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Semiotics as science

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Abstract. The present article gives an overview of different approaches on semiotics as science, its objects of investigation, methods and genesis (where, how and when does semiotics begin?). The author does not aim at establishing one prescriptive approach. Quite the opposite, by leaving the question open, the author aspires to encourage further discussion about the criteria for scientificity, establishing the borders of scientific disciplines, and the productivity of the dialogic (or, rather, polylogic) scientific meta-discourse in science in general and in semiotics in particular.

> *Understanding prescissively considered is speculative or practical, but cognitive life fully as human perforces embraces both […]. And just this truth is what semiotics brings to the fore within the sciences, both coenoscopic (such as philosophy and theology) and ideoscopic (science in the modern sense).*
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> *(Deely 2005: 205 fn)*

A look back over the history of semiotics reveals that it moves in parallel, and frequently overlaps with the development of philosophy, linguistics and logic.[1] Semiotics developed into a distinct discipline during the

[1] As is well known, there are several answers to the question of the origin of science, depending on the chosen definition of science. It can be argued that semiotics as

1950s and 1960s; thus it is a very young science. Juri Lotman has noted that semiotics as a science "originates from the fifties of our century at the cross-roads of several scientific fields: structural linguistics, information theory, cybernetics and logic (due to this "hybrid" origin the representatives of these various sciences understand the subject-matter and nature of semiotics in somewhat different ways)" (Lotman, J. 2000: 8). In fact, this hybridity is even more pronounced when one considers that a large part of semiotics is closely associated with philosophy (especially phenomenology and hermeneutics; it has even been considered as identical with the latter), and that it has been influenced (especially in its structuralist vein) by what Julia Kristeva has called the thought of the 20th century — Freudism and Marxism (Kristeva 1969: 34). Clearly, these circumstances surrounding the birth of semiotics do not make the best recommendation for gaining the honorific title of "science".

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a conscious use of signs began with the appearance of human thought: "Scientific thought is impossible as both an activity and as a problem prior to the appearance of a philosophical space in our culture. Science is by definition a universal kind of knowing and activity. Its appearance must be preceded by the appearance of a new kind of consciousness; science arises as a universal dimension of mankind" (Mamardashvili 1996: 78). Compare Deely: "this same discipline in nuce — semiotic as the doctrine of signs — is discernible in the most ancient origins of Greek medicine, philosophy, and linguistic reflections" (Deely 2005: 8). Modern science is considered to have started during the 17th century. Here, too, semiotics has a say: John Locke provided a definition of semiotics in his *An Essay Concerning Human Understanding* (1690). Contrary to this, Tzvetan Todorov argues that "a summary notion of semiotics, two components of which are important here: the fact that, with semiotics, we are dealing with a discourse whose objective is knowledge (not poetic beauty or pure speculation), and the fact that its object is constituted by signs of various types (not by words alone). These two conditions were fully met for the first time […] by Augustine. But Augustine did not invent semiotics; […] he merely combined ideas and notions drawn from several horizons" (Todorov 1984: 15).

The nature of semiotics, its object

Any scientific discipline presumes an object of study, which is usually present in the name of the science itself, and a particular methodology. Umberto Eco thinks that compared to other sciences, semiotics finds itself in a more complicated situation in this respect:

> Semiotics is in an even more difficult situation because of a double embarrassment: (i) modern semioticians are still questioning the main categories of the field and (ii) there has been no common agreement in the course of so-called semiotic investigations about a reduced list of basic categories. (Eco 1997: 733)

Indeed, as follows from its name, for semiotics, the object of study is the sign (in contemporary semiotics, this also covers sign relationships, sign processes, etc.). In fact, this leads to initial difficulties and problems, since in semiotics there are at least two definitions of sign, with two strands proceeding from them: the semiotics of Peirce/ Morris and the semiology of Saussure. This divergence is further supported by the fact that the Saussurean vein was primarily represented in the works of European (especially French), and the Peircean stream in the works American researchers. This nominal distinction persisted for quite a while and American semiotics "won" partly only as a result of the efforts of Sebeok; the difference in content nevertheless persists.[2]

While both are sciences of the sign, they are positioned differently. Peirce represents a philosophical approach, his sign is triadic, and an important role is played by semiosis, or sign action (sign process). For him, logic[3] (that is, semiotics with a different name)[4] is a science of

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[2] In his *Basics of Semiotics*, John Deely notes how Sebeok was upset by the fact that "Greimas, a glottocentrician if there ever was one, claimed for his portentously-named 'Paris School' the designation 'semiotics' rather than the far more apt title of a school of 'semiology'" (Deely 2005: 189 fn).

