planet in the intellectual galaxy, and the image of its universum.
> —Lotman (1990: 213)

Yuri Lotman develops his semiotics of culture in a language full of spatial metaphors. In the title of his book *Universe of the Mind*, in his key concept of semiosphere, or in the passage quoted in the epigraph to this paper, Lotman (1990) evokes images of open spaces of galactic dimensions. Elsewhere, we find images of closed territories separated by boundaries, spaces enclosed within spaces like a *matryoshka*, a Russian puppet in a puppet, or spaces reflecting other spaces within themselves like mirrors reflecting the space in which they are immersed (1990: 273, 54–62). His images are not without poetic qualities; some of them imply inconsistencies, lead to catachreses, or result in enigmatic logical paradoxes, as

in the aforementioned epigraph and in other similar passages, such as: 'Thought is within us, but we are within thought,' or 'the world is both within us and without us' (1990). Such enigmatic paradoxes in Lotman's semiotic rhetoric reflect a view of culture as a self-referential system in which semiotic spaces are embedded in more encompassing isomorphic spaces of cultural semiosis. Metaphors, according to this theory, are semiospheres representing mental images by means of verbal signs. Since space plays such an important role in Lotman's theory of metaphor, his own metaphors of culture as semiotic spaces can thus, themselves, be read as self-referential.

1.   Lotman's theory of metaphor

A first self-referential loop in Lotman's theory of the semiosphere arises from the fact that the Tartu semiotician himself has a theory of metaphor, a theory which not only serves to describe the metaphors of poets and novelists, but also the ones of Lotman's own semiotic prose.

1.1.   *Secondary modeling and dual coding*

According to Lotman (1990: 38), metaphors 'belong to the level of secondary modeling and metamodels, and this distinguishes them from the level of primary signs.' The primary and secondary signs which come together in a metaphor mediate between different 'semantic spheres' between which there exists a 'semantic untranslatability' (1990). Even animals may communicate metaphorically. For example, a sexual gesture which one animal produces to indicate submission instead of sexual stimulation is a gestural metaphor (cf. 1990).

It is no mere coincidence that the semiotician who creates so many spatial images proposes a theory of metaphor in which the opposition between the discreteness of the signs in verbal discourse and the continuity of nonverbal visual space plays an essential role. With reference to the different cognitive functions of the two hemispheres of the human brain, Lotman (1990: 36–37) postulates the fundamental paradox that 'within one consciousness there are, as it were, two consciousnesses' creating two kinds of 'texts,' verbal and pictorial. Verbal texts consist of discrete linear signs, and to construct the totality of a verbal text, its elements must be read in a 'bottom up' direction; beginning with the elements, the reader gradually arrives at the totality of the textual space. Visual 'texts,' by contrast, consist of a nondiscrete visual space which is cognitively

constructed in the opposite direction, that is, 'top down.' Their semantic space emerges holistically; the totality of the textual space is apprehended first, while its elementary constituents are constructed by derivation from it. Lotman emphasizes the essential difference between discrete and non-discrete texts and postulates the impossibility of their mutual translatability, since 'the equivalent to the discrete and precisely demarcated semantic unit of one text is, in the other, a kind of semantic blur with indistinct boundaries and gradual shadings into other meanings' (1990: 36–37).

However, the dilemma of untranslatability between incompatible semantic spheres, according to Lotman, can be overcome by means of metaphors. Metaphors can serve as mediators between the two spheres of the human mind. Although the results of such mediations between the spheres of discreteness and continuity are never 'precise translations' but always only 'approximate equivalences determined by the cultural-psychological and semiotic context common to both systems' (1990: 36–37), the resulting loss in precision does not merely mean a loss in the course of translation. Instead, metaphors are the source of creative thinking, since the '"illegitimate" associations' which they create 'provoke new semantic associations' (1990: 36–37). This is why a metaphor is more than a mere rhetorical ornament. It is not 'an embellishment merely on the level of expression, a decoration on an invariant content, but a mechanism for constructing a content which could not be constructed by one language alone. A trope is a figure born at the point of contact between two languages' (1990: 44).

