BOOK OF ABSTRACTS



Tartu
Summer School of
Semiotics
2011

SEMIOTIC MODELLING

Book of Abstracts

CONTENTS

SUMMER SCHOOL 2011 - SEMIOTIC MODELLING	5
ABOUT TSSS	5
CALL FOR PARTICIPANCE	6
PROGRAM	8
PLENARY SPEAKERS	11
LIST OF PRESENTERS	15
ABSTRACTS	16
Kristian Bankov	16
Niccolò Bertè	17
Tyler Bennett	18
Laura Bertossin	19
Per Aage Brandt	21
Søren Brier	22
Tatjana V. Civjan	23
Paul Cobley	24
Marcel Danesi	25
Arnout De Cleene	26
Boris Egorov	28
Jelena Grigorjeva	29
Peter Grzybek	30
Peter Gärdenfors	31
Jesper Hoffmeyer	33
Viivian Jõemets	34
Kaie Kotov	36
Kalevi Kull	37
Yunhee Lee	39
Terje Loogus	41
Mihhail Lotman	42

	4
Timo Maran	43
Mari Niitra	45
Winfried Nöth	46
Ave Paulus	47
Tanel Pern, Tuuli Raudla	48
Ahti-Veikko Pietarinen	49
Sergei Proskurin	50
Ülle Pärli	52
Anti Randviir	53
Tiit Remm	54
Gunnar Sandin	55
Aleksei Semenenko	57
Göran Sonesson	58
Wen-Li Soong	59
Frederik Stjernfelt	60
Leonid Tchertov	61
Andris Teikmanis	63
Peeter Torop	66
Boris Uspensky	67
Ekaterina Velmezova	68
Andreas Ventsel	69

70

72

Zdzisław Wasik

Shuoyu Wu

SUMMER SCHOOL 2011 - SEMIOTIC MODELLING

Summer School 2011 is five-day event taking place from August 22 to 26 in a secluded Palmse manor in North Estonia.

The first day of the event (August 22) will be one-day Conference on the historical secondary modelling systems approach of the Kääriku Summer Schools, with the roundtable by Boris Uspenski, Boris Egorov, Tatjana Civjan, Dimitri Segal, Peter Grzybek and others.

It will be followed by four-day summer school on the contemporary problems of semiotic modelling, with world leading semioticians present (among them Per Aage Brandt, Paul Cobley, Marcel Danesi, Winfried Nöth, Goran Sonesson, Frederik Stjernfelt, Jesper Hoffmeyer, et al.), together with the current Tartu group.

ABOUT TSSS

Tartu Summer School of Semiotics is a new series of gatherings that brings together representatives of semiotics and related disciplines with the aim to provide an environment to converse about core issues in semiotics that are of disciplinary as well as transdisciplinary relevance. It revives the tradition of Kääriku Summer Schools of Semiotics held by Tartu-Moscow School of Semiotics. As its forerunner, the Tartu Summer School of Semiotics is a gathering that aspires to promote dialogue between scholars and synthesis between approaches.

ORGANIZERS AND SUPPORTERS

University of Tartu, Department of Semiotics Graduate School of Linguistics, Philosophy and Semiotics Center of Excellence in Cultural Theory Estonian Semiotics Association









CALL FOR PARTICIPANCE

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.

Both on the object-level and the metalevel, the issue concerns the way models and modelling influence how we relate to the world and make sense of it, as well as what kind of knowledge do models, modelling and metamodelling provide about the world, thinking, behaviour and scientific activity.

Modelling is the topic of the 2011 Tartu Summer School of Semiotics, first because the concept of modelling systems 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, but also because, despite the centrality of this subject to semiotics, and exsistence of many approaches with varying scope and terminology, a systematic and comprehensive semiotic treatment of this issue still needs to be carried out.

The purpose of the Summer School is to achieve a more coherent and thorough understanding of the depth and scope of the modelling problem in semiotics, by inviting the representatives of different branches of semiotics to reflect upon the topic. The aim is to reach an understanding of how already existing approaches are related and what are the main gaps in understanding modelling semiotically. More systematic understanding of modelling in semiotics is also a prerequisite for defining fundamental methodological principles for semiotics and for moving towards increasing flexibility of methodological thought.

The themes of Summer School include, but are not limited to:

1. Semiotic phenomena as models / modelling phenomena; how and why semiotic systems and processes influence the way we experience and understand the world.

(For example: signs as models; thinking as sign process as modelling; mental models, mental diagrams; sign systems as modelling systems etc.)

2. Modelling semiotic phenomena and models in semiotics: the heuristic, methodological, etc. aspects of research in semiotics or, more broadly, in the humanities / social sciences.

(For example: models of sign, semiosis, sign system, text, communication, etc; issues in modelling culture, living systems, etc.; static and dynamic models in semiotics; exclusivity and complementarity of models, total models; modelling and metamodelling.)

3. Modelling as semiotic activity: what sort of epistemological and methodological insights for semiotics and other disciplines does the understanding of the semiotic nature of modelling provide?

(For example: models as the objects of semiotics and modelling as semiotic activity; semiotic analysis of the reliability and the authority of models, their heuristic and predictive functions; human factor in modelling; the relationship between understanding that is provided by the model and understanding that precedes and enters into the model, etc.)

Submission and deadlines

Participants are invited to submit a description of their contribution to the topic of summer school (500-800 words) to katre.parn@ut.ee by **April 20, 2011**.

We encourage participants to send the draft version of one's position on modeling (or specific aspect of modeling) by **August 1, 2011**. It will be made available for other participants to prepare for the discussions.

Decisions regarding acceptance will be made by April 30, 2011.

PROGRAM

MONDAY, AUGUST 22					
09:00-11:30	opening, roundtable		Kääriku Summer Schools and Tartu-Moscow Semiotic School: Reminiscences Boris Uspenski, Boris Jegorov, Tatjana Tsivjan, Mihhail Lotman, Peeter Torop		
11:30-12:30	lecture	Boris Uspenski		Moscow-Tartu School: A Retrospective View	
12:30-14:00	lun	lunch			
14:00-15:00	lecture	Peeter To	rop	Modeling and methodology of cultural semiotics	
15:00-15:30	cof	fee			
			Tartu-Moscow School and the modelling systems theory		
15:30-17:30 roundtable		Marcel Danesi, Boris Uspenski, Mihhail Lotman, Peeter Torop, Silvi Salupere, Peter Grzybek, Tanel Pern, Tuuli Raudla			
18:00-22:00	welcome dinner				
TUESDAY, AUGUST 23					
09:00-10:00	lecture	Kalevi Kull		Semiotics becomes integrated	
10:00-10:30	coffee				
10:30-12:30	roundtable Time		chair: Aht Timo Ma	Semiotics as epistemology chair: Ahti-Veikko Pietarinen Timo Maran, Ahti-Veikko Pietarinen, Zdzisław Wasik, Ülle	
	Pärl		Parli, Gora	an Sonesson	
12:30-14:00	lun	ıch			
14:00-15:00	lecture	Winfried	Nöth	The semiotics of models and of semiotic modeling	
15:00-15:30	cof	fee	T		
15:30-17:30	roundtable Pe		Modelling in linguistics and beyond chair: Ekaterina Velmezova Peter Grzybek, Viivian Jõemets, Sergei Proskurin, Ekaterina Velmezova, Kristian Bankov		
17:30-18:30	lecture	Mihhail l	Lotman	Rhetoric as a methodology of humanities	
19:00-20:00	19:00-20:00 dinner				

WEDNESDAY, AUGUST 24						
09:00-10:00	lecture	Frederik Stjernfelt		elt	Corollarial and theorematical reasoning: Levels of diagram modelling	
10:00-10:30	cof	fee				
10:30-12:30	round	roundtable chair		Modelling myths, literature, arts chair: Marek Tamm Arnout De Cleene, Mari Niitra, Ave Paulus, Andris Teikmanis, Wen-Li Soong, Yunhee Lee		
12:30-13:45	Lur	nch				
13:45-15:00	round	roundtable chair: Kristia		nternational teaching of semiotics hair: Eero Tarasti, Kalevi Kull Kristian Bankov, Frederica Turco, Eero Tarasti, Tiit Remm, Katre Väli, Frederik Stjernfelt		
15:00-16:00	lecture	Paul Cob	ley		Semiotics and observership	
16:00-16:30	Cof	fee				
16:30-21:00 s	summer schoo	ol field trip		16:30	0-18:00 film night: «Lotman's world»	
				••••••	19:00-20:00 dinner	
		THU	RSD <i>A</i>	λY,	AUGUST 25	
09:00-10:00	lecture	Marcel Danesi			Metaphor as a three-dimensional modeling system	
10:00-10:30	Cof	: Fee				
10:30-12:30	round	Chair: Ka dtable Jelena Gi		Kai Gri	g semiosphere e Kotov gorjeva, Aleksei Semenenko, Tyler Bennett, Kaie t Remm, Leonid Tchertov	
12:30-14:00	Lur	nch				
14:00-15:00	lecture	Jesper Ho	sper Hoffmeyer From genetic to semiotic scaffolding			
15:00-15:30	Cof	fee		••••••		
15:30-17:30 roundtable Terjo interest Shuotin m And of cu Gun		Terje interce Shuor in mode Andre of cul Gunn	Loogultu yu C odeli eas V ture	g translation and ideology ter Torop gus "Translation, (auto)communication, and urality" charlotte Wu "Lotman on translation: Translation ng systems" Ventsel "Political theory as a auto-communication " andin "Temporal methodological merging of vincompatible semiotic models"		

17:30-18:30	lecture	Anti Randviir		Modelling systems: From the individual to society and back and back and back	
19:00-20:00	din	iner			
FRIDAY, AUGUST 26					
09:00-10:00	lecture	Sören Brier		Problems in cybersemiotic modelling	
10:00-10:15	cof	[[] ee			
10:15-11:15	lecture			On the way to cognitive semiotics: Considerations on methods and models	
11:15-12:15 lunch					
12:15-14:15	round	table Conclusio		ısions	
14:15-15:00	cof	fee & departure			

PLENARY SPEAKERS

Per Aage Brandt

Per Aage Brandt is Emile B. de Sauzé Professor of Modern Languages & Literatures and Cognitive Science at Case Western Reserve University and director of the Laboratory for Applied Research in Cognitive Semiotics. He has worked on cognitive and semiotic theory of language, grammar, aesthetics, art, and music.

Søren Brier

Søren Brier is Professor of the Semiotics of Information, Cognition and Communication Sciences at the Centre for Language, Cognition and Mentality in the Department of International Culture and Communication Studies at Copenhagen Business School. He is the founder and editor of the journal *Cybernetics & Human Knowing*. Dr. Brier has worked on information theory, biosemiotics, communication, and cybersemiotics.

Tatjana V. Civjan

Tatjana Civjan is linguist and semiotician working in the Institute of Slavic Studies, Russian Academy of Sciences and Institute of World Culture, Moscow Lomonosov State University. Her main areas of interest are linguistic typology, Balkanistics, semiotics, structure of text.

Paul Cobley

Dr. Paul Cobley is a professor of the Faculty of Applied Social Sciences in London Metropolitan University. He has has worked on semiotics, communication theory, linguistics, and mass media, and edits the journals *Subject Matters*, and *Social Semiotics*.

Marcel Danesi

Marcel Danesi is Professor of Semiotics and Communication Theory at the University of Toronto, and coordinator of the Undergraduate Program in Semiotics and Communication Theory at Victoria College. He founded the Center for Communication and Information Sciences, and is editor in chief of *Semiotica* He has

has worked on applied and cultural semiotics, communication theory, linguistics, and Italian studies.

Boris Egorov

Chief Research Fellow, Institute of History RAS, St.Petersburg, The Section of New History of Russia, Russia

Jesper Hoffmeyer

Jesper Hoffmeyer is emeritus professor at the University of Copenhagen, Biological Institute. He is president of the International Society for Biosemiotic Studies (ISBS), and co-editor of the journal *Biosemiotics* and of the Springer Book series in Biosemiotics. His areas of interest are biosemiotics, philosophy of nature, evolution, ecology.