[3] "logic, in its general sense, is […] only another name for semiotic, the quasi-necessary, or formal, doctrine of signs" (CP 2. 227).

[4] In this, Peirce adheres to the tradition of John Locke, who in his *An Essay Concerning Human Understanding* divides human knowledge into three spheres: physics (which, according to Thomas Sebeok, should be thought of as analogous to today's natural sciences), that observes things and pursues speculative truth;

general regularities, amounting to a purposeful thinking that proceeds from ethical principles, depends on phenomenology and mathematics and consists of three parts: criticism — classification of arguments and determination of their validity and intensity; speculative grammar — general theory of signs; and methodeutic — the methods used. Without delving too deep into Peirce's contributions, let us note that in his classification of sciences, he positions semiotics into class A (science of discovery), under the subdivision of philosophy (cenoscopy, philosophia prima) that consists of Phenomenology, Normative science (aesthetics, ethics and semiotics) and Metaphysics (CP 1.176–1.283).[5] Deely argues that it can be concluded from this classification that "Peirce himself did not finally realize how radical semiotics is as a form of knowledge *vis-à-vis* the established disciplines" (Deely 2005: 148 fn). Indeed, near the end of his life, Peirce seems to have gotten lost in his labyrinth of "infinite semiosis", and today there are few who would have the will and energy to follow him there. For this reason, there has developed a rather simplistic understanding of Peirce's semiotics (which, nevertheless, is sometimes conducive to the inception of a specific paradigm).

The story of the legacy of the second founder of semiotics, Ferdinand de Saussure, is a peculiar one, not often encountered in the history of the sciences. It is well known that his main work (*Course in General Linguistics*, published posthumously in 1916), from which semiology drew

practice (the most important part being ethics, that is, the human sciences), whose purpose is to struggle towards just and fulfilling actions; and semiotics, which would be the connecting link between the first two. "**Semeiotika**, or THE DOCTRINE OF SIGNS; the most usual whereof being words, it is aptly enough termed also **Logika**, LOGIC: the business whereof is to consider the nature of signs, the mind makes use of for the understanding of things, or conveying its knowledge to others" (John Locke, An Essay Concerning Human Understanding, 1690, Book IV, Chapter XXI; Locke 1979). It should be noted that for Locke, logic was precisely the study of logos, that is, a concept much wider than what is today known as logic. For this reason, it seemed natural for him to identify logic with semiotics.

[5] For more information, see Pietarinen 2006.

its foundations, was compiled from course notes taken by his students.[6] For Saussure, the new, incipient science called "semiology" was a part of social psychology, studying the life of signs at the heart of social life, with linguistics forming but one part of semiology. Thus the science of signs was originally to have a rather humble role (especially compared to that of Peirce). But if we were to continue enquiring, on the background of what was just said, after the status of semiotics as a science, it is clear that it was precisely the semiologic vein that attained greater success and recognition, finding its greatest expression in structuralism (with which semiotics is often identified, or considered part of, even today). And in structuralism, linguistics was placed at the centre:

> [W]e must now face the possibility of inverting Saussure's declaration: linguistics is not a part of the general science of signs, even a privileged part, it is semiology which is a part of linguistics: to be precise, it is that part covering the great signifying unities of discourse. By this inversion we may expect to bring to light the unity of the research at present being done in anthropology, sociology, psychoanalysis and stylistics round the concept of signification. (Barthes 1967: 11)[7]

The popularity and attraction of structuralism was elicited by the belief that at long last a method had been discovered that would raise the lowly human sciences almost to the level of the exact sciences. Guided by the idea that the structure of language is identical to the structure of thought and the principles of the organization of the world, the concept of structure as used in linguistics was extended to different spheres of life and human activity. Yet by this very orientation towards becoming an exact science, with signs perceived as particular constructs, structuralism inclined towards the denial of consciousness and the subject (which, predictably enough, brought about a counter-reaction in the form of post-structuralism).

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[6] It allegedly also contains things that Saussure never said (see, for example, Bouissac 2010).

[7] Linguistics became the paragon of structuralist studies due to its level of formalization, for which reason it seemed natural to turn to linguistics in the search for a methodology. Yet in linguistics, semantics (a term coined only in late 19th century) was an underdog from the very start; great strides were made mainly in phonology.