1.2.   *Demetaphorization of the metaphor of the semiosphere?*

Culture manifests itself only partially in a three-dimensional form; for example, in goods, clothing, furniture, architecture, or nonverbal communication, but not in language, music, myths, narratives, customs, laws, religion, or ideologies. To describe culture as a space is therefore obviously to describe it largely in metaphorical terms. It is therefore more than surprising that Lotman, in his first paper 'On the semiosphere' of 1984, explicitly rejects the metaphorical interpretation of the semiotic space of culture. His argument against the view of the semiosphere as a spatial metaphor even seems to culminate in a contradiction in terms when the Tartu semiotician claims in the same paragraph on the one hand that 'the space of the semiosphere carries an abstract character,' while on the other hand, 'this is by no means to suggest that the concept of space is used, here, in a metaphorical sense. We have in mind a specific sphere, possessing signs, which are assigned to the enclosed space. Only within

such a space is it possible for communicative processes and the creation of new information to be realized' (1984: 207).

Is Lotman's attempt to interpret culture as a 'real' space the attempt to focus on the roots of cultural semiosis in real communicative spaces in which signs are transmitted from communicators to recipients by necessity from one place to another? His ultralocalistic view of the semiosphere as a sphere of real loci apparently shows the influence of Vernadsky, who similarly distinguished between the biosphere and 'noosphere' without distinguishing between matter and nonmaterial ideas. The Russian biologist, according to Lotman (1984: 206–207), describes the noosphere as 'a specific stage in the development of the biosphere, a stage connected with human rational activity' which nevertheless 'represents a three-dimensional material space that covers part of our planet.' In 1984, the Tartu semiotician still quotes Vernadsky's materialist concept of the noosphere as a sphere of products of 'rational activity' between the biosphere and the semiosphere with the distinction that the semiosphere is of a more 'abstract' kind (1984: 207).

Since semiosis not only takes place in real space, but certainly also in mental spaces as well as in time, Lotman may have recognized the weakness of his strong argument for the nonmetaphorical and material nature of the semiosphere when, in his book of 1990, he omitted any reference to the noosphere and also of the material nature of semiosphere. In retrospective, both Vernadsky's and Lotman's strong arguments for the noosphere and the semiosphere as nonmetaphorical spaces seem to have been a concession to the ideology of orthodox Marxist philosophy which required the sphere of ideas to be based in matter and not in a sphere of mere ideas.

1.3.   *Ubiquity of metaphors?*

The creative potential inherent in metaphors with their ability to express analogies between different spheres of thought and experience is the reason why metaphors are not only useful as a tool of poets and orators but also of scientists: 'It would be a mistake to contrast rhetorical thinking with scientific thinking ... Rhetoric is just as much part of the scientific consciousness as it is of the artistic one' (1990: 45), and this is the point at which Lotman's theory of metaphor once more turns self-referential; it clearly applies to Lotman's rhetoric, a rhetoric full of spatial metaphors through which the Tartu semiotician expresses his own ideas about the nature of the semiosphere.

If metaphors can be found in science and poetry and even in the gestures of animals, the question arises as to why Lotman did not go one

step further to postulate an ubiquity of metaphors which extends to everyday verbal and nonverbal behavior, too. It is true that an acknowledgement of the ubiquity of metaphors would have shaken one of the founding principles of Lotman's theory of cultural semiotics, namely that of the distinction between primary and secondary modeling. However, in light of cognitive linguistic research into mental spaces and their representation in everyday metaphors, we know that spatial categories, such as 'center versus periphery,' 'up versus down' or 'foreground versus background' are omnipresent not only in the verbal representation of space but also in the form of metaphors representing abstract concepts in everyday language (cf. Fauconnier 1985; Lakoff 1987: 282–283; and see 3.2.).

