University of Tartu



Σημειωτική

Sign Systems Studies 29.2

Sign Systems Studies 29.2

Тартуский университет Tartu Ülikool

Труды по знаковым системам Töid märgisüsteemide alalt

29.2

Sign Systems Studies

volume 29.2

Editors: Peeter Torop

Mihhail Lotman Kalevi Kull



Sign Systems Studies is an international journal of semiotics and sign processes in culture and nature

Periodicity: one volume (two issues) per year

Official languages: English and Russian; Estonian for abstracts

Established in 1964

Address of the editorial office:

Department of Semiotics, University of Tartu

Tiigi St. 78, Tartu 50410, Estonia

e-mail: semiotics@ut.ee

Information and subscription: http://www.ut.ee/SOSE/sss.htm

Assistant editor: Silvi Salupere International editorial board:

Umberto Eco (Bologna, Italy)

Vyacheslav V. Ivanov (Los Angeles, USA, and Moscow, Russia)

Julia Kristeva (Paris, France)

Winfried Nöth (Kassel, Germany, and São Paulo, Brazil)

Roland Posner (Berlin, Germany)

Thomas A. Sebeok (Bloomington, USA)

Eero Tarasti (Helsinki, Finland)

Thure von Uexküll (Freiburg, Germany)

Boris Uspenskij (Napoli, Italy)

Irina Avramets (Tartu, Estonia) Jelena Grigorjeva (Tartu, Estonia) Ülle Pärli (Tartu, Estonia) Anti Randviir (Tartu, Estonia)

© University of Tartu, 2001

ISSN 1406-4243 ISBN 9985-56-622-X

Tartu University Press Tiigi 78, Tartu 50410, Estonia

Table of contents

Semiotics of culture

| Floyd Merrell | |
|---|-----|
| Lotman's semiosphere, Peirce's categories, and cultural forms of life | 385 |
| Семиосфера Лотмана, категории Пирса и жизненные формы культуры. <i>Резюме</i> | 414 |
| Lotmani semiosfäär, Peirce'i kategooriad ja kultuuri eluvormid. Kokkuvõte | 415 |
| Mihhail Lotman | |
| Страх: семиотика культуры и феноменология | |
| (к постановке проблемы) | 417 |
| The semiotics of culture and the phenomenology of fear. Abstract | 417 |
| Kultuurisemiootika ja hirmu fenomenoloogia. Kokkuvõte | 439 |
| Ivan Mladenov | |
| Unlimited semiosis and heteroglossia | |
| (C. S. Peirce and M. M. Bakhtin) | 441 |
| Безграничный семиозис и многоголосие (Ч. С. Пирс и М. М. Бахтин). <i>Резюме</i> | 460 |
| Piiritu semioosis ja heteroglossia (C. S. Peirce ja M. M. Bahtin). Kokkuvõte | 461 |
| Irene Machado | |
| Projections: Semiotics of culture in Brazil | 463 |
| Проекции: семиотика культуры в Бразилии. Резюме | |
| Projektsioonid: kultuurisemiootika Brasiilias. Kokkuvõte | 477 |

Semiotics of text

| Paul Cobley | |
|--|-----|
| Analysing narrative genres | 479 |
| Анализ нарративных жанров. Резюме | 502 |
| Narratiivsete žanrite analüüs. Kokkuvõte | 502 |
| Marina Grishakova | |
| Metaphor and narrative | 503 |
| Метафора и нарратив. Резюме | 517 |
| Metafoor ja narratiiv. Kokkuvõte | 517 |
| Larissa Naiditch | |
| Remarks on semantic peculiarities of numerals and on usage of numerals in several kinds of texts | 519 |
| О семантических свойствах числительных и об использовании числительных в определенных текстах. <i>Резюме</i> | 533 |
| Arvsõnade semantilistest omadustest ja arvsõnade kasutamisest teatud tekstides. <i>Kokkuvõte</i> | 533 |
| Maria-Kristiina Lotman | |
| Prosody and versification systems of ancient verse | 535 |
| Просодия и системы стихосложения античного стиха. Резюме | 560 |
| Antiikvärsi prosoodia ja värsisüsteemid. Kokkuvõte | 560 |
| Elin Sütiste | |
| Translating the seventeen syllables | 563 |
| Переводя семнадцать слогов. Резюме | 586 |
| Tõlkides seitsetteist silpi. Kokkuvõte | 586 |
| | |
| | |
| Sociosemiotics | |
| Rodney J. Clarke | |
| Social semiotic contributions to the systemic semiotic workpractice framework | 587 |

| | Социосемиотический вклад в системный семиотический анализ грактики действия. <i>Резюме</i> | 604 |
|------|---|-----|
| | Sotsiosemiootiline panus tegevuspraktika süsteemsesse semiootilisse unalüüsi. Kokkuvõte | 605 |
| Anti | i Randviir | |
| | Sociosemiotic perspectives on studying culture and society | 607 |
| | | 007 |
| (| Социосемиотические перспективы при изучении культуры и общества. Резюме | 625 |
| | Sotsiosemiootilised perspektiivid kultuuri ja ühiskonna uurimisel. Kokkuvõte | 626 |
| | | |
| | Ecosemiotics | |
| Pau | al Bouissac | |
| (| On signs, memes and MEMS: Toward evolutionary | |
| (| ecosemiotics | 627 |
| | О знаках, мемах и микроэлектромеханических системах: | |
| | в направлении к эволюционной экосемиотике. Резюме | 645 |
| | Märkidest, meemidest ja mikroelektromehhaanilistest süsteemidest: evolutsioonilise ökosemiootika suunas. <i>Kokkuvõte</i> | 646 |
| Hai | n-liang Chang | |
| | Naming animals in Chinese writing | 647 |
| | Называние животных в китайском письме. Резюме | 656 |
| | Loomade nimetamine Hiina kirjas. Kokkuvõte | 656 |
| Eer | ro Tarasti | |
| | Metaphors of nature and organicism in the epistemology | |
| | of music: A "biosemiotic" introduction to the analysis | |
| | of Jean Sibelius' symphonic thought | 657 |
| | Метафоры природы и органицизм в эпистемологии музыки: | |
| | "биосемиотическое" введение в анализ симфонической мысли Яна Сибелиуса. Резюме | 681 |
| | Looduse metafoorid ja organitsism muusika epistemoloogias: | |
| | "biosemiootiline" sissejuhatus Jean Sibeliuse sümfoonilise mõtte analüüsi. Kokkuvõte | 682 |
| | allaluusi. Kokkuvote | 002 |

Biosemiotics

| Morten Tønnessen | |
|--|-----|
| Outline of an Uexküllian bio-ontology | 683 |
| Границы Юкскюлловской биоонтологии. Резюме | 690 |
| Uexkülli bio-ontoloogia piirjooni. Kokkuvõte | 691 |
| Kalevi Kull | |
| A note on biorhetorics | 693 |
| Замечание по поводу биориторики. Резюме | 704 |
| Märge bioretoorika kohta. Kokkuvõte | 704 |
| | |
| | |
| Reviews, comments, perspectives | |
| John Deely | |
| A sign is what? A dialogue between a semiotician and a would-be realist | 705 |
| Andreas Schönle | |
| Lotman in an interdisciplinary context: A symposium held at the University of Michigan | 745 |

Lotman's semiosphere, Peirce's categories, and cultural forms of life

Floyd Merrell

The Department of Foreign Languages and Literatures, Stanley Coulter Hall, Purdue University, West Lafayette, Indiana, IN 47907, USA e-mail: fmerrell@purdue.edu

Abstract. This paper brings Lotman's semiotic space to bear on Peirce's categories of the universe's processes. Particular manifestations of cultural semiotic space within the semiosphere are qualified as inconsistent and/or incomplete, depending upon the cultural context. Inconsistency and incompleteness are of the nature of vagueness and generality respectively, that are themselves qualified in terms of overdetermination and underdetermination, the first being of the nature of the category of Firstness and the second of the nature of Thirdness. The role of Secondness is unfolded by acts of distinguishing the possibilities of Firstness into this and that, here and there. there and then, and all the distinctions that follow. Secondness, then, with respect to cultural semiotic space, gives rise to hegemony, to dominance and subservience, superordination and subordination. Commensurate with this interpretation of Secondness, the realms of overdetermination and underdetermination are labeled homogeny and heterogeny respectively. These theoretical assumptions will then be used as a modeling device providing an interpretation for various key aspects of Latin American cultures.

Beginnings

A few words on Peirce's categories are in order, before we can proceed. Firstness is what it is, without any relationship whatsoever with any other. It is self-contained, self-reflexive, and self-sufficient. Secondness is what it is, insofar as it enters into relationship with something other, interacting with it in the sense of something here and something else there, the first something possibly acting as a sign and the second something acting as the object of the sign. Thirdness is what it is, in the respect that it brings Firstness and Secondness

together by mediating between them, and hence it brings itself into interaction with them in the same way they are brought into interaction with each other.

We have the interrelations between the categories in Figure 1. Notice how they are "democratic", since each category is interrelated the other two in the same way they are interrelated with each other. Notice that the model is not "triangular", but rather, there are three lines meeting at a point in the form of a "tripod" such that there cannot be merely a binary relation between one category and another, for the relations between any two categories are possible solely by means of interrelations between all three categories. Notice also that the swirling lines illustrating the processual character of these interrelations make up a Borromean knot, well know in mathematical topology. The Borromean knot exercises a move from the twodimensional sheet toward three-dimensionality with the overlapping lines. This is significant, I would respectfully submit. For, the three lines making up the categorical interrelations are not merely twodimensional. They are more properly conceived as a triangle seen from above, that, as a result of the swirling lines of the Borromean knot, oscillate forward and backward. Thus the three-dimensionality of "semiotic space". Speaking of "semiotic space", let us turn to the work of Jurii Lotman for a moment.

Lotman writes that the whole of culture is "immersed in a semiotic space", and subjects within a given culture "can only function by interaction with that space". This combination of signs and semiotic space he calls the "semiosphere". "The semiosphere is the result and the condition for the development of culture; we justify our term by

In a few brief pages I can hardly hope to do justice to the rich thought either of Lotman or of Peirce. Consequently, I limit myself to a few remarks on Peirce's categories and their import to some notions of cultural "logics" I have in mind, and with respect to Lotman I will not enter into a discussion of his rather controversial notion of artistic language as a "secondary modeling system" (Sebeok 1991), nor will I debate the pros and cons of Lotman's "dual models" in the dynamics of culture (Lotman and Uspenskij 1984, Nakhimovsky and Nakhimovsky 1985), the problem of "coding" in semiotic inquiry (Shukman 1977, Merrell 2000a, 2000b), or that of "textuality" (Merrell 2000c). Rather, I will take up what I consider Lotman's chief contribution to the semiotics of culture, his concept of the "semiosphere".

² Lotman has defined "semiotic space" in terms of mythology not as a "sign continuum", but as a "totality of separate objects bearing proper names. It is as if space were interrupted by the intervals between objects and thus lacks from our viewpoint such a basic trait as continuity" (Lotman 1977b: 237). It is this discontinuous, even binary, aspect of "semiotic space" that will be under the spotlight in the pages that follow.

analogy with the biosphere, as Vernadsky defined it, namely the totality and the organic whole of living matter and also the condition for the continuation of life" (Lotman 1990: 124–125). Lotman refers to V. I. Vernadsky, for whom all living organisms are intimately bound to one another and cannot exist as autonomous entities. The biosphere encompasses everything that happens within it with respect to interactions between the living organisms of all communities therein contained. In other words, if we bring Peirce's categories to bear on Vernadsky's biosphere and Lotman's semiosphere, we have the makings of multiple Borromean knots of interrelations that are themselves in perpetual flowing movement in and out of each other while entering into and breaking from triadic interrelations. In other words, we have what we might call a triadically flowing "biosemiosphere".³

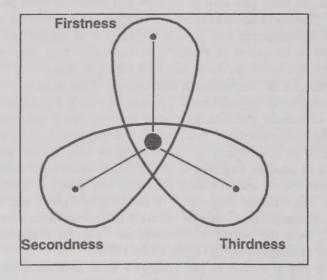


Figure 1. The categories.

 $^{^{\}rm 3}$ Lotman usually keeps the terms in separation, but I include them in one all-encompassing term.

The nature of the biosemiosphere

We read from Lotman that the biosemiosphere is marked by "heterogeneity". This is because the languages that "fill up the semiotic space are various, and they relate to each other along the spectrum which runs from complete mutual translatability to just as complete mutual untranslatability. Heterogeneity is defined both by the diversity of elements and by their different functions". In this sense, if we imagine a model of a semiotic space where all the languages emerge into existence at one and the same moment, we "still would not have a single coding structure but a set of connected but different systems" (Lotman 1990: 125).

Lotman goes on to write that if we wish to elaborate a model, say, of European Romanticism, we run into problems if we expect to map out homogeneous interrelationships between various expressions of Romanticism from one area to another and from one time period to another. There will be differences not of kind, such as there would be between Romanticism and Neoclassicism, but of degree, of iconic variations or variations of Peirce's Firstness emerging into Secondness, such that there can be no mutually complete translation between one expression of Romanticism and another. This is to say that the biosemiosphere is "asymmetrical". Asymmetry finds expression in the process of internal translation between semiotic space and time from within the biosemiosphere. Translation, Lotman asserts, is "a primary mechanism of consciousness". Expressing an idea in one language and then in another language is to rethink it and in the process to understand it anew and in a more profound way. Since in the majority of cases "the different languages" of the biosemiosphere are "semiotically asymmetrical, i.e. they do not have mutual semantic correspondences", then the whole biosemiosphere "can be regarded as a generator of information" (Lotman 1990: 127).

Allow me, if I may, to put Lotman's ideas in a different set of interrelationships in order to bring about a coalescence of his thought with that of Peirce. In Figure 2, notice that I have used the terms "heterogeny" and "homogeny" in place of "heterogeneity" and "homogeneity". I do so, above all, in order to set these two terms of from "hegemony", the Gramscian term having to do with conflict and negotiation between social groups and ideologies. 4 "Hegemony" bears

⁴ I use the Gramscian term in much the sense of Florencia Mallon as: (1) a "set of nested, continuous processes through which power and meaning are contested,

most particularly on a struggle of opposites. This is chiefly the domain of Peirce's Secondness. If "hegemony" phases largely into category Secondness, then "heterogeny" phases into Thirdness and "homogeny" into Firstness. How so? In order to qualify myself, I should briefly define Peirce's sign. In a nutshell, Peirce's sign is something that interrelates with something for someone in some respect or capacity. The first something is the representamen (the signifying entity that usually goes by the name "sign"). The second something is the object of the sign. Someone, some semiotic agent or other, must be around to make or take the sign in order that it may develop as a genuine sign. If there is no maker or taker around, then the sign is no more than possibly or potentially genuine. What renders the sign genuine, in addition to its maker or taker, is that which brings the representamen into interrelation with its object and with someone in some respect or capacity. This is the function of the third component of the sign, the interpretant.

The representamen provides initial Firstness, the representamen's object, its other, introduces Secondness, and the interpretant provides the first stage of Thirdness. A sign that is similar to its object is an *Icon* (for example, a portrait). A sign with some natural or necessary connection to its object is an *Index* (a mercury column indicating temperature). A sign whose interrelation with its object is by way of social convention is a *Symbol* (the word 'book' as a sign of the physical entity, *book*). Notice, in this regard, the relative positions of Firstness-Secondness-Thirdness, iconicity-indexicality-symbolicity, and homogeny-hegemony-heterogeny in Figure 2.

Firstness takes on the characteristic of the sign, or representamen. The Firstness of the sign involves our immediately "experienced world", the world of feelings and sensations before there is any conscious awareness of some other, something other "out there" and other than the experiencing subject. Secondness plays the role of the object of the representamen — its other, the object with which it interdependently interrelates. "Socio-cultural necessity" constitutes

legitimated, and redefined at all levels of society. According to this definition, hegemony is hegemonic process: it can and does exist everywhere at all times", and (2) "an actual end point, the result of hegemonic process. An always dynamic or precarious balance, a contract or agreement, is reached among contesting forces" (Mallon 1995: 6). This definition of the term should render it adequately Peircean and processual; that is, non-binary. It should also demonstrate how Peircean triadic processes depart from the more dyadic framework Lotman customarily sets up (for example, Lotman, Uspenskij 1984: 3–35).

the makings of the sign's Thirdness, the interpretant, the *other* of the *other* (we must keep in mind, of course, that the thin membrane between the terms is hardly more than the dynamic frontier delineating a small, temporary whirlpool from the entire semiosic movement from within which it arose).

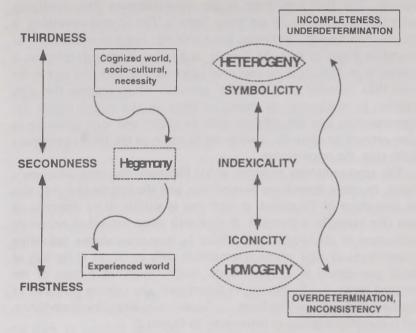


Figure 2. Interdependent, interrelated, interaction.

Now, consider the sign and the semiotic maker and taker or the subject as sign to be (1) in a swimming embrace with all its possible others as a matter of contingent happenings; (2) in apparent (I really must highlight the term) opposition to some actualized other as a matter of intransigent combat, dynamic struggle, rough-and-tumble agonistics; and (3) in intermediate, interdependent interrelation with its other other as a matter of dialogic exchange, renegotiation, and at times of happy consensus. Consider the more general picture in Figure 2, including item (1) as homogeny, (2) as hegemony, and (3) as heterogeny. Homo-qualifies the sphere of Firstness as a union of complementary contradictories into a harmonious package in terms of sheer possibilities without any pair of opposite terms having emerged

to begin their mortal combat. *Hetero*- qualifies the sphere of Thirdness as sets of actualized terms that have either become bored or exhausted as a result of their incessant warfare and are now beginning a potential reconciliation of their differences. The suffix, *-geny*, indicates a manner of emergence, origin, organic becoming without reaching the stage of already having become. (And consequently, we now become more aware of the "biosemio-" nature of Figure 2.)

All this might appear as a trivial taxonomic game. So I really must more adequately specify what I have schematically mapped out before going on, to wherever and whenever that may be. But first, if I may be so allowed, I would like to indulge a bit more by illustrating the Peircean importance of my scheme.

How better to qualify the social haves and the havenots

Assume a given culture follows a particular standard practice. Let us call it 'A'. This practice is handed down by the people in power as a code that must be honored, come what may. If I have a tendency to acquiesce and place credibility in anything and everything handed down by *Authority*, I obediently follow the received code, 'A'. As far as I am concerned, 'A' incorporates culture as it is and must be. Consequently, I follow customary practices stipulated by 'A', and since I assume the origin of 'A' is on the basis of those in *Authority*, whether in the hallowed halls of academic, the halls of legislature, or the workplace, I strive to follow it to the letter. In other words, my behavior evinces "hegemonic" affirmation. Peirce describes such acceptance of what one takes to be necessarily the case on *Authority* in his paper on "fixing of belief". He discarded knowledge via *Authority* in his anti-Cartesian argument that there is no guarantee whatsoever that it will put us on the straight and narrow path toward knowing.

In contrast to 'A', that I follow rather blindly, I might rebel by denying the standard practice. This is tantamount to saying: 'Not-A'. This is "hegemonic" denial. I may now be exercising Peirce's *tenacity*, the method of the rebellious upstart who goes his own way without any regard for authority or the helpful suggestions of anyone

⁵ I refer to Peirce's three articles on cognition in presenting his anti-Cartesian argument, where he presents the pitfalls of knowledge by way of *authority*, *tenacity*, and *apriorism* or *introspection*, and opts for knowledge by way of general agreement on the part of the entire *community* (CP: 5.213–357).

else in her community. This, for obvious reasons, will rarely lead me to any legitimate answers, since my own idiosyncratic way has little chance of becoming general community practice, hence I remain isolated or I am ostracized in one form or another. If I take on unwarranted self-importance I may go so far as to espouse the Cartesian *a priori* method of *introspection* like some privileged individual who spreads the word about his having plumbed the depths of his consciousness, survived, and returned with the grounding bit of knowledge in hand. Peirce's anti-Cartesianism simply will not let this concept fly, however. There is no knowing, ultimately knowing, who is to be trusted and who not. Why should we blindly trust anyone and abide by his counsel without questions or the opportunity for a good counterargument? Peirce's prescribed road to the best of all possible worlds of knowing rests in amicable conversation, banter, debate, kibitzing, and even agonistics when it becomes necessary.

This is the dialogic way toward knowing. It entails *neither* necessarily 'A' *nor* necessarily 'Not-A', but most likely something else, something new, some "heterogenic" practice that has emerged from the erstwhile excluded-middle between 'A' and 'Not-A'. This "something else" is what emerges within the *community* out of dialogic give-and-take. During the dialogue, what is accepted becomes caught between the horns of some dilemma or other, and something must give. But upon giving, something else emerges, which is then put to the dialogical or practical test, and hopefully some general opinion will ensue. And where did this "something else, something new" come from? From the range of possibilities, from within Firstness, or the sphere of "homogeny", from which all the "heterogenic" alternatives between 'A' and 'Not-A' can emerge.

Now, I would invite you to take a wild flight of the imagination with me, a sort of "thought-experiment", if you will. Thought experiments can at the outset be considered either consistent or inconsistent, depending on the reigning theory, the perceptual and conceptual mode of the audience concerned, and the general temper of the time. According to an Aristotle-style thought experiment, a quarter should fall faster than a dime since it is heavier. Fine. The common sense of Aristotle's time would in all likelihood tell most respectable citizens so much. So what if we attach a dime to a quarter and drop them. Would they fall faster than the solitary quarter since they make up a heavier package. Well, that is actually somewhat problematic. Since the unattached dime would fall more slowly than the quarter, when the two are connected, the dime should act as a drag on its partner and

slow its ordinary progress down somewhat. So the combination of the two coins should fall slower than the isolated quarter. But the combined pair of objects is heavier than the quarter, so they should fall faster. But they don't. Needless to say, Galileo demolished this theory with an alternative series of untested thought experiments (of course it is doubtful he ever actually carried out his experiment from the top of the Tower of Piza). And as a consequence of Galileo's work, in our day we believe we have a relatively consistent theory, unlike those naive Greeks. So far, so good. An inconsistent theory was properly discarded and replaced by a more logically and rationally respectable alternative, and sober-minds managed to prevail. In another way of putting the matter, Galileo said 'No!' to authority, to 'A'. He said: 'Not-A!' Then he went about finding an alternative between the 'A' and the 'Not-A'. Eventually, something other, something new, emerged from the semiosic soup of possibilities, Firstness, "homogeny", and the entire scientific edifice become increasingly more "heterogenous" rather than merely Manicheistic, dualistic, and "hegemonic".