Kalevi Kull

Kalevi Kull is Professor of Biosemiotics and Head of the Semiotics Department at the University of Tartu. Professor Kull is a member of the editorial boards of *Akadeemia, Semiotica, Sign Systems Studies, Journal of Biosemiotics, Cybernetics and Human Knowing, Cognitive Semiotics,* and *Biosemiotics.* His fields of research are biosemiotics, general semiotic theory and methodology, species co-existence and evolution, and theoretical biology and its history.

Mihhail Lotman

Professor Lotman is Head of the Department of Cultural Theory at Tallinn University and Senior Research Fellow in the Department of Semiotics at the University of Tartu. He is co-editor of *Sign System Studies*. His main fields of research are general semiotics and semiotics of culture, text theory and Russian literature, poetics and rhetoric, Russian verse studies, and film analysis.

Timo Maran

Timo Maran is Senior Research Fellow in the Department of Semiotics at the University of Tartu, and Editor of *Sign System Studies*. His main research fields are theory of biological mimicry, biosemiotics, imitation, mimesis and deception, interrelations of nature and culture, ecosemiotics, nature writing, ecocriticism, and problems of locality and context.

Winfried Nöth

Winfried Nöth is Professor of Linguistics and Semiotics at the University of Kassel and director of its Interdisciplinary Center for Cultural Studies. He is also Visiting Professor at the Catholic University of São Paulo, an honorary member of the International Association for Visual Semiotics, and president of the German Association for Semiotic Studies. He has worked on the topics of semiotic aesthetics, semiotics of language, literature and culture, semiotics of the image, semiotics of maps, the evolution of semiosis, systems theoretical semiotics, semiotics of the media, and semiotics of advertising.

Ülle Pärli

Ülle Pärli is Associate Professor in the Department of Semiotics at the University of Tartu and member of the editorial board of *Sign System Studies*. Her research areas include cultural and textual semiotics, russian literature, and the works of Yuri Lotman.

Anti Randviir

Anti Randviir is Senior Research Fellow in the Department of Semiotics at the University of Tartu, and is a charter member of the Estonian Semiotics Association and the Finno-Ugric Semiotics Association. His research projects include Meaning-generation and transdisciplinary methodology of semiotic analysis of culture, and nomination and anonymity in the culturespace: the concept and object in interdisciplinary perspective (methodological aspects of the integration of social and human sciences).

Göran Sonesson

Göran Sonesson is Professor of Semiotics and director of the Department of Semiotics at Lund University, and director of Centre for Cognitive Semiotics, and Secretary General of the International Association for Visual Semiotics. He has published a works on visual semiotics, pictorial concepts, as well as numerous articles on the semiotics of gestures, visual semiotics, cultural semiotics, and general semiotic theory.

Frederik Stjernfelt

Frederik Stjernfelt is a Professor at the Centre for Semiotics at the University of Aarhus and the editor of the periodical *KRITIK*. He has written papers and a book on the analysis and theory of art and literature, co-written two works on the Balkan conflicts of the 1990's, co-edited the three volume *Tankens Magt*, and published his treatise on semiotics, *Diagrammatology*.

Peeter Torop

Peeter Torop is Professor of Semiotics of Culture at the University of Tartu and President of the Estonian Semiotics Association. Professor Torop is co-editor of Sign Systems Studies and Tartu Semiotics Library, and is a member of the editorial boards of Semeiosis, Bibliotheca lotmania, Keel ja Kirjandus, Humaniora, Traduic, Galáxia, Entretextos, Trames, Folk Culture, Place and Location, and Лотмановский сборник. His research fields are semiotics of translation and methodology of translation studies, intersemiosis and intersemiotical processes in culture, semiotics of the Tartu-Moscow School, semiospherical understanding of culture, and methodology of semiotics of culture.

Boris Uspensky

Boris Uspensky is professor emeritus of Naples Oriental University, Italy and Professor of Russian State University for the Humanities, Russia. He was a member of Tartu-Moscow School of Semiotics.

LIST OF PRESENTERS

Kristian Bankov Mari Niitra

Niccolò Bertè Winfried Nöth

Tyler Bennett Ave Paulus

Laura Bertossin Tanel Pern, Tuuli Raudla

Per Aage Brandt Ahti-Veikko Pietarinen

Søren Brier Sergei Proskurin

Tatjana.V. Civjan Ülle Pärli

Paul Cobley Anti Randviir

Marcel Danesi Tiit Remm

Arnout De Cleene Gunnar Sandin

Boris Egorov Aleksei Semenenko

Jelena Grigorjeva Göran Sonesson

Peter Grzybek Wen-Li Soong

Peter Gärdenfors Frederik Stjernfelt

Jesper Hoffmeyer Leonid Tchertov

Viivian Jõemets Andris Teikmanis

Kaie Kotov Peeter Torop

Kalevi Kull Boris Uspensky

Yunhee Lee Ekaterina Velmezova

Terje Loogus Andreas Ventsel

Mihhail Lotman Zdzisław Wasik

Timo Maran Shuoyu Wu

ABSTRACTS

In alphabetical order.

Kristian Bankov

Southeast European Center for Semiotic Studies at New Bulgarian University, Bulgaria

Semiotic modeling after the age of the lazy texts

Niccolò Bertè

Student, Enby Licensing, Marketing Semiotics, Italy

Semiotic Phenomena as models / modelling phenomena:

Starting from how and why semiotic models can influence the World, concerning the licensing way, it is really important understand why one character (ex. Hello Kitty) or brand (ex. Dior) it's more likely or unlikely then others and how the modelling phenomena can works, to study and try to find an answer to this kind of argument, understanding which are the mental models of persons while they are watching this kind of symbols.

Modelling semiotic phenomena and models in semiotics:

The communication and text, signs and models of licensing, have to be modelled by semiotics models and phenomena, with the human and social sciences, to understand which are the meaning of using one symbol instead then another, which are the correct models to communicate to the different targets from kids till adults.

So modelling the different images regarding the interests, to focus the target and hit them.

When we speaks about the static and dynamic models in semiotics, it is really curios to understand the different way of static and dynamic models into the licensing World, understanding which kind of models use the consumers, to can move our self into their choose; giving them an important "street to take" concerning our interests to try to persuade (semiotics connotative) with a licensing icons (the denotative part); knowing that this is only a small part of work to do, having deep semiotics models that them have to be used.

Modelling as semiotic activity:

Knowing that the World lives on fashion and each people is different from others in each part of World, the social semiotics has to analyze which are the most interesting way of lives, to choose the correct signs (licenses) to utilize on the products, as Marketing Semiotics studies the society, to find the correct way to approach to consumers; Marketing it's a complementary part of Licensing.

The importance it is to choose the most correct epistemological and methodological sciences, to define the models' rules as objects and models' systems as semiotics activity.

My description it has been on Licensing, because it is the subject closer to me to speak about my Semiotics' passion, but of course it has to be share on all others arguments.

It this way can be choose a unique way to use on the Semiotics' models and modelling discipline, concerning objects, signs, mental signs, symbols, mental models etc to can follow a general way to analyze and describe this kind of important Semiotics' Branch.

Tyler Bennett

MA Student, University of Tartu, Department of Semiotics, Estonia

Semiosphere as Model for Unpredictable Text Generation,

The fundamental unit of Lotman's semiosphere is the dialogic translation that takes place between two different modeling systems. The greater the disparity between systems, the greater the generation of high value information, whose peripheral origins are not easily assimilated into the language of the cultural core. Lotman's discrete and iconic text, as well as his explosion and unpredictability, are further developments of the same emphasis on the dynamic movement of these more and less novel texts between the core and the periphery of the semiosphere. This system is used for the analysis of artistic texts and establishes unpredictability as the measure to which the text escapes the static discreteness of rigid conceptuality. Peirce's abductive inference is similar to this aspect of the semiosphere model in the sense that what Peirce refers to as "musement" or "free play" is meant to express the element of creative inquiry unavailable to the other forms of inference. Mind extends throughout the universe for Peirce, the consequence of which is that the inference unbound by habit and convention is just as likely to reproduce an accurate model of the universe as that inference grounded in the most predictable empirical or conceptual methods. A synthesis of Lotman and Peirce's approaches shows how unpredictability must be a consideration in all forms of discourse. Abductive inference, or the ability to relinquish conceptual restrictions in favor of a creative insight, is essential to not only the artistic text, but to all texts which aspire to even the slightest measure of originality.

Laura Bertossin PhD Student, University of Vienna, Zentrum für Translationswissenschaften, Austria

Online newspapers as socio-cultural modelling phenomena in a multi-semiotic perspective

Newspapers have lost nowadays their function of neutral information vehicle to become often a mean of giving news in a more subjective, original way. Using discourse strategies journalists are able to create suspense, to catch the attention of the reader and to involve him in the stories and events written.

In the computer age this form of telling stories and events has evolved into a more sophisticated system in which texts and images come along with sounds, video and audio programs as well as links to other web pages. The narrative structure of a traditional newspaper is in this way broken from the elements added on the site which give the reader the chance to switch to other programs, pages or sites. In this way web sites have given the written text the possibility of fusioning with other media. The presence of multimedia elements along with written texts and spoken language creates a union of first and secondary modelling systems. We have the classical written text with its mannerism as secondary modelling system along with spoken texts as primary modelling system as well as visual media built upon those modelling system defined by Altmann as "graphic language" (Altmann, 1999).

We know newspapers and their semiotic systems do influence our vision of the world, but how far the additional use of multimedia can contribute to influence or even manipulate our thoughts?

My paper analyses under a semiotic prospective the interaction between written and oral models in online newspapers compared to the traditional newspapers. Units of newspapers from Italian, German and British daily newspapers reporting the same event will be analysed to understand and compare the various semiotic concepts of Saussure, Peirce and Eco.

This research focuses also on the linguistic codes used to represent news by different types of online newspapers, on the typographic devices employed in news discourse as well as the graphic items (for ex. front-page photographs, advertising etc.).

Expressions used in the newspapers are also analysed using the non-referential semiotic theory developed by Eco: the connection among culture, the content influenced by a culture and interpretation (Eco, 1976). A semiotic analysis based on some examples of news items will be used to understand and distinguish the possible interpretation of text and images by readers belonging to different cultures.

Thanks to Internet we have now a wide range of possible addressees of the message, but which is the new role of the interpreter of the online-newspapers? Internet users

from different culture have nowadays the possibility of compare news about a specific topic directly by reading newspapers published in different countries. They can easily compare the message given by different newspapers about the same subject and realise which influence journalists with their own culture have as well as which are the political, cultural ideals of a certain newspaper. But the question is: how do addressees perceive the message given? Has the role of the reader changed in the online newspapers?

We know that semiotic analysis cannot determine how an individual reader might interpret the representations of the news items. Online newspapers create not only a new way of perceiving news but they also offer readers the possibility of interacting with the multimedia site: thanks to the article-cum-comment section they can give opinions and see their comments published on the same site of the newspapers. Thanks to the article-cum-comment section their role changes from that of the addressee to that of the addresser. The reader is not the passive target of the message any more: he can interact with the message given; he can give comments and decide to switch to other themes connected with the news read.

A last question arises: Can comments help the semiotic research in determining how messages are interpreted?

This research about online newspapers provides a review of the analysis methods of Saussure, Eco, Peirce and Altman applied both on primary and secondary modelling systems, as well as an evaluation of the new role of the reader as addressee, addresser and interpreter of the message. Another field of analysis are the multimedia elements, which are examined under the perspective of recent studies about the semiotic relationship between sound, music, image, and narrative.

Per Aage Brandt

Laboratory for Applied Research in Cognitive Semiotics, Case Western Reserve University,

Semiotic Modelling: From Diagramming to Morpho-Dynamic Analysis

The natural 'logic' of diagramming has not been systematically explored until recently, but we now have a basic cognitive grasp of the involved semiotic inventory and imaginal architecture. It turns out that dynamic modelling is a core aspect of diagramming as meaning-making. Therefore, morphodynamic topology and elementary catastrophe theory applies to its qualitative mathematization. This seminar will demonstrate the above through examples from the domains of causation, narration, and modality.

