Signs, Codes, Spaces, and Arts

Signs, Codes, Spaces, and Arts:

Papers on General and Spatial Semiotics

Ву

Leonid Tchertov

Cambridge Scholars Publishing



Signs, Codes, Spaces, and Arts: Papers on General and Spatial Semiotics

By Leonid Tchertov

This book first published 2019

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data A catalogue record for this book is available from the British Library

Copyright © 2019 by Leonid Tchertov

All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (10): 1-5275-4034-0 ISBN (13): 978-1-5275-4034-7

CONTENTS

Preface	xiv
PART I. General Semiotics	
1.1. METHODOLOGICAL PROBLEMS	
On the Semiology of Sign Means	4
1. Semiotics: Semiography, Semiology and Semiosophy	4
2. Semiotics and Hermeneutics	
3. "Small" and "Big" Semiospheres	8
4. Semiology of Sign Means	
5. Semiology of Sign Means and Inter-subject Understanding	
6. Concluding Remarks	. 14
E. de Canaganas, A. Handard Vegas, I. akon	17
F. de Saussure: A Hundred Years Later	
The Duanty of Relations between Linguistics and Semiology A View of Semiology from the Side of Linguistics	
A View of Semiology from the Side of Eniguistics A View of Semiology from the Side of Non-linguistic	. 1 /
Semiotic Studies	1 2
4. On Relations between Verbal Languages and	. 10
Other Semiotic Systems	23
Suid Semioue Systems	
I.2. THEORY OF SIGN	
The C' Delene A Constitute Label C' (C'	20
The Sign Prism: A Spatial Model of Significative Semiotic Means 1. The Problem of Synthesis	
2. The Sign Means as a Special Level of Information Connection	
The Sign Mediation of Human Activity	
4. The "Plane of Content" (PC) of a Sign	
5. The "Plane of Expression" (PE) of a Sign	
6. The Semantic Relations between the Components of Both Planes.	
7. The "Sign Prism"	
8. The Invariability of the "Sign Prism"	
9. The "Sign Prism" as an Integral Model	

vi Contents

To the Theory of Sign	40
I.3. DIVERSITY OF SEMIOTIC MEANS	
On the Diversity and Connections of Semiotic Means	
Introduction	
Information Connection and Semiosis	
1.1. The Concept of Information Connection	
1.2. Proto-information and Code	
1.3. The Concept of Semiosis	
1.4. Levels of Semiosis	
2. The Signal-indexical Level of Semiosis	
2.1. Signals	
2.2. Indexes	50
2.3. Peculiarity of the Signal-indexical Level	52
3. The Sign Level of Semiosis	
3.1. Differences of Signs from Signals and Indexes	
3.2. Meaning and Sense of the Sign	
3.3. Distinctions of Signs by Semiotic Functions	
3.4. Symbols	
4. Semiotic Systems and Their Diversity	59
4.2. Differences of Levels	
4.3. Structural Differences	
4.4. Functional Differences	
5. Connections between Semiotic Systems	
5.1. Complexes of Semiotic Systems Oriented to Diverse	00
Information Channels	66
5.2. Homogeneous and Heterogeneous Texts	
5.3. Types of Connection between Semiotic Systems	
Conclusion	
Conclusion	70
Shifted Comprehension and Psycho-semiotic	
Distinctions of Its Means	72
1. Introduction	72
2. Psychological Levels of Comprehension	73
3. Types of Shifted Comprehension	75
4. Relations to Peirce's Types of Signs	
5. Combinations of the Shifting Ways	78
6. Connections between the Levels of Comprehension	
and Cognitive Codes	80
7. Communicative Codes of Lover Cognitive Levels	82

Signs, Codes, Spaces, and Arts	vii
8. Psycho-semiotic Distinctions of Codes	
9. Combinations of Diverse Codes	
"Alphabet" and "Palette" as Two Principles of Sense Distinction	91
I.4. HUMAN IN SEMIOSPHERE	
"Animal Symbolicum" in the Cultural and Natural Semiospheres	102
Semiospheres of Culture and of Nature	102
1.1. Homo Vitruvianus	102
1.2. Semiosphere of Culture	103
1.3. Semiosphere of Nature	104
2. Information Flows in Culture	
2.1. Types of Connections between Subjects of Activity	
2.2. Variety of Semiotic Connections in Different Cultures	
3. Humans in two Semiospheres	
3.1. Humans in Natural and Cultural Semiospheres	
3.2. Interaction of Natural and Cultural Semiotic Systems	
3.3. Artificial Transformations of Natural Codes	
3.4. On the "Semiotic Profile" of a Person	
3.5. Humans in the Technosphere	
PART II Semiotics of Space	