The semiologic route was summarised by Algirdas Greimas, who, in his dictionary of semiotics of 1979, co-written with Joseph Courtès (Greimas, Courtès 1982), provides three meanings for "semiotics": 1) any manifested entity under study; 2) an object of knowledge as it appears during and after its description (this covers the typology of various semiotics, derived by Greimas from Louis Hjelmslev); 3) the set of ways that make this object possible. What we have here is already a semiotic theory (Greimas, Courtès 1982: 287). In addition, they provide a definition of scientific semiotics (also born of Hjelmslev's ideas): "by scientific semiotic systems — in the broad sense of "scientific" — we understand an object-semiotics treated within the framework of scientific theory, explicit or implicit" (*ibid*., 288). According to Greimas, no satisfactory semiotic theory yet exists, but he does have a clear conception of it (that is, at the core of every semiotic theory there must be a theory of meaning[8]), and this conception received its practical expression in his book *Structural Semantics: An Attempt at a Method* (Greimas 1984). Discussing the difference between European and American semiotics, Greimas makes note of the problem of the referent, which tends to widen this breach:

> Whereas the analysis of signs is for European semiotics but one step toward a description of the articulation network of forms, American semiotics (T. Sebeok) tends to stop at the level of signs and to proceed to a classification of these signs, based for a large part on the type of relation existing between the sign and the referent. (Greimas, Courtès 1982: 297)

Among Estonian semioticians, Mihhail Lotman[9] has published his views on this topic; he, too, divides semiotics into two, yet in an attempt to let go of the Peircean/Saussurean dichotomy, wishing instead to dis-

[8] "The human world as it appears to us is defined essentially as the world of signification. The world can only be called "human" to the extent that it means something. Thus it is in research dealing with signification that the human sciences can find their common denominator. Indeed, if the natural sciences ask questions in order to understand how man and the world are, the human sciences pose the question, more or less explicitly, of what both of them signify." (Greimas 1984: 1)

[9] The views of others have, unfortunately, been presented only in oral discussions and thus cannot be quoted.

tance himself from the prevalent position (inherent, in his view, to Eco and French researchers[10]) according to which semiotics (not unlike philosophy) is characterised not by a specific domain of research, but rather by methods, and is thus capable of successfully studying both semiotic and non-semiotic phenomena: the semiotic nature of a thing is not given *a priori*, but is the result of a semiotic analysis. To this, Lotman opposes his own view: "Semiotics is an empirical discipline that is engaged in the study of the structure, semantics and conditions of functioning of different sign formations" (Lotman, M. 2001: 419 fn). This empiricism can, in principle, proceed from both the Saussurean and the Peircean treatment of signs (at least in my opinion). Constantly emphasizing the differences between, and the incommensurable nature of the tradition of Peirce (substitutive semiotics, proceeding from the scholastic thesis "*aliquid stat pro aliquo*", attempts to include as many phenomena in semiotics as possible) and Saussure (closed and intense bilateral semiotics, the sign itself becoming represented in a substance fundamentally different from it) (Lotman, M. 2001: 422–429), he nevertheless makes use of both in his empirical (?) study of fear. He follows up on this topic in a subsequent paper (Lotman, M. 2002), in which he calls Peirce's semiotics atomistic (with the process of identification as the basis of semiotics), and Saussure's semiotics holistic (with translation as the basis of semiotics), finally claiming that

> In the contemporary semiotics we can see a certain disproportion between the semiotical theory and practical results. Using the offered terms, the semiotical theory proceeds above all from the atomistic paradigm, but the most important and interesting results from the holistic one. Consequently, the practical task, in my opinion, is to develop the holistic semiotical theory. (Lotman, M. 2002: 525)

[10] To lump together Eco and French researchers in this manner is rather misleading (and certainly Eco himself would disagree with it). There are many French semioticians active in the field, and they come in all stripes and colours. With a certain allowance one could discuss the similarities between Eco and French post-structuralists, but even here I would be cautious in drawing conclusions.

The present author would rather align Peirce with the holistic side (by keeping in mind his concept of "infinite semiosis" and synechism). Even M. Lotman's claim that in Peircean semiotics the topics studied are nearly all subsumed under the domain of speech, seems rather to support the holistic conception. Acknowledging the role of language (not as presented in the Saussurean dichotomy, but in the everyday sense) in the development of humans as a biological species, Peirce's followers (Sebeok, Deely) in fact develop an integrative view of the world permeated by a unifying force — semiosis.[11]

In conclusion, the two strands of semiotics can be clearly differentiated, even if their interpretations may differ. There is also no basis to the claim that one of them (Peirce's) leads to philosophical generalisations and the other deals with concrete studies of signs.