Søren Brier

Professor, Copenhagen Business School, Dept. of Internationl Culture and Communication Studies, Denmark

Problems in cybersemiotic modelling

Going from an empirical to an informational paradigm of cognition and communication, does not really help us to analyze, how the living systems manage to make a meaningful interpretation of environment that is useful for their survival and procreation. Other models are needed.

- 1. There is von Uexküll's cybernetic-behavioral model, which has the problem of being placed in a Platonic, static worldview. The Umwelt of an animal is a construction limited of its functional realism of survival. It is connected to the species.
- 2. Ture von Uexküll and Søren Brier both realized that Maturana and Varela's constructivist biology came closer to a modern version of Jacob von Uexküll's. Maturana's model is a relational model. Cognition and communication aims to conserve a viable relation between living system and environment. It is as such not an objective modeling.
- 3. This model is reinterpreted in biosemiotics on the basis of the evolutionary semiotics paradigm of C.S. Peirce. Semiotics underlines realism more, but is also relational in its whole project. In Cybersemiotics the autopoietic model in integrated in the Peircean framework which is of a far greater scope than autopoiesis. Thus in Cybersemiotic we have the Peircean theory of the observer as the phaneroscopic foundation
- 4. Cobley points out that both models, as they are combined in Cybersemiotics lacks to integrate a theory of interest and power. They are too consensual in their view on communication. This is a general problem in both theories. Still Luhmann do work with the power problem in his triple autopoietic communicative system theory as he sees communication specialized into generalized symbolic media, with no controlling center in the modern industrialized media society. Another way to go is Habermas' critical theory in a social semiotic theory. But here remains much to be discussed.

Tatjana V. Civjan

Institute of Slavic Studies, Russian Academy of Sciences and Institute of World Culture, Moscow Lomonosov State University

Structure of Texts and Semiotics of Culture* as the Foundational Text of the Moscow-Tartu/Tartu-Moscow Semiotic School

I will discuss in this presentation my view of this particular semiotic trend in the Moscow-Tartu School in the light of my experiences as one of the earliest participants of the Kääriku Summer schools, as well as my reminiscences of the actual compilation and editing of the volume against the background of the developments which took place since then. The book is a veritable laboratory of ideas, propositions and experiments whose elaboration began nearly fifty years ago. Among the new ideas, concepts and approaches that have since evolved into a rich system of research practices suffice it to mention the concept of semantic poetics as a potential cultural paradigm, various approaches to text analysis, including poetic analysis, the concept of the model (picture) of the world in different ethnic, linguistic and cultural traditions, mythological reconstruction (e.g. the basic Indo-European myth of the combat between the Thunderer (Thunder-God) and the Serpent (Dragon)), the concepts of semiotic space and time, both real and metaphorical.

* ed. J. v.d. Eng, M. Grygar, The Hague - Paris, 1973

Paul Cobley

Professor of Semiotics, London Metropolitan University, Faculty of Applied Social Sciences, UK

Semiotics and observership

Contemporary and future semiotic research, particularly with a biosemiotic orientation, needs to incorporate a theory of observership. This has been clear from the 1980 New York Academy of Sciences conference on the 'Clever Hans' phenomenon (Sebeok and Rosenthal 1981). Although semiotics has not consistently and explicitly developed such a theory, constructivism, particularly in its radical form (see, for example, Watzlawick 2008, Poerksen 2004), has; yet it envisages a theory of the observer which amounts to a form of nominalism. Semiotics, I would argue, necessitates a theory of observership which differs from that of constructivism while, in fact, having a constructivist tinge akin to Peirce's suggestion of the affinity between realism and an extreme form of nominalism. In particular, this paper will take its cue from Sebeok's (1986, 1991) comments on John Archibald Wheeler's conception of the 'participatory universe' and will try to explicate the relevance of Wheeler's (1994, 1998) philosophy of science for semiotics. The paper will contribute to recent key debates in the field on 'knowing' sciences (Kull 2009) and on relation and the semiotic animal (Deely 2010). As an example of how observership might be foregrounded in empirical semiotic work, the straightforward, but theoretically astute, work of Bouissac (2010) will be reviewed.

Marcel Danesi

Full Professor, University of Toronto, Department of Anthropology, Canada

Metaphor as a three-dimensional modeling system

As is well-known, the theory of language known generally as conceptual metaphor theory was developed in the 1970s, culminating in Lakoff and Johnson's now classic 1980 book, Metaphors We Live By (Chicago: University of Chicago Press). The book described what is, arguably, a veritable discovery of how the human brain generates and comprehends language. It does so, essentially, through a process of association that reveals itself in figures of speech, which are tokens of how the brain blends experience with abstract thoughts to produce concepts that have a manifest metaphorical structure. In effect, the subsequent empirical work on metaphor, and figurative language generally, has been showing that metaphor is a powerful modeling strategy that involves all three dimensions or levels of cognitive activity—primary, secondary, and tertiary. In fact, it can be shown that the levels are interdependent, providing human systems of representation and knowledge, from simple word creation to discovery of proofs in mathematics. This paper will look at the ways in which metaphor operates at the various levels, producing insights not only into the Umwelt, but also the Innenwelt of the human mind.

Suggested Reading:

George Lakoff and Rafael Nuñez, Where Mathematics Comes From. New York: Basic Books, 2000.

Marcel Danesi, *Poetic Logic: The Role of Metaphor in Language, Cognition, and Culture.* Madison: Atwood, 2004.

Thomas A. Sebeok and Marcel Danesi, *The Forms of Meaning: Modeling Systems Theory and Semiotics.* Berlin: Mouton de Gruyter, 2000.

Marcel Danesi and Andrea Rocci, Global Linguistics. Berlin: Mouton de Gruyter, 2009.

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Remodelling repertoire

In my PhD research project 'Outsider literature in Belgium' (supervisor prof. dr. Dirk De Geest), I analyze the functional interdependency of 'insanity' and 'literature' in the second half of the twentieth century in the Belgian literary polysystem. By the end of the 1970s, 'outsider literature', a corpus of texts related to insanity (e.g. anthologies such as *Écrits bruts, Les fous littéraires*), manifests itself in the periphery of the literary world due to a discernable change of attitude toward insanity. At the centre of the project is the functionalist question of how the attitude(s) of the literary world toward mental illness as a biographic characteristic of the author has evolved in the Belgian literary polysystem between 1968 and 2008. By studying the reception of outsider literature, based on a varied and representative corpus of Dutch- and French-language outsider authors, this implicit attitude in the literary 'repertoire' can be analyzed. The bilingual Belgian literary polysystem has a comparative and representative dimension in the European context, and has given rise to an intriguing interaction between autodescription and the reception of outsider literature. Moreover, in the second half of the twentieth century, important extra-literary changes in the socio-scientific conceptualization of madness (e.g. anti-psychiatry) take place.

Contrary to the post-structuralist, psychoanalytical and biographical approaches that have dominated the study of outsider literature up till now, a systemic, dynamic-functionalist perspective is at the centre of the present research. Polysystem theory (Even-Zohar 1990), which permits the researcher to analyze peripheral literary systems synchronically and diachronically, offers apt terminology and methodological principles for undertaking the described research project. Set out as a reception study to reconstruct the evolution of an 'attitude' in the literary polysystem, the research takes the concept of repertoire – "the aggregate of rules and materials which govern both the making and handling, or production and consumption, of any given product" (Even-Zohar 1997) – as its theoretical core. This definition nevertheless lacks methodological efficiency, as is often remarked. Therefore, I intend to re(de)fine it by approaching the concept from a threefold, interdisciplinary perspective: descriptive translation studies (Toury 1995), Foucauldian discourse analysis and cultural semiotics (Lotman).

Although the polysystem model of Even-Zohar takes semiotics (Jakobson, Lotman, Mukařovský) as one of its cornerstones and approaches literary and cultural studies as an investigation of modelling systems (Even-Zohar 1997, based on Lotman 1978), from a semiotic point of view, Even-Zohars definition of the function and structure of the repertoire as a combination of models and individual elements, brings up theoretical and methodological questions and ambiguities. Therefore, my contribution to the

summer school will be an investigation of the possibilities of integrating the semiotic insights in secondary modelling systems into the polysystemic concept of repertoire and its implications for the study of literature as a polysystem. This approach makes it possible to gain theoretical insight into:

- the diachronic aspect of literary models. Is the intrasystemic (centrifugal or centripetal) literary dynamic between centre and periphery stimulated by different, competing models, or by the adaptability and constant evolution of one flexible model?
- the intersystemic transfer of models and their stability/flexibility. How does an extraliterary (i.c. psychiatric) model (mental illness, schizophrenia...) transfer to the literary system (e.g. insanity as creativity)? What are the conditions leading to this transfer? Do shifts (Toury) occur in this transfer process and what does this say about the flexibility of models? What is the dependency or autonomy of literature as a secondary modelling system in relation to scientific (psychiatric) modelling systems? Does a model, once it is transferred and integrated into the literary target system, function autonomously or does the relationship with the source system keeps influencing its functioning?
- the structure of repertoires and models. Is there a structural correlation between 'insanity' as a psychiatric model, based on a dialectic between (language-based) symptoms and syndrome, and the literary model of insanity? How can we further refine Even-Zohars concept of repertoire as a combination of individual elements (texts) and models? What is the methodological status of texts, producers and consumers in a repertoire- or model-orientated literary research?
- the functioning of models in the literary polysystem. How can the concept of insanity be hypothesized as a literary model regulating the reception of literature written by the insane? How does a secondary modelling system such as literature, and more precisely the specific repertoire informed by an evaluation of insanity in the light of creativity, make sense of and thus model texts that have often been characterized as anomalies of the primary modelling system language?

My contribution to the summer school aims at tackling these and related questions to come to a better understanding of the theory of models and modelling and to make it applicable to literary polysystem studies, and my present research of outsider literature in particular.

Boris Egorov

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The influence of the Tartu Summer Schools' publications on the preparation of robots for space flights

Professor M.B. Ignatiev, the chair of the cybernetics department of the Leningrad institute of aviation equipment received a government assignment in the 1960s to construct groups of robots for lunar flights. He had difficulties creating texts for a behavioral scenario for a group of several robots. When he learned about the Summer Schools, he became acquainted with Yu.M. Lotman and B.F. Egorov and invited them to participate in his department's activities. In the beginning of the 1970s, special grants were obtained to create groups at the University of Tartu (under the leadership of Yu.M. Lotman) and at the A.I. Hertzen Leningrad State Pedagogical Institute (under the leadership of B.F. Egorov). We were creating different scenarios for the group of robots taking into consideration that one of them acts as the leader. Interesting variations of recording and segmenting the scenarios were proposed, for example the idea of a music score. Unfortunately, in less than three years the vice-rector of the Institute of Aviation Professor Zhdanov put a stop to scholarly contacts between cybernetics and philologists, being very upset at this use of government money and demanding that the researchers of his institute develop scenarios on their own.

Jelena Grigorjeva

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On the Dynamic Model of the Semiosphere

During the last academic fall (2010-2011) I proceeded in my experiment on building and studying the dynamic model of the Semiosphere. On this stage of the experiment it became clear that we are dealing with archaeology of mind, i.e. archeology of languages of human culture. I applied the principles and the mechanisms of the online experiment to my lecture course "Semiotics of everyday behavior". I supplied the course with a subtitle "Archaeology of mind" and explained to the students the main regularities of meaning production in asymmetric dialog. We followed the process of meaning production in a series of analytic experiments. At the end of the course, I generated a matrix of a short 'tanka'-kind poem "Butterfly". Students used this matrix to create their own poems. These texts constitute a book of verses. That was an experiment on meaning production in a polylog or in hypertext regime. At the same time I tried to make illustrations to these texts, i.e. to translate them into analog kind of representation of thought. In other words, I created the emblem kind of signs, i.e. conceptual hieroglyphs.