The predominance of spatial image schemas in everyday metaphors representing abstract concepts as well as in theoretical discourse are reflections and hence signs of our spatial cognition, our bodily experience of human orientation in space. Considering these cognitive foundations of metaphors, Lotman's distinction between primary and secondary modeling may take on a new light. If we reinterpret the idea of primary modeling as referring to preverbal semiosis in a cognitive and an evolutionary sense (cf. Sebeok 1991), the theory of metaphors as a secondary modeling of signs may indeed acquire a new but quite different semiotic relevance.

2. The metaphor of semiotic space immersed in a nonsemiotic universe

It is not by chance that Lotman chooses a spatial image to describe the scope of cultural sign processes. For the semiotician from Tartu, the spatial mode of thinking about and of representing culture is a universal law of all cultural self-descriptions: '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,' Lotman (1990: 203) argues.

2.1. *The semiosphere in a nonsemiotic universe*

'Semiosphere' refers to the semiotic framework of human culture, but also to culture itself. The neoclassical metaphorical compound suggests that culture is a semiotic 'space' of stellar extensions. It is well known that Lotman coined the term in analogy to and as an extension of Vernadsky's concept of the biosphere. While the biosphere, according to Vernadsky and Lotman (1990: 125), is 'the totality of and the organic whole of living matter and also the condition for the continuation of life,' the

semiosphere is 'the result and the condition for the development of culture' (1990: 125), 'the semiotic space necessary for the existence and functioning of languages' (1990: 123), and the 'unifying mechanism (if not organism) . . . outside of which semiosis cannot exist' (1984: 208).

Despite the galactic dimensions evoked by the concept of 'semiosphere' Lotman did not endorse the pansemiotic view of a universe in which signs and semiosis are ubiquitous. Instead, he offers a dualistic theory of the *Universe of the Mind* consisting of a semiotic and a nonsemiotic sphere. The latter not only comprises the biosphere of humans, animals, and biological organisms, but also a sphere of nonsemiotic phenomena in human cognition that Lotman calls 'nonsemiotic reality.' This nonsemiotic sphere comprises objects devoid of 'semiotization,' which have no cultural meaning and are 'simply themselves' (Lotman 1990: 133). The philosophical foundations of this theory, which distinguishes between nonsemiotic objects as they are and objects that are perceived as signs, is clearly based in Edmund Husserl's phenomenology (cf. Nöth 2000: 37).

The Tartu semiotician often draws very sharp distinctions between the semiotic and the nonsemiotic spheres and has a predilection for contrasting them by means of terms with the negative prefix 'non-,' for example when he states that 'culture consists of the totality of nonhereditary information acquired, preserved, and transmitted by the various groups of human society' (1967a: 213), or 'against the background of nonculture, culture appears as a *system of signs*' (Lotman and Uspenskij 1978: 211). By this definition, not only animals are excluded from participating in processes of the semiosphere, but also human life to the degree that it processes nonhereditary information. These distinctions establish a high semiotic threshold between the semiosphere and the nonsemiotic universe. The biosphere, for example, is not only characterized by the absence of language, but also by the lack of communication: 'Outside the semiosphere, there can be neither communication, nor language,' is one of Lotman's axioms (1990: 124).

2.2.   *Topography of the loci of semiotic spaces*

The characteristics of Lotman's metaphorical spaces may be read as an exemplification of his theory of the fundamental opposition between discrete (verbal) and nondiscrete (visual) texts. Space, which is continuous in human cognition, becomes transformed into a space with discrete loci in the cultural semiosphere. Whereas the cognition of real space presupposes perceptual continuity, the culturally organized semiotic space is as discontinuous as the verbal signs that represent it. Furthermore, space which is

geometrically symmetrical, evincing, for example, the symmetry between left and right or above and below, becomes asymmetrical in the cultural semiosphere, whose loci are coupled with marked opposites of cultural values such as good versus bad or life versus death. Cultural spaces are thus discontinuous and asymmetrical. The discontinuity of their loci is particularly apparent in narrative representations of mythological spaces. Lotman and Uspenskij (1973: 237) conclude that in myth 'space is not conceived of as a sign continuum, but as a totality of separate objects bearing proper names. It is as if space were interrupted by the intervals between objects and thus lacks from our viewpoint such a basic trait as continuity.'