PART II. Semiotics of Space

II.1. SPATIAL SEMIOTICS AS AN AUTONOMOUS DISCIPLINE

Spatial Semiotics as a Branch of Semiotic Studies	120
1. On the Relations between General and Spatial Semiotics	120
1.1. A particular View on General Semiotics	120
1.2. On the Emergence of Spatial Semiotics	122
2. Specific Properties of Spatial Semiosis	123
2.1. Differences between Spatial and Temporal Semiosis	123
2.2. Specific Categories of Spatial Semiotics	125
2.3. Relations between the Categories of Spatial Semiotics	127
2.4. On "Universal" and "Partial" Grammars	
in Spatial Semiotics	130
3. Spatial Codes and their Diversity	131
3.1. Spatial Codes	131
3.2. Diversity of Spatial Codes on the Substance of Expression.	132
3.3. Semantic Specifics of Spatial Codes	
(Diversity by Psychical Substance of Contents)	134

viii Contents

3.4. Peculiarities of Syntactic Constructions	136
3.5. Types of Relations between the Spatial Codes	
4. Spatial Texts and their Interaction	
4.1. Spatial Texts	
4.2. Homogeneous and Heterogeneous Spatial Texts	
4.3. Combination of Spatial Texts in Architecture	
4.3. An Example of a Heterogeneous Architectural Text	
Conclusion	
Aesthetics and Art Theory as Grounds for Spatial Semiotics	147
On the Anticipation of Spatial Semiotics in the	
Cultural Philosophy of Ernst Cassirer	153
II.2. SPATIAL SEMIOSIS AS A SPECIFIC WAY	
OF SENSE EXPRESSION	
Spatial Structures and Sense	158
Spatial Semiosis and Time	161
On Spatial and Temporal Semiosis	
2. Spatial Semiosis in Time	
2.1. Peculiarities of Temporal Being	
2.2. Presentation of the Spatial Text in Time	166
3. Time in Spatial Semiosis and Semiotic Means	
of its Representation	
3.1. Time Represented in Semiotized Space	
3.2. Semiotic Means of Time Representation in Space	172
Spatial Semiosis in Culture	177
1. The Problem of the Particularity of Spatial Semiosis	
2. The Semiotization of Space and the Spatial Codes	179
3. Genetic, Functional and Structural Peculiarities	
of Spatial Codes	
4. Spatial Semiosis as Part of the Semiosphere	
5. Spatial Semiotics as an Autonomous Branch of Sign Theory	186
II.3. SPATIAL CODES	
Toward Semiotics of Spatial Codes	
1. On Spatial Codes	
2. Architectonic Code	189

3. Object-functional Code	193
4. Social-symbolic Code	194
The Semiotization of Space and Dynamic Codes	107
1. The Specifics of the Semiotization of Space	
The Object-spatial Dualism of Visual Perception	
3. The Spatial Units of PE in Dynamic Codes	
4. Dynamic Meanings of PC	199
5. The Levels of Connection between the Units of PE and PC	
On Demarcation Code	203
Perceptographic Code in Visual Culture	207
1. Visual Culture and Perceptual Code	207
2. Perceptography as a Communicative Version	
of Perceptual Code	
3. Specific Features of Perceptographic Code	
4. Perceptography as an Art	
5. Perceptography and External Optical Means	
6. Methodological Remarks	223
On Synesthetic Codes	225
1. Synesthetic Codes as Subject of Interdisciplinary Studies	
2. Visual Synesthetic Codes as a Semiotic Subject	228
II.4. SPATIAL TEXTS	
On Structural Peculiarities of Spatial Texts	
1. The Concept of the Spatial Text	
2. Semio-topological Peculiarities of Spatial Texts	
3. The Semio-topology of Written Texts	
4. Semio-topology of Pictures	
5. Two Ways of Text Formation	
6. Texts of Behaviour Space	240
Particular Qualities of Semantics and Pragmatics of Spatial Texts	
Semantic Peculiarities of Spatial Texts	
2. Pragmatic Peculiarities of Spatial Texts	246

x Contents

II.5. CATEGORIES OF SPATIAL SEMIOTICS

On Semiotized Spaces	250
Introduction: Space as a Semiotic Subject	250
1. Autonomous Spaces	
1.1. Space and Spatial Relations	251
1.2. Autonomous Spaces and Modes of Their Existence	251
2. Anthropomorphic Spaces and Their Variety	252
2.1. Anthropomorphic Spaces	
2.2. Anthropomorphic Features in Ideal Models of Space	254
2.3. Anthropomorphic Spaces in Human Activity	
3. Semiotization of Space	
3.1. On the Natural Conditions of the Space Semiotization	
3.2. The Cultural Level of Space Semiotization	
3.3. Semiotization of Space as General Conditions	
and as Concrete Acts	259
3.4. Semiotization of Space as an Activity	260
4. Structural Peculiarities of the Semiotized Spaces	
4.1. Autonomy and Separation of Semiotized Spaces	
4.2. Anthropomorphic Properties of Semiotized Spaces	
4.3. Semio-topological Properties of Semiotized Spaces	265
5. Semiotized Spaces and Spatial Texts	267
5.1. Relations between Spaces and Texts	267
5.2. Pre-semiotized Spaces	268
5.3. Carcass and Basis	269
6. Semiotized Spaces and Spatial Codes	271
6.1. Mono- and Poly-semiotized Spaces	271
6.2. Conjoined Semiotization of the Architectural Space	
by Diverse Codes	271
7. Relations between Semiotized Spaces	273
7.1. Similarity and Differences of Semiotized Spaces	273
7.2. Structural Relations between the Semiotized Spaces	
7.3. Functional Relations between Semiotized Spaces	278
Conclusion	282
Form as a Category of Spatial Semiotics	283
1. On the Category of Form	
2. Relations with Other Categories of Spatial Grammar	
3. Semiotic Functions of Forms in Spatial Codes	285
4. Ways of Reception and Comprehension of Forms	
in Diverse Spatial Codes.	287
5. Morphology, Morphogenetics and Syntax in Spatial Codes	288