During the next step of the experiment (Doctoral school "Learning from Animals" in the frameworks of the Conference "Zoosemiotics and animal representation" held in April 2011), while using special visual code that I define as "parental language", I explained to the students the main principles of navigation through the Semiosphere. In my view, this is a kind of human proto-language that detects such stage of evolution when image is not separated from word. In a Platonian sense, this is a kind of language of concepts or ideas. During the seminar I made an experiment on composing rather long conceptual narrations that explain the main principles of the navigation in hypertext, i.e. the Semiosphere. This experiment proceeded in the onlimne blog form – lj comm.=ZOOZOO.

Then I repeated this experiment in Moscow at the Institute of Cultures. I gave 8 hours of talk in Russian: 4 hours of mimetic introduction to my way of thinking, my personal logic, i.e. matrix of my mind (this stage acts also as a filter, filtering those, who cannot stand this type of discursive logic); 4 hours of explaining the principles of this logic supplied with analytic examples. I invited all Russian students to join the blog - lj comm=Z00Z00. So, the project got an international status. It hosts English-Russian entries. I achieved excellent results - I am sure in and I can prove that at least 4 persons got the principle and applied it to fulfill the task.

As the result of these experiments I suggested a model of Double Hermeneutical Spiral of Cognition (DHSC) (26.11.11 Conference "Culture in Mediation: Total Translation, Complementary Perspectives". Hommage to Prof. Peeter Torop's 60-anniversary. University of Tartu. 26-27 November 2010). So, we are ready to start with supplying the neuron matrix of human brain with its cultural content.

Peter Grzybek

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Semiotic Modeling: Object-, Meta- and Connotative Semiotics between Possibility, Plausibility, and Probability

The concept of 'model' has accompanied Tartu-Moscow semiotics almost from its very beginnings in the 1960s. At that time, the distinction of "secondary modeling systems", based on and/or constructed according to the principle(s) of "(a) primary modeling system(s)", has been particularly important. Furthermore, generally considering any semiotic system as a modeling system, semiotics as a discipline has been defined as modeling of modeling, or meta-modeling. At first sight, such a distinction seems to include nothing special, referring back to Hjelmslev's early distinction of three levels of semiotic processes and analyses: semiotic, meta-semiotic and connotative semiotic systems. Yet, a number of theoretical and methodological questions have remained open (or even untouched) over the years. One of these questions is, how primary and secondary modeling systems refer to what has been termed "model of the world" (модель мира) in Moscow-Tartu semiotics.

In a series of earlier studies (Grzybek 1993, 1994, 1997), attempts have been made to relate the concept of 'mental model' – which arose in the mid-1980s in context of psychology of information processing (Johnson-Laird 1983, Genter & Stevens 1983, and which has hence played a continually important role (cf. Oakhill & Garnham 1996, Johnson-Laird 2004, 2005) – to the question of semiotic modeling as discussed in Tartu-Moscow semiotics. Against this background, extending the line of arguments from philosophy and psychology to evidence from neuropsychology of that time, the theoretical notions of possibility, plausibility, and probability have been brought to discussion in their possible relevance to provide some explanatory basis for the problem at stake.

The presentation aims at a further development of this line of thinking, starting from a retrospective view at the emergence of this theoretical approach. Paying due attention to the distinction of three levels as outlined above, particular attention will be paid to the relation between (i.e., to similarities and differences) models in arts and science.

Peter Gärdenfors

Modeling the development of semantic space: From pointing to verbal communication

I present an analysis of the development of the semantic space of a child from gesture to verbal communication. In the first part, I will analyze the different forms of pointing. My aim is to show that the meaning processes involved in communication by pointing are essentially the same as those in spoken communication, and that the development of linguistic communication ability can be seen as a transition from pointing in physical space to pointing in different mental spaces.

My starting point is that the relevant semantic structures can be modeled with the aid of conceptual spaces with topological and geometric structure (Gärdenfors 2000). Using combinations of physical (visual) space with various mental spaces, I argue that there is a semantic continuum in development, and that purely verbal communication may arise from a bootstrapping process grounded on gestural communication.

In my earlier work with Massimo Warglien, we propose a semantic framework based on a "meeting of minds" that will form the background for the analysis. According to this framework, the meanings of expressions do not reside in the world or solely in the mental schemes of individual users but develop via communicative interactions. The fundamental role of human communication is indeed to affect the states of mind of others. A meeting of minds occurs in pointing when the interactors perceive that they align their attention in physical space and in verbal communication when the interactors perceive that they align their attention in mental spaces.

The goal is to develop this semantic framework to show that there is a continuity between gestural and verbal communication. Pointing is a special gesture that serves as an interface between the physical environment and the semantic spaces of the communicators. It is often used in conjunction with words and plays an important role in the acquisition of verbal language in children. Not only do different types of pointing activities serve different purposes, but they also differ in terms of their cognitive representation, which we will model in terms of spatial structures. An analogy is that also the use of words is a form of pointing: the words refer to mental spaces, in addition to the physical space.

The second part will be devoted to linguistic communication and focus on an aspect of semantic learning that has not been well studied: namely, its organisation into *domains*.

Children learn a language without effort and completely voluntarily. A teenager masters about 60,000 words of her mother tongue by the time she finishes high school. In her speech and writing she may not actively use more than a limited subset of the words, but she *understands* all of them. A single example of how a word is used is often

sufficient for learning its meaning. No other form of learning is so obvious or so efficient

Nevertheless, the semantic learning mechanisms show some strong asymmetries. For example, why is easier to explain to a four-year-old the meaning of the colour terms "chartreuse" and "mauve" than to explain monetary terms like "inflation" or "mortgage"? The difference is not a matter of word frequency: the monetary terms are more frequent. Rather, the four-year-old masters the semantic *domain* of colours and thereby knows the meaning of many colour words. Adding new colour terms is just a matter of learning the mapping between the new words and the colour space: e.g., "chartreuse" is a kind of yellowish green, and "mauve" is a pale violet. On the other hand, the child is normally not acquainted with the domain of economic transactions. Money for the child means concrete things – coins and bills – that one can exchange for other things. Abstract monetary concepts are not within her semantic reach.

Grasping a new domain is a cognitively much more difficult step than adding new terms to an already established one. Once a domain is common to a group of potential communicators, various means (words, gestures, icons, etc.) of referring to different regions of the domain can be developed. Conversely, if a domain is not shared, communication is hampered. The organisation into domains speeds up language learning.

I will present a model of such domain-oriented language learning, based on *conceptual spaces*. The model is built up from the semantic domains that a child acquires during her first formative years. Some of the domains considered are the emotion domain, the visual domain, the category domain (including, colours, shapes, sizes, etc.), the action domain and the goal domain. I will also present linguistic data supporting the hypothesis that semantic knowledge is organised into domains.

Jesper Hoffmeyer

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From genetic to semiotic scaffolding

Contrary to lifeless systems organisms do not passively sit (or flow) and wait for things to happen, they actively search for the resources they need and actively protect themselves against a range of possible dangers. All of this presupposes some kind of anticipation where present cues are used to tell about future conditions in some sense or other. In a fast-changing world anticipation is a risky business and failure of a species to interpret cues "correctly" (relative to the needs of the organism) may lead to extinction. Species that manages to interpret their surroundings well would have been favored by the evolution process, thereby initiating an evolutionary dynamics leading to increasing semiotic freedom (Hoffmeyer 1996).

The appearance on our planet of biosemiosis thus opened a new agenda for the evolutionary process by providing entities with the agential property presupposed for Darwinian "striving" and thus for natural selection. For billions of years the semiotic freedom of agents remained low, and a bacterium, for instance, cannot itself chose to *not* swim upstream in a nutrient gradient. Therefore, at this stage of evolution semiotic agency is primarily exhibited at the level of the lineage (the species as an evolving unit). Only gradually would emerge a more advanced stage of biosemiosis, in which semiosic activity was no longer only a property of the lineage but also, and importantly so, a property of individual organisms.

This "individualization" of semiotic freedom, i.e., its displacement from the level of the species to the level of the individual, initiated a change in the dynamics of the evolutionary process. Patterns of interactive behavior now became increasingly regulated or released by semiotic means, and this would have induced a new kind of flexibility upon inter- and intraspecific interactions. Innovations more and more came to depend on semiotically organized cooperative patterns at all levels from single organisms and species to whole ecological settings. In fact, as I have suggested elsewhere, natural selection from now on would more and more follow directions given by the ecosemiotic interaction patterns (called ecosemiotic motif's in (Hoffmeyer 1997)). The better natural systems become scaffolded through semiotic interaction patterns (semiotic scaffolding) the less will be the role played by genetic scaffolding, and the more derivative will the role of natural selection become. Natural selection will now favor such genetic adjustments that might support already established semiotic interaction patterns but will not itself to the same extent mark out the direction of change. As a consequence, the individual rather than its genes become the main evolutionary agent, and the concrete life history of individuals will increasingly determine their behavior. By implication learning, interpretance and semiotic freedom will be more and more important parameters in the games played out in the evolutionary theater.

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Does the analysis of voice lead to the limits of modelling?

As tensive model, proposed by Fontanille and Zilberberg, has been used for analysing music, essentially a sound event and not a score, it would be plausible to attempt to apply the same kind of analysis to voice defined as spontaneous human or animal bodily sound charged with meaning. Just like any other model, the tensive model, proposed by Fontanille and Zilberberg, is a conceptual structure represented in a visual graphic form. According to the tensive model, a phenomenon is analysed by determining the two valencies – intensity and extent/range, whereas extent is the range over which intensity applies. It corresponds to variety, quantity, and the temporal or spatial range of phenomena. As in the case of voice we deal with one single monodic sound sequence, the question arises as to what the definable valencies are for voice and how could these be analysed.

According to the tensive model, there are two kinds of correlations between valencies: positive correlation (or comverse), where increase in intensity brings along an increase in extent and vice versa, and negative correlation (or inverse), if increase in intensity causes decrease in extent. Each vocal sound event is ephemeral and unique, therefore it is not possible to arrive at any permanent correlations as in the case of musical repertoire, where a musical work is a combination of permanent and variable traits, i.e. the score and the performance. We shall ask to what extent such traits may be found that could be defined as permanent in the case of spontaneous voice usage and whether such universal traits may be viewed as valencies.

The tensive model has been used for analysing musical events, and it may successfully be used in the case of symphonic music of the Vienna school, where the increase in number (of instruments) and sound volume and rhythmic accelerations may often be clearly defined and related to the increase in intensity. In the case of voice, such layers are inexistent. Moreover, as vocal expression is essentially holistic, no single trait of voice may be considered responsible for its overall effect or meaning – a whisper may convey the same meaning as a scream.

The complexity of the analysis of voice lies in its definition. We shall make an attempt to study voice outside the framework of language and music that deny us access to pure voice in Barthes's sense. Although some vocal cues have been defined as universal to all humans as well as to some non-human species, each vocal act is always unique in that it combines different, sometimes controversial cues and the process is largely unconsious: we do not modify the fundamental frequency of voice or its tone attacks or speed at will to express a certain meaning, the change in voice is brought

about by context and is not controlled nor analysed by the emitter. Different from score-based composed music, meaning in voice does not emerge from the premeditated combination of distinguishable elements, which leads to our main question - is it possible to study voice by the means of a conceptual structure and its graphic representation?

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The semiotic mechanisms of habit formation

Yuri Lotman proposed in the Introduction to his book "Culture and Explosion" that "The fundamental question concerning any semiotic system is its relationship to the external realm beyond the boundaries of the system and, secondly, the relationship of statics and dynamics. The latter may also be formulated: How can a system evolve and yet maintain its identity? These are the most fundamental and at the same time most complicated questions".

I propose that semiotic notion of habit is well situated at the cross-section of those two questions. On the one hand, it mediates the semiotic and non semiotic realms. On the other hand it provides a means to address the balance of social dynamics and social inertia (which is not necessarily a negative concept because it provides also a measure of self-identity).