In our century, physics in the form of quantum theory, especially when carrying the labels of Heisenberg's uncertainty principle and Bohr's complementary, became brazenly, and apparently without remorse or regrets, ambiguous, and even inconsistent, depending upon the perspective. At a given moment is a quantum "event" a "particle" or is it a "wave"? To put the matter quite baldly, the only possible responses to such questions is 'Yes, but no', 'No, but yes', 'Yes and no', 'Neither yes nor no'. This is perplexing, to say the least. In Galileo's "Dialogue", Simplicio the Aristotelian disrespectfully asks Salviati: "So you have not made a hundred tests, or even one? And yet you so freely declare it to be certain?" Salviati responds: "Without experiment, I am sure that the effect will happen as I tell you, because it must happen that way" (Galileo 1967: 145; in Brown 1991: 2-3). This recalls Einstein's remark regarding physicist-astronomer Arthur Eddington's experiment designed either to verify or falsify Einstein's general theory of relativity. When asked his opinion about the possible outcome of the event, Einstein responded that if it appeared to refute his theory, then he was sorry for the dear Lord, because the theory was correct. A marvel of arrogance? Yes ... and no. Such declarations bear witness to the power of the mind and the confidence of she who dwells within it. It also testifies, I would respectfully submit, to the inextricable union of Firstness-Secondness-Thirdness, representamenobject-interpretant, iconicity-indexicality-symbolicity, and feelingsensing-interpreting. This union can hardly be put to the test, like Aristotle's or Galileo's thought experiments could have been had their authors been so disposed. Yet Hume, Locke, and others, including Peirce, bear witness to the impossibility of one's observing oneself in the act of observing oneself in order to distinguish roughly between the equivalent of Peirce's categories. It's roughly tantamount to the quantum "event" just described.

It seems that, with respect to this mutual embrace of Peirce's intriguing triads, and in light of his anti-Cartesian posture as outlined above, the counsel might be: never bow to authority unless it is deserving of your respect, do not blindly push forth come what may with paranoid tenacity, beware of those false prophets bearing tidings of their having been to the wilderness of their introspective mind where they saw the light of Truth, but pay your dues to the community of your choice, keep the dialogue open, and do the best you can. With respect to the triads themselves, we would have it that the imaginary thought-sign is the possibility of 'A', a might be from the "homogenic" sphere of 'Both A and Not-A'. In this regard, the object of the sign would be an "anti-hegemonic" 'Not-A'. And the interpretant would be a "heterogenic" 'Neither A nor Not-A', but since it brings 'A' and its respective other into a three-way mediation, it potentially gives rise to the emergence of something different, something even possibly new. We can construct Figure 3, with the "point" or "vortex" connecting each of the "sign" components, such that it can be mapped into Figure 1.

The "vortex" is the composite of all unactualized signs. It is, so to speak, the "emptiness", the sheer possibility of anything and everything. It is as if we had 'Both A and Not-A' and 'Neither A nor Not-A' written on the two sides of a strip of paper and then we make of the two-dimensional sheet a Möbius-band in three-dimensional space to yield 'Both of the propositions', and 'Neither of the propositions'. Moreover, the choice is not a choice between Aristotelian truth and falsity, between what is on no uncertain terms true and what is not true, between what exists and what does not exist, but rather, between what from some context or other might be possibly true and what might be possibly false, and what might possibly be neither true nor false because it not yet is: there is only something like what Peirce (CP: 6.512) calls a "cut" or G. Spencer-Brown (1972) a "mark of distinction". There is no more than our "tripod" plus the "vortex".

This "cut" or "mark of distinction" makes up what Gregory Bateson (1972) terms a "difference that makes a difference". In the

beginning, demarcating line is set down separating "this" from "that", "inside" from "outside". Then other distinctions are made, and then still others, and so on, toward ever increasing complexity. Lotman writes that every culture

begins by dividing the world into 'its own' internal space and 'their' external space [...] The boundary may separate the living from the dead, settled peoples from nomadic ones, the town from the plains; it may be a state frontier, or a social, national, confessional, or any other kind of frontier. (Lotman 1990: 131)

Lotman refers to this division as binary. I would beg to differ with him in this respect. It is, more appropriately, trinary or triadic, following the Peircean model of the sign depicted in Figures 1 and 3. How can this triadicity come about as a result of a binary division between "this" and "that"? As in Figure 4, I would suggest. The sign tripod collapses to a point, the original "vortex", the "emptiness" giving rise to the emergence of the sign, of all signs, of all that is becoming. Then the point, by repeating itself over and over again, becomes a line, the "cut", the "mark of distinction". That is to say, two-dimensionality collapses into zero-dimensionality that becomes one-dimensionality that separates two semiotic spaces of two-dimensionality.

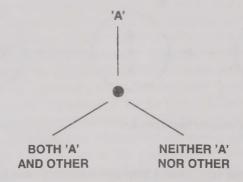


Figure 3. Always, alternatives.

Lotman writes that:

The asymmetry of the human body is the anthropological basis for its semioticization: the semiotics of *right* and *left* are found just as universal in all

human cultures as the opposition *top* and *bottom*. And the fundamental asymmetries of *male* and *female*, *living* and *dead*, are just as widespread. The *living/dead* opposition involves the opposition of something moving, warm, breathing, to something immobile, cold, not breathing (the belief that cold and death are synonyms is supported by an enormous number of texts from different cultures, and just as common is the identification of death with turning to stone/ see the numerous legends about the origins of mountains and rocks). (Lotman 1990: 133)

Lotman's words might strike one as pure and adulterated binarism. Actually, in every case the binary implies the "vortex" of "emptiness" and meaning, that is, the point at the center of Peirce's semiotic tripod (that which contains the possibility for all semiotization) and the interpretant (meaning). Right and left imply existence of the body, male and female imply the notion of gender, living and dead imply the universal principle transcending life. And so on. The "vortex" there will always be, for if not there are no signs. And the third leg of the tripod, the interpretant, there will always be, for if not, if there are no sign makers and takers, then there is no genuine *semiosis*. Because semiotic space "is transected by numerous boundaries, each message that moves across it must be many times translated and transformed, and the process of generating new information thereby snowballs" (Lotman 1990: 140).

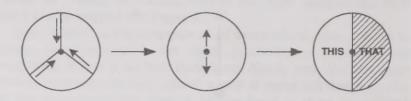


Figure 4. How the semiotic tripod divides.

But, ... this is not very clear, I fear. But what more can be said if what is to be said cannot explicitly be said? It only lends itself to a sort of feeling for what is on the tenuous cultural track of semiosis. There is no Cartesian clarity to be had at this "nonlogocentric", "nonlinguicentric" sphere of vague and overdetermined possible signs where nothing is distinct and where there are no sharp lines of demarcation.

Back to a few more concrete examples, then.

A picture puzzle of *n*-dimensions and uncountable pieces

Latin America cultures, it goes without saying, are a complex, virtually chaotic, "logic" of ethnicity and culture, conquest and postcolonialism, virtual identity and radical difference, imitation and distortion, conflict and co-optation, antagonism and reciprocity. Whoever surfaces to the top of the gush of ongoing cultural becoming in the beginning might appear to have gained the upper hand. But not necessarily. That is, unless she might have been able simultaneously to perch on the shoulders of all those below and maintain a paternalism-patronizing hegemonic relationship with them. She who happens to be of the haves at the top depends upon those havenots below and they in turn depend upon her.

In the beginning, the forging of Latin America seemed to be the product of clear and distinct delineation. Answers were straightforward, and no further questions were asked. Or so it seemed to many. However, take the case of an imaginary Amerindian from the central plateau of Mexico. If when asked who "discovered" America he without hesitation says "Why, your ancestors, of course", he is either consciously or tacitly giving a nod to the "superiority" of Europeans over pre-Hispanic civilizations. In other words, he is manifesting his co-optation into the colonizing system and turning his back on his own heritage. This is cultural awareness like it "should be" according to the hegemonically endowed haves of the conquest and colonization and the aftermath of independence. If, on the other hand, our Amerindian retorts: "Well, Patrón, as I see it, according to your account, Columbus 'discovery' America, but actually, we had no need of anybody to 'invent' us and tell us who and where we were", he questions the supremacy of the "discoverers" and subverts the very idea of "discovery" (to reveal, to be the first to know). His response is quite properly counterhegemonic. It is as if to say 'No!' to the colonizing system, depending on whether we are taking strict classical logical principles into account or the pragmatics of human communication. As far as he is concerned, there was no "discovery", for nothing was concealed so that it might be revealed. There was no unknown in waiting expectation of its being placed in the light of knowledge.

A response to a comparable question regarding the problem of identity might be exceedingly more complex for a *mestiza* woman (of mixed racial and ethnic heritage) from the same area of the country. Part of her heritage is native American, another part perhaps African

American, and another part Castillian, which is itself streaked with Arabic cultural presuppositions and propensities, perhaps along with a little Roman, Celt, and so on, influence. The matter of her cultural heritage, her identity, her proper posture vis-à-vis the pressures of today's neoliberal, postmodern consumerism become a mixed and confusing bag of tricks. One might tell her that she really should choose. She should choose who she is, what her attitude is to be with respect to herself, her background, her political inclinations, her behavior and relations with others in society, her role in the economic life surrounding her — what she will purchase and what she will be willing to do in order to purchase more, and how she will use it — and so on. Indeed, the choices are hers, and to decline exercising her right to choose is itself also a choice that will have its own effect on her. Whichever choice or set of choices she arrives at, she will remain separated and at the same time integrated; she will adopt and she will reject; she will embrace and she will resist; she will interrelate and become part of an interlocked concoction of conflicts and contradictions. Along these lines María Lugones writes:

If something or someone is neither/nor, but kind of both, not quite either.

If something is in the middle of either/or,

if it is ambiguous, given the available classification of things,

it is mestiza,

if it threatens by its very ambiguity the orderliness of the system, of schematized reality.

If given its ambiguity in the univocal ordering it is anomalous, deviant, can it be tamed through separation? Should it separate so as to avoid taming? Should it resist separation? Should it resist through separation? Separate as in the separation of the white from the yolk? (Lugones 1994: 459)

Yes, choice. We are condemned to the imperative of choosing, whether we know it or not and whether we like it or not. The choice exists between the either and the or, that is, between both the either and the or, or rather, what is between the either and the or. But... No. Not that, I'm afraid. Not really, for there is nothing between the either and the or. But... that's not right either. Not really. In a metaphorical manner of speaking, "emptiness" is "between" them: nothing and everything, as possibilia. The emerging mergence of both the one and the other is declaring 'Both A and Not-A'. Poking around in the interstices at the risk of falling into the very slightly, in fact infinitesimally, parsed mouth of 'emptiness', and one might perchance enter that never-never land where 'Neither A nor Not-A' is the case, and

there is a ray of hope that something novel might emerge — the self-organization of all things, all things as organism, as benign signs of ongoing resonance. It's all a process, a marvelous process, and she, that is, our 'enchanting' and 'enchanted' mestiza, is in it, as are all of us. What she is, is not what she is, and she both is and is not what she is, and she is neither what she is nor what she is not; and she is all of the above and she is none of the above.

Riddles! Is there no way out? But who promised us a comfortable road to truth by means of binary either-or logic anyway? Who told us there must be either discovery and knowledge or eternal darkness? A matter of dominating or of subservience? Of raping nature or living a sordid animal existence? Of razor-sharp binary choices between eithers and ors? Of course Galileo and Bacon and Newton and Locke and Descartes, and later Thomas Edison and Henry Ford and Bill Gates and many others, and a host of celebrities of various sorts in their own way, all give us an image of that machine-oriented, materialistic, consumerist good life. From another direction, a concoction of religious saints, seers, and assorted sinners also promise milk and honey. As do those who "discovered, conquered, and colonized" America, and Hitler and Mussolini and Stalin and a few Latin American revolutionaries and visionaries and populists who belong to the same crowd. Where did it all get us? Within the last century we have been warned by Nietzsche and Heidegger and Wittgenstein and Foucault and Derrida, and their critics and disciples that the promised paradise is a sham. And we have the limitations on our knowledge by way of Heisenberg and Bohr and Gödel and their counterparts in science, logic and mathematics. Any and all answers to all questions eventually meet their others, and eventually there may be a happy meeting ground, or some alternative or other may pop up between the neither and the nor, and then it may be a matter of all of the preceding ... or none of it. Yes, riddles. Yet, in spite of it all, liberation, which, though at the outset it may appear perverse, is over the long haul quite healthy.

What is for sure is that, with due respects to Lotman, binary thinking must go the way of the dinosaurs, for if not, it is most likely we who will follow them into oblivion. This is especially the case of the most complex processes the likes of cultural comings and goings. Cultures, "hot" and "cold" and modern and postmodern alike, are comparable to pervasive "strange attractors". They are nonlinear, interrelated, unpredictable. Their virtual Brownian motion is the result of the dependency of every part on every other part, and if deter-

ministic laws there be, they are beyond the pale of human cerebral capacities. Cultures are processes, never products; they are codependently arising becoming, not cause-and-effect sequences; they are events, not things moving along like trains on a track; they are perpetually self-organizing into unseen and unseeable wholes, rather than predictable wholes and their parts in terms of static and statistical averages. They are semiosis at its best, though, unfortunately, occasionally at its worst.

Yet binaries continue to rule the roost in many quarters. Cultures are for some reason or other still seen as hardly more than oppositions between the powerful and the helpless. The idea generally has it that the powerful form a bloc; they are unified, quite stable, concordant, and allied toward common economic, social, political, legal, moral and aesthetic goals. The weak, in contrast, are diverse, dispersed, diasporic, discordant. The haves are into structure, control, domination, manipulation; the havenots are reduced to a diversity of interests, with no central organizing force (for example, Hall 1981). John Fiske (1989a) dubs the power-bloc homogeneous and the people heterogeneous. He compares the former to Mikhail Bakhtin's centrifugal forces and the latter to centripetal forces, conceding that the opposition is actually more like the dynamic conflict between an occupying army and "cultural guerrilla" activity, following the work of Michel de Certeau (1984). The struggle, we read, is always a confrontation between legato or hegemonic forces of homogeneity and the unruly, staccato or heterogeneity of the people's weak and usually futile hits and misses. Yet, distinctions cannot be so clearly demarcated. As we have noted and will note with greater emphasis, the havenots actually enjoy a "cultural guerrilla power" that invariably pushes new terms into the gaps between erstwhile opposites.

Those in power generally tend to put things in a straightforward way, simply providing the information in order to reap profits. The sober-minded somnambulistic folks tend to take what is ladled out to them with neither questions nor much creative input. The wily "cultural guerrilla-minded", in contrast, nimbly catch the ambiguities of the system and use them to subvert it in the only way they are capable. The power-bloc, of course, uses a combination of methods. For example, jeans ads might have a rugged Western scene, or they might give the idea of frolicking young people having fun, with hardly a hint that the objective is to sell you a pair of pants. Ads can cross barriers, such as Bill Cosby convincing you you should eat more Jello pudding in a commercial break during *The Cosby Show*. Such ads also

leave themselves open to "cultural guerrilla" activity. A giant billboard for Uniroyal tires once depicted a Latin American kid with a Walkman plugged into his ears and sitting on the desert floor next to a pair of tire tracks under the caption: "He only knows three words of English — Boy George and Uniroyal". Some "cultural guerrillaminded" subvert painted over "Boy George" and "Uniroyal" and replaced them with "Yankee go home". The ad mixed otherwise discordant images for a specific purpose; the tables were turned in order to bring consonance to that same image. Examples are virtually uncountable, of course, and I trust I need not press the issue further. The upshot is that the powermongers strive to make everybody alike (homogenous) and to entice them into doing the right thing in conformity to their own motives. Those well-meaning citizens who are robotic of mind tend to play along with the game. The "cultural guerrilla" subverts, on the other hand, distort the system in whatever way than can and create (heterogenous) differences, which can give rise to alternatives that may then be assimilated into the system or not, however the possibility for the exploitation of these differences may be interpreted.

In short, according to one story, money talks, might makes right, and status is everything. That story is the power-bloc's favorite. Everybody is there to fulfill his respective role, and with a few constables around, the ship's order is maintained. But this is a binary view of things. I exists in contradiction with the Peircean triadic nature of semiosis. The other Peircean nonbinary story has it that the orderly phalanx marching in step to the beat of the big band is to a greater or lesser degree constantly thrown into disarray by the upstart subverts. The first story, the binary story, falls comfortably in line with the traditional hard-line view of science; what is of worth is that which is universal and unchanging, that which is solid and lasting; what changes is of ephemeral value and unworthy of serious attention. However, according to the recent view, originally pioneered by philosopher Karl Popper, science is good precisely because it is open to change, because there are always a few "guerrilla" scientists lurking around. In fact, it is at its best when in constant war with itself, and it progress most effectively by revolutions and internal conflicts (Agassi 1975).

There are battlefields where we least expect them

Not only is science perpetually at war with itself, so also are many of our most cherished inductively derived beliefs. The real problem is that not only are these beliefs more often than not binary based, they also engage in either-or binary warfare among themselves.

Perhaps the most succinct way to put the issue is by evoking what is known as the "paradox of induction", developed by Carl Hempel (1945). In a nutshell, the tale goes like this. We could assume "All swans are white" and attend to our daily affairs quite effectively without ever becoming aware of any anomalies or alternatives. It is simply true to say "All swans are white" and false to say that "Some swans are nonwhite", and that's that: case closed. It is ideally an either/or binary matter. We have an ingrained feel (Firstness) for the whiteness of swans, and we could hardly feel otherwise, unless in some imaginary world.

However, a certain explorer down under, namely, Captain Cook, once found — that is, sensed (via Secondness) and interpreted (via Thirdness) — some swans as black. Henceforth the categorical borders suffered a change. It eventually became known that "Most swans, but not all, are white; those nonwhite, that is, black, swans can be found in a remote region of the globe, namely, Australia". Instances like these led Popper to declare that if you look for positive evidence for a general proposition you will almost always be able to beat the world into submission and "discover" your evidence. So looking for positive evidence is no big deal. What is important is looking for negative evidence that will change customary ways of thinking and of looking. In other words, you should expect to be surprised by the unexpected, and then you can give a nod of acknowledgment that you are not surprised that you are surprised when an expected unexpected event turns up. Consequently, you alter your expectations somewhat, and continue on your way expecting another surprise somewhere along the road that will thwart those newfound expectations. If you want to learn something, don't just see everything and say everything as repeats of what presumably was, is, and will be, but look for mistakes, differences, events that weren't supposed to happen.

In this manner, it should not be at all shocking that "All swans are white" did not withstand the test of time. In fact, it was to be expected. This goes to show that in the sphere of possibilities for all events,

seeing and saying must imply the statement: "Swans are white and they are nonwhite". One pole of this contradiction was held true during one period of human history, the other pole during another period. So if "Swans are white and they are nonwhite" is taken to be atemporal, then "Either swans are white or they are nonwhite" is atemporal in another more limited sense, for, logically speaking that is, in terms of classical logic — either one or the other is viewed as immutable, depending on the time and the place and the folks involved. However, we also have the implicit statement: "It is neither the case that all swans are white nor is it the case that no swans are nonwhite". That is to say, previously "All swans are white" was the case, but it is now the case that "Most swans are white". And it was previously the case that "No swans are nonwhite" but it is now the case that "Some swans are nonwhite, specifically, those that are black". From this rather unkempt sphere where events, seeing, and saying, is neither timelessly one thing nor the other but potentially something else, something different, we have temporality. Given our temporality, we have one thing at one time and another thing at another time, with both things thrown into the same bag as part of a vast ocean in constant self-organizing movement wherein it is perpetually becoming something other than what it is.⁶

So we have, at one extreme, (1) "Both white swans and nonwhite swans", at the other extreme, (3) "Neither exclusively all white swans nor no nonwhite swans", and in the middle, (2) "Either white swans or nonwhite swans" (i.e. all from Figure 2). (1) is the sphere of unactualized possibilities in harmonious intermeshing, no matter how contradictory, (2) is the sphere of classical logic, and (3) is the sphere of emerging novelties between the either and the or. (1) is qualified as exceeding vaguenes; it is fraught with contradictions any number of which can over time be actualized, hence it is overdetermined (notice how the terms are used in Figure 2). (3) is marked by generalities arising from the particulars actualized from (1) and passing through (2); it is invariably incomplete, since there is no knowing when and where something new and different will emerge to take is place between two already actualized general conceptualizations, hence it is underdetermined. Given the above considerations, (2) is under most circumstances the dwelling place of binary practices as they are

⁶ The above is another way of putting Peirce scholar Charles Hartshorne's (1970) view that temporality begins to emerge within Secondness and comes into full bloom within the sphere of Thirdness.

customarily articulated: there is *either* the haves *or* the havenots, locked in an apparently eternal, timeless, synchronic struggle. (1) may be labeled homogeny. (3), then, is heterogeny, since between any two general terms or statements there always exists the probability somewhere and somewhen of something else emerging, hence the system is perpetually moving toward the completion of its own continuity without ever realizing that goal. Focus obsessively on (2), and you have the makings of binary, "linguicentric" practices, the pathway of least resistance the somnambulistic yes sayers customarily trod.

Now, allow your attention nomadically to wander over (1) and (3), and you begin to "resonate" with the tossing, rolling, heaving tide of *semiosis*, which includes "cultural guerrilla" strategies. You are also coming to an awareness of the unspecifiability of this "resonance". You can't clearly and distinctly say what you think about the hegemonic cultural milieu outright; at best, you can only feel it, empathize with it, bring it into rapport with your general understanding. Consequently, you might find yourself on the path of "cultural guerrilla" activities. I wrote "find yourself". That's an overstatement, actually. From within your "cultural guerrilla" mode of bucking the waves, kicking at the pricks, swimming cross stream, you will engage in your somewhat subversive activity because of your gut feelings and proclivities. Your behavior will be what it is because that is how you feel, often without your ability precisely to articulate your actions and reactions. It is as if you were a natural born "cultural guerrilla".

Back to statements (1), (2), and (3) and their counterparts in Figure 2 for a moment.

Little signs within the inconceivable big picture

Bringing about a happy emergence of (1) and (3), and of homogeny, hegemony, and heterogeny, we have either inconsistency or incompleteness, or perhaps both, by the good grace of Kurt Gödel's proof that spelled the limitations of logic and mathematics, and by extension of the sciences, the humanities, and in general all human communication. The upshot is that we cannot help but spout out unexpected contra-

⁷ The goal can never the reached, for, as Peirce had it, it is an infinitely receding horizon that can be no more than approximated by asymptotic movement comparable to Zeno's Achilles moving in on the tortoise in the race in an infinite series of successively smaller increments (however see Hesse [1980] for a critique of this view).

dictions and occasional paradoxes, and no matter how much we manage to say about some particular aspect of our world, our saying will always be incomplete.