Place and Form in Spatial Grammar	. 292
1. Meaningful Place and its Species.	
2. Mutual Relations between <i>Place</i> and <i>Form</i> Categories	
3. Meaningful Connections of <i>Places</i> and of <i>Forms</i>	
4. Disposition and Distribution	
5. <i>Place</i> and <i>Form</i> in Semiotic Systems	
Borders as a Category of Spatial Grammar	300
On the Semiology of Colours	. 304
1. On the Subject of Colour Semiology	
2. On the Differences in Colour Codes and their "Psychic Substance"	305
3. On Semantic Functions of Colours in Diverse Codes	. 308
4. On the Syntactics of Colour Texts	. 309
5. On Colour Texts in Paintings	. 312
II.6. SPATIAL SEMIOSIS AND MODELLING	
On Spatial Modelling	. 316
1. Modelling in the Human Activity	
1.1. On the Concept of a Model	. 316
1.2. Modelling as an Activity	
1.3. Modelling and Semiotic Means	
1.3.1. Models and Signs	
1.3.2. On the Modelling Functions of Semiotic Systems and Texts	
1.3.3. Semiosis and Mimesis in Modelling	
2. Spatial Modelling	
2.1. Spaces and Spatial Modelling	
2.1.1. On Spatial Modelling	
2.1.2. Spatial Relations and Autonomic Spaces	
2.2. Spatial Models	
2.2.1. Spatial and Non-spatial Models	
2.2.2. On the Spatial Models of Space	
2.2.3. On the Spatial Models of Non-spatial Objects	
2.3. The Models of Space	
2.3.1. On the Verbal and Derived Models of Space	
2.3.2. On the Visual Models of Space	
2.4. Semiotic Means of Spatial Modelling	
2.4.1. Spatial Codes as Modelling Systems	
2.4.2. Spatial Texts as External Models	
2.4.3. Spatial Means of Modelling and Verbal Language	
3. Spatial Modelling by Means of Depictions	. 332

xii Contents

3.1. Depictions as Spatial Models	332
3.2. Depictions as Spatial Texts	
3.3. Perceptographic Code as a System of Norms Correlating	
Depicted and Depicting Spaces	335
3.4. Connections Between the Levels of Spatial Modelling	556
in the Depiction	337
in the Depteton	557
On Semiotics of Pictorial Means	339
Structural Similarity and Coding in Pictorial Representation	343
1. Differences between the Depicting and Depicted Spaces	
2. The Structural Peculiarities of the Depicting Space	
3. On Structural Peculiarities of Depicted Space	
4. Structural Similarity and Dissimilarity of the Both Spaces	
5. <i>Projection</i> and <i>Prospection</i> as Relations between	547
the Depicting and Depicted Spaces	350
6. Modelling and Coding as two Sides of the Linear Perspective	330 250
7. Comparison of the Picture and the Map	252
8. Conclusion	
II.7. SPATIAL THINKING	
The Languages of Architects' Thinking	358
1. Verbal and Non-verbal Means of Thinking	
2. Specificity of Spatial Thinking	359
3. Spatial Codes as Means of Architectural Thinking	361
4. Infralogical Syntax and Semantics of Architectural Thinking	
5. Pragmatics of Architectural Thinking	
On the Borders in Space and in Thinking	369
II.8. SPATIAL SEMIOSIS IN OBJECT ENVIRONMENT	
	a= :
Semiotics of Object Environment and Personal Space	374
On Semiotic Aspects of Technics	
1. A Synthesis of Causal and Teleological Series in Technics	
2. Technical Tools as Mediators of Intersubjective Relations	
3 Technical Tools as Semiotic Means	380

Signs, Codes, Spaces, and Arts	xiii
On Semiotics of Chess Space	385
On the Semiotization and Resemiotization of City Space	389
II.9. SPATIAL SEMIOSIS IN ARTS	
How is Semiotics of Art Possible?	398
Space of Depiction and Visual Codes	404
Visual-spatial Codes in Pictorial Arts	408
1. On the Application of Visual-spatial Codes in Arts	408
2. On the Means of Perceptographic Code in Pictorial Arts	
3. Participation of Diverse Codes in Depictions	415
4. Cooperation of Codes in the Formation and Interpretation	
of Depiction	
5. Relations between Semiotic Systems in Depiction	425
6. Relations of Spatial Codes to Verbal Language	
7. Changes of Spatial Codes in Art History	431
"The Natural Codes" in Arts	438
On Visual Synesthetic Codes in Painting	444
On Visual-spatial Codes in Architecture	448
1. Semiotization of Space and its Diverse Ways	
2. Connections between the Spatial Codes	
3. The Spatial Codes in Architecture	453
4. Architectural Piece as a Heterogeneous Spatial Text	456
Constructivism and Spatial Semiotics	458
Artist, Viewer and Strategies of Vision	471
1. The Productive and the Reproductive in the Vision	
of Artist and Viewer	471
2. Differences of Vision Strategies	
Bibliography	479
Index of author's papers presented in the book	502
Index of Names	507

PREFACE

The papers collected in this book have been thought of and written over the past three decades. Most of them were published in diverse times and places and can be read as independent works. Several papers are being published here for the first time. In spite of these differences, they add up into a series, where a holistic conception is presented.

The main part of this conception is related to spatial semiotics and its application to the analysis of visual arts. However, the articles, which have as their subject the topics of general semiotics, are no less essential for it. The point is that the introduced notions of spatial semiotics become justified on condition that the general semiotic concepts considered in the book are accepted as well. Both parts of the book, the papers on general and on spatial semiotics are connected with each other: the notions of spatial semiotics are based on more general concepts, and the latter are formed so that they can be applied to an analysis of the spatial semiosis and of art pieces.