The binary topography of the semiosphere evinces opposites derived from spatially symmetrical categories, such as figure versus ground, center versus periphery, right versus left, inside versus outside, or internal versus external space (Lotman 1990: 140). These symmetries become asymmetries in cultural space when they serve to represent the opposition between positive and negative cultural values: the center, inside, right, or figure representing positive values in contrast to the periphery, outside, left, or background which have the negative evaluation.

Visual asymmetry is hence the typical metaphorical representation of such oppositions between the opposed loci in a semiosphere: 'The structure of the semiosphere is asymmetrical' (1990: 127). Asymmetry characterizes the relationship between the center of the semiosphere with its conservative tendencies towards stability and stagnation versus its periphery with its tendencies to instability and creativity.

In contrast to physical space, which is homogeneous, the semiosphere is thus characterized by the *heterogeneity* of its loci (cf. 1990: 125). The discontinuity and heterogeneity of the semiosphere is particularly apparent whenever its loci are described by means of complementary opposites. Such opposites do not admit grading but require either-or decisions (cf. Nöth 1997); something is either inside or outside, above or below; there is no in-between, nor is there a gradual transition between the two opposites.

In the cultural conceptualization of semiotic loci and spaces in binary opposition, the boundary between the two spheres in opposition turns out to be of special relevance. In Lotman's cultural semiotics, it is the boundary that separates a culture from nonculture or the culture of alterity. It separates the territory of one's own, good and harmonious culture from its bad, chaotic, or even dangerous anticulture. It is a frontier between an inner and an outer space. To draw borders of this kind is a universal law of culture, according to Lotman (1990: 131), for 'every culture begins by dividing the world into 'its own' internal space and 'their external space.'

The boundary does not only separate, it also functions as a filter which determines the flow of the messages into the semiosphere from without, a process which requires 'translation' and 'semioticization' of the non-semiotic signals that come from beyond the frontier: 'Belonging simultaneously to the internal and external space, the semiotic border is represented by the sum of bilingual translatable "filters", passing through which the text is translated into another language ... *outside* the given semiosphere' (Lotman 1984: 208–209).

3.   Universe of dualisms, levels, and stratifications

Lotman's semiotic universe is one of levels, strata, and hierarchies based on the foundation of dualisms which begin with the axiom that 'against the background of nonculture, culture appears as a *system of signs*' (Lotman and Uspenskij 1978: 211).

3.1.   *Dualisms and levels*

At the root of Lotman's universe, there is a fundamental dualism between the semiotic and the nonsemiotic. Human semiosis, marked by this dualism, begins with the distinction between the two spheres:

Any act of semiotic recognition must involve the separation of significant and insignificant ones in surrounding reality. Elements that, from the point of view of that modeling system, are not bearers of meaning, as it were do not exist. The fact of their actual existence recedes to the background in face of their irrelevance in the given modeling system. Though existing, they as it were cease to exist in the system of culture. (Lotman 1990: 58)

Lotman not only sets up his dualistic distinction between the semiotic and nonsemiotic world but goes on to distinguish between levels and metalevels within the sphere of semiosis, again on binary principles. Furthermore, the Tartu semiotician's dualistic view of the universe of the mind is not restricted to the distinction between the bio- and the semiosphere; it appears again in his description of the semiosphere itself.