Sign processing within these limitations is a dialogical community affair. Peirce writes that whenever a sign is vague (inconsistent) it is up the to maker of the sign to render it a bit more precise and in the best of all worlds hopefully to clear up the inconsistencies. On the other hand, in order that the sign's nature as a generality may become properly acknowledged, the sign's taker must enter into the game, interacting with the sign, with its maker, and with the entire ambient, in order to bring the sign's meaning a tad closer to its completion but, as pointed out above, the sign's meaning never stands a chance of completion in the genuine sense (CP: 5.505). Hegemony as a dualist practice of the sort we might expect to find in (2), could well culminate in the empowerment, the enfranchisement, of those who have the proper pull and know how to engage in the most advantageous but ruthlessly aggressive practices. Within this sphere we might encounter the makings for paternalism, patriarchy, patronage, and such practices in this stark desert of dualistic cultural values.

This is a stringently limited view, however. Vagueness and generality from a broad cultural view paints another picture entirely. In order to put this picture in focus, consider, once again, Figure 2.8 In the first place, I use reversible arrows of various sorts to emphasize the fluid character of all the categories involved. This is no indication of linearity or isotropic timeless time, however. The categories, usually coming in threes rather than twos, are placed at various levels to depict their fuzzy codependent interrelationships and their nonlinear, time-bound, self-organizing nature, though, I must hasten to emphasize, no hierarchy of dichotomous terms is implied here. The general movement is from signs of vagueness toward acknowledgement of classical logic and "styles of reasoning" and then to the construction of perpetually incomplete generalities, universals, taxonomies, and hierarchies. Inconsistency below might be hopefully abandoned, and progression upward might hopefully be toward the fulfilment of those fond and familiar dreams of the good life, social

⁸ It bears mentioning at this juncture that I have availed myself of the overdetermination-underdetermination and inconsistency-incompleteness and vaguenessgenerality scheme in various previous studies with respect to Peirce's basic sign types, our sensory modes for perceiving signs, and our sign interpretation (Merrell 1995a, 1996, 1997).

⁹ The idea of "styles of reasoning" is from Hacking (1985, see also Merrell 1995a).

justice, emancipation for all, and complete and consistent knowledge. Given the underdetermination factor, however, there is no utopia to be had. In other words, the plenitude of all things is a pipe-dream, for there is no royal highway to the land of milk and honey. Homogeny-heterogeny are here to stay, whether we know it or not and whether we like or not.

All this has further bearing on Peirce's categories. Firstness is the mode in which something is as it is irrespective of anything else, such that it would not make any difference if nary a thing else existed, for it is self-contained and self-sufficient. This mode is apprehended not by intellect or as a result of sensations received from the big wide world out there, for, simply put, there is no other mode that could be perceived or conceived in relation to Firstness. There is only Firstness. Firstness is also without parts, for if there were parts there would be something other than the whole of Firstness. The whole of the Firstness is a melding of everything that makes it up. It is without clearly delineable features; it is vagueness of the most vague sort. Imagine a combination of vibrations in the air that according to Fourier analysis produce in their composite high C[#]. You hear the note and nothing else, you feel it, and this feeling is perpetuated, one second, two seconds, then many seconds and minutes, without its being related in any form or fashion to any other sounds. You simply feel it as it is, no more, no less. Now imagine you are the subject and the sound is the object, and by listening to the high C[#], by sensing it and perceiving it, you enter into it as a result of many years of your own musical appreciation and actual practice. Your recognition of high C[#] as just that, high C[#], is an act of reaction and interaction with something other than yourself. It is otherness, the otherness of Secondness, of indexicality. Everyday living is pervaded through and through with such action, reaction, and interaction with ephemeral items of our surroundings, with tokens, items as they pop up on the stage before us, the stage we are on. Thirdness, on the other hand, is a general matter. The high C# note is recognized as such in terms of its being related to and distinguished from any and all other notes in the repertory of your knowledge of music. It is now not merely this note here and now, but high C# as a type, a general category. The note as a type is a modification of its feeling and of its perception as such-andsuch an item from among a range of other items to which it is related. It is acknowledgement that the sound belongs to a general category that gives it its character insofar as that character is susceptible to an account by means of symbolic signs, words, language.

This hybrid view of knower and known is gradually coming into view. It is now taken for granted that Gramsci's concept of hegemony made it possible to move beyond the dualistic idea of power brokers imposing their values on helpless and hapless common people. This switch has been a long time in coming, however. Amongst leftist writers the old fad had the dominant classes in control and the popular classes as victims. In later years, especially given hegemony theory, the popular classes were looked on positively as a group with virtually unlimited resources and capacities to manifest their defiance and in the process provide alternatives to the stolid, stultifying ways of the dominants. Such obsessive focus on extremes in order to erect dichotomies is discomforting. The problem is that, in anthropologist Néstor García Canclini's words:

there is so much insistence on the juxtaposition of the subaltern and hegemonic culture and on the political necessity of defending the independence of the subaltern culture that the two come to be thought of as two quite separate entities. With the presupposition that the task of hegemonic culture is to dominate and that of the subaltern culture is to resist, much research has had no other aim than to inquire about the ways the two distinct roles were carried out. (García Canclini 1984: 48)

In this sense, obsession with *either* one *or* the other of the horns of the presumed opposition is binary thinking, in spite of the concession that the subalterns might enjoy more power to alter the system than was previously thought. This Manichean tendency is certainly not vintage Gramsci; he resists facile dichotomies. There is not merely power, but also seduction, complicity, negotiation, subversion and covert, "cultural guerrilla" action.

Gramsci teaches that what meets the eye is often not as clear-cut as it appears. He ties the notion of popular culture to the subaltern condition and at the same time reveals the complexity of these ties. The dynamic interaction between subalterns and the dominant class, as pointed out above, makes for constant shifting of postures and strategies such that the interrelations are best qualified as process. There is no standing still; everything is in perpetual movement. Consequently, the subaltern's admission of hegemonic power is not necessarily an act of submission, and her rejection of that power is not necessarily resistance. All expressions from the haves are not always the manifestation of irresistible hegemonic forces, and the passive response of the subalterns is not simply a bow of the weak to the strong. Nor is the exercise of hegemony merely a product of the

inculcation of Pierre Bourdieu's *habitus* in the people such that they respond the way they respond because they can't really respond otherwise (Bourdieu 1990; Bourdieu, Passeron 1977). Creative responses on the part of the people, in de Certeau's (1984) conception, keeps the social organism's heart pounding and lungs heaving. In the final analysis, popular culture is above all creative.

Given their creativity, what the people believe, buy, and consume, cannot simply be subsumed within a binary logic of domination and subservience. The dominant rationality would have it, nonetheless. that the people behave and consume in such a way that they all become one homogenous soup (from homogeny, not homogeneity). The subalterns gravitate toward homogeny, while the dominants move up slightly toward the world of heterogeny, in order to highlight their distinction from those others and to refortify their power. Yet the subalterns, given their de Certeau role as "cultural guerrillas", create differences of their own upon expressing their contempt for their lot in life. They sweet talk their superiors and play up to them; at the same time they cheat a little, mix things up in order to alter them, bring spice to life, and subvert the motives of the hegemonic haves. In so doing they are not simply liars, thieves, and rebels obsessed with overturning the system. They are engaged in practices on a small scale compared to the megalevels of lying, thieving, and subversion going on at the upper levels. They are simply doing the best with what they have. Hegemony is in this sense most proper to Secondness and heterogeny to Thirdness. But these categories did not simply spring out of a vacuum. They existed in interrelated, interactive, codependence within the sphere of homogeny, Firstness, wholeness. Within homogeny, there are parts, to be sure, but they are possibles, they are not (yet) actualized for a particular mind. The parts remain melded into one, that is, they make up a collection so vast that in terms of themselves as possibles there is no room for them to retain any form of distinction or individualism, so they are welded into one another, they are annealed. Firstness is the continuum of all that is possible. It is like a ring, with no conceivable beginning or ending and no middle. As Secondness emerges into the being of the becoming and the becoming of the being of signs, the ring is cut, severed, such that there is now one side and the other side and the border of borders in between. And the chain of Seconds has begun its becoming, the task of which then begets Thirds, and more Thirds. There is no conceivable end of semiosis, nor is there any conceivable beginning, or center.

Now, for an illustration of self-perpetuating semiosis, if I may.

How subverting signs emerge

In 1977 in the historic Plaza de Mayo of Buenos Aires and site of the presidential *Casa Rosada*, the women's sudden appearance was hardly noticed except by the secret police of the military government.

At first there was only a handful of women walking around in flat shoes and wearing kerchiefs over their heads. They appeared uncertain, even frightened (after all, Argentina was ruled by a repressive dictatorship that lasted from 1976 to 1983 and 'disappeared' some 30,000 citizens and tortured countless more). They wore photographs of missing family members on their dresses. They came from every social class to fight the Armed Forces, the politicians, the Clergy, the complacent press, everybody, in order to get some answers. The handful of women gradually grew to fifty, then hundreds, and then more than a thousand. Tourists began asking questions, that embarrassed the state. But the women went virtually ignored by government officials. Their visits to the Catholic Church in search of support yielded no results: its complicity was obvious. The government continued to pay the women hardly any mind. Yet, they persevered. As time went by, they became known as the *Madres y Abuelas de la Plaza de Mayo* ('Mothers and Grandmothers of May Square'). While the 1978 World Cup soccer championship team was honored, the women protested. When progovernment youths, whipped into a frenzy, spat insults at them, they asked questions. Eventually, moral outrage ensued. In 1980 the Argentine human rights movement became involved, especially after Adolfo Pérez Esquivel was awarded the Nobel Peace Prize. In 1981, workers began protesting inadequate wages, working conditions, and housing. In 1982 they joined the protesting mothers, and in that same year the press took a more active role in criticizing the government. The humiliating Malvinas/Falkland war came and went. And finally, in 1983, the military brought out and dealt its last deck of cards. Elections were held, a civilian became president, and the military, as a final coup, granted itself amnesty from all human rights violations!

This train of events is perhaps one of the best examples of honest, sincere, patriotic subversion on the part of subalterns from among subalterns: women, as "cultural guerrillas", taking on a role with few precedents. It is also living proof that the subalterns by peaceful means can create alternatives and impose them on the dominants.

¹⁰ See Agosín (1992), Bouvard (1994).

Subalterns interjected the homogeny of hegemony with a massive dose of heterogeny, and the system finally caved in. Iconicity raised itself to the level of indexicality by signs pointing toward the presence of absent individuals, and silent icons and indices proceeded in the direction of symbols, that were eventually forthcoming. Firstness engendered Thirdness, subversive Thirdness, and the erstwhile hegemonic discourse of Thirdness suffered the consequences. Persistent women, makers of alternative signs, gave vent to their signs of vagueness, brought them to their most supreme expression, and they were eventually interpreted by their signs in terms of generalities, and found the interpretation to be the alternative that demanded the most serious attention. Signs from the overdetermined sphere took their place between the otherwise excluded middle between existent dichotomies of an intransigent polity.

The 'Mothers and Grandmothers of May Square' and related movements in Latin America bear perhaps the most striking illustration in the world of what Roberto DaMatta (1991) calls 'relational society', where the whole follows a logic the parts can choose to ignore. The "and" of 'Both A and Not-A' fuses and confuses the mansions and the shanties, the powerful and the weak, the dominant and the subaltern. DaMatta's concept of 'relational society' is perhaps no more strikingly exemplified than in Latin American mestizaje (racial and ethnic mixture). Mestizaje entails nonlinear interrelations. The mestizo of today, especially in countries like Mexico, Colombia, Peru, Venezuela, Northeastern Brazil, and the Caribbean, is no simple mix of European and Amerindian or African and European or Amerindian and African. The mix is virtually randomly variegated. 11 Moreover, mestizaje is not merely a racial fact, but in addition, it is the incorporation of the Latin Americans' way of life, their very existence, the becomingness of their being, the beingness of their becoming. Mestizaje is more than an abstraction, it speaks, it perceives, conceives, narrates, becomes at once an actor and a spectator on the stage of everyday living. I we are to take some anthropolisists at their word, mestizaje also embodies an inner need to exercise control. Eric Wolf writes of the mestizo male as "power seeker" par excellence. The struggle in which he has been historically engaged was more than a means:

¹¹ Magnus Mörner (1967) provides one of the best general studies of race mixture in colonial Latin America (see also Graham 1990).

[A]s a validation of self and of one's station in society, it became an end in itself. To the mestizo, the capacity to exercise power is ultimately sexual in character: a man succeeds because he is truly male (macho), possessed of sexual potency. While the Indian strives neither to control nor to exploit other men and women, the mestizo reaches for power over women as over men. As the urge for personal vindication through power is continuous and limitless, so the mestizo possesses "a limitless sexual deficit" which feeds merely upon past conquests. While the Indian man and the Indian woman achieve a measure of balance in their relationship, the mestizo male requires absolute ascendance over women. Thus even familial and personal relationships become battlegrounds of emotion, subject to defeat and to victory. (Wolf 1959: 240)¹²

Mestizaje entails a different socio-politico-economic and cultural sensibility. In tales from the U. S. by way of James Fenimore Cooper, Mark Twain and others we have a pretty dire image of the Afro-Americans, the Amerindians and the mestizos in the U.S. Harvard professor and scientist Louis Agassiz once painted a picture of the non-European ethnic groups and the mestizos of Latin America as physically and morally degraded people. The passing of time has unfortunately done little to temper the North American prejudice toward the mestizo. This is not surprising, given one of the basic differences between Anglo American and Latin American policies on territorial expansion. The Anglo American policy was fundamentally one of exclusion. It fixed limits beyond which the Amerindian should not venture; in fact, the native was looked upon as an encumbrance and should be cleared off, like the forests, the buffalo, and the wolves. The Latin American policy, in contrast, was chiefly one of inclusion — though, as one might expect, there are plenty of exceptions to the rule. Consequently, even though the mestizo's place in society in the Latin American colonies left plenty to be desired, he fared considerably better there than in the U.S. Quite ironically, given the distinction between exclusionary and inclusionary practices, during the nineteenth century, travelers, businessmen, and diplomats from the U. S. to Latin America generally enthused over the cultured oligarchy in Latin America. On the other hand, they had few kind words for the mestizo class, which was often assumed to be no more than a bastard

¹² Wolf is admittedly overgeneralizing and exaggerating. But a grain of credence must be allowed him, for he does reveal some of the chief characteristics of the *mestizo*, though exceptions abound and as the *mestizo* becomes more numerous his characteristics become more heterogenous and less homogenous. Moreover, the *mestiza* must also be given due consideration, and she has been since the time of Wolf's study.

people (Pike 1992: 144–151). In the 1930s historian Herbert Eugene Bolton (1939: 98) saw the Spanish-Anglo borderlands as a "meeting place and fusing place of two streams of European civilization, one coming from the south, the other from the north". Had Bolton been more keen on actual empirical studies of border cultures, however, he would have realized that long before development of his "borderlands" thesis, North American racism had taken its toll.

Nevertheless, I repeat, *mestizaje* entails an entirely different sociopolitico-economic and cultural sensibility, and until and unless that fact is acknowledged by peoples of non-*mestizo* cultures, whether inside our outside Latin America, there will be little hope of understanding this hybrid mix, let alone of coping with it and merging with it. This most complex hybrid mix is an openness to institutions and realities of everyday living, to the subjectivity of the social actors and the multiplicity of loyalties, to the relations of patronage, paternalism, and so on, that operate simultaneously in Latin America. It is a constant weaving, unraveling, and re-weaving of intricate ties and relations and encounters and elbow rubbing. There are continuities of relations broken by frequent discontinuities, and reconciliations and renew continuities (García Canclini 1995).

In Latin America cultures, uncertainty is the tenuous rule, vagueness finds its way into every nook and cranny, and everything is always already in the incompletable process of becoming in the sense of *semiosic* process, in spite of the persistent hard-line view of Latin America that remains obstinately mired in bivalent logic, in a Manichean mind-set.

References

Agassi, Joseph 1975. Science in Flux. Dordrecht-Holland: D. Reidel.

Agosín, Marjorie 1992. Circles of Madness: Mothers of the Plaza de Mayo. Trans. Kostopulos-Cooperman, C. San Francisco: White Pine Press.

Bateson, Gregory 1972. Steps to an Ecology of Mind. New York: Chandler.

Bolton, Herbert Eugene 1939. Wider Horizons of American History. New York: D. Appleton-Century.

Bourdieu, Pierre 1990. The Logic of Practice. Cambridge: Polity.

Bourdieu, Pierre; Passeron. J.-C. 1977. Reproduction in Education, Society and Culture. London: Sage.

Bouvard, Marguerite Guzmán 1994. Revolutionizing Motherhood: The Mothers of the Plaza de Mayo. Wilmington: Scholarly Resources.

- Brown, James Robert 1991. The Laboratory of the Mind: Thought Experiments in the Natural Sciences. New York: Routledge.
- Certeau, Michel de 1984. *The Practice of Everyday Life*. Berkeley: University of California Press.
- DaMatta, Robert 1991. Carnivals, Rogues, and Heroes: An Interpretation of the Brazilian Dilemma. Trans. Drury, J. Notre Dame: University of Notre Dame Press.
- Fiske, John 1989. Reading the Popular. New York: Routledge.
- Galileo Galilei 1967. *Dialogue Concerning the Two Chief World Systems*. Trans. Drake, S. 2nd ed. Berkeley: University of California Press.
- García Canclini, Néstor 1984. Gramsci con Bourdieu. Nueva Sociedad 71: 45-62.
- 1995. Hybrid Cultures: Strategies for Entering and Leaving Modernity. Trans. Chiappari, C. L.; López, S. L. Minneapolis: University of Minnesota Press.
- Graham, Richard (ed.) 1990. The Idea of Race in Latin America, 1870–1940. Austin: University of Texas Press.
- Hacking, Ian 1985. Styles of scientific reasoning. In: Rajchman, J.; West, C. (eds), *Post-Analytic Philosophy*. New York: Columbia University Press, 145–165.
- Hall, Stuart 1981. Notes on deconstructing "the popular". In: Samuel, R. (ed.), People's History and Socialist Theory. London: Routledge and Kegan Paul, 227-240.
- Hartshorne, Charles 1970. Creative Synthesis and Philosophic Method. LaSalle: Open Court.
- Hempel, Carl 1945. Studies in the logic of confirmation. *Mind* 54: 1–26; 97–121.
- Hesse, Mary 1980. Revolutions and Reconstructions in the Philosophy of Science. Bloomington: Indiana University Press.
- Lotman, Jurij 1977a. The Structure of the Artistic Text. Trans. Vroon, R. (Michigan Slavic Contributions 7.) Ann Arbor: University of Michigan.
- 1977b. Myth name culture. In: Lucid, D. (ed.), *Soviet Semiotics*. Baltimore: Johns Hopkins University Press, 233–252.
- 1990. Universe of the Mind: A Semiotic Theory of Culture. Trans. Shukman, Ann. Bloomington: Indiana University Press.
- Lotman, Ju. M.; Uspenskij, B. A. 1984. The Semiotics of Russian Culture. (Michigan Slavic Contributions 11.) Ann Arbor: University of Michigan.
- Lugones, María 1994. Purity, impurity, and separation. Signs 19(2): 458-477.
- Mallon, Florencia E. 1995. Peasant and Nation: The Making of Postcolonial Mexico and Peru. Berkeley: University of California Press.
- Merrell, Floyd 1995a. Semiosis in the Postmodern Age. West Lafayette: Purdue University Press.
- 1995b. Peirce's Semiotics Now: A Primer. Toronto: Canadian Scholars' Press.
- 1996. Signs Grow: Semiosis and Life Processes. Toronto: University of Toronto Press.
- 1997, Peirce, Signs, Meaning. Toronto: University of Toronto Press.
- 2000a. Change through Signs of Body, Mind, and Language. Chicago: Waveland.
- 2000b. Signs, Science, Self-Subsuming Art(ifacts). Dresden: Thelem.
- 2000c. Tasking Textuality. Peter Lang.

- Mörner, Magnus 1967. Race Mixture in the History of Latin America. Boston: Little, Brown.
- Nakhimovsky, Alexander D.; Nakhimovsky, Alice Stone (eds.) 1985. *The Semiotics of Russian Cultural History*. Ithaca: Cornell University Press.
- Peirce, Charles Sanders 1931–35. Collected Papers of Charles Sanders Peirce. Hartshorne, C.; Weiss, P. (eds.), vols. 1–6. Cambridge: Harvard University Press. [Reference to Peirce's papers will be designated CP]
- 1958. Collected Papers of Charles Sanders Peirce. Burke, A. W. (ed.), vols. 7–8. Cambridge: Harvard University Press.
- Pike, Fredrick B. 1992. The United States and Latin America: Myths and Stereotypes of Civilization and Nature. Austin: University of Texas Press.
- Sebeok, Thomas A. 1991. In what sense is language a "primary modeling system"? In: Anderson, Myrdene; Merrell, Floyd (eds.), *On Semiotic Modeling*. Berlin: Mouton de Gruyter, 327–339.
- Shukman, Ann 1977. Literature and Semiotics: A Study of the Writings of Yu. M. Lotman. Amsterdam: North-Holland.
- Spencer-Brown, G. 1972. Laws of Form. New York; E. P. Dutton.
- Wolf, Eric 1959. Sons of the Shaking Earth. Chicago: University of Chicago Press.

Семносфера Лотмана, категории Пирса и жизненные формы культуры

В статье семнотическое пространство Лотмана соотносится с категориями Пирса. Отдельные формы манифестации семиотического пространства культуры в семиосфере могут, в зависимости от контекста культуры, описываться как противоречивые и/или неполные. Противоречивость и неполнота соотносятся по своему характеру соответственно с сверхдетерминированностью и недодетерминированностью, которые, в свою очередь, могут описываться соответственно посредством неопределенности и общепризнанности. Первая из них по своему характеру связана с категорией Первичности, вторая с категорией Третичности. Роль Вторичности — выделить возможности Первичности: определить это и то, тут и там, теперь и тогда и, исходя из этого, определить и все остальные различия. С точки зрения семиотического пространства культуры Вторичность делает возможным возникновение гегемонии, отношений доминирования и подчинения, суперординации и субординации. Интерпретируя Вторичность таким образом, мы можем сверхдетерминированность и недодетерминированность характеризовать соответственно как гомогеничность и гетерогеничность. Исходя из этих теоретических предпосылок рассматриваются многие существенные моменты в культурах Латинской Америки.

Lotmani semiosfäär, Peirce'i kategooriad ja kultuuri eluvormid

Artiklis seostatakse Lotmani semiootiline ruum Peirce'i kategooriatega. Kultuuri semiootilise ruumi teatud avaldumisvormid semiosfääris on, kultuurikontekstist sõltuvalt, kirjeldatavad kui vastuolulised ja/või mittetäielikud. Vastuolulisus ja mittetäielikkus sarnanevad oma iseloomult vastavalt üledetermineeritusele ja aladetermineeritusele, need on omakorda kirjeldatavad vastavalt ebamäärasuse ja üldkehtivuse kaudu. Esimene neist on oma iseloomult seotud Esmasuse, teine aga Kolmasuse kategooriaga. Teisesuse roll on eristada Esmasuse võimalikkused: määratleda see ja too, siin ja seal, nüüd ja siis ning kõik ülejäänud nendest järelduvad eristused. Kultuuri semiootilise ruumi seisukohast teeb Teisesus seega võimalikuks hegemoonia tekke, domineerimis- ja alluvussuhted, superordinatsiooni ja subordinatsiooni. Teisesust niimoodi tõlgendades saame me üledetermineeritust ja aladetermineeritust käsitleda vastavalt kui homogeensust ja heterogeensust. Nendest teoreetilistest eeldustest lähtudes vaadeldakse seejärel mitmeid olulisi momente Ladina-Ameerika kultuurides.