Semiotics and other sciences

Let us now turn to the "epistemological trihedron" proposed by Michel Foucault in his *The Order of Things* (2002[1966]), to search for an answer to the question whether semiotics fits into this scheme, and if yes, then where could it be placed. As is well known, in this book Foucault argues that the human sciences were born only in the late 19th century (made possible by the emergence of the object of these sciences — man). Foucault never identified himself either as a structuralist, poststructuralist, semiotician or a philosopher (although he has been called all of these). His influence on a wide range of topics is very evident to this day. Gilles

[11] Deely claims that semiosis as a subject of semiotic investigations "would establish nothing less than a new framework and foundation for the whole of human knowledge. This new framework and foundation would embrace not only the so-called human and social sciences, as we have already seen from the partial tradition of semiology after Saussure, but also the so-called "hard" or natural sciences, precisely as they, too, arise from within and depend in their development upon experience and the processes of anthroposemiosis generally, as the wholistic tradition of semiotics after Peirce has begun to outline" (Deely 2005: 36).

Deleuze[12], who had a long friendship with Foucault, has said that his work links up "with the great works that for us have changed what it means to think" (Deleuze 2006: 120).

Now according to Foucault, the modern episteme is characterised by a three-dimensional space:

> In one of these we would situate the mathematical and physical sciences, for which order is always a deductive and linear linking together of evident or verified propositions; in a second dimension there would be the sciences (such as those of language, life, and the production and distribution of wealth) that proceed by relating discontinuous but analogous elements in such a way that they are then able to establish causal relations and structural constants between them. These first two dimensions together define a common plane: that which can appear, according to the direction in which one traverses it, as a field of application of mathematics to these empirical sciences, or as the domain of the mathematicizable in linguistics, biology, and economics. The third dimension would be that of philosophical reflection, which develops as a thought of the Same; it forms a common plane with the dimension of linguistics, biology, and economics: it is here that we may meet, and indeed have met, the various philosophies of life, of alienated man, of symbolical forms (when concepts and problems that first arose in different empirical domains are transposed into the philosophical dimension); but we have also encountered here, if we question the foundation of these empiricities from a radically philosophical point of view, those regional ontologies which attempt to define what life, labour, and language are in their own being; lastly, the philosophical dimension and that of the mathematical disciplines combine to define another common plane: that of the formalization of thought. (Foucault 2002: 378)

The human sciences[13] reside in none of these dimensions or planes, however, but do reside within the space of this trihedron, dispersed in its interstices. For this reason it is so difficult to define their precise location, and also the reason why they appear so threatening for

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[12] *In What is Philosophy?*, co-written with Felix Guattari, Deleuze, too, provides a kind of a spatial model of thinking and its basic forms, a topology of thought in which all of human thinking is divided into three fields: "Philosophy, art, and science are not the mental objects of an objectified brain but the three aspects under which the brain becomes subject, Thought-brain. They are the three planes, the rafts on which the brain plunges into and confronts the chaos" (Deleuze, Guattari 1994: 210).

[13] According to Foucault, history marks the beginning of all human sciences.

the other sciences (the slightest deviation from the rigorously defined planes of the trihedron leads to the danger of being contaminated with the human sciences — "psychologism", "sociologism", in a word, "anthropologism". This is the source of their essential instability:

> What explains the difficulty of the 'human sciences', their precariousness, their uncertainty as sciences, their dangerous familiarity with philosophy, their ill-defined reliance upon other domains of knowledge, their perpetually secondary and derived character, and also their claim to universality, is not, as is often stated, the extreme density of their object; it is not the metaphysical status or the inerasable transcendence of this man they speak of, but rather the complexity of the epistemological configuration in which they find themselves placed, their constant relation to the three dimensions that give them their space. (Foucault 2002: 380)

Now if we were to try to determine the location of semiotics, in which dimension or plane would it find itself? Would it be nowhere and everywhere, just like the human sciences? At this point, the diversity of semiotics becomes especially noticeable: structuralism would fit on the formal plane of thought (the structural semantics of Greimas, early studies by Kristeva, the models of Zholkovsky and Shcheglov from the Tartu–Moscow school, and others); the different directions of the speedily developing biosemiotics[14] would fit both between the 1st and the 2nd dimension (for example, Vehkavaara 2002) as well as the 2nd and 3rd dimension (for example, bioethics, etc.; see Weber 2002; Ponzio, Petrilli 2001), with its major part most likely remaining close to the 2nd (for example, Pattee 2005). Deely's approach to semiotics, however, can be wholly placed in the 3rd dimension.

In this sense semiotics is a human science par excellence, with its special capability to mix up, to infiltrate[15], to posture as a universal science. It is for this reason that semiotics is sensed as threatening, yet as it often happens with dangerous things, it is also seen as exciting and attractive.

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[14] I thank Kalevi Kull for this helpful information.