What can a semiotic research program benefit from the development of semiotic notion of habit? For one thing, it enables to address the "cultural subconscious" in a more intelligent and nuanced manner, providing more insight into the mechanisms of cultural and social dynamics. When applied, it enables to have a more profound understanding of the resilience of a culture. In the face of the cultural and social explosions (in Lotman's sense) that have taken place in the World as well as Estonian society in recent years bringing about the experience of a crisis, semiotics can offer an insight as to the factors that either enable or inhibit the adjustment or as to the underlying patterns that guide the adjustment.

The paper analysis some of the more eminent notions of habit in the semiotic literature and investigates the relationships between habit and habit formation and semiotic model and semiotic modelling and the compatibility of respective notions.

Kalevi Kull

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Semiotics becomes integrated

- 1. Last 50 years in semiotics may be described as including three stages:
- (a) in the 1960s and 70s, semiotics was established as a field (under the leadership of Lotman, Eco, Greimas, Sebeok, et alii); the dominating theoretical view was Saussurean;
- (b) in the 1980s and 90s, semiotics became global, both institutionally and via its applications in many fields of knowledge (under the leadership of Sebeok, et alii); the dominating theoretical view was Peircean; in this period, several large works have been produced that cover semiotics as a whole handbooks and encyclopedias compiled by T. A. Sebeok, R. Posner, K. Robering, W. Nöth, P. Bouissac;
- (c) in the current decades, at the post-Sebeok period, we see our task in the development of more consistent conceptual apparatus that could be used as a common basis by all branches of semiotics; this is also a period of synthesis between different semiotic schools, and of necessary adjustments in their terminology and conceptual systems in order to take into account all levels of semiosis and various branches of semiotics. A particular task for Tartu School is the integration of Lotman's and Uexküll's approaches.
- 2. The limits of semiotics can be quite precisely defined. The sciences that are dealing with laws that nobody has established and never err (i.e., with phenomena that are explained without an involvement of meaning and polysemy), can be called phisciences (physical sciences); the sciences that deal with rules (codes) established by life and involving exceptions (i.e., the sciences that study the sign processes as real, able to cause ambiguous behaviours), can be called sigma-sciences (semiotic sciences). Physical sciences describe all sorts of things; semiotic sciences describe all kinds of knowing (signs, texts, models). Thus semiotics is modelling of (all kinds of) modelling.
- 3. The field of semiotics can be described as a general study of knowing, acting, and learning, in the assumption that the meaning-making process is made explicit. Knowing in a broad sense as a process that assumes (and includes) at least memory (together with heredity, i.e. code processes), anticipation, communication, meaningful information, and ententionality (needs), is a distinctive feature of living systems in all their forms. Acting is a behaviour of an agent that is based on the signs of self one's needs, one's various forms of knowing. Learning (that consists of plasticity and habituation) is the development of knowing, in all its forms.
- 4. The models that explicitly include the description of semiosis, are non-computable (in the sense of R. Rosen and A. Louie). Rosen's (M, R)-system can be seen as a model of semiosis (together with Peircean, Uexküllean, Lotmanian models). Semiosis requires

always certain inconsistency, non-translatability. Accordingly, the theorizing and model-building in semiotics has to differ radically from that of phi-sciences.

5. The basic types of semiosis are vegetative, animal, and cultural, which create accordingly the main different types of umwelten (and are related to the main types of learning, knowing, and acting). Humans are involved in all of them.

Readings:

Deely, John 2010. Semiotics Seen Synchronically: The View from 2010. New York: Legas.

Kull, Kalevi 2009. Biosemiotics: To know, what life knows. *Cybernetics and Human Knowing* 16(3/4): 81–88.

Kull, Kalevi 2009. Vegetative, animal, and cultural semiosis: The semiotic threshold zones. *Cognitive Semiotics* 4: 8–27.

Kull, Kalevi 2009. The importance of semiotics to University: Semiosis makes the world locally plural. In: Deely, John; Sbrocchi, Leonard G. (eds.), *Semiotics 2008: Specialization, Semiosis, Semiotics*. Ottawa: Legas, 494–514.

Kull, Kalevi 2010. Umwelt and modelling. In: Cobley, Paul (ed.), *The Routledge Companion to Semiotics*. London: Routledge, 43–56.

Torop, Peeter; Lotman, Mihhail; Kull, Kalevi 2000. Intercommunication: Editors' comments. *Sign Systems Studies* 28: 11–14.

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Semiotic modeling in narrational activity of interpretation and communication: narrative as communication media

Narrative as a form of representation medium mediates the world with the mind by virtue of cognitive characteristics. The significance of narrative form and its function have changed through history. As Vico pointed out, in the era of God the narrative is manifested in the form of mythology, in the era of hero it took the form of fable, and it took the form of history in the era of human. This remark implies that human history always needed a form of story insomuch as we humans perceive the world mediated by a form of story in which the external world and the internal world are encountered.

From this regard, human mind works in an analogical way so that the mediated Storyworld forms our perception to see the external world. For this reason, Storyworld is a semiotic phenomenon which bridges the external reality with the internal psychology as communication media. This aspect of communication media works in two-fold communication by way of narrational activity.

As Vygotsky emphasizes the order of development of culture, the activity occurs first on the interpsychological plane and secondly the intrapsychological plane follows. On the basis of this order the external activity is internalized, through which a higher mental psychological process is performed. This idea from Vygotsky can be found in two other thinkers' thoughts: first, a Lotmanian communication model, autocommunication, is a key concept of internalization of a message of the author in the different context and code of the reader in the course of literary communication. Second, this communicative act is performed by a semiotic enterprise of mediation by means of three categorical levels from Peirce's semiotic. This means that a message cannot be delivered in a direct way or in immediacy of transparency. That is, in order to lead to an effective communicative act, people need narrational activity of interpretation of progression, procession, transition. The feature of narrative shows a mediational tool for higher psychological process, transforming the direct information from the story, building interpreters' own narrative form of Storyworld, so that they can find their own meaning from the story presented. The reality of medium has changed through the history of narrative. No matter what medium was employed, the form of narrative has been maintained constantly so as to convey a message itself as a phenomenon of the story, and conveying a message by way of emplotment of the story. Finally, the narrative form has come to be used as the cultural mediation in communication.

Narrative with the cognitive and semiotic aspects appeals to mind as a modeling sign system for feeling and cognizing and thus symbolizing the world, which leads to a worldview or world-picture for the construction of meaning from environments. Based on these features of narrative, I intend to examine them, analyzing with Peirce's semiotic perspective. Specifically, three categorical elements of modeling are to be examined as to how narrational activity is performing. Therefore, presentation of a story, representation in a narrative, and narrative interpretation are the three levels of narrational activity to be examined in a semiotic action. The narrative form here is not dependent on a material aspect of medium; thus, it has its own characters and functions.

Regarding the three levels, first I will explain the concept of iconicity of narrative; second, indexicality of narrative; third, symbolicity of narrative as a modeling sign system from the Peircean semiotic framework. I will also provide some examples which are relevant to the concept of narrative in three levels for higher mental development by interacting with others in a dialogical way. Particularly, I will look into new media of representation and interpretation process by virtue of narrational activity.

Terje Loogus

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Translation, (Auto)communication, and Interculturality

Translation has become the dominant means of communication between European literatures. Translation is always a dialogic process (Lotman 2001: 143). The need for dialogue can be viewed both at the level of comprehensive theoretical understanding and at the level of the complex mechanism of individual behaviour (Torop 2008b: 376). In the translation process, the dialogue involves not only communication between different languages and cultures but also intraindividual communication. The classical communication model sees communication as a transfer of information from an addresser to an addressee: the I to YOU communication. Lotman (2001: 21) also distinguishes the I to I communication, or autocommunication, where the message is directed from a person to him- or herself. The carrier of the information remains the same person, but the message is recoded and acquires a new dimension during the communication process. In an act of autocommunication, the addresser is split into several personalities and represents different addressees he identifies himself with. While interpersonal communication bridges space, intrapersonal communication bridges time (Jakobson 1985: 98). This model relates directly to the work of translators who not only mediate between languages and cultures but also switch between different roles they have to perform in the translation process. The translator in his double role as a recipient of the source text and the producer of the target text takes complex decisions which often involve internal conflicts.

The model of autocommunication can also be adapted to culture: just as the translator, culture is continuously analysing, describing, educating, developing itself, and creating autocommunicative models for itself (Torop 2008a: 254). Translation has often been considered as cultural transfer. The paradigm of interculturality captures the complex phenomenon of intercultural contact, including intercultural communication. While transculturality aims at phenomena common in different cultures, interculturality focuses on phenomena which are different in cultures but still relate to each other (Welsch 1999). The question of difference between languages and cultures emerges above all in translation studies. In literary texts, the notion of poetic and cultural alterity can be distinguished (Mecklenburg 2008). Cultural phenomena of the latter kind pass on and set particular cultures, keeping them separate from other cultures. Cultural products of a poetic or artistic nature, on the other hand, do not function by passing on a particular culture but rather open up a culture progressively to other cultures. Therefore, this paper focuses not only on cultural alterity but also on poetic concepts of literary texts as well as of translations.

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Rhetoric as a methodology of humanities

A unique position of rhetorics in the scholarly landscape of Ancient Greece is related to two circumstances. First, differently from poetics or linguistics there are no parallels to it in other traditions, the rhetoric of the whole world has evolved from the ancient Greek rhetorics. Second, from the beginning, rhetoric has a strong reflexive primordium: an inseparable part of rhetoric is metarhetoric (another difference from poetics with its emphasized technological tendencies). Parts of rhetorics, rhetorical operations and even rhetorical figures can be both descriptive of objects and operations of metalanguage, moreover, they can both at the same time. For instance, the so-called canons of rhetorics: invention, arrangement, style, memory, delivery, are feasible not just in composing and delivering an oral, political or court speech, but, with small generalizations, in composing any text or performing any research. In the paper the main emphasis will be on the metarhetorical functions of cutting, naming and comparing. Special attention will be paid to metaphor as a prototype to any kind of model.

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From "Semiotic self" to the accumulation of meaning

The semiotic nature of human self has been an intriguing topic for semiotics at least from the writings of Charles S. Peirce and George Herbert Mead (for historical reviews c.f. Colapietro 1989, Wiley 1994). In the late 1970s Thomas A. Sebeok focused at the topic, shaping his understanding in four short essays: Semiotic self (1991a [1977]), Semiotic self revisited (1991b [1989]), 'Tell me where is fancy bred?' The biosemiotic self (2001a [1991]) and The cognitive self and the virtual self (2001b [1998]). In contrast to previous accounts, Sebeok develops an explicitly biosemiotic perspective. Based on Sebeok's works, we can bring out the following principal properties of the concept of "semiotic self":

- 1. Semiotic self is rooted in biological semiotic processes. On the most primitive level it derives from the functioning of the immunological system and other processes, by which the organismal self is distinguished from its surroundings.
- 2. Semiotic self is a result of sign processes of different levels. It arises from the modeling based on different codes available in the living organism.
- 3. Semiotic self is not a singular unit, but emerges from compound or collective processes on different organizational levels (there is a parallel to Hoffmeyer's (1997) understanding of the swarm as a basic biosemiotic mechanism).
- 4. Semiotic self is a dynamical entity that allows the development of the self, misidentification of the self and even a virtual projection of the self, thus including also an environmental perspective.

Sebeok's interpretation of "semiotic self" has a potential to be developed into broader understanding of semiotic subject by emphasizing the relational nature of the subject in its environment. It appears that semiotic selves are rooted biologically and contextually, they are phenomena with history and specific identities, which also prescribes the selection of methods suitable for describing these.

In close reading of Sebeok's essays it appears that the concept of semiotic self is based on two different types of layeredness. The layers of the first type are based on different codes operating in the animal body (genetic, immunological, linguistic and others, cf. Uexküll et al. 1993). The second type of layeredness is based on the hierarchy and they can be expressed as primary, secondary and tertiary in accordance with the theory of types (cf. Bateson 1972).