Семиотика культуры и феноменология страха (к постановке проблемы)

Михаил Лотман

Dept. of Semiotics, University of Tartu Tiigi St. 78–310, Tartu 50410, Estonia e-mail: mihhail@ehi.ee

Abstract. The semiotics of culture and the phenomenology of fear. In the paper fear is treated as semiotical phenomenon. The semiotical speciality of fear is that while being a strong semiotical factor, its semiotical nature is often overshadowed and fear is treated proceeding from the scheme of stimulus-reaction. In the paper fear is analysed in the context of both Peirce's semiotics and Saussure's semiology and it will be demonstrated that these approaches allow to open up different aspects of fear: while in Peircean perspective frightful evokes fear, then proceeding from the Saussure's approach we could say that fear creates the frightful, fear appears to be creative; we could even speak of fear as semiosis.

0.1 Опасности, подстерегающие исследователя, занимающегося проблемами семиотики страха в культуре, образуют широкий спектр, располагающийся между полюсами метафоризма и редукционизма. Впрочем, нередко эти противопложности сходятся и метафорическая трактовка знаковых процессов в культуре сочетается с публицистической прямолинейностью выводов. Позволю себе воспоминание личного характера. После просмотра "Соляриса" Тарковского, заканчивающегося сентенцией о том, что спасение не в страхе, а в стыде, не имеющей прямого аналога в

¹ Настоящая публикация представляет собой вводные части исследования семиотических механизмов страха в русской культуре, первый вариант которого был зачитан на конференции "Sémiotique de la peur dans la culture et la litérarure russes", в Сорбонне (Париж IV), 27.03.2001.

повести С. Лема, но демонстрирующую несомненное знакомство с публикацией о семиотических механизмах стыда и страха (Лотман 1970), Ю. М. Лотман был одновременно и польщен, и смущен, поскольку интерпретация его концепции в качестве глобального проекта спасения человечества представлялась ему опасным упрощением.

Наиболее разработанные подходы к проблеме страха предложены в рамках философских и психологических (в первую очередь — психоаналитических²) исследований. Закономерные, по-видимому, в рамках соответствующих дисциплин, они с точки зрения семиотики культуры представляются одновременно и редукционистскими, и метафорическими, поскольку нередко основываются на механическом перенесении характеристик, приписываемых отдельным личностям, на всю систему культуры в целом. Существует очевидная опасность использования семиотической терминологии лишь для "декорации" соответствующих построений. Во всяком случае, автор настоящей работы не готов обсуждать проблемы соотношения страха бытия и страха небытия в русской культуре (например, интересного, но никак не проверяемого мнения, что в отличие от "нормального" страха небытия, в русской культуре преобладает страх бытия), или рассуждать о кастратическом комплексе, якобы присущем русским в особой мере³. Хотя нельзя не отметить, что в страхе бытия и кастратическом комплексе может быть выявлено некое общее

² Традиционный психоанализ связывает страх, в первую очередь, не с агрессией, а с неудачами и аномалиями в сексуальной сфере (характер связи при этом варьируется: в одних вариантах неудачи являются причинами страха, в других — его следствиями); страх противопоставлен удовольствию. Для целей культурологического анализа более продуктивным представляется юнгианский подход к страху как к результату неосознаваемого узнавания образов собственного или коллективного бессознательного.

³ В подтверждение этого мнения можно встретить ссылки на скопчество — явление, столь же в мировой культуре уникальное, сколь и характерное именно для русской культуры. Представляется, однако, что типичность и распространенность скопчества сильно преувеличивается — оно носило маргинальный характер. Когда же, например, русская революция и весь коммунистический проект трактуется в терминах коллективного самооскопления, то эту трактовку следует признать сугубо метафорической, причем предлагаемая метафора ничуть не лучше любых других. Кроме того, следует иметь ввиду, что скопчество не выводится непосредственно из кастратического комплекса (во всяком случае из его трактовок у классиков психоанализа). Скорее всего, здесь дело опять-таки идет лишь о манипуляциях со словами, а не о реальном анализе механизмов глубинной психологии.

основание, совершенно непонятно, как такого рода утверждения могут быть эмпирически проверены — в отличие от человека, культуру нельзя уложить на кушетку психоаналитика.

1. Прежде чем говорить о семиотике страха вообще, не говоря уже о семиотике страха в какой-либо конкретной (например, русской) культуре, следует задасться вопросом, является ли страх знаковым образованием, или, по крайней мере, обладает ли он семиотической спецификой; иными словами, может ли страх считаться "законным" объектом семиотического рассмотрения 1. Ответ на этот вопрос совсем не очевиден.

Поучительно в этом смысле обратиться к истории становления оппозиции *смешное/страшное*, в современных обществах, являющейся чуть ли не культурной универсалией, однако неизвестной многим архаическим культурам — трагедия всегда старше комедии. Оппозиция эта явно асимметрична, ее члены обладают принципиально различной природой. Если юмор присущ лишь человеку и может быть в какой-то мере некоторым высшим приматам, то страх является одной из базовых эмоций у животных всех видов, способных испытывать эмоции. Не вдаваясь в детали теории юмора, можно утверждать, что смешное возможно лишь на фоне страшного⁵, в то время как страшное в смешном не нуждается, оно, по-видимому, коренится в инстинк-

³ Подчеркнем, что речь идет о смешном лишь в контексте оппозиции *смешное/страшное*; принципиально иной характер смешного обнаруживается в оппозиции *смешное/серьезное*.

⁴ Хочется дистанцироваться от сравнительно распространенной точки зрения, высказывавшейся, например У.Эко и рядом французских исследователей, согласно которой семиотика (подобно, например, философии) характеризуется не особым предметом, но исключительно методами исследования, и поэтому она с равным успехом может рассматривать как знаковые, так и незнаковые по своей природе феномены: знаковость не дана а priori, но есть результат семиотического анализа.

Семиотика — эмпирическая дисциплина, занимающаяся рассмотрением структуры, семантики и условий функционирования различных знаковых образований. Действительно, подобно тому, как любое взаимодействие физических тел может рассматриваться с точки зрения действия закона всемирного тяготения, и семиотический аспект можно выделить в каких угодно явлениях и процессах; тем не менее, в столкновении космических тел и соприкосновении танцоров балета соотношение гравитационных и знаковых механизмов является принципиально различным. Если страх удастся свести лишь к комплексу психо-физиологических факторов, то о культурологии или семиотике страха можно будет говорить лишь в метафорическом смысле.

тах (например, в инстинкте самосохранения; по Хайдеггеру страх связан с самой основой бытия 6). Далее, хотя юмор и не сводим к рациональным схемам, многие его формы "замешаны" на логике, другие же тесно связаны с языком и т.п.; на этом фоне особенно заметна внелогичность и бессловесность страха⁷. Показательно и то, как оппозиция смешное/страшное нейтрализуется. Наиболее распространенной схемой представляется редукция страшного в смешное, причем дело может идти как о нейтрализации страха юмором, так и о смехе как результате разрядки страха, причем сопровождается это всегда какой-либо формой рационализации последнего (по крайней мере его вербализацией и, как правило, также нарративизацией), прояснением ситуации (по принципу: "когда поняли, что это было на самом деле, долго смеялись"). Значительно реже наблюдается противоположный процесс перехода смешного в страшное, причем в таких случаях дело всегда идет о дерационализации, примитивизации и автоматизации смеха, отделении смеха от юмора (например, у Гоголя, Салтыкова-Щедрина или Леонида Андреева). Еще важнее то обстоятельство, что юмор имеет выраженную культурную окрашенность, часто — национальную специфику, в то время как о страхе этого сказать с такой же степенью определенности никак нельзя.

Итак, словосочетание 'семиотика страха' представляет собой по меньшей мере проблему, даже целую совокупность проблем: (*) Является ли страх знаком? Если да, то, во-первых, какова

семиотическая специфика этого знака; во-вторых, что

7 Ср: "Ужас перебивает в нас способность речи. Поскольку сущее в целом ускользает и надвигается прямое Ничто, перед его лицом умолкает всякое говорение с его "есть" (Хайдеггер 1993: 21). Т.о. по Хайдеггеру страх отностится к до- или внезнаковой сфере. Трактовка страха как тяги к изначальному Ничто близка Мандельштамовской формулировке: "Паденье — неизменный спутник страха, И самый страх есть чувство пустоты" (1912).

⁶ В русском переводе говорится не о страхе, а ужасе (например, Хайдеггер 1993: 20 и след.); для наших целей разграничение страха и ужаса не представляется существенным, тем более, что хайдеггеровское противопоставление страха и ужаса может быть передано по-русски и используемой нами оппозицией испуг/страх. Следует также учитывать, что Хайдеггер выступает здесь в качестве последователя Кьеркегора, а в переводах последнего говорится именно о страхе; ср. хотя бы следующие пассажи, по духу весьма близкие Хайдеггеру: "Ничто. Но какое же воздействие имеет ничто? Оно порождает страх" (Кьеркегор 1998: 143). "Если мы теперь спросим, каков объект [...] страха, здесь как и прежде придется ответить, что таким объектом является Ничто. Страх и Ничто постоянно соответствуют друг другу" (Къеркегор 1998: 191).

- является его значением и, в третьих, какого рода объекты обозначаются этим знаком?
- (*) Если же страх не знак, а значение, то, во-первых, что является знаком этого значения, а, во-вторых, обладает ли это значение какой-либо спецификой?
- (*) Если страх не знак и не значение, а следствие некоторой знаковой деятельности⁸, то что это за деятельность и как страх связан с ней?
- (*) Является ли страх кодом или сообщением? Можно ли говорить, о языке, дискурсе и тексте страха?

Все эти вопросы должны быть если не разрешены, то по крайней мере осознаны и сформулированы, в противном случае все рассуждения о семиотике страха могут оказаться беспредметными. Прежде, чем пытаться ответить на поставленные вопросы, следует хотя бы самым поверхностным образом остановиться на некоторых проблемах семиотической теории.

2. Семиотика. Существует две основные семиотические традиции, первая из них восходит к идеям Ч. С. Пирса, вторая — Ф. де Соссюра. Различия между этими традициями представляются столь значительными, что в настоящее время не приходится говорить не только о каких-либо перспективах синтеза между ними, но и о возможности простого взаимопонимания между исследователями, работающими в рамках соответствующих парадигм. Недоразумения начинаются уже в сфере базовой терминологии: Соссюр говорит не о семиотике, а семиологии. Мы будем считать эти термины синонимичными, несмотря на то, что рядом авторитетных авторов (назовем хотя бы Э. Бенвениста и П. Рикёра) предлагались различные варианты их содержательного разграничения. Еще хуже то, что различные явления обозначаются одним термином. Наиболее разительный пример — понятие знака: обычно не обращается внимание на то, что Пирс и Соссюр обозначают этим словом не просто различные, но даже несопоставимые вещи. Основная проблематика пирсовской семиотики не уловима для соссюрианского подхода; проблемы же, волновавшие Соссюра и его последователей, подчас бывает трудно даже сформулировать в пирсовских терминах (наиболее добросовестная попытка такого рода содержится в ряде работ

⁸ Т.е. можно ли в духе теории речевых актов говорить о локутивности, иллокутивности и перлокутивности страха, рассматриваемого в качестве акта?

Р.О.Якобона, но и она в конечном счете сводится к низложению Соссюра и утверждению Пирса); основные семиотические традиции оказываются взаимонепереводимыми. Поскольку в ходе дальнейшего изложения нам придется прибегать как к пирсовсой, так и соссюрианской терминологии, необходимо по этому поводу дать хотя бы самые краткие разъяснения.

2.1. Пирсовская традиция и проблематика страха. Для Пирса семиотика является новой логикой, включающей и новую систему универсальных категорий, и новую эпистемиологию, и новую методологию науки — вся система знаний имеет по Пирсу знаковый характер. Поэтому в знаках его интересовала в первую очередь их познавательная функция, природа значения, условия становления и функционирования знаков и знаковых образований. Из многочисленных определений знака, данных Пирсом, наиболее широкой известностью пользуется следующее:

Знак, или penpeзенmaмен, это нечто, что обозначает что-либо для кого-нибудь в определенном отношении или объеме (2.228; курсив автора)⁹.

Семиотику Пирса можно назвать субститутивной: знак есть нечто, заменяющее и репрезентирующее нечто иное. При этом знак, взятый сам по себе, а priori не обладает никакими признаками знаковости; знаком делает его лишь совокупность отношений с остальными компонентами семиозиса. Семиозис есть система из четырех неизвестных: знак (первое нечто), репрезентируемый им объект (второе нечто), интерпретанта (некий объем или отношение, в котором знак репрезентирует объект) и интерпретамор (кто-нибудь). Семиотика Пирса имеет открытый и экстенсивный характер: интерпретанта знака сама является знаком (знак "адресуется кому-то, то есть создает в уме человека равноценный знак или, возможно, более развитый знак" 2.228), этот созданный знаком знак, в свою очередь, сам обладает интерпретантой (которая опять-таки является знаком) и т.д. Любой объект может стать знаком, любой знак может быть объектом для

⁹ В формулировке оригинала репрезентативная сущность знака проступает сще более отчетливым образом (речь идет не об обозначении, а именно о замещении): "Sign [...] is something which *stands to* somebody *for* something in some respect or capacity" (Peirce 1965-1967: 2.228; курсив мой — M.Л.).

некоторого иного знака, любой интерпретатор может выступать как в роли знака, так и объекта для какого-либо знака.

Вообще говоря, введение интерпретатора нарушает основывающуюся на триадичности логику построений Пирса; в других определениях знака Пирс обходится без него (ср. 2, 274; 6, 177; ср. также 5.484, где Пирс определяет семиозис как систему взаимоотношений между репрезентаменом, объектом и интерпретантой). Сам термин 'интерпретатор' был предложен позже Ч. У. Моррисом, который существенно пересмотрел пирсовскую концепцию: ввел пятый параметр семиозиса — контекст, а объект заменил на значение (вероятно, не без влияния идей Г. Фреге 10).

Семиозис (или знаковый процесс) рассматривается как пятичленное отношение — V, W, X, Y, Z, — в котором V вызывает в W предрасположенность к определенной реакции (X) на определенный вид объекта (Y) [...] при определенных условиях (Z). В случаях, где существует это отношение, V есть $\mathit{знак}$, W — $\mathit{uhmepnpemamop}$, X — $\mathit{uhmepnpemamma}$, Y — $\mathit{зhavehue}$ [...], а Z — $\mathit{контекст}$, в котором встречается знак. (Моррис 1983, 119)

Причины, побудившие Морриса пересмотреть определение Пирса, вполне очевидны: его интересовала не столько чистая теория знаков, сколько ее возможные приложения в сфере психологических и социальных наук; проигрывая в теоретическом плане пирсовскому, в практическом отношении для анализа культурных феноменов его трактовка знака и семиозиса оказываются более удобными.

Каждый из компонентов семиозиса определяет точку зрения, с которой могут быть рассмотрены различные знаковые феномены; если обратиться к страху, то соответствующие аспекты могут быть выделены примерно следующим образом:

(*) в аспекте V страх может рассматриваться как совокупность различных его признаков, симптомов и обозначений (которые сами по себе могут вовсе и не быть страшными);

¹⁰ Фреге различает знак, его *смысл* и *значение*: значение знака — это "определенный предмет", в то время как его смысл — это способ представления значения в знаке. "Мы выражаем некоторым знаком его смысл и обозначаем им его значение" (Фреге 1997: 30). В пирсовской терминологии смыслу соответствует интерпретанта, значение — объекту; с точки зрения де Соссюра и его последователей смыслу соответствует означаемое знака, значению — вещь (ср. ниже).

- (*) в аспекте W субъект, испытывающий страх; если его "предрасположенность к определенной реакции", является чрезмерной, то он имеет шанс быть названым трусом, если недостаточной храбрецом или безумцем в зависимости от Z;
- (*) в аспекте *X* выявление и фиксация страшных сторон в *Y*, причем, сами рассматриваемые объекты совершенно необязательно должны быть опасными а priori, напротив они могут носить нейтральный характер (так, страх может быть интерпретантой не только хищника или бандита, который атакует интерпретатора, но и, например, результатом химического анализа состава почвы, воздуха или воды; именно такого рода страхами порождено экологическое мышление), или даже чем-то милым (распространенный сюжет в литературе и кинематографии ужаса: игрушка или любимое домашнее животное, становящиеся опасными врагами);
- (*) в аспекте У объекты и действия, вызывающие страх; при этом не имеет значения, идет ли дело о рационально оцениваемых реальных опасностях, или о фобиях, порождаемыми мнимыми опасностями;
- (*) в аспекте Z предметом рассмотрения становятся условия, в которых имеет место страх; особый интерес представляют случаи, когда именно контекст определяет, что является страшным, а что нет (в одиночестве зарождаются одни страхи, в толпе принципиально иные).

Очевидно, что с точки зрения семиотики культуры наибольший интерес представляют аспекты X и Z.

2.1.1. Пирс уделяет много внимания классификации знаков, особое значение имеет его "вторая трихотомия знаков": знаки разделяются на иконы, индексы и символы (2, 247). Не будем воспроизводить логику пирсовской классификации — она довольно сложна и исследователями, чуждыми данной традиции, нередко оценивается с пренебрежительным непониманием 11, — для наших целей достаточно упрощенной трактовки. Икон похож на объект, субститутом которого он является (2.276), следовательно, вызывающий страх иконический знак сам должен быть

¹¹ Ср. характерный вердикт Э.Бенвениста: "Эта трихотомия — почти все, что осталось сегодня от сложнейших логических построений" (Бенвенист 1974; 69–70).

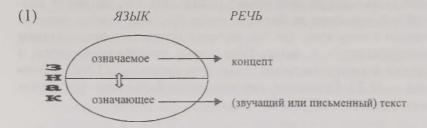
страшным в силу своего сходства со страшным объектом. Индекс основывается на реальной связи знака и объекта, в силу которой знак указывает на свой объект (2.285–288), так, например, волчий вой указывает на близость волка. Наконец, символ является знаком в силу того, что "он является правилом, определяющим интерпретанту", и далее: "Все слова, предложения, книги и другие конвенциональные знаки суть символы" (2.292; курсив мой — M.Л.). Символический знак может быть связан со страхом в силу условностей различного рода.

2.2. Соссюровская семиология и проблема страха. В отличие от Пирса, Соссюр не только не создает универсальной системы, но и какой-либо законченной системы вообще (дело не только в том, что он не успел прочитать объявленный курс лингвистики речи, а прочитанные части не готовил к печати, а в самом характере его Курса — даже наиболее разработанные его фрагменты представляют собой теоретические конструкты, скорее иллюстрируемые, чем систематически разработанные). Если Пирс стремиться дать своим последователям готовый инструмент, и авторы, работающие в рамках пирсовской парадигмы, в основном заняты либо исследованиями его творчества, либо приложением его идей ко все новым объектам анализа, то Соссюр лишь указывает направление дальнейших поисков, а наиболее значительные результаты, полученные в рамках соссюровского направления, были связаны как раз с полемикой и опровержением едва ли не всех основных положений, выдвинутых великим швейцарцем.

Соссюр разделяет языковую сферу (langage) на собственно язык (langue) и речь (parole). В этом разграничении наиболее существенными представляются два обстоятельства: во-первых, язык является абстрактной системой, воплощаемой в речи, причем в последней лингвистический интерес представляет лишь то, как и в какой мере она реализует структуру языка, 12 во-вторых, только язык является системой знаков. Последнее кажется особенно парадоксальным: произносимые и воспринимаемые речевые сигналы (не только отдельные звуки, но и целые фразы) сами по себе знаками не являются, они лишь репрезентируют

 $^{^{12}}$ Соссюр заявляет об этом со всей категоричностью: "Что касается прочих элементов речевой деятельности, то наука о языке <как раздел семиологии — M.J. > вполне может обойтись без них" (Соссюр 1977: 53).

знаки языка. Сказанное может быть представлено в виде следующей схемы¹³:



Непосредственных связей между понятийной сферой и речевой субстанцией не существует, их связывает лишь то, что в них реализуется языковой знак. Мы еще вернемся к обсуждению этого положения, пока же отметим, что центральное место в этой схеме принадлежит отношению, связывающему означаемое и означающее знака (впоследствие Л. Ельмслев назовет его знаковой функцией). Хотя обычно в соссюровской традиции термин 'семиозис' не употребляется, можно сказать, что именно знаковая функция составляет основу знакообразования, т.е. семиозиса. Такой семиозис может быть назван внутренним, в отличие от пирсовского внешнего.

По Соссюру, связь между означаемым и означающим носит исключительно произвольный (арбитрарный) характер, никакой естественной мотивировки у этой связи нет (Соссюр 1977: 100–102); с другой стороны, она обладает известной обязательностью, во всяком случае, когда дело идет о естественном языке, "человек не властен внести даже малейшее изменение в знак" (101); аналогичную обязательность Соссюр обнаруживает и в знаках других семиотических систем: в пантомиме, в этикете. Это положение даже у самых верных последователей Соссюра неоднократно вызывало недоумение и не раз объявлялось просто

¹³ Любопытная деталь: хотя Пирс постоянно использует термины, имеющие визуальные коннотации (диаграммы как специальная разновидность знака и т.п.), сам он за редкими исключениями (например, в статье "Как сделать наши идеи ясными" (5.388–410)) иллюстрациями не пользуется, предпочитая обстоятельные, постоянно уточняемые формулировки; напротив, Соссюр любит свои подчас расплывчатые рассуждения иллюстрировать схемами и рисунками. При этом, в теории Пирса важное место занимают *иконические* знаки, в то время как в центре внимания Соссюра находятся исключительно знаки арбитрарные.

ошибочным, поэтому важно разобраться в логике соссюровского построения.

Философской базой Соссюра — никогда не заявляемой и, вероятно, не осознаваемой, но вполне определенной — является платонизм, причем платонизм в строгом варианте¹⁴ (хотя и не всегда последовательно проводимый): язык — это идея, все его воплощения в речи — лишь бледные и аморфные тени. Странное утверждение Соссюра — между прочим, автора блестящих идей в области исторической лингвистики — о неизменности языка во времени и пространстве объясняется именно тем, что язык находится вне времени и пространства. Всякие инновации, изменения в значении и/или звучании — суть факты не языка, но речи; если же они утверждаются в качестве нормы, следует говорить не об изменении знака, но о другом знаке (столь же произвольном и обязательном как и все прочие знаки), причем бессмысленно рассуждать о том, который из этих знаков старше — можно лишь зафиксировать факт, что в речи один из них был реализован раньше другого.