[15] The intrusion of semiotics into all fields of the sciences is well illustrated by the four-volume encyclopaedia of semiotics (Posner *et al.* 1997–2004), in which one can find "Semiotic aspects of X"-type entries about almost all branches of science.

A good example of how science bureaucracy is still in trouble with placing semiotics, is the Common European Research Classification Scheme (CERCS) that is at this moment in official use in Estonia, and where semiotics is located in subsection H352 Grammar, semantics, semiotics, syntax (H means Humanities). We can only sigh and be happy that the division was not worse.

Semiotics as modelling and criticism

A view of semiotics related to the above, but still somewhat different from it, has been proposed by Julia Kristeva, writing during the golden era of semiotics, when she and her colleagues were actively participating in the group that had gathered around the journal *Tel Quel*[16]; people who sincerely believed in the omnipotence of their Semiotic project.

Niels Bohr had already declared that a scientist has no truck with "reality"; their work has to do with building models.[17] The specific nature and distinguishing feature of semiotics that sets it apart from the exact sciences is, according to Kristeva, that although "just like in the exact sciences, the models created in semiotics are, in essence, representations, and as such have tempo-spatial coordinates", nevertheless "semiotics in fact differs from the exact sciences precisely because it produces the theory of this modelling that it itself is — theory that can, in principle, be applied to objects that are not representational by their nature" (Kristeva 1969: 29–30).

[16] In 1960, Philippe Sollers, together with young avant-garde writers founded the journal *Tel Quel*, which became the mouthpiece of the French (post)structuralism ever since the second half of 1960s. The goals of TQ were: 1) to create a general theory of sign systems; 2) to formalise semiotic systems from the perspective of communication, that is, to attempt to distinguish the zones of meaning-generation in communication; 3) to politicize text (here: discourse). In principle, all politics proves to be a product of language politics (Tel Quel 1998).

[17] "There is no quantum world. There is only an abstract physical description. It is wrong to think that the task of physics is to find out how nature is. Physics concerns what we can say about nature […]." (McEvoy 2001: 291)

Kristeva paints a very confident picture of the future of semiotics and its future missions:

> Originating at the point where the most diverse sciences enter into a contact with a continuous theoretical process, semiotics is incapable of being petrified as one particular science, nor, moreover, science as such: semiotics — it is an open road of research, it is criticism always turned towards itself, that is, self-criticism. Being a theory of itself, semiotics is that sort of thinking that is capable, without turning into a system, of modelling itself. (Kristeva 1969: 30)

Proceeding from this, Kristeva ends up redefining the very concept of the scientific:

> Being the space where the sciences are abolished, semiotics emerges as the self-consciousness of this process, and *thus* as a revaluation of "*scientificity*"; as something lesser (or greater) than science, semiotics is a space for obliterating aggression and illusion within scientific discourse. (Kristeva 1969: 31)

Semiotics thus turns into the ideology of the sciences, it strives to become a discourse that would be capable of "shifting the metaphysical speech of the philosopher[18] with the rigour of its scientific language — language capable of creating different models of social functioning (different semiotic practices)" (Kristeva 1969: 55).

A semiotics of this sort would make use of the models of other sciences, applying them to the sign practices being studied; and with it will demolish those

> precise premises that lay at the foundation of the scientific approach; as a result, linguistics, mathematics and logic, being merged with semiotics, appear as "demolished premises" that have nothing (or very little) to do with the status that they have outside the boundaries of semiotics. These supplementary sciences not only form a kind of warehouse from which semiotics would derive its models, but are, for semiotics, an object of denial: semiotics denies this object in order to form explicitly as critical practice. (Kristeva 1969: 32)

Such liberties taken with the assets of other sciences inevitably generate protest and feelings of being threatened, already discussed with relation to Foucault, above.

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[18] Inevitably, a parallel arises here with Husserl's claims for re-creating philosophy as an exact science.

Semiotics as foundational or meta-science

Semiotics has been accused of "imperialism", in that it attempts to achieve a special status among the other sciences, to rise above them. How do semioticians themselves substantiate this unique role for semiotics? And how substantial are these substantiations?