These main two parts are divided into subsections, where the papers that are thematically close to each other are placed.

The first part begins with the paper "On Semiology of Sign Means", where some methodological problems of general semiotics are discussed. A combination of two seemingly incompatible ideas is considered here: a wide understanding of semiotics and a narrow understanding of sign. Whereas the concept of sign is related here only to the conventional means of human activity created in culture, the sphere of semiotics is understood more widely and extends to signal and indexical means of mediated information connections between biosystems in nature and in some devices in the sphere of technics. So, the semiotics of sign means of human activity differs from wider general semiotics that also studies natural signals and indexes.

A variety of semiotic studies permits one to pick out in them not only diverse areas, but also at least three levels of generalization. These are distinguished in the paper: a semiographical level, where descriptions of definite signs and sign systems are performed, a semiological level, where the concepts used for such descriptions are researched, and a semiosophical level, where some philosophical reasons for choosing these concepts are discussed.

The general concept of semiology preserves its initial sense suggested by F. de Saussure, although both: the principle of sign arbitrarity and the principle of signifiers' linearity suggested by the Swiss linguist turn out not to be universal. This gives grounds to distinguish between "Saussurean" and "non-Saussurean" semiology, as is performed in the paper "F. de Saussure: A Hundred Years Later".

The papers of the next subsection are dedicated to the theory of signs understood in a narrow sense—as the means of human activity. The signs are considered as the elements of a mechanism of communication between its subjects regarding represented objects. Entering in the system of subject-object and inter-subject relations, these means are structured in a way that can be represented with the help of a spatial model—a "sign prism". This model demonstrates not only invariant aspects of a significative way of information connection, but also a possibility to integrate a number of other models (various "sign triangles", "dyads", etc.) as parts of a united system.

The third subsection of Part I contains the papers where a variety of semiotic means are considered. In the paper "On Diversity and Connection of Semiotic Means", the sign level of information mediation is matched with signals and natural indexes belonging to another level of semiosis. All of them are covered by the concept of semions and are able to be units of semiotic systems, which also belong to diverse levels and can interact with each other in different ways.

In the next paper of the subsection, the shifted understanding of represented objects via conventional signs is considered as a particular case of shifted comprehension, which is also possible at other mental levels. There is also shifted recognition, perception and sensation, which are mediated by certain pictorial and indexical means and participate in codes of the lower levels of semiosis. These codes can interact and form together various complex semiotic constructions

The diversity of semiotic means is related not only to units of various codes, but also to their structural organization—as it is shown in the paper "Alphabet and Palette as Two Principles of Sense Distinction". Even the division of semiotic means into discrete units is not a universal principle and coexists with another principle of syntagmatic and paradigmatic organization of sense discriminating elements. Another such "principle of palette" takes place, for example, when a multitude of colours continuously flowing into each other participate together in the creation of a complex sense.

The last paper of Part I "Animal Symbolicum..." considers a human as a being, which at the same time is included into two semiospheres—the

xvi Preface

sphere of natural signals and indexes, which are available to people as to living organisms, and the sphere of arbitrary signs and symbols that are created by a human in culture. Semiotics that includes as its subject both natural signal-indexical and cultural sign levels of semiosis has an opportunity to research the complex interaction of these levels in human behaviour and mental activity.

Part II using the general semiotic concepts considered in Part I, is dedicated to different aspects of spatial semiotics. Its first subsection begins with an article, in which this branch of semiotic studies is considered as a whole. Several of its roots in aesthetics and art theory, as well as in the philosophy of symbolic forms by Ernst Cassirer are discussed specially in two other articles of this subsection.

The features of spatial semiosis are discussed in the papers of the next subdivision of Part II. A connection of space with sense in dependence of the way of its inclusion in human activity is considered in the first of them. A subject of the second paper is the relations of the spatial semiosis with time: the ways of its temporal being and the ways of time representation by spatial constructions. The peculiarity of spatial semiosis and its specific role in the semiosphere of culture is discussed in the last article of the subdivision.

The third section of Part II is dedicated to a number of specific and insufficiently explored spatial codes. In its first two papers, a group of dynamic spatial codes is considered, which differ not only in that their expression plane is formed by spatial objects, but also in that their content plane consists of motor images of movements and subject-object or intersubject actions. Several other little studied spatial codes, where the content plane is also formed mainly by infralogical images of diverse kinds and levels, are considered in the next papers of this subdivision. Among them, the perceptographic codes mediating communication via depictions and a complex of synesthetic codes using as expressive means of spatial arts are discussed in this section.

The results of applying spatial codes—the texts extended in space and their syntactic, semantic and pragmatic specificity—are discussed in the papers of the next section II.4. In particular, their non-one-dimensionality, isotropy and anisotropy, discreteness and continuity as well as some other semio-topological features are considered there.

The next section contains the papers dedicated to special categories of the spatial semiosis. In the article "On Semiotized Spaces", such an essential for the spatial semiotics category as space is researched from a semiotic perspective. Diverse ways of anthropomorphic spaces that are differently structured and interpreted in human activity are considered as a formation of spatial relations, which have various types of autonomy, can be separated and interact with each other. In a similar semiotic vein, several other specific categories of spatial semiotics are explored in the next papers: spatial form, place and border. The features of such specific means of visual-spatial semiosis as colour are also described in an individual paper of this subdivision

The relations of spatial semiosis to modelling and to pictorial means of representation are discussed in section II.6. Spatial modelling in general and its participation in the means of depiction are the subject of the paper "On Spatial Modelling". The next two articles continue the research into the question of the relations of the modelling and of the coding in the pictorial means of objects' representation.