Традиционному понятию значения, выступающего по отношению к знаку в роли чего-то внешнего и в той или иной степени навязанного, Соссюр противопоставляет понятие внутренней значимости (valeur), определяемое как совокупность внутрисистемных отношений, в которые вступает тот или иной элемент языка: каждый элемент языковой системы возможен лишь в силу того, что он отличается от всех прочих элементов. Совокупность этих различий и образует язык.

В языке нет ничего, кроме различий. [...] В языке имеются только различия без положительных членов системы. Хотя означаемое и означающее, взятые в отдельности, — величины чисто дифференциальные и отрицательные, их сочетание есть факт положительный (Соссюр 1977: 152–153).

Языковой знак является частью языковой системы, он связан многочисленными отношениями с другими знаками, более того, именно совокупность этих связей и определяет его в качестве знака. Таким образом, Соссюр приходит к очередному парадоксу: означаемое языкового знака не мотивируется его означающим и

¹⁴ Сам Платон в посвященном природе языкового знака диалоге "Кратил" значительно менее категоричен.

vice versa, но языковой знак, взятый как целое, мотивируется всей структурой языка (Соссюр 1977: 146–148). Итак, с соссюрианской точки зрения атомарный анализ отдельных знаков — занятие малопродуктивное, нужно анализировать всю знаковую систему в целом¹⁵.

Сказанное представляется особенно актуальным, когда дело идет о невербальных знаковых системах, или системах, надстраивающихся над вербальным языком. Таковы, например, языки различных искусств, но также языки мифов, сновидений и т.п. Одной из важных заслуг психоанализа является трактовка сновидений в качестве сообщений на определенном языке, названном не вполне удачно (из-за возможных ассоциаций с пирсовской терминологией) символическим, а также сближение этого языка с языком мифов и некоторых неврозов (Фрейд 1991, Фромм 1994). Символический язык далек от естественного языка и от языка формальной логики, он не подчиняется законам причинности и пространственно-временных отношений; место внешней логики и основанного на здравом смысле правдоподобия занимает внутренняя логика семантического развертывания концептуальных комплексов, место упорядоченности во времени и пространственной локализации — интенсивность связи (не обязательно смысловой, возможно и звуковой — ср. внимание Фрейда к оговоркам, каламбурам и т.п. — соссюровское понятие знака "работает" здесь явно лучше пирсовского): т.е. чем теснее связаны между собой элементы этого языка, тем ближе друг к другу они располагаются в тексте 16.

Теперь следует задасться вопросом, нет ли и у страха специфического языкового измерения? В свете сказанного на этот вопрос, вероятно, следует ответить положительно: вопреки Хайдеггеру, страх не только лишает происходящее смысла, но и является исключительно интенсивным генератором смысловых связей; правильнее было бы сказать, что страх уничтожает рациональные связи, но тем более властными выступают иные, им самим и создаваемые. Язык страха ближе к языку сновидений, чем к естественному (вербальному) языку, не случайно, что

¹⁵ Позже аналогичные рассуждения приведут В. Проппа к созданию концепции внутрисистемных функций, инвариантных по отношению к их реализациям в различных текстах.

¹⁶ Описанная Фрейдом логика сновидений оказывается близкой выявленным Л. Леви-Брюлем закономерностям "первобытного мышления", основанном на принципе партиципации (Леви-Брюль 1930).

скрытые страхи отчетливее проступает во сне, чем наяву; нередко страхи легче переводятся в визуальные образы, чем вербализуются и, подобно сновидениям, страхи в результате вербализации если не уничтожаются, то во всяком случае могут существенно смягчаться (это не касается страхов, вызываемых конкретными объектами или ситуациями — страх высоты или пауков уговорам практически не поддается).

О страхе можно говорить не только как о языке, но и как специфическом механизме семиозиса, но не в пирсовском "субститутивном" смысле, а в духе соссюровской семиологии: страх может выполнять знаковую функцию, связывать между собой означаемое с означающим, соединять различные знаки в сложные комплексы¹⁷.

2.3. Выводы. Итак, важнейшее различие в трактовке знака у Пирса и у Соссюра заключается в том, что у Пирса знак репрезентирует нечто иное, в то время как у Соссюра сам знак репрезентируется в принципиально от него отличной субстанции. Представляется, что дело не сводится здесь лишь к концептуальным различиям, основоположники современной семиотики имеют ввиду не только различные подходы к знакам, но и различные знаки: с одной стороны, произвольные объекты, в силу обстоятельств оказавшиеся знаками, и знаки раг excellence, каковыми, к примеру, являются слова естественного языка.

В ряде других принципиальных отношений соссюровская семиотика также существенно отличается от пирсовской. В противоположность пирсовской субститутивной семиотике, семиотику Соссюра можно назвать билатеральной: (языковой) знак есть неразрывное единство означаемого с означающим, а не субститут чего-то вне него находящегося. Далее, в противо-

¹⁷ Разумеется, страх является лишь одним из многочисленных механизмов такого рода. Ср. публикации В. П. Руднева о травматическом характере смыслообразования и его остроумные разработки (Руднев 1999а, 1999б и др.). Думается, однако, что сводя всю сферу смысла к травматизму, автор искусственно сужает проблему. Поэтому и заключительный вывод его статьи нуждается в определенной корректировке. В. П. Руднев пишет:

Культура семиотична и с этой точки зрения она действительно "бессмысленна", но кроме нее никаких иных путей к смыслу мы не имеем (Руднев 1999в: 168).

Если культура бессмысленна, а смысл травматичен, то культура должна быть признана атравматичной — вывод, с которым едва ли согласится и В. П. Руднев.

положность пирсовской семиотике, соссюровская семиология носит замкнутый и интенсивный характер. Пирс пытается втянуть в семиотку как можно более широкий круг явлений, Соссюр же тщательно расчищает площадку будущей науки, его семиология носит принципиально минималистский и системный характер. Системны не только внутризнаковые отношения, еще важнее системность межзнаковых отношений, каждый знак характеризуется не только соотношением его означаемого с означающим, но и внутрисистемной значимостью, определяемой всей совокупностью его отношений с другими знаками языка.

С одной стороны, понятие представляется нам как то, что находится в отношении соответствия с акустическим образом внутри знака 18, а с другой стороны, сам этот знак, то есть связывающее оба его компонента отношение, также и в той же степени находится в свою очередь в отношении соответствия с другими знаками языка (Соссюр 1977: 147; ср. также с. 164–166).

Пирса интересует функционирование отдельных знаковых образований (как отдельных знаков, так и целых текстов), в то время как в центре внимания Соссюра находится язык, как генератор таких образований. С точки зрения соссюровской семиологии почти все, чем занимается Пирс, лежит не в сфере языка, а в сфере речи. Высказывалось мнение (особенно энергично — Р. О. Якобсоном), что в то время как Пирс исследует знаки во всем их многообразии, Соссюр, пренебрегая иконами и индексами, пытается все свести к символам. Дело, однако, в том, что и соссюровский конвенциональный знак не может быть идентифицирован с пирсовским символом. Вся пирсовская типология знаков строится на базе соотношения знака с его объектом; его семиозис — это семиозис речевого акта. У Соссюра же языковой знак реализуется в речи. Характер этой реализации Соссюром не раскрыт, это сделали его ученики и последователи: III. Балли и

¹⁸ Чтение Соссюра затрудняет аморфность его неустоявшейся терминологической системы, особенно же употребление в его лекциях, в целом антипсихологических по своей направленности, терминов, заимствованных именно из психологии. Так, он неоднократно говорит о языковом знаке, как о единстве понятия и акустического образа и т.п. Вместе с тем, его концепция знака далека от какого бы то ни было психологизма: ср. хотя бы его рассуждения о том, что язык организует мыслительную деятельность, а не наоборот, что нет понятия вне акустического образа и vice versa (Соссюр 1977: 144–150); зато его термины 'означасмое' и 'означающее' как нельзя лучше передают самое существо дела.

Э. Бенвенист. Она заключается, грубо говоря, в следующем: если знаки языка строятся по принципу их исключительно внутриязыковой мотивированности (и, следовательно, абсолютной немотивированности внешними обстоятельствами), то в речи знаки, напротив, постоянно соотносятся с самыми различными факторами, характеризующими речевой акт: с его временными и пространственными параметрами, субъектом и предметом речи и т.п., — знаки речи являются (внешне) мотивированными: мотивированность кодом определяет их символизм, мотивированность условиями речевого акта ("я", "здесь", "сейчас" Бенвениста) — индексальность, сходство с предметом речи — иконизм. Именно поэтому в речи следует говорить не о иконических, индексальных и символических знаках в чистом виде, а о соответствующих составляющих знака. Следует указать, что аналогичные результаты были получены не только в лингвистике; в рамках логико-философской аргументации к аналогичным выводам пришел Е. Пельц, с точки зрения которого корректнее говорить не об иконическом знаке, а об иконическом употреблении знака (Pelc 1986), т.е. иконичность возникает в результате определенной реализации знака, который сам по себе иконом не является. Очевидно, что mutatis mutandis это же справедливо и относительно индекса и символа — все они являются знаками речи, а не языка.

Итак, принципиальное отличие пирсовской семиотики от соссюровской семиологии заключается в том, что в центре внимания первой находятся явленные знаки, сфера семиотики культуры предстает совокупностью так наз. "текстов культуры", в то время как вторая занимается исключительно системами знаков, а семиотика культуры предстает системой культурных кодов. Принципиально различными представляются и возможные подходы к страху. Если в пирсовской перспективе страх может включаться в семиозис в качестве одного из компонентов, то соссюровский подход дает возможность говорить о креативности страха, о самом страхе как специфической форме семиозиса. Грубо говоря, если в пирсовской семиотике страх вызывается страшным, то в соссюровской — страшное создается страхом.

3. Ситуация страха. Как идущая от Кьеркегора и Хайдеггера философская традиция, так и психоанализ стремятся вывести страх за пределы сознания и логики, представить его порождением Ничто, глубин подсознания или коллективного бессознательного. Страх страшен и, одновременно, притягателен, причем притягательность делает его, в свою очередь, еще страшнее ¹⁹. Нашей задачей является если не победа над страхом ("окончательная" победа над страхом невозможна в принципе), то примирение с ним, поиск возможностей сосуществования со страхом в этом страшном мире. На этом захватывающем фоне предлагаемая нами трактовка выглядит сугубо прозаической и, если так можно выразиться, безопасной: анализ страха не обязан быть устрашающим.

Следует подчеркнуть, что представляется совершенно очевидным, что страх обладает целым рядом положительных функций: предупредительной, сдерживающей, познавательной и даже успокаивающей (ср. любовь Розанова к страху "с моим страхом мне не страшно"), поэтому всякие попытки его априорной демонизации представляются не слишком продуктивными. Страх становится негативным фактором лишь в тех случаях, когда он перерастает сигнальную функцию и приобретает самодовлеющий характер, заслоняет собой опасность, затрудняет адекватно ее оценить и адекватно на нее реагировать; в таких случаях страх сам становится фактором, усиливающим опасность, а подчас и главной опасностью.

Предметом рассмотрения в данном параграфе является не сам страх, взятый как переживание, а лишь феномен страха, описываемый и классифицируемый извне как *ситуация страха*. Поэтому, например, мы предпочитаем говорить не о причинах страха, но лишь о его источниках; это позволяет нам абстрагироваться не только от обсуждения психологических механизмов, но и от проблемы причинности: порождает ли некий объект страх или же сам он является порождением страха.

Источником страха является опасность; в наиболее общем виде страх может быть определен в качестве реакции на опасность. Заметим, что заранее не накладывается никаких ограничений на характер опасности, ее источник и т.п.: опасность может быть мнимая, результатом проекции внутренних характеристик субьекта вовне и т.п.; опасность, наконец, может быть

¹⁹ Амбивалентность страха — осознаваемое отталкивание от предмета страха и подсознательное влечение к нему — была выявлена уже Фрейдом (Фрейд 1991а, ср. также главы "О природе страха" и "Феноменология страха" в Левицкий 1995: 220–238).

²⁰ Ср., например, замечание Э.Фромма, что лишь благодаря смертельному страху герой Кафки смог увидеть подлинные ценности жизни (Фромм 1998: 470).

предположительной: "если я сделаю то-то, то может случиться то-то" и т.п.

- 3.1. Имперсональная опасность. Простейшая из связанных со страхом ситуаций состоит из трех компонентов: субъекта, воспринимаемой им опасности и собственно страха, как результата этого восприятия:
- (2) $O\Pi ACHOCT \rightarrow CYF \rightarrow CTPAX^{21}$

Несмотря на кажущуюся элементарность, эта схема предлагает ряд вариантов, обусловленных как природой субъекта (индивид или коллектив), природой опасности, так и возникающих страхов. Первое и, вероятно, с семиотической точки зрения наиболее существенное разграничение определяется временной соотнесенностью опасности и порождаемой ею страха:

- (а) страх, как реакция на уже произошедшее событие;
- (b) страх, предваряющий еще не произошедшее событие.

Думается, что различие это имеет фундаментальный характер; оно затрагивает не только временной фактор, но и субъективный: в случае (а) событие является, как правило, для субъекта неожиданным, в то время, как в случае (b) не только будущая опасность, но и само ее ожидание является фактором, по крайней мере потенциально служащим умножению страха. Во многих языках различие этих форм страха закреплено терминологически; так по-русски в первом случае говорится, как правило, не о страхе, а испуге. Испуг — эмоция того же типа, что и ощущение холода при соприкосновении с холодным предметом, боли от удара и т.п. — это естественная реакция на определенный

²¹ Может показаться, что существуют еще более элементарные ситуации: совершенно беспричинные страхи, страхи без опасности, например, страх ответственности и т.п. Представляется, что здесь следует различать структуру сигуации и ее вербальную формулировку. Так, страх ответственности может обозначать две принципиально различные вещи: страх перед последствиями за свои (конкретные) действия или бездеятельность и внутренний дискомфорт, испытываемый субъектом, принимающим решения, безотносительно к их результату. В первом случае мы имеем дело с обычной ситуацией типа (2), где последствия деятельности выступают в функции опасности; во втором случае сама ответственность выступает в роли опасности; возможно, что в таких случаях лучше говорить не о страхе, а о беспокойстве или тревоге. Впрочем, с точки зрения психоанализа вообще следует говорить не о беспричинных страхах, но лишь о страхах с невыявленными причинами.

раздражитель, а не результат интерпретации. Принципиально иной является природа страха — это реакция не на само событие или объект, а на те или иные предваряющие его знаки, интерпретируемые в качестве страшных или опасных. Очевидно, что семиотическая составляющая играет в механизмах страха гораздо более существенную роль, нежели в механизмах испуга; временной разрыв вообще является важным фактором в механизмах смыслообразования: "Между приращением смысла и грузом времени должна иметься существенная связь" (Рикёр 1995: 39 и след.)²².

Тем не менее, различие между испугом и страхом не должно абсолютизироваться, нередко испуг перерастает в устойчивый синдром страха, а страх редуцируется в мимолетный испуг. Следущее разграничение связано с реальностью угрозы. Важность его для семиотики культуры подчеркивал Ю.М.Лотман:

Рассматривая общество, делающееся жертвой массового страха, мы различаем два случая: 1. Общество находится под угрозой некоторой очевидной для всех опасности (например, "черной смерти" — эпидемии чумы, или вторжения турок в Европу). В этом случае источник опасности ясен, страх имеет "реальный" адресат, и объект, его вызывающий, один и тот же и для самой его жертвы, и для изучающего ситуацию историка. 2. Общество охвачено приступом страха, реальные причины которого от него самого скрыты (порой скрыты и от историка, который вынужден прибегать к специальным исследованиям для их выявления). В этой ситуации возникают мистифицированные, семиотически конструируемые адресаты — не угроза вызывает страх, а страх конструирует угрозу. Объект страха является социальной конструкцией, порождением семиотических кодов, с помощью которых данный социум кодирует самого себя и окружающий его мир (Лотман 1998: 63–64).

Таким образом, выделяются следующие разновидности ситуации страха:

- (с) страх, как реакция на ясную и реальную опасность;
- (d) страх, как реакция на скрытую или мнимую опасность.

Заметим, что и это различие имеет относительный характер: между страхом, так сказать, адекватным существующей угрозе, и страхами абсолютно беспричинными располагается основная масса случаев, когда источник опасности преувеличивается (по принципу "у страха глаза велики") и мифологизируется.

²² Ср. также рассуждения М. Фуко о "полезности модуляции наказания во времени" для эффективности "знаков-препятствий" (Фуко 1999: 157–158).

Немаловажное значение имеет и *источник опасности*. С этой точки зрения мы выделяем опять-таки два принципиально различных случая:

- (е) источник опасности находится вовне;
- (f) источник опасности находится внутри субъекта.

Если основная масса страхов, преследующая индивидуального субъекта относится к категории (е), то коллективные фобии часто тяготеют к типу (f). Важным частным случаем (f) является страх проникновения внешней опасности: микробофобия, боязнь (скрытых) чужаков и двуручников-перерожденцев, теория заговора и т.п.

Обозначенные типы ситуаций нередко сочетаются; имеет смысл выделить две наиболее выраженные комбинации: с одной стороны, это (a), (c) и (e), с другой — (b), (d) и (f). Очевидно, что вторая комбинация во всех отношениях представляет больший интерес.

3.2. Персонифицированная опасность. Следующую степень сложности представляют ситуации, когда мы имеем дело с двумя субъектами и целью одного из них является запугивание другого; страх выполняет в таких случаях не только знаковую, но и коммуникативную функцию. Основное отличие от ситуаций типа (2) заключается в том, что опасность здесь имеет определенный и обычно персонифицированный источник:

Приведенная схема варьируется в зависимости от характеристик субъектов, опасности, страха и параметров угрозы и различных форм взаимодействия этих факторов. Остановимся лишь на одной из многочисленных классификационных возможностей, она связана с соотношением угрозы и опасности. Мы выделяем здесь четыре принципиальных случая:

- (A) Угроза предваряет реальную и ясную опасность; например, рычание охотящегося хищника перед его нападением на жертву. Запугивание играет здесь вспомогательную роль, оно является дополнительным средством, призванным деморализовать жертву, сломить ее возможное сопротивление.
- (В) Угроза отделяется от опасности и выполняет предостерегающую функцию, например, рычание србаки охраняющей свою

территорию и т.п. Однако пренебрегший предостережением подвергается реальной опасности.

- подвергается реальной опасности.

 (С) Угроза, которая не может быть адекватно подкреплена возможностями угрожающего. Здесь, в свою очередь, следует различать две ситуации: блеф, когда угрожающий пользуется тем, что угрожаемый не знает его реальных возможностей, и собственно пустая угроза. В определенном смысле именно такая угроза представляет собой наиболене чистый тип, поскольку здесь угрожающ сам акт угрозы. Ср. "Ужо тебе!.." Евгения; с другой стороны, такого рода угрозы быстро девальвируются и угрожающий рискует стать посмешищем: "Вы меня не знаете, вы меня узнаете!" подпоручика Дуба.
- (D) Угроза ради забавы. По своим целям этот тип угрозы прямо противоположен типу пустой угрозы: угрожаемого подстерегает не та "реальная" опасность, о которой ему сообщается, а опасность стать посмешищем.
- Схема (3) ясно демонстрирует, что ситуация страха является разновидностью коммуникативной ситуации. Поэтому ситуация страха может быть описана в терминах теории речевых актов. В наиболее простом случае СУБЪЕКТ1 ставит перед собой цель вызвать страх у СУБЪЕКТ42, для реализации которой он формирует угрозу, следствием которой и является страх. В этом случае страх является перлокутивным актом, следствием иллокутивной силы, заложеной в угрозе. Следует особо подчеркнуть, что даже в этом примитивном примере (иллокутивная) сила угрозы вовсе не обязательно является автоматическим следствием силы (реальной) опасности; здесь важен целый ряд дополнительных факторов: статус угрожающего, его репутация, формулировка угрозы и т.п. С другой стороны, возможен целый ряд более сложных случаев, когда угроза либо является нежелательным побочным продуктом высказывания, либо, напротив, носит скрытый характер (в таких случаях можно говорить об угрозе как о косвенном речевом акте) и т.п.
- 3.3. Передатичии страха. Число участников ситуации страха в принципе безгранично, особую роль играют посредники. Их значение особенно велико в тех ситуациях, когда они являются, одновременно, и напуганными адресатами угрозы, и средством ее распространения. Любопытно, что в философском подходе к страху преобладают индивидуалистические мотивы; интерактивная сущность страха является предметом социологических шту-

дий (ср. Канетти 1990, Хоффер 2001 и др.). В массе страхи многократно усиливаются, возникает своего рода эффект слабого звена: монолитная толпа охвачена страхом в той мере, в какой боятся ее наиболее пугливые члены (это знают подлинные любители фильмов ужаса: их нужно смотреть в заполненном зале, где страх физически заполняет пространство — он проходит волнами по рядам и чей-то непроизвольно вырвавшийся крик запускает цепную реакцию восклицаний и взвизгов).

Важную роль играет коммуникативное пространство страха и используемые для его распространения каналы связи. Страх (как и ненависть) вовсе не безразличен к средствам, которыми он распространяется: то, что так действенно в слухах, графити, листовках и т.п., будучи помещенным в книгу теряет значительную часть своей эффективности. Так, социологические опросы в России 1990-х годов (до московских взрывов и начала второй чеченской войны) свидетельствуют, что свыше 50% респондентов высказывали в той или иной мере негативное отношение к чеченцам, свыше 40% — к цыганам, порядка 30-40% — к другим народам Кавказа и лишь порядка 10% — к евреям (правда, среди респондентов из КПРФ этот показатель поднимается до 18%; Гудков 1999, табл. 2 и 6). Если отношение к чеченцам в какой-то мере объяснимо актами насилия и их освещением в средствах массовой информации, то фобии, вызываемые цыганами, азербайджанцами или армянами подпитываются исключительно слухами, распространяемыми преимущественно вокруг рынков. Никакой антицыганской, антиармянской или антидагестанской литературы в России нет. Напротив, постоянно растущая антисемитская литература не имеет практически никакого влияния на настроения масс (по социологическим данным сознательными антисемитами стабильно считает себя лишь около 6% населения).

В последнее время все более активной средой распространения фобий становится интернет; вероятно в скором времени он займет в этом смысле доминирующее положение.

Литература

Бенвенист, Э. 1974. Общая лингвистика. Москва: Прогресс.

Гудков, Л. 1999. Антисемитизм в постсоветской России. In: Витковская, Г.; Малашенко, А. (ред.), *Нетерпимость в России: старые и новые фобии*. Московский Центр Карнеги, 44–98.

Гуревич. П. С. (сост.) 1998. Страх. Антология. Москва: Алетейа.

Канетти, Э. 1990. Масса и власть. In: *Человек нашего столетия*. Москва: Прогресс, 392–443.

Къеркегор, С. 1998. Понятие страха. In: *Страх и трепет.* Москва: Республика. 115–248.

Леви-Брюль, Л. 1930. Первобытное мышление. Москва.

