

SCHOOL OF SEMIOTICS FROM TARTU: GENESIS OF SEMIOTICS OF CULTURE AND SEMIOTICS OF NATURE

Olga PÂNZARU¹

E-mail: opanzaru@yahoo.com

Abstract

The paper presents the importance of the School of Semiotics from Tartu (Estonia) in the appearance and development of the Semiotics of Culture and Semiotics of Nature. Although the studies of speciality and some critics often speak about the influences of the Western structuralist linguistics and anthropology on the development of the school, it has been recognized that the School from Tartu has managed to preserve its independence and originality. The School of Semiotics from Tartu hasn't got an unique methodological approach, but concrete and different methodological patterns focused on a way of thinking directed, on the one hand on the understanding of the character of structure and system of the object under study, and, on the other hand, on the search of several methods for the semiotical description of different languages from non-linguistic fields. The language, the text, the structure, the model, the system of modelling have represented the major notions and concepts in the studies of the Tartu semioticians till 1973, when the Semiotics of Culture was born. In the first half of the '90s it was noticed a change of the linguistic concerns in the semiotical publications of the time, followed by a more and more marked attraction towards a semiotical approach of some new non-linguistic disciplines. Thus, in 1998 the first articles of eco- and biosemiotics were published in *Sign System Studies*. Since their appearance eco- and biosemiotics have developed significantly and have been considered subfields belonging to the Semiotics of Nature. One can say that the Semiotics of Nature was born as a result of the increased interest of the biologists for the activity of the sign system, and bound to it the assumption of the communicative character of the natural processes. If the School of Semiotics from Tartu was founded by humanists, who sometimes in their studies have resorted to the help of some non-linguistic disciplines, the Semiotics of Nature may be considered as the result of an analogous approach coming from the specialists in natural sciences, who have resorted to semiotics in order to elucidate some phenomena from biology and ecology, in other words we are witnesses of a new "retelling" of some aspects from biology and ecology, using the language of Charles Peirce and Ferdinand de Saussure.

Key words: School of semiotics from Tartu, Semiotics of Culture, Semiotics of Nature, non-verbal communication

Tartu-Moscow Semiotic school is a scientific school of thought in the field of semiotics that was formed since 1964 and led by Juri Lotman. Tartu-Moscow Semiotic school developed its original method of multidimensional cultural analysis where the languages of culture were interpreted as secondary modelling systems in relation to verbal language. This school is widely known for its journal *Sign System Studies*, the oldest semiotics journal in the world. In the first period (1960's and 1970's), the School followed a structuralist approach and since 1980's, it can be characterized as post-structuralist. Since 1990's, we speak about the „new and modern” Tartu School of Semiotics, whose main goals are the shaping principles of semiotic analysis of culture for such transdisciplinary methodology that would ensure the integration of the diversity of research objects and methods into a complex analytic strategy, unifying three areas of semiotic analysis: semiotics of culture, sociosemiotics, and

semiotics of nature (ecosemiotics and biosemiotics).

MATERIAL AND METHOD

All semioticians generally agree upon some basic principles that have been formulated over the years. According to these principles Semiotics is a study of sign and sign systems. More specifically Semiotics is interested in the origin, structure, meanings and workings of signs and sign systems. Semiotics claims that communication always makes use of signs, i.e. it is always semiotic. Signs and meanings in turn always come into being in communication. The former entail the latter and vice versa. A sign is fundamentally mediating, it stands for something other than itself. Thomas A. Sebeok, a renowned pioneer of modern Semiotics, has said that Semiotics studies the mediation of reality. (*The Sign Science and the Life Science*, 1999). Due to this broad definition a semiotician can study a much wider array of phenomena. Modern semiotics, sometimes called „sign theory”

¹ University of Agricultural Sciences and Veterinary Medicine of Iași

has had a transformative impact on linguistic, literary, and cultural studies through the 20th century, despite resisting clear definition or forming a truly coherent discipline. A semiotician of culture may analyse the complex sign systems of rituals and mythologies, a semiotician of literature may unveil the signifying nature of literary works, a zoosemiotician can explain the intricate meanings of the honey bee dance, a specialist in semiotics of language may uncover the underlying principles of human language. The list of „semiotics of ...” could be endless. Semiotics is associated with the work of the American philosopher, Ch. S. Peirce (although its roots are in medieval philosophy) and semiology with the work of the Swiss linguist Ferdinand de Saussure. Both are concerned with how meaning is generated and communicated. Because semiotics is concerned with everything that can be seen as a sign, and given that just about everything can be seen as a sign (that is, substituting for something else), semiotics emerges as a kind of master science that has utility in all areas of knowledge, especially in the humanities, arts, and social sciences. It has been used in criticism of the fine arts, literature, film, and popular fiction as well as in interpreting architecture, in studying fashion, in analysing facial expression, in interpreting magazine advertisements and radio and television commercials, in medicine, and in many other areas. Semiotics as a study of communication processes (or sign processes more globally) is today one of the basic foundations for culture studies and continually more so for life sciences. The Tartu School of Semiotics is based on the traditions of Juri Lotman and Jakob von Uexküll. Juri Lotman (1922-1993), scholar of literature, culture, and semiotics founded the Tartu School of Semiotics and was the author of numerous important works on the Semiotics of Culture, and the structure of poetic and literary texts. A highly prolific writer, Lotman became the leading theoretician of the Tartu-Moscow semiotic School, first known especially on the Continent and then in America. One of Lotman's central arguments was that the text is a meaning-generating mechanism. Natural languages are according to Lotman primary modelling systems. The language of art, cultural rules, religion etc. are secondary modelling systems, or more complex languages built upon natural language. Modelling is one of the foundational problems in semiotics both on the level of phenomena under study and that of research methods. Since all semiotic systems can be viewed as modelling systems - systems that shape the information about the world while mediating it – and, conversely, any type of models and modelling can be regarded as semiotic phenomena, semiotics itself has been defined as modelling of modelling or metamodelling. The concept of modelling system is one of the most original contributions to semiotics from the Tartu – Moscow School of Semiotics, and simultaneously