In 1984, a paper was published by leading semioticians, a manifesto of a sort, in which a definition was provided of the nature of semiotics and its place among other sciences. It was this that gave rise to the definition of semiotics as an "umbrella science":

> a semiotics which provides the human sciences with a context for reconceptualizing foundations and for moving along a path which, demonstrably […], avoids crashing into the philosophical roadblock thrown up by forced choices between realism and idealism, as though this exclusive dichotomy were also exhaustive of the possibilities for interpreting experience. (Anderson *et al.* 1984: 7)[19]

The authors of this thesis represent Peircean semiotics and proceed from the concept of semiosis. But principally the same conclusion can be reached by following the path laid down by Louis Hjelmslev in his *Prolegomena to a Theory of Language*, who elaborated Saussurean themes:

> We find no non-semiotics that are not components of semiotics, and in the final instance, no object that is not illuminated from the key position of linguistic theory. Semiotic structure is revealed as a stand from which all scientific objects may be viewed. (Hjelmslev 1961: 127)

Among contemporary semioticians, the most ardent defender of the idea of semiotics as the connecting link between the human and the

[19] Compare with: "Semiotics is beyond doubt a science without an object; the very fact of semiosis appears as secondary, as a play of the mind, as a search for way of describing. So, semiotics is, *a priori*, a metascience — due to the absence of an object and the way we use semiotics models" (Chernov 1988: 7).

natural sciences (that is, permeating both nature and culture)[20] is John Deely:

> Semiotic is a perspective or a point of view that arises from an explicit recognition of what every method of thought or every research method presupposes. Semiotic arises from the attempt to make thematic this ground that is common to all methods and sustains them transparently throughout to the extent that they are genuine means by which inquiry is advanced. (Deely 2005: 13)

Thus "semiotics provides a perspective on the whole of experience in what is proper to it as experience. In achieving this, it becomes "first" among the sciences […]" (Deely 2005: 102).

As we can see, all this still lies in the future of semiotics, whereas today

> Among the human sciences, semiotics is unique in being a study concerned with the matrix of all the sciences, and in revealing the centrality of history to the enterprise of understanding in its totality. The centrality of history to understanding is revealed through the codes of culture that alone sustain, beyond the individual insight, the *commens* […] or shared mentality […]. (Deely 2005: 109)

The above arguments are closely related to the conception of semiotics as an inter-(trans?)-disciplinary science. One can also perceive here the pretension of solving basic philosophical issues. But the problem of the relation between semiotics and philosophy is too broad to fit into the scope of this paper.

From here it would be logical to proceed to a survey of semiotics as theory of science and a basis for studies of science. Walter A. Koch's collection *Semiotik und Wissenschaftstheorie*, published in 1990, dissects semiotics as science with a characteristically German thoroughness. In the book, Christoph Hubig (1990) divides semiotics into two: object-science and meta-science. The first covers semiology as derived from Saussure's linguistic studies and conceived as a general science of the sign, in which the object of study is the (primarily linguistic) sign and

[20] For Thomas Sebeok, who is Deely's greatest influence, "semiotics is really the study of the relationship between the mind and reality" (Sebeok 1997: 291) and he, too, fails to see a rigid distinction between the humanities and the "hard" sciences.

the relations between the signifier and the signified, and which is characterized by reconstruction. Peirce's semiotics, on the other hand, is characterised by reflexion, and this connects semiotics with the hermeneutic tradition. At the same time, however, Hubig argues that it would be rather important to distinguish different levels of reflexion within semiotics, and that this would allow the observation and analysis of the most diverse scientific phenomena (Hubig 1990).

In his unification of theory of science, science itself and reality, Walter Koch proposes a conception of "evolutionary cultural semiotics" that would, according to him, form the foundation of this kind of holistic model of the world, and would provide much-needed perspective (Koch 1990).

In conclusion

This paper does not strive to be comprehensive or to declare final truths. Several fascinating and important problems were left aside (for example, semiotics and philosophy, semiotics and cognitive sciences, semiotics in practice, pseudosemiotics).

If we were to try and wrap this paper up while keeping its title in mind, we could perhaps take a look at semiotics in light of Imre Lakatos's research programs (Lakatos 1980), and note that, without doubt, there exist research programs proceeding from Saussure and Peirce (and, in Estonia, perhaps from Juri Lotman, too)[21], all of which have a more or less hard core and a certain zone of defence. If we were to ask whether we are dealing with scientific, that is, progressing programs, or pseudoscientific ones, then in light of Lakatos' theory I could not provide a clear answer. Is semiotics a research program in which theory would lead us to the "discovery of hitherto unknown novel facts" and provide us with "dramatic, unexpected, stunning predictions"[22], or is theory left behind

[21] Biosemioticians would probably also add Jakob von Uexküll.