There is, together with external modelling via pictures or some similar means of representation, internal modelling in mental images and processes of thinking. Specific spatial thinking and the using of spatial codes in it are considered in section II.7.

The last two sections of the book are dedicated to using of spatial semiotic means in diverse areas of the semiosphere. Objects' environment, city space, the sphere of technics and the features of a game space in chess are considered in section II.8.

Last but not least is the subdivision, where the means of spatial semiosis in arts are considered. In a certain sense, this subject is the goal that most of the research placed before this section is approaching, and the examples from the field of arts were often used in the previous sections of the book. It is essential that a semiotic exploration of arts is considered here not as a direct projection of some linguistic or logic concepts into another sphere, but is prepared by research of spatial semiosis and its special means. Only on this ground, one can expect to receive a satisfactory description of spatial arts in a semiotic perspective.

Precisely these issues are discussed in the paper "How Semiotics of Art is Possible?". Taking as an answer to this question a thesis that semiotics of arts should be based on the research of spatial codes, one has to recognize it as logical that the subjects of the next papers are various aspects of these codes' participation in the pictorial arts and in architecture. The diversity of these semiotic systems, their interactions in art pieces, their development and changes of their relations in art history as well as in different strategies of viewers are discussed in the papers of this section. In particular, the following question is considered, how are the codes, which have natural roots—synesthetic, architectonic, perceptographic and others—involved in the sphere of arts and become important expressive and depictive means in it.

xviii Preface

The papers presented in the book mainly aimed toward the semiological studies of the concepts as theoretical instruments of research. At the same time, the descriptions of partial codes and their semiotic means should be recognized as semiographic studies, and some philosophical reasoning about the subject and methods of semiotic studies shall be related to the field of semiosophy—using the terms introduced here. A sharp division between these three levels is not carried out in the book, and they can coexist in the same article. However, as far as the succession of papers is concerned, it is intended that they move mainly from general to more specialized topics, and the first papers are related to the semiological level more than the latter ones.

As the papers collected in the book were written and published as individual works, they contain some repeated theses that are important in their various contexts. Some of these repeats have been removed (this is indicated by an ellipsis in angle brackets). However, several of them have been saved, because they have various senses in different contexts. At the same time, as parts of a united conception, the articles have numerous references to each other (in parentheses). The papers have been re-edited, and changes and additions have been made to some of them

The author expresses his gratitude firstly to his late teachers—to the architect and artist Prof. Vladimir Vassilkovsky from Higher Art-Industrial School, who helped to develop the creative spatial thinking of his students, and to the philosopher Prof. Moissey Kagan from St. Petersburg State University, who helped to develop system categorical thinking at the level of logical concepts. The author's gratitude is also extended to his colleagues, who discussed his experiences to reflect the artistic spatial thinking in theoretic categories at the semiotic seminar of Prof. Sergev Chebanov at St. Petersburg State University and at the conferences of the International Association for Semiotics of Space (IASSp). Special thanks also to the honorary president of IASSp Prof. Pierre Pellegrino (Geneva), who supported the author's projects and made a number of valuable comments to them. The author is also grateful to Lubov' Belkina, Varvara Golubeva and Sofia Verba for their help in the translation of his papers into English as well to Alex Monaghan for the professional proofreading of the book.

PART I GENERAL SEMIOTICS

I.1. METHODOLOGICAL PROBLEMS

ON SEMIOLOGY OF SIGN MEANS

1. Semiotics: Semiography, Semiology and Semiosophy

Semiotics is now understood as the entire sphere of knowledge about signs including their partial descriptions, general theories explaining the nature of the sign connection, as well as the philosophical foundation of these theories. This heterogeneity in the field of semiotic research allows one to distinguish within semiotic studies at least three levels of generalization: "semiographical", "semiological" and "semiosophical".

Semiography would include all descriptions of single semiotic units, constructions built from them and rules of their formation and interpretation. Such descriptions can take a normative form or be properly descriptive investigations of what norms are used in definite areas of semiotic practices. Semiographical research is often performed within the frames of other spheres of knowledge, such as grammars of distinct languages, heraldry, numismatics, hieroglyphics, systems of musical or mathematical notation, descriptions of etiquette, meaningful behaviour, etc. Moreover, they can even be realized apart from any relation to semiotics.

On a higher level of generalization, descriptions of specific signs and sign systems are superseded by explanations of what the sign way of connection is, how it is built, on what conditions something can perform the functions of a sign, what the structure of a "sign situation" is, etc. This level of semiotics can be conveniently called by the term *semiology*, which in this case is no longer its synonym but rather a term denoting its theoretical part separate from semiography as the more descriptive part of semiotics (cf. the difference between "descriptive" and "pure" semiotics in Morris, 1971a: 24). Semiology generalizes the partial semiographical studies and identifies universal properties common for various semiotic means; it constructs theoretical models describing the structural organization and functioning of these means. The semiological level also includes a comparative analysis of organizing sign systems of various types and investigations of possible forms of their interaction when heterogeneous sign constructions are built.