one of the principal foundations of the Tartu approach to semiotics. More systematic understanding of modelling in semiotics is also a prerequisite for defining fundamental methodological principles for semiotics and for moving towards an increasing flexibility of methodological thought.

RESULTS AND DISCUSSIONS

Starting from the semiotics of the various art systems, the Moscow – Tartu scholars have devoted increasing attention to the semiotics of other cultural systems and their mutual translatability. According to Juri Lotman (*The Semiotics of Culture and the Concept of a Text*, 1986) two tendencies are ascertainable in the development of semiotics. The striving for precise modelling procedures has led to the creation of metasemiotics: the object of study becomes not the texts as such, but models of texts, models of models, etc. The secondary tendency concentrates its attention on the semiotic functioning of a real text. Using Saussurean terminology, we might say that in the first case it is language that interests the investigator as a materialization of the structural laws of a language; in the second case it is those semiotic aspects of a text that diverge from the linguistic structure that are the object of attention. Whereas the first tendency is materialized in metasemiotics, the second by nature gives birth to the semiotics of culture. For anthropologists, the term culture refers to any conventional arrangements communities use as adaptations to their surroundings. Whereas genetic adaptations are controlled and transmitted organically through DNA, cultural adaptations are invented and learned conventions transmitted between individuals and generations by language and other shared symbolisms. Culture is a kind of umbrella term that covers a multitude of learned, conventional adaptations. A semiotic approach to culture views culture as a knowledge system. From this perspective, cultural forms have both symbolic and cognitive dimensions. As symbolic forms, culture comprises a set of objectively observable public institutions. A particular kind of handshake, an origin myth, an arrangement of house space, etc. are examples of possible cultural conventions. As a cognitive construct, culture comprises forms of knowledge embodied in cognitive models or schemata. It is by means of cultural schemata that objective cultural forms become available to the mind as one of its constituting features. Culture thus has a kind of double life as an objective social fact in the world and as a dimension of subjective experience. A semiotic view of culture invites us to bridge these perspectives. Semiotic approaches to

culture focus on culture as a set of meaning systems rather than a set of purely functional strategies. Cultural institutions are assumed to have distinctive formal properties as sign systems or codes. A semiotics of culture assumes that meaning entails shared symbolic forms. The formal character of cultural codes is intrinsic to cultural meaning. Lotman described culture as a „semiotic mechanism for the output and storage of information” and a „historically evolved bundle of semiotic systems (languages) which can be composed into a single hierarchy (supralanguage) which can also be a symbiosis of independent systems. The analogy is to the memory of mankind or of some narrower collective, memory implying the capacity of systems for storage and accumulation of information. Furthermore, the attempt is to prescribe culture „types” as specific languages. The broadening of the linguistic concept of *text* is fundamental to these departures, since it is the basic significant unit of cultural semiotic systems. Juri Lotman considers that there are many ways of defining culture (*On the Semiotic Mechanism of Culture*, 1971). Every historically given culture generates some special model of culture peculiar to itself. Therefore, a comparative study of semantics of the term „culture” over the centuries provides worthwhile material for the construction of typologies. There are certain specific features of a culture. Culture is never a universal set, but always a subset organized in a specific manner. Culture never encompasses everything, but forms instead a marked-off sphere. Culture is understood only as a section, a closed area against the background of nonculture. The various ways of delimiting culture from nonculture essentially come down to one thing: against the background of nonculture, culture always appears as a system of signs.