This double-layered structure equips semiotic self with a principally new method of meaning creation that contrasts with both logocentric and glossocentric

understandings of semiosis. In this, meaning derives from the regulatory processes of lower layers in semiotic self that actualize for the subject when developing the organization of higher layer. The modeling taking place in semiotic self cannot be formal but rather fuzzy or organic. It can be expected that such a mechanism of accumulation of meaning is rather widespread in biosemiotic phenomena, taking place in most cases, in which organism derives a meaning about itself or about its relation to the environment.

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The poetics of myth in children's literature: an inner urge or a conscious modelling of the world?

Children's literature could be viewed as an example of asymmetric communication, where adults produce texts for child audience with special purpose. It could be approached as adults modelling the world for children who are inexperienced and in need of knowledge and instruction.

Child consciousness is often associated with mythological consciousness both in commonplace understanding and in theoretical approaches (among others, in the works of Tartu-Moscow school of semiotics). Consequently, children's literature is frequently viewed as a conglomeration of mythological plot types.

The assumption that there could be some resemblances between child consciousness and mythological consciousness poses the question on what purpose adult authors create texts which use mythological features such as personification, magic, specific conception of time and space etc for aesthetic modelling of the world.

Mythological worldview is thus conveyed to child readers, be the reason unconscious associations between childhood and myth, conscious reconstruction of authors' childhood memories, just a conventional cultural practice, or should there be clear didactic purposes. Treating childhood as a mythological period is in fact strongly ideologized as well, either by treating children as being in "less developed" state of mind or favoring this period in human life as a "more natural" way of being. On the other hand, the widespread employment of mythological elements in children's books in some ways legitimizes mythological worldview within Western rational culture.

Winfried Nöth

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Models as Signs and Semiotic Models as Signs of Signs

Models, both in the form of mental and in the form of physical representations, are diagrammatic signs, and modeling means devising mental or physical diagrams. Hence, modeling is always semiotic modeling in a broader sense, but in a narrower sense, semiotic modeling is the modeling of signs, sign systems, and sign processes.

Signs have often been called models – models of natural or artificial objects, of organisms, processes, reality, ideas, concepts, etc. Lotman's distinction between primary and secondary modeling systems draws attention to the metasemiotic character of semiotic modeling. However, his model of semiotic modeling should not mean that there are signs which are genuinely and truly primary in semiosis since signs are always or at least in many respects signs of signs.

Furthermore, not all signs but only diagrams can serve as models. Semiotic modeling is always diagrammatic modeling. Indices cannot model themselves although they are important constituents of most models. Symbols do not model anything since they are habits, mostly based on conventions, but almost all models include symbols, and the syntax of symbols (in sentences and texts) can only be understood through mental models, i.e., diagrams. Hence, models can only model successfully if they make use of diagrams and other signs. Paraphrasing Peirce, we must conclude that the most perfect model is a sign "in which the iconic, indicative, and symbolic characters are blended as equally as possible" (CP 4.448).

Reading recommendations:

Anderson, Myrdene and Floyd Merrell. 1991. On Semiotic Modeling. Berlin: Mouton de Gruyter.

Nöth, Winfried. 1990. *Handbook of Semiotics*. Bloomington, IN: Indiana University Press.

Nöth, Winfried. 2000. Handbuch der Semiotik, 2nd rev. ed. Stuttgart: Metzler.

Nöth, Winfried. 2009. Metareference from a semiotic perspective. In: *Metareference Across Media: Theory and Case Studies* (=Studies in Intermediality 4), W. Wolf in collab. with K. Bantleon & J. Thoss (eds.), 89-134. Amsterdam: Rodopi.

Nöth, Winfried. 2010. The criterion of habit in Peirce's definitions of the symbol. *Transactions of the Charles S. Peirce Society* 46.1: 82-93.

Stjernfelt, Frederik. 2007. Diagrammatology. An Investigation on the Borderlines of Phenomenology, Ontology and Semiotics. Dordrecht: Springer.

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Mythopoetic versus ideological modelling in the construction of cultural identity

According to the works of TM School, mythopoetic thinking refers to a specific type of memory, language and worldview. Typologically it represents the paradigmatic type of culture and consciousness as opposed to syntagmatic type. The concept is close to R. Jakobson's theoretical approaches. We can also draw parallels between this binary distinction and Roland Barthes` concepts of ideological and mythological sign production. These two different structures coexist in actual communication, enabling us to talk about different dominants that constitute differences in culture or mind.

While different types of communication coexist typologically, from the evolutionary perspective they do not. Characterizing mythopoetic thinking both socio- and ontogenetically, the approach of TM School stresses on the diachronical shift of cultures and individuals from one type to another. To our mind the concept of mythopoetical thinking appears to be an appropriate tool for a typology of cultures. Theoretical model of the presented paper describes these typological differences of cultures, giving regards to the R.Barthes` concept of myth.

Second part of the present paper focuses on concrete analysis of one model. Space can be regarded as the substrate and representation of culture. In present paper there is under discussion how culture uses space as self-description. Focus is on formation of Lahemaa National Park as institutionally constructed social reality. Although intentionally constructed space, landscape being shaped according to a pre-existing plan and value-system (as the area of Lahemaa itself had no unified historically bound cultural identity), it is at the same time existing natural and historical landscape with gathered and added symbolic or textual meaning. Lahemaa National Park is here analysed as representation and model of national identity. The semiotic space is functioning as the semantic model of culture, where significance is not so much on the concrete referential physical reality and time, but dominantly on the values and spiritual dimension of the place. It can be seen in the codes present in the discourse of Lahemaa, bordering and naming principles, conceptual 'other'.

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Modelling systems theory: origins and interpretation

This paper focuses on the concept of modelling in the semiotics of Tartu-Moscow School. We present a review of the theoretical background of the concept of modelling and the development of the concept through the contributions of several members of the school. Some of the concepts under consideration are the cybernetic concept of modelling, the concept of poeti model in Ivanov's works, Toporov's conception of universal semiotic complexes, early presentations of modelling systems theory (e.g. Zaliznjak, Ivanov, Toporov 1962).

The second part of the paper focuses on clarifying the relationship between primary and secondary modelling systems based on the conceptions discussed above. The main question here is, whether the distinction between primary and secondary modelling is of fundamental significance or of it is really just a form of semiotic mimicry, as is claimed by B. Egorov and V. Uspensky, the latter being the original author of the term. Sketching a clearer picture of the original conception will also help us evaluate its persistence it later semiotic theory. From this perspective, we shall take under consideration Thomas Sebeok and Marcel Danesi's "Modelling systems theory", which is, at present, the only monographic work published in English on the concept of modelling systems. The paper will present the most significant differences between the visions of Sebeok and Tartu-Moscow School – primarily based on the distinction between primary and secondary systems. We will also discuss some possible reasons why the interpretation of modelling systems theory has diverged so substantially from the original conception.

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Is there a general diagram concept?

Studies on various possible diagrammatic models supplementing or even supplanting those of natural languages have been going on for some time now. Frederik Stjernfelt has recently proposed a strong thesis for diagrammatic representations: that there is a general diagram concept to accommodate all conceivable diagrammatic forms and not only those that can be constructed from the diagrammatic signs of logic. I will evaluate Stjernfelt's thesis from the point of view of Peirce's suggested classification of icons, which singles diagrams out as the 'second firstnesses' of hypoicons. I will argue that, unless the general notion of diagrams is defined in a precise manner, Stjernfelt's thesis runs the risk of semantic holism about diagrammatic meaning: that no predominantly non-symbolic representation can fail to be a diagrammatic sign. The reason for this diagrammatic universalism is that we lack the means of measuring the expressivity of the class of diagrams taken in its wide sense. Alternatively, I propose that there is another general diagram concept, which is to be found in the higherorder diagrammatic logic of existential graphs. That logic of potentials, whose development was left incomplete by Peirce, was not only his preferred framework for formalizing abstraction, but also the true logic of generalities: its second-order part is capable of accommodating all mathematics. Thus anything worth expressing can be expressed in it. Though the predicates (spots as potentials) are not rendered iconic in their diagrammatic (secondness) sense, they are icons in the sense of images ("first firstnesses"). It is contestable, however, whether a diagrammatic logic of potentials (despite being an interpreted logic) qualifies, unlike first-order existential graphs, as a diagrammatic language. But this only supports the argument that the empirical distinction of what is a logical and what an extra-logical diagram cannot be maintained at the end.

Sergei Proskurin

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Modeling and writing

The process of modeling is the basis of the creation of new writing, including alphabets (see Stepanov, Proskurin [Степанов, Проскурин 1993]). The ancient Indo-European language, Hittite, used the borrowed Sumerian cuneiforms, which were not pronounced and concealed Indo-European words still unknown to us (for instance "woman", "ship", "copper"). The Sumerian cuneiform tablets served as a matrix to develop written utterances in Hittite, hence their appearance could be considered as matrix copying.

The usage of Sumerograms in Hittite reminds us how the synthesis of inherited molecules by the way of matrix copying occurs. The main thesis is such: as a matrix for the gene of a new generation the gene of the previous generation is used. There is a certain similarity in this type of preservation of non-genetic information. In the case of Hittite writings we can speak about the source of Sumerograms – the Sumerian tablets that preserved data of the Sumerian language and were used as samples for Hittite codified writings.

A similar matrix copying, mostly in a graphical sense, was used by the Greeks when they borrowed old Phoenician letters which were creatively adjusted to the first alphabet. However, it was not so simple because the Greeks used a different principle of the ABC built-up, which presupposed separate symbols for vowels and consonants instead of consonant syllabic writing of a Semitic language and its designation peculiarities. Noticing this difference and describing the way Greek adjusted Phoenician letters, John F. Healy wrote: "This can be clearly demonstrated by a comparison of the Phoenician and early Greek letters. Some of the letters - 'A' is a good example - even retain an element of the pictograph, in this case the drawing of a bull's head (") now upside down [...]. The Greek name for this letter is alpha (alfa), a word, which is meaningless in Greek (apart from referring to this particular letter) but which means "bull" in West Semitic languages (e. g. Ugaritic 'alpu, Hebrew 'elef). This is true of almost all the Greek letters" (Healy 1991: 35). The Greeks were the first, however, who, as A. Meillet admitted, noticed sounds as a linear array. The Phoenician alphabet served as a matrix for them and was not what we are used to calling an alphabet, that is, a writing that analyzes each word in its consecutive phonetic elements, consonants and vowels, and allocates a special sign to each of these elements, to the vowels as well to the consonants. Thus the Phoenician matrix was used by the Greeks to install a new type of writing that became a characteristic feature of all Indo-European languages. "We as subjects", J. Kristeva writes, "belonging to a cultural zone in which writing is phonetic and literally reproduces phonetic language, find it is difficult to imagine that a type of language - writing - could have existed and still exists today for many people that functions independently of the spoken chain, a type of language that is

consequently not linear (as is emission of voices), but spatial, and so registers a mechanism of differences where each mark's value depends upon its place in the traced whole" (Kristeva 1989: 26).

Summarizing the above, we notice the parallel processes in biological substances and cultural societies and raise the question whether the sign activity is gaining momentum due to the same cause?

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Models of understanding: Hermeneutic circle and semiosis

The hermeneutic circle incorporates, right from the beginning, the complexity of understanding: linguistic and psychological syncretism, the closedness and openness, pre-cognition and possibility of the textual whole or the "anticipation of perfection" (H. G. Gadamer); hence the synthetic nature of the methods employed. The hermeneutic understanding of the text as an experience-based way the world is given to us, as the "objectification of life" (W. Dilthey), the delimitation of the infinite by creating horizons, is not far from Lotman's conception of art as the possibility of modelling the infinite through the finite; similarly, Lotman's discussion of the power of the artistic text to express truth relates to M. Heidegger's discussion of truth as the essence of the artistic text – Sich-ins Werk-setzen des Wahrheit. This paper, then, attempts to juxtapose hermeneutic logic with the concept of semiosis, with the focus on interpreting the hermeneutic circle on the background of the concept of infinite semiosis and, following that, through the concept of transgression.