Левицкий, С. А. 1995 [1958]. *Трагедия свободы. Сочинения. Том 1*. Москва: Канон.

Лотман, Ю. М. 1970. О семиотике понятий "стыд" и "страх" в механизме культуры. Тезисы докладов IV Летней школы по вторичным моделирующим системам, 17–24 августа 1970 г. Тарту: Тартуский государственный университет, 98–101.

1998. Охота за ведьмами. Семиотика страха. Sign Systems Studies [Труды по знаковым системам] 26: 61–82.

Моррис, Ч. У. 1983. Знаки и действия. In: Степанов, Ю. (ред.), Семиотика. Москва: Радуга, 118–132.

Пирс, Ч. С. 2000. Избранные философские произведения. Москва: ЛОГОУ.

Рикёр, П. 1995. *Конфликт интерпретаций. Очерки по герменевтике.* Москва: Медиум.

Руднев, В. П. 1999а. Психотический дискурс. Логос 3 (13): 113-132.

— 1999б. Шизофренический дискурс. Логос 4 (14).

 1999в. Смысл как травма: психоанализ и философия текста. Логос 5 (15): 155–169.

Соссюр, Ф. де 1977. Труды по языкознанию. Москва: Прогресс.

Тимофеев, М. А. (ред.) 1996. *Демонология эпохи Возрождения*. Москва: РОССПЭН.

Фреге, Г. 1997. Смысл и значение. In: *Избранные работы*. Москва: Дом интеллектуальной книги, 25–49.

Фрейд, З. 1991. Толкование сновидений. Ереван.

— 1991а. "Я" и "Оно". Труды разных лет. Книга 1. Тбилиси.

Фромм, Э. 1998. Забытый язык. Введение в понимание снов, волшебных сказок и мифов. Душа человека. Москва: АСТ, 283–470.

Фуко, М. 1999. *Надзирать и наказывать. Рождение тюрьмы.* Москва: Ad Marginem.

Хайдеггер, М. 1993. *Время и бытие. Статьи и выступления*. Москва: Республика.

Хоффер, Э. 2001. Истинноверующий. Мысли о природе массовых движений. Минск: Издательство Европейского гуманитарного университета.

Peirce, Charles S. 1965–1967. *Collected Papers*. Vol. 1–8. Cambridge: Harvard University Press.

Pelc, Jerzy 1986. Iconicity. Iconic Signs or Iconic Uses of Signs? In: Bouissac, Paul; Posner, Roland; Herzfeld, M. (eds.), Iconicity: Essays on the Nature of Culture. Festschrift for Thomas A. Sebeok on his 65th birthday. (Problems in Semiotics 4.) Tübingen: Stauffenburg-Verlag, 7-16.

Kultuurisemiootika ja hirmu fenomenoloogia

Artiklis käsitletakse hirmu kui semiootilist fenomeni. Hirmu semiootiline eripära seisneb selles, et olles tugev semiootiline faktor, jääb selle semiootiline loomus tihti varju ning hirmu käsitletakse lähtudes skeemist stiimulreaktsioon. Artiklis analüüsitakse hirmu nii Peirce'i semiootika kui ka Saussure'i semioloogia kontekstis ning näidatakse, et need lähenemised lubavad hirmu puhul avada erinevaid tahke: kui Peirce'ilikus perspektiivis hirmus tekitab hirmu, siis lähtudes Saussure'i lähenemisest võiks öelda, et hirm loob hirmsa, hirm osutub kreatiivseks, võiks isegi rääkida hirmust kui semioosisest.

Unlimited semiosis and heteroglossia (C. S. Peirce and M. M. Bakhtin)

Ivan Mladenov

University of Helsinki, P.O. Box 35, Vironkatu 1, FIN 00014 Helsinki, Finland e-mail: mladenovivan@hotmail.com

Abstract. The article draws parallels between Bakhtin's literary theory and some of Peirce's philosophical concepts. The comparisons with Bakhtin go beyond the theory of heteroglossia and reveal that related notions were implicitly originated by Dostoevsky. The elaboration of the concepts of dialogue, "self" and "other" continue into the ideas of consciousness, iconic effects in literature, and the semiotic aspect of thought. Especially important in this chapter is the aspect of Peirce's theory concerned with the endless growth of interpretation and sign building, or *unlimited semiosis*. Peirce's discussion of unlimited semiosis is not among the less elaborated ones. Quite on the contrary, it is one of the most important of his ideas of sign. As a semiotic notion it is widely exploited in many related areas. However, it is not often used as an analytical tool to examine literature or to other works of art. Here, we will employ this notion in conjunction with Bakhtin's doctrine of *heteroglossia*.

Iconicity and polyphony

In his *Problems of Dostoevsky's Art* (1929), M. M. Bakhtin first popularized the theses of *dialogism* and *polyphony*, which deal with the harmonizing and autonomy of characters' voices and emphasize contextual relations. These theses, along with *carnivalization*, derived from the work of Rabelais, became crucial for Bakhtin. (In fact, polyphony and carnivalization are manifestations of the broader phenomenon *heteroglossia*). Subsequently Bakhtin often clarified and redefined these terms, rendering them more precisely. More and more he

delved into the plurality and independence of "many-language-ness" of artistic discourse.

Bakhtin's preoccupation with Dostoevsky's novels is understandable in that Dostoevsky is not only a novelist, but also a moralist and a great thinker. It is quite possible to talk about Dostoevsky's philosophy or even his literary criticism, although they are often unsystematic and sometimes self-contradictory. The same can be said of Bakhtin's theses, the formulations of which can be identified in Dostoevsky as artistic principles. What Bakhtin actually did was to calibrate more systematically ideas about the *different voices*, *otherness*, and *polyphony* already inherent in the novels. Bakhtin, as a zealous reader of Dostoevsky, was engaged in a constant dialogue with the latter's heroes. Like Bakhtin, Peirce defines and redefines his basic terms, elaborating the formulae of the sign, sign-process and other key theses.

Let us start with Bakhtin's widely adopted term *polyphony*. For Bakhtin polyphony is an umbrella-term over all interactive processes among the characters in artistic discourse. The individual speeches, genres, and languages with their own voices in a literary work strive for harmony, which unites the structure of the whole. A more abstract term for this interaction, one that embraces the notion of harmony as well, is "heteroglossia" (literary: 'different voices'). Sometimes dialogue is used in a comprehensive sense, but it will be more precise in taking heteroglossia as a theoretical model and dialogue as a practical manifestation. Among the numerous explanations of polyphony given by Bakhtin, is this one:

An idea here is indeed neither a principle of the representation (as in any ordinary novel), nor the leitmotif of representation, nor a conclusion drawn from it...it is rather the object of representation. As a principle for visualizing and understanding the world, for shaping the world in the perspective of a given idea, the idea is present only for the characters, and not for Dostoevsky himself as the author. (Bakhtin 1984: 24)

The semiotic aspect of this statement concerns the idea as represented by its iconic part, i.e., by its resemblance or similarity to other ideas. A set of iconic signs, like a system of mirrors, can reveal "the idea as an object of representation". Iconicity in text will generally mean different viewpoints, unguided by the author. Dostoevsky's novels, although deeply philosophic, are penetrated with iconicity. In every

character's speech, visions, hallucinations and nightmares dominate the narrated stories or thoughts.

If we carefully follow the plots, we will see that each monologue is preceded by something similar to the setting of a stage: a cascade of pictures prepares the reader for hearing a prophecy rather than a story. Then the same happens in the next chapter: the narrative continues like an endless preparation for something more important that will come later, but instead only a new stage has been set, or rather a new system of mirrors. The plot lines are split, the ideas are vague, although they seem like they will be clarified in the next paragraph. But this expectation remains unfulfilled until the last sentence. This method can be compared to the developing of a photographic negative. The process continues until the new image appears only the outcome looks different from what was expected. Seeking a final meaning of a story by Dostoevsky resembles opening a series of Chinese boxes (or, a "Matryoshka"-set).

For Bakhtin a sign can live as a sign only if it appears as something other than itself, only in a dialogue with another sign of the contextual relations. Bakhtin speaks for an interior dialogue that is microdialogue in every sentence. Furthermore he finds a dialogue even at the level of the single word, a double-voiced word. As David K. Danow claims: "The word [...] is conceived as a sign not only bearing meaning, or having a referent, but as being potentially engaged in continuous dialogue" (Danow 1991: 24).

For Peirce too, there a sign exists only if it is mediated by its interpretant: i.e. there is no sign without the other sign, which interprets it. Each time this occurs, the interpretant in its turn becomes another sign. The identity of the sign (its meaning) lies in the field of mediation between the sign and its interpretant. It may be rather surprising to recognize in the following sentence Peirce's (not Bakhtin's) thoughts: "And the existence of a cognition is not something actual, but consists in the fact that under certain circumstances some *other* cognition will arise" (CP 7.357).

Seeing and listening

The roles that iconicity plays in dialogue can be best explicated from Peirce's argument on this topic where he adopts the medieval scholastic view. According to Peirce, to recognize something as being "red" means to interpret actual cases of seeing the color as similar to

other possible occurrences of the sighting of red, and hence as a sign of the quality of red in these other possible occurrences. Or, in Peirce's words:

Two objects can only be regarded as similar if they can be compared and brought together in the mind [...] It is plain that the knowledge that one thought is similar to or in any way truly representative of another, cannot be derived from immediate perception, but must be a hypothesis. (CP 5.288)

The idea here is that seeing is not a kind of passive registration of sets of pictures. It is rather a process comparable to reading. To see something as red, green, gray does not mean that all occurrences of red, green, gray are equal each time we see them, but that our minds have produced series of comparisons (hypotheses, according to Peirce). Only the final result of this thought-like process could be named seeing something as green, which means recognizing the greenness. So, what we see as green depends, in fact, on our experience of greenness. Now, in order to stick closer to Peirce's idea here, we have to take a step further and to conclude along with his hint that our perception of "this green" relies on our thought. Or, as Murray G. Murphey argues:

For Peirce, then, color is a concept, which is applied to the manifold of impressions as an explaining hypothesis; it is not therefore an impression itself. The term 'impression' is thus restricted to the instantaneous neurological stimuli, which occasion the concept and are related by it. (Murphey 1961: 71)

This means that color is similar to an expression, or even to a thought rather than being seen as a singular element. Murphey goes on to quote an unpublished draft of a Peirce's manuscript where the same judgement is made. Peirce compares the simplest color to a piece of music — the perception of both depends on the relations between different parts of the impression. The impression of color is not repeatable each time we see the same color. Pierce saw differences between colors as differences between harmonies; a new impression has to be harmonized with a previous experience of the same perception. To comprehend the differences between the colors we must be conscious of the elementary impressions whose relation creates the harmony. The conclusion is that the color is not an impression, but an inference.

Such an understanding can explain why a particular human mood is expressible in music with relative accuracy, but a color is not. Why, for example, can a musical tone sound cheerful or, sad, but cannot depict redness, or blueness? If we follow Peirce, we may answer that the perceptions of color are complex and cannot be harmonized in only one tone. For Peirce perceptions or sensations are mental representations determined by a series of comparisons grounded in the previous experience. Those comparisons are represented in the mind. and with each subsequent appearance their details are less sharply defined. But how can one differentiate among the manifold sensations? What differentiates the perception of music from that of color, or of literature?

We are thus approaching the medieval question of the "images in the mind", but from an unusual perspective. If comparison and reflection are the only mental tools for recognizing the impressions, how can we know which are the tools and which are the results? In this paper we will try to outline the process of transformation of the signs by which we recognize our thoughts. But how can we be sure that we are not confusing impression with perception and sensation?

We have seen that for Peirce color is an explaining concept, thus it is not inseparable from itself, but a result of a complicated process of comparison. What the color seems to contain is an element of generality that is found in all instances and in the final impression. According to Peirce, the universal conception that is "nearest to sense is that of the present in general" (CP 1.547). It is a conception, because it is universal. However, the present in general does not seem to be inseparable from itself. It is, rather, a general relation.

If we return to a more strict version of Peirce's terminology as well as an "atomic" level of analysis, we could say that a quality is not just the sensory data of a particular thing, but a unit, separable and extractable from its occasional occurrence, which can be shared by more than one object. What follows is that every sign, conveying some information about the quality of its object, must involve, at least in part, a "qualisign", or a sign of an iconic nature. As already mentioned, if the quality "redness" depends on our experience — in other words, is in our thoughts — it follows that it grows and changes. that is, the iconic is subject to interpretation. In a footnote Peirce says:

I am not so wild as to deny that my sensation of red today is like my sensation of red yesterday. I only say that the similarity can consist only in the physiological force behind consciousness — which leads me to say, I recognize this feeling the same as the former one, and so does not consist in a community of sensations. (CP 5.289)

But how can the iconic sign be subject to interpretation, if iconicity means a full similarity? How can an iconic sign keep its generality, and hence, its interpretability, if it is absolutely equal to its object? Does it follow the same rules as any other sign-interpretation? Are these rules cognizable? If "yes", can they be used by the authors purposely in varying artistic discourses?

Signs and silhouettes

That which gives rise to growth is the self-generative power inherently existing in the sign. Semiosis is a continuous process of interpretation. The infinity of the sign-interpretation results from the triadic definition of a sign. There is no other way for Peirce to define a pure icon, except as a "possibility" or a monadic quality. The quality has to be one and the same in both, sign and its object, in order to be recognized as a pure icon. If there were a monadic quality, it would act as a sign of itself while retaining its identity; in other words, it would become the same old Kantian "thing-in-itself". Peirce overlooks this problem, accepting that even an idea, except in the sense of a possibility, or Firstness, cannot be an Icon. "A possibility alone is an Icon purely by virtue of its quality; and its object can only be a Firstness" (CP 2.276).

Furthermore he applied the same solution to words. In order to refer to an individual and still retain their generality, all words have to be *legisigns*. But at the same time, they are *symbolically* related to their objects, that is, they are interpreted as related to their objects. Only by conveying some information about the quality of its object, can any sign take part in semiosis, in communication and in extending of knowledge, in other words, can it be a sign. (A sign has to carry information and to be able to communicate this information). To do that, any sign, which contains some new code, has to convey a nucleus of something known, an iconic similarity, which will enable its understanding. This is the only reason why, when speaking about words and meaning, one must mention icons. Of course, words are not icons, but they are *capable of producing iconic effects*. Words in literary texts can produce iconic effects, by virtue of which we recognize signs. When we read we do not see icons, indices or

symbols before our eyes. What we read is a set of legisigns, as already mentioned; what we interpret is quite another thing. It is surprising to what great extent our readings are similar. We follow similar patterns to read and interpret signs, as if they were live pictures, a kind of coded "pay-per-view". In our consciousness we decode those pictures and classify (or store) them in different programs such as: "important to remember", "less important", "archive", etc.). We lay these categorizations down into the tracks of the effete mind.

All this is possible because the signs reproduced in consciousness, being only silhouettes of the virtual pictures from reality, have looser relations to their "grounds", and similarly, to their objects. This is so because of the different way of establishing a meaning of the sign in each consciousness (seeing something as red depends on our individual case of a first recognition of red, as very young children, and on the following generalization of this individual act). But the way of establishing meaning in the mind takes time. As already mentioned, each sign inherently possesses a kind of generality, which in its turn means that its interpretation demands continuity. Peirce understood continuity as a real generality, which should not to be reduced to a set of its actual instances. Seeing pictures from reality means recognizing the signs represented in consciousness, in other words, reading them. The latter is a process that occurs in time and occupies time.

As a next step, creating a meaning would mean establishing an inner dialogue in which a triadic relation is to be set. For Peirce, as for Bakhtin, meaning is essentially a three-term relation. A sign relates to a particular object but the latter can never exhaust its meaning, because this relation is "in-some-respect" only, that is, a sign is endlessly interpretable. This unlimited interpretation occurs in a dialogue, often an internalized one, when a person communicates with himself, taking on the part of the other.

In order that the fact should come to light that the method of graphs really accomplishes this marvelous result, it is first of all needful, or at least highly desirable, that the reader should have thoroughly assimilated, in all its parts, the truth that thinking always proceeds in the form of a dialogue — a dialogue between different phases of the ego — so that, being dialogical, it is essentially composed of signs, as its matter, in the sense in which a game of chess has the chessmen for its matter. (CP 4.6)

At a higher level of abstraction, interpretation might be considered as a translation and a sign could be transposed to another level of identification not only by similarity, but also by hypothetical resemblance

(for instance, pure icons). A sign may adopt another image and it will not be a result of necessary contiguity. In that case it will no longer be able to obtain its identity — it will be an invented or inspired sign like an invented image from a science-fiction movie or a computer-created graphic.

The logic of seeing

Thus the question about the identity of the sign arises again but as already mentioned, it is to be sought neither in the interpreted sign. nor in its object, nor in the interpretant, but in the circulation field between them. The represented object, i.e. the immediate object, is a construct of thought, a product of a sign process, and a part of semiosis. It is not the real object, or, it is always an incomplete object. No sign gives us facts from reality unchanged by interpretation. Hence, being only a part of a system of producing meaning, no sign can convey to us the whole meaning; consequently there is only a transitional meaning, which is, in other words, a set of viewpoints. The fact that seeing means making hypotheses has a solid base in language: for example, the expression point of view is used both as a visual and mental concept. A different point of view is at the same time a different angle of seeing and of thinking. Bakhtin says: "Dostoevsky — to speak paradoxically — thought not in thoughts but in points of view, consciousness, voices" (Bakhtin 1984: 93).

We may further deepen our knowledge of seeing by exploring its purely biological sense. Thomas Sebeok writes:

The olfactory and gustatory senses are likewise semiochemical. Even in vision, the impact of photons on the retina differentially affects the capacity of the pigment rhodopsin, which fills the rods to absorb light of different wave lengths, the condition for univariance principle. Acoustic and tactile vibrations, and impulses delivered via the thermal senses, are, as well, finally transformed into electrochemical messages. (Sebeok 1991: 15)

It would seem that this account does not have much in common with the making of hypotheses, although it confirms the semiotic nature of seeing. Seen as such, it can be found that there are signals (or, "sinsigns"), which convey outside information and bring it to the mind for further consideration. The entire process starts by activating semiosis from pure iconic indeterminacy to forming hypotheses in the consciousness.

Peirce considers the logic of seeing in "Some Consequences of Four Incapacities". There he makes several remarkable suggestions, which are proofs for the creative role of the mind in vision. He claims: "We carry away absolutely nothing of the color except the consciousness that we could recognize it" (CP 5.300). Then he goes a step further:

I will now go so far as to say that we have no images even in actual perception. It will be sufficient to prove this in the case of vision [...] If, then, we have a picture before us when we see, it is one constructed by the mind at the suggestion of previous sensations (CP 5.303).

We can move even deeper in our sensorial life, taking this time a contemporary thesis. In an article called "A modified concept of consciousness", R. Sperry writes:

As we look around the room at different objects in various shapes, shades, and colors, the colors and shapes we experience, along with any associated smells and sounds, are not really out where they seem to be. They are not part of the physical qualities of the outside objects, but instead, like hallucinations or the sensations from an amputated phantom limb, they are entirely inside the brain itself. Perceived colors and sounds, etc. exist within the brain not as epiphenomena, but as real properties of the brain process. (Sperry 1969: 535)

Seeing defines a semiotic process, which takes only the "idea", the pure indeterminate iconicity, from the outside world and brings it to the mind for further treatment and recognition. In other words, shapes, shades, colors, etc., can be considered as hypothetical devices of consciousness, which uses them as examples for comparisons it makes constantly. Perhaps our sensations could be taken as immediate objects. In other words, starting as rhematic-iconic-qualisigns, they attain their identity as sinsigns or legisigns in the mind.

In general, a sign is not a sign until it is interpreted, that is, until it becomes a part of a triad which includes an interpretant; consequently, the only way an iconic sign can refer to an individual is by being at the same time indexical. But Peirce also hints at the idea that "a sign may be *iconic*, that is, may represent its object mainly by its similarity no matter what its mode of being" (CP 2.276). (Here he speaks of hypoiconic, and further he proposed that the iconic to be divided into three types: *images*, diagrams and metaphors).

To recapitulate briefly, the formation of hypotheses by the iconic does not flow continuously as in the reading of words. We do not

recognize 'redness' as continuity of syllogistic premises and consequences, i.e. syntagmatically, but as a result of mosaic-like associations, paradigmatically. Something is red because our cognition of redness tells us so, and because another instance of red has been activated in our consciousness, which interprets what we have seen. What is meant here is that the identification of a sign does not flow as a chain of mechanical synonymous substitutions. It involves inferences of all three types: deduction, induction and abduction. The sign's identity is attained not because it is recognizable as fixed and definite, but on the contrary, because of its instability, which forces it to appear as something other in order to be itself. This is similar to what our seeking Self does in order to merge with our personality.

Thirdness and otherness

Both Bakhtin's and Peirce's theses agree on this point. Bakhtin's concept of dialogism, like Peirce's, does not presuppose two, but three elements. Michael Holquist writes:

...it will be helpful to remember that dialogue is not, as is sometimes thought, a dyadic, much less a binary phenomenon. But for schematic purposes it can be reduced to a minimum of three elements having a structure very much like the triadic construction of the linguistic sign; a dialogue is composed of an utterance, a reply, and a relation between the two. It is the relation that is most important of the three, for without it the other two would have no meaning. (Holquist 1990: 28)

This sounds too Hegelian if not Marxist, with its unspecified emphasis on the relation only. In any case it is still a dyadic explanation, which precludes the dialogue between two elements that can be transformed into each other, but cannot interpret each other so that the result is something third. It would be more correct to say that in Bakhtin there is a creative "self" which implies "other" as a replica of an "I-other" construction, called, at a higher level of abstraction, "otherness". (Let us here recall Peirce's internalized dialogue.)

Likewise, by reading a story, which is "other" to us, we are not outside of it as one element in dialogue with it. The story tells us its events as it tells them to all the other characters; it takes our emotion, anticipation, expectation, objection, vision; we become involved in the whole process of structuring the system of producing meaning. Our

"searching self" becomes a sum of many "dialogue-oriented" relations. It becomes an ever changing-self. Here is Bakhtin again:

Meanwhile our underground hero recognizes all these perfectly well himself, and understands perfectly well the impossibility of escaping from that circle in which his attitude toward the other moves. Thanks to this attitude toward the other's consciousness, a peculiar *perpetuum mobile* is achieved, made up of his internal polemic with another and with himself, an endless dialogue where one reply begets another, which begets a third, and so on to infinity, and all of this without any forward motion. (Bakhtin 1984: 230)

In Peirce one can find almost the same thought:

It should never be forgotten that our own thinking is carried on as a dialogue, and though mostly in a lesser degree, is subject to almost every imperfection of language. (CP 5.506)

Peirce's term Thirdness corresponds to Bakhtin's notion of dialogue. In Bakhtin's philosophical system "dialogue" is not two-sided, but rather a polyphonic concept engaged in a potentially endless inquiry. Through dialogue we are questioning nature or another mind in order to acquire further knowledge. In this sense the dialogue relates to silent effects of the text, to the reader's expectations, to the aesthetic values, or to yet unspoken words. For Bakhtin "dialogue" is the actual reality of the text, like Thirdness is the objective reality of sign-action (semiosis) for Peirce. This is a direct consequence of Bakhtin's and Peirce's general understanding of meaning as a three-term relation. But if our entire thinking is in signs, how does a sign become dialogized in the language? Some scholars equate a sign with a Third. However, this equation cannot be the whole truth. What Peirce calls "a sign in itself" (or a qualisign), according to his ten-class division, is a shapeless flash of light before being embedded. A sign becomes meaningful by virtue of the Third, which fulfills its triadic structured relation. Thirdness is a category, which brings into life the process of growing and interpretation.