The semiosphere is a semiotic space divided once more into two, since it comprises signs that derive from two kinds of systems, primary and secondary modeling systems. A modeling system, according to Lotman (1967b: 7), is a code or language with signs to represent 'the entire sphere of an object of knowledge, insight or regulation.' A natural language is a

Table 1.   *Lotman's semiospheres in the framework of his Universe of the Mind*

Sphere	Phenomena	How phenomena are perceived
(several) secondary semiospheres	culture (metaphors, myth, art, religion)	supplementary superstructure; second level of meaning; communication
primary semiosphere	(nonmetaphorical) gestures, language	the signs represent the 'world' and have a primary meaning; there is communication
(nonsemiotic) biosphere	living beings	life, symptoms, but no 'communication'
(nonsemiotic) sphere of objects	objects	objects 'are as they are,' without semiotization, without cultural meaning

primary modeling system in the sense that it is a means of representing the world. Secondary modeling systems, by contrast, 'have a natural language as their basis and acquire supplementary superstructures, thus creating languages of a second level' (1967b: 7). The latter systems are created in mythological, religious, legal, ideological, or literary texts. Table 1 gives a preliminary survey of these stratifications of the semiosphere and the nonsemiotic spheres from which it emerges.

3.2.   *In search of the level of primary coding*

Lotman's research on the semiosphere is almost exclusively concerned with texts and codes generated by secondary modeling systems. His definition of the semiosphere as the sphere of secondary modeling systems occasionally even seems to exclude everyday language, at least when Lotman defines (everyday) language as a primary modeling system and the semiosphere as the domain of secondary modeling systems. However, the account of language as a primary modeling system is never very explicit. In which sense are verbal models of the world primary? The few contexts from which an answer may be derived suggest that the signs of a primary modeling system are less complex (Lotman 1974: 95), more direct in their representation of the 'sphere of an object of knowledge' (1967b: 7) and above all without 'supplementary superstructures.'

  Primary coding, according to Lotman (1990: 58), is not restricted to verbal language. Much of the reality of human life evinces primary coding, which begins with the perceptual act of filtering cognitively

significant from nonsignificant elements (see 3.1.), a process which takes place at each level of coding (see 3.3.) but separates the semiotic from the nonsemiotic world at the lowest level of semiosis.

Lotman's sharp distinction between primary and secondary coding is not without inconsistencies. If metaphors belong to the sphere of secondary modeling, and thus to the semiosphere, but animals also use metaphors (see 1.1.), then it cannot be maintained that animals do not communicate, nor can it be maintained that animals are excluded from the semiosphere. The sharp opposition between a semiosphere of human culture and a nonsemiotic world of animals and objects in a sphere without cultural significance appears too dualistic. Natural language is rarely a system representing the world in a direct or even simple way, if at all (cf. Sebeok 1991: 58–59). Bakhtin had a more modern insight into the nature of language when he affirmed, in 1930, that 'all signs are subject to ideological evaluation' and that 'the domain of ideology coincides with the domain of signs' (Volishinov 1973 [1930]: 9–10). From a very different perspective, cognitive linguistics has more recently given similar evidence. Natural language is permeated with metaphors; verbal signs are hardly ever 'simple' or 'primary' representations of the world (see 1.3.).

Defined as a secondary modeling system, too much is excluded from the semiosphere that has meanwhile been discovered to be part of it. The dichotomous view of culture and nature as two opposed spheres appears to carry the burden of the heritage of a semiotic structuralism that sought to explain semiosis in terms of oppositions even where gradations and transitions between the opposites prevail, as we have learned from Peirce's synechistic semiotics. In light of the results of decades of biosemiotic research, it can no longer be maintained that communication occurs only in the cultural semiosphere, and we now know that the biosphere and perhaps even the physical world are spheres of semiosis and hence semiospheres, too (cf. Hoffmeyer 1996; Nöth 2000a, 2000b, 2001, 2002a, 2002b; Nöth and Kull 2001). The concepts of bio- and semiosphere must hence be revised as follows: biosphere and semiosphere are not two separate spheres of the universe, but the biosphere is included in the semiosphere, and semiosis begins with life, if not in the physical world before life appears (cf. Nöth 2001, 2002c, 2004, 2005).