Anti Randviir

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Modelling Systems: From the Individual to Society and Back. And Back ... And ... Back ...

How to model systems, how systems model themselves, how systems model their environments? In the case of humans, we obviously should centre at both ends of societal modelling systems: the individual and the society. Or: are both/either the latter the actual elementary units to study? To this an answer cannot be given by merely what is being called semiotics, but much wider scope of disciplines. And this wider scale raises again the quest asked first. Then: what are connections between diverse disciplines in the humanities and the social sciences studying modelling? All the more: in the context of the Tartu-Moscow School - should we enlargeour scope of study either by objects or the general concept of modelling?

Following: should we, when studying modelling, take TMS as the base? There are very obvious very tight connections between the TMS understanding of modelling and pretty various other disciplines. Or are they actually separate disciplines? We shall dwell on these topics, raising a quest on the originality of the whole topic of modelling, beginning from the primary, up to the seemingly final tertiary modelling.

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Spatial modelling and the city

Various spatial models have occupied a prominent place in studies and theories of culture and society, e.g. culture area, culture space, semiosphere, social space, sociocultural space etc. Often these spatial concepts concentrate explicitly on the semiotic aspect – generation of meanings, classifications, meaningful interaction etc. In addition, spatial modelling is genuinely a semiotic activity.

The discourse on modelling has so far not been unified in semiotic circles. Various available distinctions and definitions enable "mapping the space of" spatial modelling of semiotic spaces, models and systems.

It is of common knowledge that the city is a spatial phenomenon and that this space is meaningful and meaningful in multiple ways. Due to variations in spatial modelling the city is also spatial in various ways – both, in theory and in urban practices.

Gunnar Sandin

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Temporal methodological merging of seemingly incompatible semiotic models

In the domain of semiotics of space, two important, but also radically different principles, namely the actantial approaches of Manar Hammad's and Bruno Latour's respectively - can be used to model the co-operative agency of human, material and legal properties of space. Hammad, as truer to the Greimasian (and Proppian) origin, regards a finite set of principal actantial possibilities, while Latour suggests a more open-ended model as regards the types of act ants. Both approaches can be said to model the production of space made in societies or communities from an agency perspective. As models that allow an extended semiotic analysis of for instance architecture they thus both contribute to a contemporary understanding of space. This semiotic modelling (actantial analysis) opens for instance for the issue of the negotiability of space, and for the determination of spatial accessibility, in the fashion of Hammad's spatial experiments. In comparison to Hammad's systematically elaborated variation of the studied spatial situation, the philosophical concept of spatial otherness (heterotopia) as stated by Foucault will inevitably be seen as confined to its ability to describe existing spatial divisions and overall societal trends. At best, a heterotopic point of view may help deconstructing authoritative categorization by way of making clear that specific places' dependend on the societal web and its overall historical authorization mechanisms. A description more true to the daily mechanisms of production, will be possible if, in accordance with Hammad as well as Latour, actors are found, and 'followed' in their defining of spatial activities, and by locating the controversies in connection to these activities. But not only that; one would also, with Latour, in a certain aspect be able to extend Hammad's way of locating possible conjunctions and disjunctions of actants, with a gradual view where actants rise and expire, grow and diminish, transform or stay intact as the sociological process goes on. If Latour's emphasis on letting the actants themselves decide the listing and grouping of will and matter, is added to Foucault's and Hammad's approaches, one may see a successive methodological pattern of how to investigate the agencies of urban/rural space production. Such a "merged" model, of otherwise incompatible semiotic origins would be built on a methodological succession, or analytical procedure, that should preferably await stabilisation as long as possible, not to loose its applicability to unexpected data/studies. A fair acknowledgement then, of all three approaches could be reached if an initial evaluation of the social reflectivity (heterotopia) was followed by a 'check' on a limited set of recurrent actant-types (Hammad), and then re-opened for a descriptive search for controversies and connections between unpredicted actors (Latour). This three-step - temporal - analytic procedure would leave Latour's approach open for a re-evaluation of the predicted types, and treat Hammad's scale of recurrent actants (owners, visitors, authorizers, and

material spatial partitions) not as a compulsory and finite set, but as catalytic and complementary types. In such a "merged" model, the regular, as well as the spontaneous operators will appear as informing the descriptions of semiotic space, and of the spatial situations we enact.

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Semiosphere as a Model of Cognition

The concept of semiotic space or semiosphere is arguably the most multifarious concept coined by Juri Lotman (Lotman 1990). Not only it encompasses almost all key notions of Lotman's semiotics, it also serves both as an object of the analysis and as a metaconcept, a methodological tool. With regard to modeling, the semiosphere is a precondition of all semiotic systems and modeling processes, including understanding and thinking.

In one of the articles, Lotman describes all semiospheric levels—from human personality to the text to larger semiotic unities (e.g., culture)—as "semiospheres inserted into one another" (Lotman 1984: 22), thus reiterating his thesis that culture is isomorphic to the individual consciousness (intellect). Consequently, semiosphere becomes an extension of human mind, a universal mind, and an individual mind in turn becomes a microculture. But how exactly may culture be presented as a "collective mind"? How does Lotman define consciousness and thinking?

In my paper I discuss Lotman's use of the terms consciousness, intellect, and thought, demonstrating how the concept of semiosphere appears to be appropriate for description of cognitive processes and how Lotman's holistic approach at certain point may be presented as a theory of cognition.

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On the way to cognitive semiotics. Considerations on methods and models

Such familiar characterisations of semiotics as being a method, a model, an interdisciplinary perspective, or a philosophical movement are inadequate, because semiotics itself comprehends many models, methods, and philosophical perspectives, and it is just one of the many enterprises which may be seen as occupying a space intermediate to the traditional sciences. Semiotics must be considered a science in its own right, defined by a particular point of view, rather than a domain of reality. As such it is in many ways comparable to cognitive science. A distinct advantage of cognitive science is being by definition a confluence of different research traditions, whereas semiotics has long been hampered by the autonomy postulate. On the other hand, cognitive science still seems to be stuck in an epistemological impasse, just as semiotics was at the time of structuralism. Cognitive semiotics could be a promising way out of both quandaries. This has inplication both for methods and models. When envisaging models, however, we should never forget that models might also be part of the subject studied. This is notably the case in the semiotics of culture, as defined by the classical Tartu school.

Readings:

Göran Sonesson (2008): Beyond methods and models. Semiotics as a distinctive discipline and an intellectual tradition. In *Signs - International Review of Semiotics*. Electronic publication.

- (2002) The Varities of Interpretation. A view form semiotics. In *Galáxia*, 4, 2002, 67-99. São Paolo, EDUC.
- (2000) Ego meets Alter. The meaning of otherness in cultural semiotics. In *Semiotica* 128 3/4, Special issue in honour of Vilmos Voigt, Bernard, Jeff (ed.), 537-559

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Modeling Presence and Absence in a Few Chinese Semantic Primitives

Comparing to the simple-minded language use in most of the recent date psychological testings and questionnaires, a cultural psychologist must have an urgently felt need to go "deeper" into the semantics of any language used.

According to Wierzbica's notion of semantic primitives (or semantic primes), although it is claimed that a handful of semantic and lexical universals can be found in all the cultures researched, there arises a problem about how these lexicons could have emerged in the primitive minds.

It is fortunate that Chinese language (more precisely, 漢語, "Han language")has preserved in its modern use the characters which can be traced back philologically to their origins up to as early as three or four millennia ago. When scrutinized closely, through their forms, that is, taking them as icons and indexes, one can find some winding paths of their modeling of the meaning that later crystalized as "cultural wisdom."

I will try to show a few nested meaning in some characters in the way that a semiotician can reveal while traditional philologists are unable to discover yet. Since the matter about presence and absence may be of the first and foremost importance within those semantic primes, I will start right with those lexicons, including the very ones used as translation for the term "Semiotics."

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Corollarial and Theorematical Reasoning -Levels of Diagram Modeling

As to subspecies of Diagrammatical Reasoning, Peirce developed the distinction between Corollarial and Theorematical Reasoning in the years after 1900. Famously, he considered this his first major discovery. This paper presents and discusses Peirce's different descriptions of the C/T distinction and proposes three further sublevels of Theorematical Reasoning.

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Mental models of space and spatial models of mental images

1. The *concept of model* is connected with the features of similarity between modeled and modeling structures and of possibility to represent one of them by another one. The structural similarity influences reversibility of the concept, which can be related in its diverse versions to the modeled and to the modeling as well. Such ambiguous relations exist between mental models of spatial relations and spatial models of mental images.

2. The *mental models of space* are constructed on diverse levels of mind and are connected with various aspects of human activity. These models can have *cognitive* character, if they participate in creating of knowledge about organization of some external objects. They can be *projective* models, creating planes of instrumental or social behavior in space. The spatial images can be interpreted in *affective* modus, when a subject gives an emotional evaluation of a spatial situation and its relation to his plans and preferences. There is at least a *communicative* modus of interpretation, when a spatial construction is conceived as a text endowed with a sense

The mental models of space can be built also on various levels in each of the modus. Particularly, there are several levels of visual modeling of space as an object of knowledge. The *vision*, as a sort of subject activity, can be developed on sensorial, perceptual and apperceptual levels. Each of them serves as a basis for the mental models which have their own elements, structures and functions. If the sensorial models relate visible spatial objects to the body of the subject, and the perceptual models inform about the relations between these objects, the apperceptual models allow operating schematized spatial images independent on position of subject's body or arrangement of objects.

The cognitive models of space are also built on the non-visual conceptual level in verbal language and other modeling systems, derivative from it. In particular, all spatial ideas of natural philosophy and science are developed at the conceptual levels, though can more or less keep features of the visual models of space.

It is also possible to distinguish diverse levels of projective and affective ways of space modeling. But a special interest for semiotics is the communicative modus of the modeling which treats spatial objects as particular texts mediating between the subject and the other ones and delivering some messages to and from them.

3. The concept of *spatial text* is related to the complex of semiotic means, which have in their expression plane such elements as co-existing forms and their spatial relations. An interpretation of spatial texts can be performed on various cognitive levels by diverse codes.

It is possible to separate "spatial models" as a particular class of spatial texts. This class contains such means of representation, which have a spatial structure similar to the structure of some other objects, first of all spatial ones. So, pictures, sculptures, planes of buildings, ground maps, etc. can be considered as spatial models of other spatial objects. These models not only point out, but show a represented object; they awake not only a thought about it, but also its perception. But the concept of spatial model is related also to spatial constructions representing some non-spatial structures, as, for example, "genealogical tree". In both cases spatial models represent not only some external objects but also internal images of the subject, the mental models, which are built on perceptual or conceptual levels. These internal mental models can be represented and communicated by the external spatial models.

4. In any case, the spatial models represent something invisible as visible, realizing "semiosis" in an ancient sense. How do *semiosis* and *mimesis* relate to each other in the formation of the spatial models? Both of them give the *means of modeling* of objects, but these means have different organization. *Semiosis* is organized as such way of representation of objects and communication between subjects, which performs its modeling function first of all due to the structure of semiotic system – a language or a code. The text produced by the code can also more or less serve as a model, but the main modeling function is taken by the semiotic system. On the contrary, *mimesis* is organized as such way of representation, where main modeling function is performed by the semiotic means, given *in praesentia*, but not *in absentia*, as a semiotic system is given. This does not exclude that the interpretation of presented spatial models also needs using some semiotic systems – as, particularly, perceptographic code in picture*. So, the spatial models use semiotic and mimetic means combined and complemented, though in another way, than verbal texts.

^{*} See detailed: Tchertov L. Perceptographic code in visual culture. *Sign Systems Studies.* 33.1. Tartu. 2005. Pp.137-158.

Andris Teikmanis

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The usage of semiotic modeling as a research tool of art history

The purpose of this study was to elaborate politically neutral research method that could be used to explore and to categorize Soviet Period art. Necessity to avoid any bias conditioned by political or ideological context and, in the same time, necessity to analyze such heterogeneous discourses as art and politics in their mutual relations and influences conditioned the selection of the semiotic approach.