[22] One could perhaps refer to Deely's conception, in which, after a discussion of the four ages of semiotics (of understanding), the coming of a fifth age, not earlier

by facts? Can we even discuss the temporal succession/anteriority of theory and facts with respect to that part of semiotics that strives for the role of science(?) that would unite all other sciences, precede them and cover them all? If semiotics amounts to constant modelling and criticism, to a theory of itself, as Kristeva has argued, then this opposition of theory and fact seems to slip through our fingers. In fact, this is yet another thing of which semiotics is accused: that it doesn't "give a handle to itself". It doesn't even want to be "normal science" in the Kuhnian sense. The appearance of such a paradigm is further hindered by the fact that semiotics re-creates its method, and partially its meta-language, anew every time, on the basis of its research object. But semiotics does seem to correspond to the second criterion, that of the consistency of the research program (especially if we bear in mind Lakatos's own examples: Marxism and Freudism). It is difficult to resist the temptation to quote Deely again, for whom the contemporary, post-modern era has brought to light two very fruitful suggestions: "The first is a new definition of sign which brings out the fundamental character of semiotics for any theory of experience and knowledge: a sign is *what every object presupposes*. The second is a useful description, or perhaps we could even say an adequate definition, of semiotics itself as *the study of the possibility of being mistaken*" (Deely 2005: 175).[23] Is this sufficient for semiotics to bear the name of science? Not according to Lakatos. Yet

than the 22nd, and most likely not before the 25th century, is predicted. This is when a new generation of intelligible semiotic animals has developed, for whom the concept of "sign action", objective relation to sign systems generated by the interaction of nature and culture, speculative and practical, is entirely natural (Deely 2001: 157).

[23] Deely opposes his definition to two different ones (which can be considered as the result of a coherent research program): "First, the celebrated proposal of Umberto Eco (1976) that semiotics is the study of whatever can be used to lie falls short by being one-sided […] Second, the less widely known but equally theatrical definition proposed by Paul Bouissac according to which semiotics is the study of whatever is interesting has the defect of being too broad, but the merit of implying the point that whatever is interesting involves semiosis, which is that from the study of which semiotics properly speaking results; but, owing to the intrinsic indifference of the sign to the reality of its object in any determinate or univocal sense, what semiotics reveals is the possibility of error as always alongside and even intrinsic to the means by which we investigate truth" (Deely 2005: 175 fn).

is not Lakatos' theory itself but one more research program, amenable to refutation? And besides, it seems that semiotics does not really worry about its own *scientificity*. It just is.[24]

Translated from Estonian by Silver Rattasepp

References

Anderson, Myrdene; Deely, John; Krampen, Martin; Ransdell, Joseph; Sebeok, Thomas A.; Uexküll, Thure von 1984. A semiotic perspective on the sciences: Steps toward a new paradigm. *Semiotica* 52(1/2): 7–47.

Barthes, Roland 1967. *Elements of Semiology*. New York: Hill and Wang.

Bouissac, Paul 2010. *Saussure. A Guide for the Perplexed*. London: Continuum.

Chernov, Igor 1988. Historical survey of Tartu–Moscow Semiotic School. In: Broms, Henri; Kaufmann, Rebecca (eds.), *Semiotics of Culture. Proceedings of the 25th Symposium of the Tartu–Moscow School of Semiotics, Imatra, Finland, 27th–29th July, 1987*. Helsinki: Arator Inc, 7–16.

CP = see Peirce, Charles S. 1931–58.

Deely, John 2001. *Four Ages of Understanding. The first postmodern survey of philosophy from ancient times to the turn of the twenty-first century.* Toronto: University of Toronto Press.

Deely, John 2005. *Basics of Semiotics/ Semiootika alused*. Tartu: Tartu Ülikooli kirjastus.

Deleuze, Gilles 2006[1986]. *Foucault*. Minneapolis: University of Minnesota Press.

Deleuze, Gilles; Guattari, Felix 1994[1991]. *What is Philosophy?* New York: Columbia University Press.

Eco, Umberto 1997. History and historiography of semiotics. In: *Semiotik: ein Handbuch zu den zeichentheoretischen Grundlagen von Natur und Kultur = Semiotics: a handbook on the sign-theoretic foundations of nature and culture. Halbband 1*. Berlin; New York: de Gruyter, 730–746.

Foucault, Michel 2002[1966]. *The Order of Things*. London, New York: Routledge.

Greimas, Algirdas J. 1984[1966]. *Structural Semantics: An Attempt at a Method.* Lincoln: University of Nebraska Press.

Greimas, Algirdas J.; Courtès, Joseph 1982. *Semiotics and Language: An Analytical Dictionary.* Bloomington: Indiana University Press.

Hjelmslev, Louis 1961[1943]. *Prolegomena to a Theory of Language*. Madison: University of Wisconsin Press.

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Hubig, Christoph 1990. Semiotik als Objekt- und Metawissenschaft: Zum wissenschaftstheoretishen Status der Semiotik. In: Koch, Walter A. (ed.), *Semiotik und Wissenschaftstheorie*. Bochum: Brockmeyer, 1–12.