A group of philosophical biologists from Tartu (and Copenhagen school) represented among others by Jesper Hoffmeyer, Kalevi Kull, Claus Emmeche, Alexei Sharov, Timo Maran and others influenced the development of a new doctrine, belonging to the Semiotics of Nature - biosemiotics. We should mention that one of the early pioneers of biosemiotics was Jakob von Uexkull (1864-1944), and among the founding fathers of the contemporary discipline were Thomas Sebeok (1920-2001) and Thure von Ueskull (1908-2004). Biosemiotics encompasses all living systems from the cell, over bacteria, fungi, plants and animals to humans as sign producers and interpreters. Signs are the basic units for the study of life. Thus biosemiotics transcends the semiotic threshold between man and the rest of the world. Biosemiotics attempts to integrate the

findings of scientific biology and semiotics, representing a paradigmatic shift in the occidental scientific view of life, demonstrating that semiosis (sign process, including meaning and interpretation) is its immanent and intrinsic feature. To define biosemiotics as „biology interpreted as sign system study” is to emphasize not only the close relation between Biology and Semiotics, but primarily the profound change of perspective implied when life is considered not just from the perspectives of molecules and chemistry, but as signs conveyed and interpreted by other living signs in a variety of ways, including by means of molecules. In this sense, biosemiotics takes for granted and respects the complexity of living processes as revealed by the existing fields of biology, from molecular biology to brain science and behavioural studies. Biosemiotics uses concepts from semiotics (in the sense of Ch. S Peirce as the broad logical and scientific study of dynamic sign action in humans as well as elsewhere in nature) to answer questions about the biological emergence of meaning, intentionality and physic world, questions that are hard to answer within a purely mechanist and physicalist framework. According to the basic types of semiosis under study, biosemiotics can be divided into vegetative semiotics (also phytosemiotics), which occurs in all organisms at their cellular and tissue level) and animal semiotics which occurs in the organisms with neuro-muscular system. To describe the realm of biosemiotics, J.Hoffmeyer in his work *Signs of Meaning in the Universe* (1996) builds a triangle which consists of culture, external nature and internal nature. According to him, the relationship between culture and internal nature is the sphere of psychosomatics, the relationship between internal and external nature is the field of biosemiotics, and the relationship between culture and external nature is the environmental sphere. This latter can also be named as an ecosemiotic area.(K. Kull *Semiotic ecology: different natures in the semiosphere*, 1998). The paper of W.Noth *Ecosemiotics* (1996) was the first to coin this term and to define it. However, these were not the first works in which semiotic ecology was introduced. Already 15 years earlier, attempts to build semiotic ecology were made in the Moscow group of the theoretical biology (Levich, 1983), and these ideas were discussed in joint meetings with colleagues from Petersburg and Tartu. Ecosemiotics can be defined as the semiotics of relationships between nature and culture. This includes research on the semiotic aspects of the place and role of nature for humans; ecosemiotics deals with the semiosis going on between a human and its ecosystem, or a human in one's ecosystem, but it also extends to

non-human systems. Some semioticians consider ecosemiotics as a part of the semiotics of culture which investigates human relationships to nature which have a semiotic (sign-mediated) basis, whereas biosemiotics can be seen as different from the cultural semiotic field. Both, nevertheless, are researching nature from the semiotic point of view.

CONCLUSIONS

Cultural research is inseparable from the study of cultural contacts. The globalisation of the world and the integration of Europe make the problem of cultural contacts more and more important. In addition to political dialogue, dialogue between cultures is a theoretical, empirical, and didactic problem. Cultural contacts, cultural mechanisms, cultural boundaries and identities are simultaneously problems of cultural dialogue and dialogue between description languages of culture. Dialogue between different disciplines studying culture has been hindered by the absence of a unified theory of culture in world science. It is important to bring together the diversity of contemporary cultural processes and the possibility of studying them from unified scientific positions. Cultural semiotics has the makings of becoming into such methodologically connecting discipline for these trends. In the study of culture the initial premise is that all human activity concerned with processing, exchange, and storage of information possesses a certain unity, individual sign systems, though they presuppose immanently organized structures, function only in unity, supported by one another. None of the sign systems possesses a mechanism which would enable it to function culturally in isolation. The semiotic view of culture assumes the multiplicity, diversity, stratification and intercorrelation of sign systems which are investigated on various levels from that of technology to social, economic, and expressive behaviour to ideologies. Indeed it encompasses all communicative behaviour that is cultural (meaningful, shared, organized, and dynamic). Following this approach, the synchronic and diachronic aspects of semiotic systems are viewed to be inseparably related and to be appropriate subjects for investigation. Thus,

biosemiotics attempts to bring together separate findings of the various disciplines of biology into a new and more unified perspective on the central phenomena of the living world, including the generation of function and signification in the living systems from the beginnings of life to its ultimate meanings. Furthermore, by providing new concepts, theories and case studies from biology, biosemiotics throws a new light on some of the unsolved questions within the general study of sign processes (semiotics), such as questions about the origin of signification in the universe. Estonian semiotics that is mostly connected to the university from Tartu is world famous. Tartu is the birth place of semiotics of culture (Juri Lotman and Tartu-Moscow School of Semiotics) and biosemiotics (Jakob von Uexküll). The oldest periodical of semiotics is published in Tartu. The contemporary Tartu semiotics is developing further its traditional orientations of inquiry, but also deals with reconciling and combining of ideas from different semiotic traditions without losing its successful *genius loci*.

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