The distinction between primary and secondary semiotic modeling also raises the question of evolutionary priority, but Lotman (1974: 95) has no evolutionary perspective in this respect and admits that 'there are not sufficient grounds for concluding that the scheme 'first primary, then secondary modeling systems' also corresponds to the historical process of complex semiotic structures and can have chronological significance

attributed to it.' The primacy of the primary modeling system seems to be a logical, not an evolutionary primacy.

3.3.   *Relational stratifications*

However, despite the fundamental dualism inherent in the distinction between primary and secondary modeling, the system created by Lotman is more differentiated than his dualisms occasionally suggest since primary vs. secondary is never a categorical but always a relational opposition. What is primary at a higher level may be secondary from the perspective of a lower level and even twice secondary from the point of view of a still lower level. In this hierarchy of levels, the secondary levels are always conceived of as semiotic space with more dimensions in relation to the space of its lower levels. Lotman illustrates this increase of semiotic levels and spaces with the example of intermedial relationships between texts:

This secondary 'word' is always, when we are speaking of literary texts, a trope: in relation to ordinary non-literary speech, the literary text as it were switches over into a semiotic space with a greater number of dimensions. To grasp what we are talking about let us imagine a transformation of the following type: scenario (or verbal literary narrative) → film, or libretto → opera. With this type of transformation a text with a certain quantity of semantic space coordinates turns into a text with a greatly increased dimensionality in its semiotic space. (Lotman 1990: 47)

This hierarchy of stratified semiospheres begins above the level that is still without any semiotic modeling, that is, at the level of the 'non-semiotic world of things.' The transition to the first semiosphere leads to 'the system of signs and social languages' (1990: 47); higher semiospheres are those of myth, art, and religion. At each higher level, there is a 'unification' of the sign systems of the lower levels, for example, 'the unification of word and melody, singing, wall painting, natural and artificial light, the aroma of incense; the unification in architecture of the building and the setting, and so on' (1990: 48). The higher levels are unifications but never mere translations of the lower ones since 'no stage of the hierarchy can be expressed by the means for the preceding stage, which is merely an image (i.e., an incomplete representation) of it. The principle of rhetorical organization lies at the base of this culture as such, transforming each new stage into a semiotic mystery for those below it' (1990: 48).

4.   Lotman's semiosphere as a self-referential system

Lotman's concept of semiosphere is not merely a synonym of culture. The metaphor of the semiotic space that constitutes the semiosphere refers to culture *and* its semiotic environment. On the one hand, the languages or codes of a culture are 'a cluster of semiotic spaces and their boundaries,' on the other hand, the semiosphere is the space in which these languages are 'immersed,' and 'it can only function by interaction with that space' (Lotman 1990: 123–125). Thus, while cultural codes consist of semiotic spaces, the semiosphere refers to the larger framework that creates these spaces. With the concept of semiosphere, Lotman usually means the larger framework that constitutes and creates culture as a whole. The semiosphere in this sense precedes and is presupposed by cultural semiosis. This is what Lotman aims at when he emphasizes that the semiosphere is 'the semiotic space necessary for the existence and functioning of languages,' a space which has 'prior existence and is in constant interaction with languages' (1990: 123), or when he argues that 'the unit of semiosis . . . is not the separate language but the whole semiotic space of the culture in question' (1990: 125). Occasionally, the Tartu semiotician also defines the products of culture, and hence all cultural codes and texts, as a semiosphere, for example, when he states that 'the semiosphere is the result and the condition for the development of culture' (1990).