Any semiological theory has explicit or implicit premises related to definite philosophical views on its subject and research methods. These views form a field which can be generally described as the sphere of *semiosophy*. It includes, first of all, various versions of the philosophy of language, sign, name etc. Various aspects of other divisions of philosophy—ontology, epistemology, logics, philosophy of culture, etc., which are employed as bases of semiology—are also "semiosophical" in character. Unlike semiography or semiology, semiosophy is not restricted to the sphere of scientific knowledge and may contain elements of specific ideologies as systems of values.

Neither semiography nor semiosophy necessarily claims to be a sphere of knowledge directly related to semiotics. This relation is quite often revealed only to a view directed from some centre, from the standpoint of semiology, whence both semiography and semiosophy are seen in the semiotic perspective. In this interpretation, semiology is extracted from semiotics as its "core" around which semiotic studies are concentrated.

In this system of relations semiology, on the one hand, is crystallized in relations to semiosophic discourse as a more concrete theory of signs. On the other hand, it is developed as the result of generalizing the "semiographical" material in respect to various "-graphies"—descriptions of signs in such disciplines as linguistics, ethnography, history of culture, art, etc. Proposed by F. de Saussure as a result of linguistic generalization, the term "semiology" preserves here the intention to consider semiology as a discipline that "would show what constitutes signs, what laws govern them" and to separate it from more special descriptions of definite sign systems like national languages, systems of notations, symbolic rites, polite formulas, military signals etc. (Saussure, 1960: 16).

2. Semiotics and Hermeneutics

Semiotics has much in common with hermeneutics. Both of them study signs and texts, their connections with meanings and senses, and their relations with its creators and interpreters. Nevertheless, they are non-coincident spheres of knowledge as they have different aims. The purpose of hermeneutics is the interpretation of diverse objects as texts expressing a certain sense treated by the given interpreters, often in the definite conditions. This purpose is common for both theological and philological hermeneutics, and philosophical hermeneutics is developed according to the purpose of the "decoding" of the world like the text as well. The broader the subject of hermeneutic researches is, the more this research needs a general theory of connections between senses and signs used for their ex-

pression, and the closer it approaches to semiotics (as, for example, in: Meier, 1757).

The subject of semiotics is just the uniform norms of correlation between significant constructions and some unifying ways of interpreting them. Semiotics describes as its subject not particular senses of certain texts, but the norms of interpreting them and general conditions of sign connection. It is, therefore, the "nomothetic" discipline (using the term of Rickert, 1896).

This purpose to research general conditions of sense forming and understanding differs semiotics from and even opposes it to hermeneutics. which always preserves the aim of identifying the specific qualities of concrete texts and the individual acts of interpreting them and is, thereby, the "idiographic" discipline (in the same terms). Taking no notice of specific contexts, semiotics on its various levels makes generalizations and identifies more or less uniform ways of sign formation and construing. While hermeneutics sticks to its individualizing disposition even when it has to rise to the level of philosophical generalizations, semiotics, on the contrary, preserves its generalizing disposition even when it deals with specific norms of partial sign systems on the level of semiography and, especially, when it investigates the general principles of creating signs and their meanings on the level of semiology. Identifying systems of such norms and rules, the semiotic scholar endeavours to find reproducible signs and symbols as regular units of semiotic systems—languages or codes whereby meanings are expressed. As results of applying such systems, semioticians also consider specific texts, treated in the same generalizing spirit including verbal and any other sign constructions, where the identification of more or less uniform rules of structuring and interpretation is possible.

This generalizing orientation of semiotics, as has already been mentioned, is the common property for all its levels. It is clear for the semiosophic studies of the grounds of the sign theory. In particular, such a unifying approach is appropriate for logical semantics, where signs are considered only as the means of representation, aside from their communicative functions. For example, the concept of sign by G. Frege connects it with a constant meaning ("Sinn") which differs not only from an object it denotes ("Bedeutung"), but also from subjective images of this object ("Vorstellungen"); unlike various images arising in minds of different people, the meaning of sign is a unifying and invariant way of representation, independent of the subjects it uses (see: Frege, 1962: 41–42). In a similar way, the semiotics of Ch. S. Peirce, which was also formed on the grounds of logics, considers the sign as a member of triadic relation,

where it functions as a "representamen" of an object for an "interpretant" (see: Peirce, 1931: §§ 541, 564). The representative function of sign is also not connected at that with performing of communicative function.

Unlike the logical concept connecting the sign mainly with the representative function, its linguistic models to a greater degree consider the communicative function of signs. At the same time, semiology, developed on the grounds of linguistics, is also oriented generatively, considering its task to be a research of a stable "sign function" between semiotic "forms" of expression and contents, independent of a changeable "substance", and therefore regards signs of language as constant units, where the connections between *signified* ("*signifie*") and *signifier* ("*significant*") are unifying norms preserved in diverse individual acts of speaking (Saussure, 1960: 14, 113).

The tendency to generalization is obvious enough for semiology in all its versions, though they were directed to the research of general principles of sign connection (Peircean semiotics), to the organization of sign systems (Saussurean semiology and Hjelmslevian glossematics), or to the clearing of relations between diverse semiotic systems (as in the studies of many latter semioticians: R. Barthes, E. Benveniste, U. Eco, Yu. Lotman, and others).

At last, semiographical investigations also keep a semiotic way of vision directed to the identification of some reproducible *conditions*, on which something functions as a sign. Like semiology, semiography studies more or less uniform norms of creating and interpreting certain concrete types of signs and symbols, rather than their specific treating in any particular cases. Multiform branches of semiography are occupied with identifying of systematic relations between signs and their meanings, between the "plane of expression" and the "plane of content", even if these invariant relations are limited with the frames of particular sign systems.