Koch, Walter A. 1990. Semiotik, Kultursemiotik und Evolutionäre Kultursemiotik als Prototypen für die Aufteilung von Wissenshaft und Wirklichkeit. In: Koch, Walter A. (ed.), *Semiotik und Wissenschaftstheorie*. Bochum: Brockmeyer, 118–156.

Kristeva, Julia 1969. *Sèméiotikè. Recherches pour une sémanalyse*. Paris: Éditions du Seuil.

Lakatos, Imre 1980. *The Methodology of Scientific Research Programmes*. (*Philosophical Papers*, vol. I; Worrall, John; Currie, Gregory, eds.). Cambridge University Press.

Locke, John 1979. *An Essay Concerning Human Understanding*. Oxford: Clarendon Press.

Lotman, Juri 2000 = Лотман, Юрий. Люди и знаки. *Семиосфера*. С.-Петербург: Искусство—СПБ, 5–11.

Lotman, Mihhail 2001 = Лотман, Михаил. Страх: семиотика культуры и феноменология (к постановке проблемы). *Sign Systems Studies* 29(2): 417–439.

— 2002. Atomistic versus holistic semiotics. *Sign Systems Studies* 30(2): 513–527.

Mamardashvili, Merab 1996 = Мамардашвили, М. К. Введение в философию. *Необходимость себя*. Москва: Лабиринт, 7–155.

McEvoy, Paul 2001. *Niels Bohr: Reflections on Subject and Object*. San Francisco: MicroAnalytix.

Pattee, Howard H. 2005. Physics and metaphysics of biosemiotics. *Journal of Biosemiotics* 1(1): 223–238.

Peirce, Charles S. 1931–58. *Collected Papers of Charles S. Peirce*. 8 vols. Cambridge: Harvard University Press. [Hartshorne, Charles; Weiss, Paul (eds.), 1931–1935; vols. 7–8. Burks, A. W. (ed.) 1958; In-text references are to CP, followed by volume and paragraph numbers]

Pietarinen, Ahti-Veikko 2006. Interdisciplinarity and Peirce's classification of the Sciences: A centennial reassessment. *Perspectives on Science* 14(2): 127–152.

Ponzio, Augusto; Petrilli, Susan 2001. Bioethics, semiotics of life, and global communication. *Sign Systems Studies* 29(1): 263–276.

Posner, Roland; Robering, Klaus; Sebeok, Thomas A. (eds.) 1997–2004. *Semiotics: A Handbook on the Sign-Theoretic Foundations of Nature and Culture*. 4 vols. Berlin: Walter de Gruyter.

Sebeok, Thomas 1997. What is semiotics, really? Interview with Thomas Sebeok. *Trames* 1(51/46), 4: 291–305.

Tel Quel 1998[1968]. Division of the assembly. In: Ffrench, Patrick; Lack, Roland-Francois (eds.), *The Tel Quel Reader*. London: Routledge, 21–24.

Todorov, Tzvetan 1984[1977]. *Theories of the Symbol*. Ithaca: Cornell University Press.

Vehkavaara, Tommi 2002. Why and how to naturalize semiotic concepts for biosemiotics. *Sign Systems Studies* 30(1): 293–313.
Weber, Andreas 2002. Feeling the signs: The origins of meaning in the biological philosophy of Susanne K. Langer and Hans Jonas. *Sign Systems Studies* 30(1): 183–200.

Семиотика как наука

В статье дается обзор различных воззрений (от корреспондирующих до взаимоисключающих) на научный статус семиотики, объект и предмет ее исследований, метод и «точку отсчета» (с чего начинается семиотика, когда и как?). Автор не ставит своей целью вынесение вердикта, напротив: вопрос остается открытым, что провоцирует дальнейшие размышления о критериях научности, о границах научных дисциплин, о продуктивности диалогического (или, скорее, полилогического) научного метадискурса в науке вообще и в семиотике — в частности.

Semiootika teadusena

Artiklis antakse ülevaade erinevatest vaatepunktidest semiootikale teadusena, tema uurimisobjektist, meetodist ja kujunemisloost (millest algab semiootika, kuna ja kuidas?). Autori eesmärgiks ei ole mingi lõpliku tõe väljakuulutamine, vaid vastupidi — küsimus jääb lahtiseks, ärgitades edaspidiseid mõtisklusi teaduslikkuse kriteeriumite, teadusdistsipliinide piiritlemise, dialoogilise (õigemini polüloogilise) teadusliku metadiskursuse produktiivsuse üle teaduses üldse ja semiootikas sealhulgas.