Thus, Thirdness closely resembles the category of Otherness by Bakhtin. Let us start with the concept of "other" and then to approach the category of Otherness. In the already quoted "Problems of Dostoevsky's Art", Bakhtin speaks of "other" not simply as a counterpart of a dialogue, but as a substance of discourse. It is a necessary condition in starting the process of narration. "Other" may be embodied into another voice, another consciousness and even another discourse.

This concept could be compared with Peirce's concept of the "ground": something, which is inside the sign and provides the essen-

tial quality of any sign.

Although not so specifically determined. "other" can be found at any level of the author's own voice, from the single word to the whole story, as an inside substance of the narrative process. Without cognition of the "other" no cognition of the "self" would be possible, but the relation between self and other is not binary. Both parts should not be considered as opposed to each other, but rather as including one another. Correspondingly, the category "Otherness" is not simply alien to, or a mirror of the self, but is rather a distant prospect from which the narrator's "I" approaches the fictional truth. It is not only a theory of the other's presence in the author's own vision, but also of the common vision in the author's own presence. It is exactly that "perspective" which becomes a locus, or "a place of events" for the transforming and continuity of qualities. In other words, it is the context of a possible relationship. It is the category that furnishes meaning to the different points of view.

The perspective of "other" is the crucial idea of a theory of a dialogue. The category "Otherness" determines most of Bakhtin's concepts, such as "chronotope", "dialogue", even "heteroglossia", the last of which signifies the presence of more "voices" on the entire scale of the discourse. In turn, the explanation of the non-dyadic nature of dialogue can be found in the continuity, unfinished-ness and interpretability of "Otherness". Bakhtin also considers the word as wholly dependent on the context: hence, it cannot convey a meaning other than a transitional one, a meaning determined by previous contextual usages of the particular word and by its further intentions to complete its ever-incomplete object. There must always be something else, an "other" sign, and an "otherness" to affect the chain of interpretation. There is no meaning unchanged by interpretation, hence the dialogue is also a process of interpretation. However, interpretation is not a chain of continuous succession, like a domino effect. Better is to speak of a transitional discontinuity. It grows, covering and surrounding the interpreted object, affecting other signs and causing new sign-processes. The original sign can be reproduced in another sign-context, in another code, even in another "language" by iconic or hypothetic similarity.

Let us take an example from Dostoevsky's work. At first sight the novel Poor Folk is narrated in a traditional manner, that is, descriptively. The narrator is not the author, but a young woman; she writes a letter to another character, telling about an incident from her life. She tells about a young student who suffers from tuberculosis. He needs books for his studies and gives private lessons in order to earn money. His father is an alcoholic who loves his son and would very much like to help him. The father dreams of buying books for his son, but he himself desperately needs money for drinking. Throughout the story there are repeated appearances of one image: books. At the beginning and at the end books appear merging with another intrusive image. that of mud. The discourse is typical for Dostoevsky - expressive, breathless, rapidly building to a climax. Only when the narrator remembers a small episode, which occurred in the student's room, does everything change. The beginning of the passage functions like the setting of a stage. The reader is, literally, seeing a small room; the eye casts about the room and focuses on the shelf with many books. In a brief scene, which follows shortly thereafter, the narrator accidentally pushes the shelf and the books fall down.

As the story continues, the student dies, the father cries in his son's room. A few days before that, he had managed to buy several books for him and put them in his pockets. The funeral scene follows. Again, everything has disappeared: there are no houses, no people on the streets. There is only a hearse with the coffin, and the father running after it. They take up the whole field of vision. There is no speech, no author's voice, no dialogue, only details: the running father, the raindrops pelting his face, his coattails, and the books falling from his pockets into the mud. There is a hint at the end of another impending death, that of the narrator's mother.

What we have here is a play of iconic effects, produced in the reader's consciousness by the iconic signs. This is a process of systematic reduction of the dialogue by which heteroglossia and interpretation have been minimized to a few words, unrelated to one another. A strong impact is achieved by increasing the role of details. The few remaining details persistently refer to some previous, vivid associations: for example, the books falling from the pockets of the father's coat. This approach represents a total iconization of the narration, which turns back the process of interpretation, interrupts it,

or stops it. Similar scenes exist in all Dostoevsky's novels, for example, The Brothers Karamazov, Netochka Nezvanova, Double.

This technique could be described as an effect of *frozen semiosis*. Dostoevsky "freezes" the interpretation by tightening the chain of associations, calling our attention upon one, already familiar detail (the falling books). The few signs relate only to a few details, which, in turn, have already been components of a similar picture. At the end, the mud in which the books have fallen takes up the whole visual field. But, in fact, even this is not the end. The end of the scene is the wide white space, like a blind spot, with which the printer has set off the section. Again, what we see here blocks the associative interpretation by augmenting the iconicity, which, in its turn, means creating different viewpoints.

The "many voices" have been gradually limited to a single one, which is, as much as possible, neutral. Well-orchestrated polyphony is silenced to a single tone like the silence in music that reigns when the conductor's baton is raised, before a new theme explodes. This is meaningful silence. In the wholeness of the discourse it is of an iconic type; something certain, but "other", something contrapuntal will occur when it lasts. It is an activated, *loaded silence*. More abstractly, it could be said that in the effort to liken reading to seeing, Dostoevsky uses a method, which can also be named "intensification of nothingness". "Nothingness" means the empty spaces of the pages, and the entire disturbance of the associative process. It can be described also as the opposite of polyphony, interpretative discontinuity, or, as dialectic of a dialogue.

In this case semiosis flows like the process of seeing, from the indeterminate polyphony, where all sign-processes occur, to the organized silence of the blank space, which acts as a qualisign. As it has been mentioned above, Dostoevsky is trying here to compare the reading process with the visual one. Between the two there will always be a gap, which can be overlooked only imaginatively, like the small space a spark needs in order to jump to the other pole.

Dostoevsky tries to overcome this gap by augmenting iconicity, i.e. by multiplying the signs that act as icons. The empty spaces between paragraphs are the very gaps where the intensification of nothingness occurs. There are all the processes of freezing the flow of the semiosis: gravitation around the single detail, return to the similar association, the sudden beginning of a different story without any transition. M. Holquist writes:

Dialogism begins by visualizing existence as an event, the event of being responsible for (and to) the particular situation existence assumes as it unfolds in the unique and constantly changing place I occupy in it. (Holquist 1990: 47)

After being classified in the consciousness, the qualisign attains a determined meaning. It begins to point to something, which is not a full analogue of its iconic origin. It becomes a sinsign. In the "inbetween-space" of the blank page the sinsign has also made "a leap" into a new semiosis. In terms of literary theory, it has become metaphoric. The blank space (the shape of emptiness) acts like a more general Emptiness, that of a human life. A more precise comparison of this transition would be again a musical one, when the conductor's baton serves as the sign of rhythm. And indeed, white spaces between sections are signs of the inner, ongoing rhythm of representation.

Moving silence

The sign of silence is of iconic nature. This might appear paradoxical, but because the written text is soundless, the "sound-effects" are achieved by virtue of the iconicity. This does not mean that there are icons or pictures in the text, which "resemble" sounds, although the hypothesis of synaesthesia was alien neither to Peirce nor to Bakhtin. Rather "the pictures of signs" in consciousness create sound/silence by combining many different signs. For instance, there is a silent effect when after a scene of a quarrel the narrator depicts a single detail. Silence is produced through icons. This is an evoked silence: it is produced as all voicing signs in polyphony fade away, so that from the indeterminate manifoldness only a few "tones" remain, only single details. The silence reigning immediately after is a mere feeling, that is, it may be seen as a rhematic-iconic qualisign (qualisign). But when we recognize (or, hear) it through intensification of icons, it becomes a rhematic-iconic sinsign (sinsign). Here we may recall Peirce's remark that there are no actual iconic qualisigns. In other words, in the process of muting the polyphony, the rhematic-iconic qualisign (the feeling of a silence) becomes an iconic sinsign, that is, a sign of a silence, which points to both — the final chord of the previous polyphony and to an anticipated leap toward another discourse (see Fig. 1).

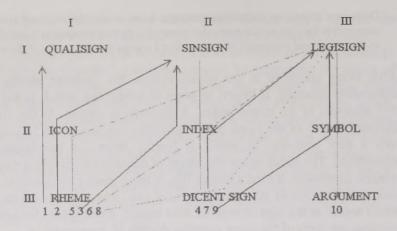


Figure 1. Peirce's ten-fold-division of signs — loading the silence.

The fading away of polyphony simultaneously acts as a process of loading the silence¹. (To follow this process, just take a look at the solid line of the scheme). With the inclusion of all the additional effects, such as the play with the blank portions of the page, the sudden finishing of the chapter, reducing the heteroglotic narration to one or two voices, it might be considered as a process of completing the sign, that is, a movement to a complex sign, involving both an icon and an index. Further speculations can be made as to how the moving silence attains a symbolic character. In this case, according to Peirce, a sign must relate to its object by virtue of law, rule or habit, i.e., a word must be a sign of a class or a law.

Let us go back to the end of the scene from Dostoevsky discussed above. The whole field of vision is occupied by mud. In the blank spot of the page, mud, through which the pathetic funeral procession makes its difficult way, has been transformed into a sinsign; it points to itself and to desolation. The empty space is a locus where the semiosis flows and freezes at the same time, a moment when a new association is involved in the process of interpretation. It is a very complicated play of iconicity; the opposition "white space/mud" animates a whole chain of basic associations,

For the notion of "loading the silence" I am grateful to Professor Nathan Houser of the *Peirce Edition Project* at Indiana University — Purdue University at Indianapolis.

As polyphony dies away to a single symbol, the process of loading the silence is achieved. Its sign has been related to its object by virtue of likeness (qualisign and sinsign), and then by virtue of its interpretant (symbol). We can now take a more general look at the same process, considering the entire phenomenon of "frozen semiosis" as a sign. When it becomes recognizable through its frequent appearance in the whole of the novel, or even in different novels, we can speak of dicent-indexical-legisign.

This new sign is accomplished by abduction, which means that the nature of the relation between premises and conclusion is of the "iconic type", as mentioned by Augusto Ponzio (1985: 25). In fact, the sign (life-death) is invented *ex novo*. Concentration on a few details, the "mirror-play" with the previous associations, directing the sight to the mud, the emptiness of the space, all of these inevitably create an open connection to a new semiosis. We can carefully start to speak about dicent-symbolic legisign. (The whole process can be also represented by numbers of the signs: $1\rightarrow 2\rightarrow 3\rightarrow 7\rightarrow 9$.)

We need some examples to clarify the last claim. We know that ever since movies were screened they were accompanied by music. Why is this so? Music takes away tension, or builds suspense. Music gives hints about the next scene, or suppresses the development of the plot. On the other hand, why is an art exhibition only rarely accompanied by music? In some of their most frequently used clarifications musicologists would probably say that music is a condensed silence, a defrosted feeling or a drifting thought. We could further ask why film music as a rule is not intrusive? Why it is the exception rather than the rule that a person talks convincingly of music, without using practical examples?

By their mutual interaction both music and pictures borrow devices for increasing their effects from each other. Music and picture together carve deeper grooves in our past experience, both acting as seeking Selves. The purpose of such action is to awaken the "effete mind" (i.e. an explanatory text) as much as possible. When both drop onto the effete mind the process of drawing relations intensifies. The sound of music generates more iconicity from the memories where these combinations occur. The iconicity induces sharpness in the effete mind by shining brightness on any single representation. It is an effect comparable to an unexpected discovery of a bundle of old letters that brings to mind nostalgic memories. As time passes, the events from the letters, similar to the representations in mind, lose their freshness. What remains is the sentimental feeling that seizes us. (We confuse

these moments by saying that something is gone, when in fact, it has arrived. Now it is possible to store these feelings in a track of the effete mind, a sensation which serves as a relief from the de-actualized present that has until now accompanied us).

We have to keep in mind that we are talking about signs whose appearances are somewhere beside those evoked by the immediate reading of the text. The impact of the former is built up next to the images and pictures that emerged as a result of following the narrated signs. The signs we are discussing were silently layered in our mind, turning our emotional memory in a direction different than the one created by the events of the novel. Using the play of iconic effects, an author could make its reader feel inexplicable nostalgia while imagining, for example, a luxury ship heading somewhere deep in the night. Thus another paradox arises: the combination of music and pictures increases the effects of silence by which the implementation of signs is fulfilled. From the undefined mass of emotions to the sharpness of particular memories, the process continues until actual thoughts emerge. Such is the effect of loading the silence.

The turn of a kaleidoscope

The effect of unlimited semiosis and heteroglossia may be compared to playing with a kaleidoscope: with a turn of a tube, a very few elements create endless new figures. Or, in a more sophisticated view, to looking at a broken mirror: all pieces reflect the same object, but in a refracted way. And even if someone sums up all the pieces, they still show the object as a manifold of different images.

We can also describe the whole process from a reverse perspective, as a "visualization" (projection) of an idea into the realm of words (symbols), through the effect of the "broken-mirror-world" that occurs in the play of an "unfinished dialogical consciousness". Bakhtin speaks of "an image of the idea" (Bakhtin 1984: 89); Peirce discovers its representation as a complex sign. Any time a picture of an idea arises in a consciousness, it interrupts the semiosis. But, on the other hand, this sharper image is refracted into many "broken pieces" and what we have before us is "just another sign", requiring further interpretation, which is essentially the technique of dialogue. The purpose is a "different-like" sign, established in semiosis, which slows down the interpretative process and guiding it to the effete mind. But instead

of stopping it, it affects another interpretation chain in another meaning-spectrum.

Bakhtin believed in both the ingenuity of silence and its potentiality for playing with sign-effects, as well as in the growth and inexhaustible creativity of dialogue. The last sentence of the essay "Discourse in the Novel" states:

For, we repeat, great novelistic images continue to grow and develop even after the moment of their creation; they are capable of being creatively transformed in different eras, far distant from the day and hour of their original birth. (Bakhtin 1981: 422)

The two discussed ideas of C. S. Peirce and of M. M. Bakhtin both have strong potential of serving as analytical tools to explain many old phenomena. This has always fascinated artists: to create an image through the play of a broken mirror, a "live" product of consciousness. This image then would be centered, as by an illusion, somewhere before the mirror-pieces, outside of the mind. For a very brief moment it would represent the thought, the sign, or the searching Self.

What characterizes Bakhtin's efforts in his theory of heteroglossia is the constant attempt to explicate "inner speech" at any level of human communication, from the single word to philosophical discourse. One of his many definitions of heteroglossia states: "Another's speech in another's language, serving to express authorial intentions but in a refracted way" (Bakhtin 1981: 324).

Such speech constitutes a special type of double-voiced discourse. The special emphasis on dialogue always emerges when Bakhtin proclaims that language is the basis of all human communication and that language is always dialogic in its nature. Formulated repeatedly in an unequivocal manner, that view relates very closely to essentially similar thoughts of Peirce's, for example, the frequent postulate that "All thinking is dialogic in form" (CP 6.338).

But that which links the philosophic efforts of the two thinkers is the demonstration of how the sign constantly escapes from its "final" meaning, striving for an "openness" and "unfinished-ness", by which alone reality can be approached. The common perspective of both theories is to see the sign in one more meaning-dimension through an unlimited dialogue and a hetero-interpretation.

References

- Bakhtin, Mikhail M. 1981. The Dialogic Imagination: Four Essays by M. M. Bakhtin. Holquist, Michael (ed.). Austin: University of Texas Press.
- 1984. *Problems of Dostoevsky's Poetics*. Emerson, Caryl (ed. and trans.). Minneapolis: University of Minnesota Press.
- Danow, David K. 1991. The Thought of Mikhail Bakhtin: From World to Culture. New York: St. Martin's Press.
- Holquist, Michael 1990. Dialogism: Bakhtin and his World. London: Routledge. Murphey, Murray G. 1961. The Development of Peirce's Philosophy. Cambridge:
- Harvard University Press.
- Peirce, Charles S. 1931–1966. *Collected Papers of Charles Sanders Peirce*, 8 vols. Hartshorne, Charles; Weiss, Paul; Burks, A. W. (eds.). Cambridge: Harvard University Press.
- Ponzio, Augusto 1985. Semiotics between Peirce & Bakhtin. Kodikas/Code 8(1/2): 11-28.
- Savan, David 1976. An Introduction to C. S. Peirce's Semiotics. Part I. Toronto: Victoria University.
- Sebeok, Thomas A. 1991. A Sign is Just a Sign. Bloomington: Indiana University Press.
- Sperry, Roger W. 1969. A modified concept of consciousness. *Psychological Review* 76(6): 532–536.

Безграничный семиозис и многоголосие (Ч. С. Пирс и М. М. Бахтин)

В данной статье вводятся параллели между литературной теорией М. Бахтина и некоторыми философскими понятиями Пирса. Сопоставления с Бахтиным основываются на его теории многоголосия и выявляют тот факт, что аналогичные идеи имплицитно содержались уже у Достоевского. Выработка понятий диалога, "себя" и "другого" продолжается у Бахтина в идеях о сознании, иконических явлениях в литературе, о семиотическом аспекте мышления. Из теории Пирса для нас особенно значима та часть, которая касается безграничного роста интерпретации и знакопорождения — безграничный семиозис. Понятие безграничного семиозиса одно из наиболее разработанных у Пирса и широко используется в настоящее время. Тем не менее это понятие не так часто применяется в качестве аналитического инструментария при изучении литературы и других произведений искусства. В нашей статье понятие безграничного семиозиса применяется вместе с учением М.Бахтина о многоголосии.

Piiritu semioosis ja heteroglossia (C. S. Peirce ja M. M. Bahtin)

Artiklis tõmmatakse paralleele M. Bahtini kirjandusteooria ja mõnede Peirce'i filosoofiliste mõistete vahel. Võrdlus Bahtiniga toetub tema heteroglossia-teooriale ja toob välja ka fakti, et sarnased ideed sisaldusid implitsiitselt juba Dostojevski teostes. Mõistete dialoog, "mina" ja "teine" üksikasjalik väljatöötamine Bahtinil jätkub ideedes teadvusest, ikoonilistest efektidest kirjanduses, mõtlemise semiootilisest aspektist. Peirce'i teooriast on siin eriti oluline see osa, mis puudutab tõlgenduse ja märgiloome lõputut kasvu ehk piiritut semioosist. Peirce'i piiritu semioosise mõiste näol on meil tegu tema ühe olulisima märgiga seotud ideega, mis on leidnud laialdast kasutamist. Siiski ei kasutata seda kuigi sageli analüütilise tööriistana kirjandus- või kunstiteoste uurimisel. Käesolevas artiklis rakendatakse piiritu semioosise mõistet koos M. Bahtini heteroglossia doktriiniga.

Projections: Semiotics of culture in Brazil

Irene Machado

Rua Bergamota 190, apto. 21-B, 05458-000 São Paolo, Brazil e-mail: irenemac@uol.com.br

Abstract. Projection is a dialogical mechanism that concerns the relationship among things in the world or in various systems, both in nature and culture. Instead of isolating these systems, projection creates an ecosystem without borderline. Projection is a way to comprehend how different cultures can link, enrich and develop one another by understanding the relationship among different sign systems. From this central point of semiotics of culture, different cultural traditions can be related to one another by considering the nature of their sign systems. That is why it is that the object of semiotics of culture is not culture but its sign systems. That is why we understand the nature of relationship among sign systems as pro*jection*. In this article, we are interested in a particular kind of projection: that one in which the formulations of semiotics of culture of Slavic tradition project themselves onto the Brazilian culture. The conceptual field of Russian semiotics — dialogism, carnivalization, hybridity, border, outsideness, heteroglossia, textuality and modelling semiotic sign systems projects itself on the equally defining aspects of the semiotic identity of the Brazilian culture. I will refer here to two sets of projections: the concept of textual history, as a possibility to reach internal displacement within the culture, and the notion of semiodiversity produced by the meeting of different sign systems.

If it is true that semiotics of culture was born as an applied theory, the importance played by the cultures with long semiotics tradition in the consolidation of that approach cannot be less true. We know that, in the so-called semiotic cultures, the intensity of the expansion process of sign systems is related to their capacity to answer internally to the manifestations and impulses that come from the outside. The applied character, seen from this vantage point, can be understood thanks to

the establishment of relations aiming at answering a cohesive set of questions: how do cultures link? how do they enrich each other? how do they expand?

If this type of relation is a characteristic of the cultures, the semiotics of culture must systematize, theoretically, the approach the applied character of which stems from the interconnections of the lines of power located between systems. This is a systemic semiotics aspect.

What was mentioned above is far from being the preamble to a conceptual approach. In fact, it is just about a guideline that guarantees the notion that the applied character of semiotics of culture is justified not only by the dynamism of the sign systems that constitute the cultures, but also by the largest process of semiotic reception. Such evidence appeared due to the need to understand the property of elementary conceptions of semiotics that, developed in the context of the Slavic tradition, elaborated theoretical instruments for the studies of cultures or, more specifically, of the internal responses that emerge when cultures meet. Although the proposed theoretical set has appeared as an applied theory, it presents itself as basically operating with the same projection mechanism. Relations of convergence, dialogues, mutual elucidation are some of the manifestations through which it is possible to appreciate the interventionist movement of a culture in relation to another. The projection refers to the interrogative look that only the culture which is outside can address one to the other.

I owe Boris Schnaiderman the understanding of the so essential proximity in the exercise of the approach of semiotics of culture as it was formulated by Russian scholars long before the semiotic theory itself conquered its space as a specific field of knowledge or as a science. In this way, I understand *projection* in the meaning given by Schnaiderman: *projection* is a term that denominates the movement of confluences among phenomena of a world "in which everything is projected against everything, where there are no exact limits between anything, the realm of the deliquescent and the unfinished, of the fluidity and the never ending" (Schnaiderman 1978: 7). In this way, the projection of elements of a culture on another one realigns limits and borders.