The boundary that separates and filters by means of translations from an external sphere into the codes of the internal semiosphere (see 2.2.) also constitutes the identity of a semiosphere. Its function is not only to protect the system from undesired external influences, but also to define the semiosphere itself. In this sense, the boundary is a semiotic necessity of the semiosphere. The semiosphere even 'requires a "chaotic" external sphere and constructs this itself in cases where this does not exist' (Lotman 1984: 6). A boundary which is determined by a system itself is the boundary of a self-referential system. Moreover, since 'culture not only creates its internal organization but also its own type of external disorganization' (1984: 212), the self-construction of a semiosphere does not only extend to the construction of its own boundary, but also to the 'chaos' which surrounds it, a chaos which makes the own internal structure appear the more orderly.

If the semiosphere is the semiotic space in which culture is immersed, a space that even exists prior to the semiotic spaces it creates, and if the spaces it creates are also semiospheres, we arrive at a paradox, for what else can the semiosphere in which culture is immersed be than a cultural sphere? How can the semiosphere be both the space that creates culture and the cultural space itself? How can a culture precede language, when

language is defined as culture? The kind of paradox with which we are faced at this point does not necessarily imply self-contradiction; it is well known from the theory of self-referential systems (cf. Nöth 2002). Lotman's description of the semiosphere is the description of a self-referential system. It is an adequate description of culture to the degree that culture indeed creates and is created by culture.

Any *description* of culture, according to Lotman (1990: 37, 134), is a 'meta-cultural structure,' that is, a 'text in the system of self-descriptions which form the metacultural level' (1990: 46). Culture is thus a system of two spaces relating to two levels of cultural semiosis. One is the textual space created in the arts, in myths, social codes, or ideologies, the other is the metatextual space created in the form of cultural self-descriptions. The prefix 'meta-' referring to this latter space conveys the idea of a separate semiotic space at a higher level, but the two semiospheres of culture and cultural self-description do not exist as separate spaces; rather one is included in the other like a Russian puppet in a puppet.

Semiospheres create their own metasemiosphere in a self-generative and self-referential way. They do so within their very center with the purpose of the self-stabilization of the cultural system (1990: 128): 'Whether we have in mind language, politics or culture, the mechanism is the same: one part of the semiosphere (as a rule one which is part of its nuclear structure) in the process of self-description creates its own grammar … Then it strives to extend these norms over the whole semiosphere.' Modes of social behavior, for example, are self-descriptively stabilized by means of books of etiquette or legal codes; languages are controlled by means of normative grammars; the architectural space of a capital depicts the relationships of political and cultural power in the whole country, and in this sense, it is not only a product of culture, but also its self-description. Like so many forms of self-reference, this self-referential circle between description and self-description leads to a paradox, for, on the one hand, 'culture organizes itself in the form of a special space' and on the other hand, 'this organization … in the form of the semiosphere … comes into being with the help of the semiosphere' (1990: 133).

An appropriate image for characterizing the relationship between a semiosphere and its metasemiosphere is that of the mirror, since it is able to characterize the relationship of iconicity between the two spaces (cf. Lotman 1990: 54–56). The semiosphere is a mirror that depicts its metasemiosphere, but the metasemiosphere is also a mirror of the semiosphere of which it is an image. Lotman illustrates this argument with the example of the semiotics of urban spaces in which the main church of a city or the capital of a country function as an idealized center of a much larger cultural universe: 'On the one hand, architectural buildings copy

the spatial image of the universe, and, on the other hand, this image of the universe is constructed on an analogy with the world of cultural constructs which mankind creates' (1990: 203). The iconic principle which is apparent in this kind of bidirectional cultural modeling is the following: 'Real space is an iconic image of the semiosphere, a language in which various nonspatial meanings can be expressed, while the semiosphere in its turn transforms the real world of space in which we live in its image and likeness' (1990: 191). In a most poetic image almost reminiscent of the Renaissance doctrine of signatures (Nöth 2000: 14), Lotman (1990: 223) epitomizes: 'We are both part and a likeness of a vast intellectual mechanism ... We are within it, but it — all of it — is within us. We are at the same time like *matryoshkas* ... and the likeness of *everything* ... We are both a planet in the intellectual galaxy, and the image of its universum.'

Note

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