Assuming that the political messages in pictures are expressed in direct or indirect presence of political texts the relations between art and politics were translated into relations between visual and textual discourses of artworks. This leads to first conclusion that in the case of politically engaged images the political texts usually subjected the visual discourse of pictures. However, the investigation of various examples of Soviet period art suggested acknowledging that the relations between the textual and visual discourses of the image are more complex and can serve as a basis to create various models of interaction.

Two sources of power – textual and visual – defined the first two types of models that were determined by the domination of political (verbal) or visual discourses. In other words, these two sources of power defined the basic opposite models of domination.



Figure 1. The basic interaction between textual and visual dominance.

Considering more complex relations of logical conjunction and disjunction of verbal and visual domination in a pictorial message this set of models were extended from two to four models applying Greimas's Semiotic square. By means of the square and the adaptation of conceptual framework of political functions of artwork that could derived from Murray Edelman's texts four models of interaction between art and politics were defined – the Ideological model, the Propaganda model, the Postideological model and the Post-propaganda model (later this set of models were referred as the Canonical Model).

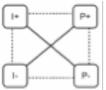


Figure 2. The Canonical model of interaction between art and politics

I + - Ideological model, P+ - Propaganda model, I- - Post-ideological model, P- - Post-propaganda model

The attempt to track patterns of the Canonical Model in Latvian Soviet period art highlighted the requirement of taking into an account potential one but not yet expanded models of domination. The need to incorporate the potential models determined utilization of the Matrices of concepts proposed by Paul Franceschi. The Extended Model that consisted of the set of six models caused by conceptual conditions of domination was constituted. These models were referred as: the Ideological model; the Propaganda model; the Post-propaganda model; the Proto-propaganda model.

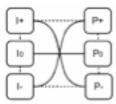


Figure 3. The extended model of interaction between art and politics based on Paul Franceschi's Matrices of concepts.

I + - Ideological model, P+ - Propaganda model, I- - Post-ideological model, P- - Post-propaganda model, Io - Proto-ideological model, Po - Proto-propaganda model

The transition from means of the Semiotic square to instruments of the Matrices of concepts marked the path for the possible adaptation of other logically geometric constructions that are used in modern logic: the Logical Cube, the tetradecahedron and the tetraicosahedron and possibility to expand set of models with complex models of conjunction and disjunction of defined simple models of domination.

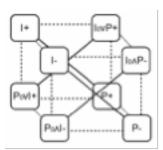


Figure 4. The extended model of interaction between art and politics based on adaption of Logical Cube. I+-Ideological model, P+-Ideological model, P+-Ideological model, P+-Ideological model, P+-Ideological model and Propaganda model, P+-Ideological model and Protopropaganda model and Ideological model; P+-Ideological model and Protopropaganda model; P+-Ideological model and Protopropaganda model; P+-Ideological model.

The application of the developed Extended Model and its derivatives allowed introduction of the new division into periods of Soviet Period art. It also highlighted semiotic modeling as a possible research tool of art history.

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Modeling and methodology of cultural semiotics

Modelling is a key-notion and conceptual field of semiotics of culture. From *historical point of view* modelling means for Tartu-Moscow semiotic school existence of primary and secondary modelling systems. In context of secondary modelling systems culture was in semiotics of culture defined as hierarchy of different modelling systems and correlation between these modelling systems or cultural languages was research object of semiotics of culture. Typology of modelling systems is still task of cultural semiotics. From *communicative point of view* modelling activity is natural activity of culture and in every culture exists some hierarchy of descriptions and self-descriptions – system of models and self-models. Self-communication is important aspect of every process of communication. From *methodological point of view* modelling systems and systems of models (scientific, artistic models, metamodels) and self-models are important basis for formulating methodological principles of semiotics of culture and for working out a system of core terminology.

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Two models of semiotic knowledge in the Russian linguistics in the 1920s-1930s

If semiotics could be interpreted not only as a science concerned with signs, but also as a synthesis or a dialogue of various branches of knowledge, in the «pre-history» of Russian semiotics in the 1920s-1930s two basic trends should be distinguished. In the both cases, Russian researchers took a profound interest in semantics and studied mostly the meanings of particular words either in synchrony or in diachrony. These researches were considerably stimulated by the rise to power of Marrists in the late 1920s, because semantics constituted one of the basic components of N.Ja. Marr's "New Theory of Language". At the same time, interested in semantic (and semiotic) studies were also those who had never adhered to Marrism (R.O. Shor, V.N. Voloshinov, G.G. Shpet). As to the first trend of these "pre-semiotic" studies, among its distinctive features there were a) the search for semantic universals and for the laws of development and "life" of words, and b) the study of word semantics in the light of connections between linguistics and other disciplines (history, archaeology, biology, philosophy, literary criticism, etc.). Representatives of the second trend (who were also interested in theoretical collaboration between linguists and specialists in other branches of knowledge) wrote much about signs as such (their structure, possible classifications and definitions, etc.). The influence of the both trends on subsequent semiotic researches in Russia was not always manifest; besides, the intellectual heritage of these two trends has not been preserved equally well - partly because of political and ideological repressions and because of Stalin's criticism of Marrism in 1950. Nevertheless, certain discoveries made in the 1920s-1930s within the framework of these two models of semiotic knowledge exerted influence on the evolution of Russian linguistic (semantic) studies in the second half of the 20th century.

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Political theory as a auto-communication of culture

The paper sets for itself the modest task of putting forward an opportunity for theoretically account for a vexed question that has come fort with the emergence of certain new approaches to political analysis, offering an alternative to those of the mainstream. In his wonderful book Post-foundational political thought: political difference in Nancy, Lefort, Badiou and Laclau, Oliver Marchart gathers such approaches under the label 'post-fundationalism'. The latter view is primary characterized by the rejection of essentialist notions of ground for the social, and the inauguration of cultural and discursive characteristics (like asymmetry and entropy; explosion; antagonism; insurmountable tension between organization disorganization, regularity and irregularity etc) into wider social scientific paradigm. Usually those characteristics are attributed to contingent or peripheral events and phenomena that by nature do not belong to the social structure. Grounds for such 'groundless' contingencies are found from philosophy (Marchart), or for instance from the psychoanalytic notion of affect (Laclau). However, it seems that despite placing communication at the heart of their conceptions of discourse, the communicative character of constructing power relations remains undertheorized in those conceptions. The notion of communication is by nature connected to the notion of auto-communication (Lotman). The outcomes stemming from the latter are unavoidable, since the result of a possible research (text) itself belongs to culture or a larger discourse and operates at the organizing function of the latter. Hence, the research practice and its results need always be looked at as mutually affecting each other. In the paper I will try, using semiotics (especially cultural semiotics), to ground this methodological position

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Modeling the epistemological multipolarity of sign and its reference relationships

The subject matter of this paper will constitute the question of how to present the status and nature of the semiotic object equalized with the sign as an entity or the unity of the sign and its reference. As it has been deduced from historical searches, the popular conceptions of the sign (and its reference) are formulated either in terms of a unilateral sign in which the sign-vehicle and its referent are treated as separate entities or a bilateral sign whose two parts, the signifier and the signified, comprise a twofold psychical unity. Some semioticians adhere to the concept of a semantic triangle in which the sign-vehicle, its meaning (thought or notion), and its referent form separate parts, and some prefer a trilateral sign concept where the sign-vehicle, its meaning (the interpretant generating one or more signs), and its object of reference form a threefold unity. Separately noted are also the concepts of the sign as a dyadic relation and the sign as a triadic relation.

As far as these sign conceptions exhibit not only differences in the usage of terminology but also in the formation of their visual representations, the author postulates to find an appropriate parameter or a matrix that would contain features and constituents specific for particular approaches to their forms of being and manifestation. Having noticed that the constituents of all hitherto known sign conceptions are to be found within framework of a semantic quadrangle, he proposes to consider the usefulness of a typological matrix, which encompasses unified explanatory and illustrative primitives.

Another kind of distinction that can have an impact upon the number of sign conceptions depends on the answer to the question whether the sign is to be regarded as a token or a type (in the sense: a specimen or a class, an item or a kind). The distinction, however, between tokens and types concerns not only the manifestation forms of signs but also of the objects they stand for, refer to or signify, represent, evoke or indicate, namely to those objects, which are named signata (a plural form of signatum being respectively a counterpart of signans).

To show the search for explanatory and illustrative devices in the domain of semiotic objects, the point of the author's departure constitutes the applicative value of a positivist's conception of a unilateral sign, which is detached from its referent according to the functionalist principles of abstractive relevance. In the first instance, he discusses the unilateral sign conception distinguishing between the sets of individual and normal-usage features and the mass of characteristic properties of the sign and its referents. And, in the second, he aims at providing evidence how the combined empiricist and rationalist perspectives may be useful for the exhibition of

multipolar nature of the linguistic sign and its object of reference exposing both their concluded essence and the observed relevance.

Having reviewed the array of hitherto known sign conceptions brought to the common denominator within the framework of a semantic quadrangle, the author will demonstrate how its two main constituents, the signans and signatum, as a token and type, with their collective and individual properties exclusively and inclusively, may be modeled as oscillating between the following epistemological positions: logical positivism, rational empiricism, empirical rationalism, absolute rationalism.

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Lotman on Translation: Translation in modeling systems

Title: Lotman on Translation: Translation in modeling systems Translation has been an indispensable element in Ju M. Lotman's (1977; 2001) discussion both on modeling systems and on semiosphere. Yet, just as the semantic precision of the notion semiosphere 'is often blurred' (Chang, 2003:6) in Lotman's discussion, translation, has also been used to refer to a series of different functions within the semiosphere or the modeling system. For Lotman, translation is not merely the act of thinking, but more importantly, the mechanism that enables creative thinking due to the asymmetrical semiotic structure between texts. Crucial as translation is in Lotman's work, there seems to be relatively little discussion on how and in what ways that translation functions in or among semiotic systems, which thus becomes the aim of the present project to explore into how translation 'acts' in Lotman's work.

Generally speaking, when translation is referred to, it usually stands as a synthesis of notions. Translation is frequently viewed as practices that generate inter-lingual, intra-lingual and inter-semiotic products. That is to say, translation is largely seen as a semiotic process and the result of the semiotic process. It is 'homofinal' (M. Lotman 2001). Yet, translation is more than the combination of text-producing and produced text. Translation is semiosis that generates ad infinitum meaning chains among texts (i.e. composite linguistic acts). Hence, to translate is to establish certain kind of relation between texts. And the feature that distinguishes translation from general semiosis is that translative semiosis is a kind of interpretative semiosis which is based on the autopoietic re-structuring of the same organization among texts. Lotman sees this generative feature of translation when addressing the indeterminacy involved in translation. This generative feature enables translation not only to bridge the gap between untranslatability but also to provide the structural tension in the semiotic systems synchronically as well as the dynamics in the semiosphere diachronically. Aside from the generative function, translation also serves as the semioticization mechanism in the semiosphere. For texts 'traveling' across the semiotic borders, it is translation that screens and 're-forms' the 'outsiders' and then internalize them into the system. In this sense, translation is the mechanism that re-represents texts between/within semiotic systems on the level of text transaction. Furthermore, on the level of the interaction between the primary and secondary modeling systems, translation itself stands for two layers of representation processes. On the first layer, it forges the individual representations of what Lotman terms as 'the same extraliguistic reality' (1977: 96). On the second layer, it brings the individual representations into collectiveness, that is, the 'stereoscopic quality' (ibid). Hence, translation can be seen as the modeling device that enables the interactions, or, interconnectedness, between individual semiotic systems and culture semiotic system as a whole. From the above, I

would suggest that translation is the intermediate modeling device that enables the interactions from the 'text-text' level, to levels such as 'text-system', 'system-system', 'system-semiosphere' and 'semiosphere-semiosphere'. Thus, if it is language that enables the 'content in expression', then it is translation, as a modeling device, that forges the 'reflection of content in expression' (Lotman, 2001: 204) within and among the semiosphere.