An important difference between semiotics and hermeneutics is connected also with their diverse relations with the subject of understanding. Hermeneutics, grown as an "art of understanding", is directed to revealing the ways that the sense for a subject is presented. From the point of view of hermeneutics, the researches of some objective "mechanisms" of constructing and reconstructing of senses via signs looks like some supporting investigations for the clarification of individual ways of subjective interpretation. The semiotic approach is essentially different: semiotics intends to reveal just the objective "mechanisms", by which the construction, communication and understanding of senses via the signs can be performed independently of whether the subject conceptualizes these mechanisms or uses them only subconsciously. The objective conditions of sign

connection is a more important topic of researches for semiotics than the subjective ways of the sense interpretation, and the means providing the processes of communication and understanding are also more interesting than the results of these processes in certain cases.

3. "Small" and "Big" Semiospheres

The versions of semiology appearing on diverse grounds differ not only in their purpose to identify some general conditions of sign connection, but also in how broadly they consider this connection to be, and what way they see these conditions. Various versions of the semiotic theory definethese limits in a different ways. If the sign theory of logical semantics is limited by the signs used in rational thinking (see, for example, Carnap, 1946: 13–14), semiology in its Saussurean project should research "the life of signs within society" more brightly (Saussure, 1960: 16). Considering the verbal language as a model, this project of semiology was aimed to extend the linguistic concepts to research of other sign systems. F. de Saussure has supposed that "linguistics can become the master-pattern for all branches of semiology although language is only one particular semiological system" (Ibidem: 68). Such a "linguocentric" approach was developed by Louis Hjelmslev, who has suggested considering a large number of disciplines, including, on the one hand, logistics and mathematics, and on the other hand, the study of literature, art, and music, from a common point of view, whence they all look as "concentrated around a linguistically defined setting of problems" (Hielmslev, 1961: 108).

The sphere enveloping such a semiological project approaches the realm of "symbolic forms" researched by Ernst Cassirer, whose conception has the task to reform Kantian "criticism of pure rationality" to a "criticism of culture", and who considered the human to be not only an "animal rationale", but more brightly, as an "animal symbolicum" (Cassirer, 1923–1929, 1944). The sphere of Cassirer's "symbolic forms" is close in its scope to Yuri Lotman's concept of the "semiosphere", which is also broader than the sphere, outlined by logical semantics or linguistics and includes all means of human communication, generalized in culture (see Lotman, 1984). This concept of the semiosphere outlines roughly the same subject, which was also supposed by Umberto Eco, who connects the limits of semiology with the sphere of communicative means supported by certain cultural conventions (Eco, 1976: 19).

"Umberto Eco's semiotic threshold", however, is also crossed by some other semiotic conceptions—first of all, by the general theory of signs suggested by Ch. Peirce and developed by Ch. Morris, which despite its logical roots assumes as its subject a much larger sphere including biological processes (see, particularly, Morris, 1971a: 67, 83). According to Winfried Nöth "Peirce's semiosphere certainly includes the whole biosphere" (Nöth, 2001: 16; see also: Nöth, 2000: 57).

Such a bright treatment of semiotics allows one to include into its subject so-called "natural signs"—phenomena which are not created deliberately to express someone's ideas but are nevertheless able to point out some peculiarities of a presented situation due to naturally arising regularities (considered by E. Husserl as the opposition between "Ausdrucke" and "Anzeichens", the two ways of explaining the concept "sign"; see Husserl, 1984: 30 ff.). Investigations of signals and natural indexes used in information processes within and between living beings constitute such domains as "phytosemiotics", "zoosemiotics", "biosemiotics" and even "phisicosemiotics" (see, particularly, Krampen, 1981; Sebeok, 1972, 1999; Nöth, 2001). There are thus the reasons to understand the concept of the "semiosphere" in a broader sense spreading it at least to the realm of the living beings (see Hoffmeyer, 1996).

Despite the evident divergence, Lotman's and Hoffmeyer's conceptions of the semiosphere can be coordinated with each other—as a "small" sphere of human communicative means developed in culture and a "big" sphere of information connections, while also admitting any other ways and including mediators of natural processes and of technical vehicles. One can speak from the sufficiently general point of view about the *semiology of nature* as well as about the *semiology of culture*. Moreover, the speech can go on about their mutual interaction in case of the human as an "animal symbolicum", who is involved into both of these spheres and thereby has specific problems with their interdependence (see more detailed on this bellow, I.4). These problems cannot even be formulated within the frames of only one of these two semiological directions.

At the same time the "small" semiosphere cannot be "dissolved' in a "big" one, because the sign means intentionally created in a culture for communication between members of a group and for the representation of objects of their activities cannot be reduced to naturally grown signals and indexes. These "natural semiotic means' are not the "sign means" in this sense. Semiology as a scholarly discipline may not ignore the principal difference between these types of mediators, and at the same time, it cannot ignore many common properties of information means functioning in the "small" and "big" semiospheres.

Considering both the resemblance and difference of information mediators of various types, semiology may be divided into a "general" domain, which is occupied with the initial principles of such mediating in the com-

parison of various means of information connection within both the "big" and "small" semiospheres, and at least one "partial" branch, which specializes in the research of sign means deliberately created in human activities.

4. Semiology of Sign Means

"Semiology of sign means" builds conceptual models of sign connection, which is produced and reproduced in culture and mediates both subject-object and inter-subject relations. As these sign means differ from semiotic means of other types, like natural signals and indexes, this name is not tautological. "Semiology of sign means" may be distinguished from "general semiology" and from other "partial" semiologic branches in virtue of specific genetic, functional, and structural properties of its subject.

The sign means differ from other ways of information connection first of all by their *genesis*. Unlike the naturally formed signals and indexes in bio-systems, they arise in culture as means of human activity that are deliberately produced, reproduced and applied in acts of communication between subjects to represent objects of their cognition, evaluation or transformation. Interpretation of signs as consciously used means of activity allows, in particular, an understanding of the characteristic arbitrary nature of its various aspects—the arbitrary connection between the sign and its meaning, the arbitrary selection of sign vehicles and their combination in sign constructions, the arbitrary use of signs in specific contexts, the arbitrary reaction to signs, etc.

The sign means created in human activity also differ from the natural bearers of information also by their *functions*. Unlike signals or indexes arising in nature at various levels of biologic processes, signs are able not only to *present* an object within the current context, but also to *represent* objects missing in the current situation and *express thoughts* about them, independently of how distant they could be in time or space. Thereby the sign means give a possibility to make the results of learning, evaluation or projection the material of communication and, *vice versa*, to involve communication means into any of these acts.

A combination of *communicative* and *representative* functions is an essential peculiarity of the sign means, which performs both of them in virtue of the same mechanism. A basic element of this mechanism is a necessary reference of meanings constructed and reconstructed in the communicative acts for the objects of other ways of activity. Whether an object exists in reality or not, whether it is presented in the situation of meaning

expression, or has nothing to do with it; meanings expressed by signs have always the intention to relate a thought to a certain object. Correspondingly, signs which express these meanings always have an object correlation which is the property of signs themselves rather than the context in which they are used. The context and specific referents of signs may vary, but the ability of a sign to relate a thought to some referent is its inherent property.

So, the sign connection performed through a special "mechanism" of relations forms a specific structure. This structure is constituted as a net of connections between different components of sign situation, where one subject of activity can express to another subject a thought about an object represented by the sign constructed according to a definite scheme connected with a scheme of thought formation by a code accepted in the culture. These two types of schemes are reproducible and invariant members of the "expression" and "contents" planes, respectively, and are connected by the relation of signification (cf. the "form of expression" and "form of content" of L. Hjelmslev, who considers them to be two "functives" of relation identified with itself as "sign function"; see Hielmsley, 1961: 48). The relation of signification is a key element in the whole structure of sign connection and should be included in the class of semantic relations together with relations of reference between the sign vehicle and the object it denotes, of expression between ideas of object and of its sign in the mind of a sender, and of interpretation between corresponding ideas in the mind of the recipient. The complete structure of the "mechanism" of sign connection can be represented by a spatial model of "sign prism", which shows the way these semantic relations are included into the structure of human activity and allows a combination of the models of diverse aspects of sign connection developed in logical, linguistic and other forms of signs study (for more details of this, see I.2.1).

Semiology of sign means is not reduced to the theory of the sign mechanism. The concept of sign means also includes, beside proper signs, all sign systems (of codes and languages) and the sign constructions (texts). Accordingly, there are reasons to consider within the frames of the semiology of sign means the theory of sign systems (of codes and languages), the theory of sign constructions (texts), as well as the general theory of the "small semiosphere", which considers the mutual connection and interaction of codes functioning in culture and the texts created and interpreted by them. Such a theory of the semiosphere can also be considered as semiology of culture researching the ways of cooperation between various kinds of sign means to form diverse forms of culture (myth, ritual, religion, art, science, technique, social life, etc.).

5. Semiology of Sign Means and Inter-subject Understanding

Semiology of sign means, separated from general semiology as well as from other "partial" semiological branches, may be interpreted as a theory explaining how and on what conditions *understanding* between subjects is possible. Such a theory is based on a presupposition, which could be formulated via the "semiosophical" thesis: "Understanding between the people is possible". This optimistic presupposition is not obvious in the world where misunderstanding accompanies almost all joint actions and understanding seems to be an unachievable goal. Nevertheless, the reasons for its acceptance seem more convincing than those for its negations. If any minimal understanding between subjects were impossible, any cooperation aimed to achieve common goals would also be impossible. It is true, equally, for particular agreements between friends or colleagues as well as for the general existence of culture as a system of knowledge, values or skills, common for different members of a collective and concentrated in the collective memory of the society as a united subject. And vice versa, if any common projects were performed, planned buildings were built, trains came to destination areas, books were edited, etc., then this fact make it evident that a minimal understanding among the creators of these results took a place.

If a certain understanding is a condition of any mutual activity of people at all, it is a more necessary item for inter-subject communication, in particular. Indeed, a communicative act could not get this property without understanding it to be its result—it would only turn into a huge number of strange sounds or motions.

Understanding, in a semiological sense, relates not only to the cases of mutual agreement and cooperation, but also to the cases of opposition and conflicts. Even the opponents should have something in common relating to the object that they are struggling over, and be agreed at least that the conflict has a place; moreover, they should have a common language to express the disagreement. A duel cannot take place if an opponent does not understand that he was challenged.

Focusing its attention on the sign means of understanding, semiology takes the mechanism of the sign forming and functioning out of the ways of using it by participants of the communication process. Individual differences in the degree of mastering this means, the readiness to apply them in some way in various situations, etc., are not taken into consideration by semiology, which only pays attention to the capacity of diverse subjects to uniformly use the same system of meaning expression.