Despite the generic character of this formulation, I am interested here in a particular kind of projection: the one in which projected theoretical assumptions about cultures the semiotic character of which is impossible to deny, unchain an equally specific type of theoretical reply. This is the assumption that led me to examine the projection formulations of semiotics of culture concerning their Slavic origin in the Brazilian culture context. My hypothesis is that, since Brazilian culture develops semiotic systems founded in a dialogue with different cultural traditions, it seems to be presented not only as a potentially rich field of intercultural manifestations, but also as an important interlocutor for theoretical reception. Therefore, Brazilian culture serves as a field for applying semiotic theses that were born in the Slavic cultural context, and not only in the approach of the European semiology and socio-semiotics as is usually publicized. Once weighed out the linguistic, socio-historical, as well as spatial and temporal differences, there are many aspects that approximate Russian culture to that of Brazil. It is, however, an exclusively semiotic proximity. In no hypothesis is it possible to assume that the mysteries of the Slavic soul, established in ancient times, can be similar to the exoticism of a young, distant and convulsive culture. What lies in the core of this hypothesis is the evidence of a fact: the defining conceptual basis of Russian semiotics — dialogism, carnivalization, hybridity, border, outsideness, heteroglossia, textuality and modelling sign systems projects itself on the equally defining aspects of the semiotics of our cultural identity, creating an intense dialogue. Such formulations define the analytical instruments of the semiotic systems of Brazilian culture that become, thus, a field for experimenting with semiotic ideas that appeared in another place on the planet. Russia and Brazil become close. However, this is good to clarify: it is not about delimiting the confluences across cultural manifestations, but on examining the theoretical striking among cultural practices the dialogue of which happens in the sphere of semiotic ideas. In order to carry out this task, I will refer here to two sets of projections only: the concept of textual history, as a possibility to reach internal movements within the culture; and the process of semiodiversity that calls attention to the semiotic character of the overlap among cultural species. In this way, I hope to clarify how the key-concepts of Russian semiotics were received in the context of my culture.

Textual history and the foundations of the semiotics of culture approach

There is no doubt that the projections of the tradition of the Slavic thought in Brazil were installed here thanks to the dialogue between some of our eminent intellectuals with Russian scholars who occupied the scene of thinking in the 20th century. Those among these theoreticians, who deserve special prominence are Roman Jakobson, Mikhail Bakhtin, Juri Lotman, Vyacheslav Ivanov. Jakobson is a special case among them. Besides the long and intense conversation with the translator and essavist Boris Schnaiderman, the poet and critic Haroldo de Campos, the poets Augusto de Campos and Décio Pignatari, Jakobson guaranteed the spreading of his teachings when he had Joaquim Mattoso Câmera, one of the greatest linguists in our country, as a disciple. Mattoso Câmera, as well as Claude Lévi-Strauss, were Jakobson's pupils when he conducted a course about the relations between sound and meaning in the United States. Later on, Mattoso could analyze with great success the invariant aspects of Portuguese language in Brazil on the basis of Jakobson's concept of relation and invariation principle. A projection like this is an example of the relation that should be looked at with great interest. Jakobson's accurate formulations became mandatory in the field of semiotic and linguistic studies. According to Boris Schnaiderman,

Jakobson's work is now inseparable from our culture, a lot of what has been done and thought in these years has to do with the existence of this jovial and irreverent scholar, of this scientist and artist, 'the poet of linguistics', as Haroldo de Campos defined him. (Schnaiderman 1993: 3–4)

This confirms the hypothesis that Jakobson was the great landmark of basic concepts of semiotics of culture inside and outside Russia.

Jakobson's contacts with his Brazilian interpreters consolidated due to the convergence of ideas and worries, like, for instance, his intense correspondence with the poet and professor Haroldo de Campos. Even before he became one of the most important translators of Russian poetry (with Boris Schnaiderman and Augusto de Campos), Haroldo de Campos was a scholar who shared many ideas with Jakobson, promoting a mutual enrichment for what they searched. Among these ideas, it is worthwhile highlighting the projection that the studies on synchrony had in the formation of the study of semiotics of culture

in Brazil. I refer to the research on textual history that Haroldo de Campos carried out throughout his work, in an intense unfolding of the relation between synchrony-diachrony.

The study in which the Brazilian scholar demands the necessity of a textual history for the study of Brazilian literary culture dates from 1975. In a slightly provocative tone, he affirms: "in what concerns literature, from time to time, it is always good to throw the diachrony into a state of confusion" (Campos, 1976: 10). If, on the one hand, the objective of textual history would be to cause panic in literary history. on the other hand, it would try to bring to the core of the study of literature the following defining criterion of the approach of semiotics of culture in modern world: the concept of text. In view of the concept of text, Campos noticed the possibility of seeing the literary culture in the dialogic movement of its texts, thanks to which all culture systems, as well as all cultures, correlate. When the text is the semiotic criterion, assures Campos, it is possible to reach those correlatives that are beyond the base culture. The textual history establishes itself, thus, as a "translatory" operation and, by translation, Campos understands "transcreation and transculturation, since not only the text but the cultural series (Lotman's 'extra-text') transtextualize themselves in the imbricate subtaneous ways of times and different literary spaces" (Campos 1976: 10).

Taken in a wider context, the concept of text given by the historical view is presented as an important clue to a systemic approach to culture that can be seen in the translation either among codes or among completely opposite systems, like those of messages produced by mass media and the new digital media. According to this, textual history can be taken as a strategy. As I have already stated, textual history deals with an approach to the historical question in literature that is not considered in manuals in which the dominant remark is the preservation of a canon and the cycles of the representation that they conjugate. On the contrary, the textual history allows for carrying out trans-temporal and outsideness approaches aiming at valuing the implicit cultural dialogue in the texts. It is a circuit that sets text and history in movement, in an interactive dynamic, and enables the hearing of the dialogue that tradition establishes with the present. Nothing is considered in isolation, neither works, nor authors, nor periods. Everything is focused on the tense process of its dialogic relations (Machado 1999: 31).

Since I put in the horizon of my approach the necessity to look for projections of Russian formulations in the Brazilian context, I cannot fail to register that three great conceptual arteries exist, of Slavic roots, in the development of the theoretical foundations of textual history. Besides Jakobson's synchronic cut, it is not possible to ignore Bakhtin's concept of great-time dialogic and Lotman's notions of semiosphere and of text as informational content.

In 1969, Haroldo de Campos defined the *synchronic poetics* idea as an "aesthetic-creative criterion" for the approach of the literary phenomenon. It is about a critique subsidized by the formalists' interventions, especially about what Jakobson wrote in his essay "Linguistic and Poetics" when he postulated the notion of dialogics of cultural times and the reading of traditions in the light of contemporary paradigms. For Campos,

the application of this criterion in a literature like the Brazilian one (of which real history is, strictly speaking, still going to be made) soon produces unobstructive and profanation effect" (...). Thus, the textual history "that takes the text, characterized by its "informative content" (its inventive components), as the kernel, and privileges a synchronic envisage," gets distant from the literary history "predominantly diachronic-cumulative, that considers literature in its conventional sense. (Campos 1976: 15)

In view of this envisage, it is possible to get another dimension of the semiotic character of literary culture in Brazil, in its foundational aspects: the carnivalization of the language, the thematic of profanation (in fact, the Brazilian term for profanation is desacralization), the iconic prose intersemiosis, among others. Thus, "between the 'present time of creation' and the 'present time of culture' there is a dialectic correlation: if the first is fed by the second, the second is redimensioned by the first" (Campos 1976: 22).

If, on the one hand, the idea of textual history expresses the semiotic intervention in literary culture, on the other hand, the notion of text leads its search by the cultural dialogics that Campos exercises in innumerable translations of consecrated masterpieces into the Portuguese language. From the Homeric *epos* to the Biblical text; from modern Russian poetry to chinese ideogram; from Dante's Hell to the Goethe's Faust; from medieval *troubadours* to hai-kais. The newness of these works is not the translation of the work within the limits of the code, but the recoding (the code switching or transmutation) that ultimately leads to the linguistic-semiotic reconstitution in the great time of cultures. In this bias, the rescue of the chronotopic dimension

of culture is assured. Campos called "transcreation" the operation of transferring a linguistic sign system from a culture to another sign system of a different culture. It is not only a simple translation. In the best tradition of Jakobson's teachings, the poetical translation can only be considered inter-semiosis: it is necessary to consider two systems of different signs. This practice, denominated by Campos as text translatory operation, dialogues theoretically with the concept of modelling of the Tartu-Moscow's group, a conceptual key of which unfoldings in the tradition of semiotic studies have made its contribution to the vertiginous process of codes and language expansion in the culture. The translation fulfils a modelling textual function when it transfers the poetical structurality of a language to a completely different one. Think about, for instance, the Japanese, Russian, Italian, French. German, the Hebrew modelled in Portuguese. Evidently, translation carried out in this way creates new information. What is said here in relation to the verbal code is applied, of course, to other codifications outside that universe.

The concept of text as inventive informational content is a direct projection of the formulations discussed in the summer seminars of Tartu-Moscow's school that Campos got in contact with just after his first essays were published in the Occident.

"The new Russian semiology of the Tartu group suggests a similar problem today", said Campos in 1976. J. Lotman and A. M. Piatigorski ('Text and Function', Tartu conference, May 1968) examine culture as a set of texts. They distinguish between 'global linguistic message' (significant in the sense of everyday communication) and 'textual message' or 'text'. They formulate the following axiom: 'It is exactly the zero degree of global linguistic message that discloses the high degree of its semioticity as a text'. Or else: 'To be noticed as a text, the message must be little or not at all understandable, and susceptible to an ulterior translation or interpretation [...] the art, where the plurality of senses is erected in principle, produces theoretically nothing but texts'. In accordance with this, the two authors study the text processes of becoming sacred ritualized (or sacralization and ritualization of texts as we say in Portuguese), as secondary modelling systems.

This is the theoretical-semiotic support from which Campos bases his translatory operation of Holderlin's text as a phenomenon of decommunication. This way, the theoretician shows his "translatory" practice as a pattern of the modellizing systems, revealing a subtle understand-

ing of the *Theses* of semiotics of Tartu published in 1964. (Campos 1976: 90-91)

With the conception of culture as a text formed by the gathering of modelling systems, the study of textual history opens another direction, embracing the intercultural dialogue, in which modelling results from the interventions across cultures. This is another projection of semiotics of culture that happens directly in the sphere of studies on multiculturalism. Instead of simply looking for the genesis of the hyphenated conjugations in culture, semiotics presents the basis of the interculturality, systemizing, theoretically, increasingly essential instruments for the understanding of culture as a set of diversified, dialogic semiotic systems in expansion. From the semiotic point of view, there are two basic unfoldings of this pattern: carnivalization and semiodiversity. If we owe the anthropologist Roberto da Matta the discovery of carnivality as a founding feature of the contrasting social relations in our culture, we owe another anthropologist, Antonio Risério, the perception that the proliferation of contrasts indicates the diversity that supports the semiotic character of our culture. Thanks to Risério, the conceptual field of semiotics of culture can be read according to the translatory process that interweaves cultures.

Semiotics of culture as a defence program of semiodiversity

The projection of the tradition of the Slavic thought in the field of inter and multicultural studies cannot be seen straightforwardly. For this, I propose a route of ideas that is a little longer and, therefore, less exact. I could not speak in another way about a projection that has hardly been set into action.

One of the indisputable assumptions of the concept of culture is the one that refers to the symbolic production that serves as a living environment for man's exercise, exploitation and expansion of the most different relational processes, specially regarding behaviour control. In this concept, the idea that culture is woven by a string of codes which strengthens the premise that every culture is potentially semiotic, is assumed. Anthropologists like Clifford Geertz do not raise any doubts about this premise. On the contrary, they agree that culture and its signs are the most complex forms of relationships since diverse forms of meetings, crossings and interpretations permanently operate in the

culture. On the basis of these relationships, the cultural identity is built and it can be thus understood due to its inclusive character rather than an exclusion, as it is usually stated. The specificity of the culture would be the result of contacts, combinations, projections. Following this thought, every approach to culture could not do without a deep understanding of its signs and codes.

In fact, there is a long way between acknowledging the semiotic nature of culture and the available instruments to reach this understanding. What could be considered a legitimate and unquestioned premise becomes a source of mistakes. What could be obvious is a phenomenon waiting for understanding.

The conflicting aspect of this thought is the understanding of what a semiotic culture is. Considering the anthropo-sociological conceptions, we would say that cultures recognized as result of hyphenated conjugations (Shohat, Stam 1994) are hidden under such denomination, therefore that gives them a hybrid identity. Yet, in this conception there is no place for the definition that we intend to reach: in this concept there is no space to set the dynamism of the culture, or better, the actual movement of crossings, transformation, semiosis. For the understanding of the semiotic character of a culture it is not enough to point out its genesis. It is necessary above all not to lose sight of its movement because semiosis is born in it. The semiotics approach, in this case, shows another way: instead of a weapon, the semiotics understanding of the cultural identity is a form of knowledge and, like that, the biggest source of cultural life and all the environment that supports it. It is about defending the diversity without taking the risk of falling into the incoherence of those who profess the diversity of the biological species on behalf of ecology, with the same grip they talk about identity as the elimination of one of the terms of hyphenated-composition, due to the undeniably violent power of political circumstances.

Perhaps such precariousness of the anthropologic approach has pushed the Brazilian anthropologist Antonio Risério to field of Russian formulations, where the borderline concept was created as a semiotic space of confluences across different cultural systems. For Lotman, *boundary* is not the dividing edge, but the translatory filter inside space which was very properly called semiosphere. Although the semiospheric space has an abstract character, the mechanism that defines it — the translatory filter of the border — is endowed with concreteness. This is so because the notion of circle, as delimiting

what belongs and what does not belong to a specific set, has nothing abstract. The elements of boundary are both inside and outside. However, it is necessary to be cautious not to confuse the semiotization process with a mixture where everything is annulled: time, space, particularities. In this particular sense, the semiotization process is far from syncretism.

How do two cultures meet dialogically, preserving their specificities and not allowing obstacles to its expansion? This is a question that was part of the theoretical inquiries of the Russians Lotman and Bakhtin, as well as those of the Brazilian Risério.

The necessity to value the boundary as semiotic space is not a theoretical tenet, but an alternative proposal to understand explosive moments of the culture without the feature of historical determinism. If it is true that culture is cumulative, it is necessary to foresee moments of bigger concentrations that, even though unpredictable, are not ruled by chance. This is the reality Lotman speaks about when he tries to examine the semiosphere of the contemporary world of which semiodiversity cannot be denied.

Although the concept of semiosphere stems from Lotman's thought, "In defense of Semiodiversity" (1995), it is also found in the text-manifesto by the anthropologist and Brazilian poet Antonio Risério, which highlights its great contribution to understand semiotics of culture in Brazil. Presented as an intervention during a debate with Tzvetan Todorov about the intercultural dialogue in the context of the many international multiculturalisms of the last decades, it turned out to be a vigorously uttered speech to undo certainties, deviate thought paths, shake positions, especially those that appear as great truths about homogenization foreseen by global order to dominate many places in the world. Its greatest virtue was to bring light to the heart of conflictuous debate by introducing a theoretical analysis instrument.

Committed to the complexity of the planetarization phenomenon of culture, not only as a direct result of the sophisticated performances linked to communication technologies, but also as a consequence of the westernization of the planet, this text has the power to add another route to the ecological discourse.

While theoreticians from different fields, mobilized by the emergent ethnic conflicts in distant points of the world, defend a harmonic multiculturalism, Risério chose the defence of diversity, understood in the wider sense of the anthropologic construction, and it does not

seem possible to discern the basis of the ethical condition without it. Thus, far beyond the rows that thicken the field of multiculturalism, Risério reaches an apparently unexplored region. In it, he situates the discourse in defence of semiodiversity.

Semiodiversity is a concept to denominate the sphere of life that refers, particularly, to the realm of signs. Although it has been created in the context of biodiversity, it assigns a wider territory, which is almost unknown. Contrary to biodiversity, it is not a 'trendy' term, even though embedding a much wider scope. The most different kinds of message creating information produced by different languages, signs and cultural codes can be found in the domain of semiodiversity. In the light of this concept, it is possible to clarify, equally, the anthropologic messages and those of genetic character. Finally, semiodiversity aims at accounting for the radicality that concerns the variety of signs. If biodiversity is the name of the biotic variations originated from the genes in the ecosystem, and, if by genes, we understand information, biodiversity is a rich subgroup that integrates semiodiversity. I think this is the hypothesis which enriches the research in the field of semiotics of culture.

Despite the many doubts, there is a certainty: defending the diversity of the species as a common flag for the preservation of the biosphere can be a useless task if there is not a similar effort to preserve the semiosphere. After all, *life* is the manifestation of the *bio* that, in its turn, is fed by information conveyed as *semion*. Nature and culture are so umbilically impregnated of each other that only such interconnection can define "how much human we would like to remain" (Risério 1999) especially from the ethical point of view. This is the key argument in defence of semiodiversity.

If life is the interrelationship of networks, there is no reason to defend a sphere (bio) in detriment of others (noosphere, sociosphere, semiosphere). Once again I quote Risério's words:

Amid the immense list of problems and planetary unbalance, with the whip of poverty burning the world body, I am going to permit myself the luxury to highlight three important questions here. Preserving a human being is one of them. Preserving the biosphere is another. But beyond biodiversity, we must also preserve semiodiversity. [...] Let us say the obvious, freedom and ethics don't exist outside the realm of signs. Every ethics brings, in its basis, an anthropologic construction. And it is exactly the semiodiversity, the neobabelic existence that makes the amplitude of the arc of questions and possible responses a basic thing at this moment of human adventure on Earth. (Risério, 1999: 108)

Although it seems to be an isolated claim, in fact, Risério's argument defends disturbing causes. He confirms the existence of another basic sphere in relation to the biosphere and the sociosphere. This is a very recent discovery. The Lotmanian notion of semiosphere dates from the beginning of the 1980s, as the place of thinking structures in the universe. If, on the one hand the defence of semiodiversity implies the defence of culture as an organism formed by different interactive systems, on the other hand it propagates the notion of semiosphere as an emergency of a new sphere of communication. This way, it constitutes another argument in defence of semiodiversity: the necessity of having a wider domain on the planetary expansion of the communication languages.

Since technology has become the basic perspective through which it is possible to produce any discourse about the world, we quit living in a natural environment to live in a technological environment that acquires, thus, the character of an autonomous phenomenon (Simmons 1993: 6). Not only does the place of the human being in the planet seem definitely impossible to be established, also the severity of the polarity between nature and culture loosens and shelters the coexistence of different spheres of life. If the existence of such a great diversity of species on Earth remains a disturbing mystery, it is not possible to keep on attributing to biodiversity the sole guarantee of the good operation of the ecosystem. The discovery of a totally diversified world does not only lead to the necessity of knowing which forces and processes take to evolution and persistence of many species but, especially, the coexistence mechanism without which no kind of diversity would be possible.

The projection of the concept of semiosphere onto the semiodiversity of Brazilian culture is a process that has already started, and it announces what it has come for. In the first place, its questioning character is clearly seen when it comes to what we understand by multiculturalism. For this phenomenon it is necessary to focus on a similar viewpoint of those who take things from the world according to the reverse perspective. This is what it means: the cultural contacts are the clearest manifestation of semiosis. Instead of finally opening up, they reproduce the same autoregulating dynamism of life. Multiculturalism is not the root of a culture, but the dynamic principle of relations. This way, it is useless to reproduce it from a centre. In fact, if you want to use the analogy with the reverse perspective, multiculturalism will always be a polycentric envisage. In this sense, it will be very difficult

not to take it as a synonym of semiodiversity. Also, in this sense, the analysis of polycentric multiculturalism is a problem for the semiotic analysis.

The accuracy of this look, which the Brazilian culture is enhancing towards a better understanding of its own qualities, is the richest contribution of the projection of the principles of semiotics of culture under a Slavic tradition. The biggest source of this richness is its unleashing possibility that definitely moves the perspective of stigmas and sociological spectrum away. The challenge, therefore, gains a different proportion. The defence of semiodiversity is a commitment to the dynamics of changes. In this sense, it compels us to understand the cultural identity as a modellizing process because such is the condition of all systems of culture. This is the theoretical impulse that leads us to look inside of the culture, a focus that I tried to locate in the property of the Russian semiotic ideas in the Brazilian context since the beginning of this projection.

The article ends here, but the projection continues since many points still need to be discussed. In order to assert a principle of the best bakhtinian tradition, there is no point in making a hasty conclusion when the object of our discussion is an unfinished dialogue.

References

- Campos, Haroldo de 1969. A arte no horizonte do provável. São Paulo: Perspectiva.
- 1976. A operação do texto. São Paulo: Perspectiva.
- Jakobson, Roman 1971. Lingüística e comunicação (trans. I. Blikstein, D. Pignatari). São Paulo: Cultrix.
- 1970. Lingüística. Poética. Cinema. Roman Jakobson no Brasil. São Paulo: Perspectiva.
- Jakobson, Roman; Pomorska, Krystyna 1985. *Diálogos* (trans. E. A. Kossovitch; B. Schnaiderman; L. Kossovitch; H. de Campos). São Paulo: Cultrix.
- Machado, Irene 1999. El texto como objeto de estudio en la unidad dialógica de las culturas. In: Zavala, Lauro (ed.), Lecturas simultáneas: La enseñanza de lengua y literatura con especial atención al cuento ultracorto. Mexico, Universidad Autonoma Metropolitana (Unidad Xochimilco).
- Risério, Antonio 1995. Em defesa da semiodiversidade. A via Vico e outros escritos. Salvador: Oiti, 1999.
- Shohat, Ella; Stam, Robert 1994. *Unthinking Eurocentrism: Multiculturalism and the Media*. London & New York: Routledge.
- Schnaiderman, Boris 1978. Projeções: Rússia/Brasil/Itália. São Paulo: Perspectiva.

— 1993 [1985]. Uma viagem aos diálogos. In: Jakobson, Roman; Pomorska, Krystyna, *Diálogos* (trans. E. A. Kossovitch; B. Schnaiderman; L. Kossovitch; H. de Campos). São Paulo: Cultrix.

Schnaiderman, Boris (ed.) 1979. Semiótica russa. São Paulo: Perspectiva. Simmons, I. G. 1993. Interpreting Nature: Cultural Constructions of the Environment. New York: Routledge.

Проекции: семиотика культуры в Бразилии

Проекция — это диалогический механизм взаимоотношения вещей в мире или в разных системах, как в природе, так и в культуре. Вместо того, чтобы их изолировать, проекция помещает их в ту же систему. В этом смысле проекция создает экосистему без границ. В контексте культуры проекция дает нам возможность понять через взаимоотношения разных знаковых систем, как разные культуры могут связываться, обогащать и развивать друг друга. Это основная цель семиотики культуры. С этой точки зрения, изучение природы знаковых систем позволяет связать различные культурные традиции. Поэтому объектом семиотики культуры считается не культура, а знаковые системы. Вследствие этого мы понимаем природу отношений между знаковыми системами как проекцию.

Здесь нас интересует только один вид проекции: проекция понятий славянской традиции семиотики культуры на бразильскую культуру. В этом смысле концептуальное поле русской семиотики — диалогизм, карнавализация, гибридность, граница, экстрапозиция, гетероглоссия, текстуальность и моделирующие знаковые системы — проецируется на такие же определяющие аспекты семиотики бразильской культурной идентичности. Анализируя эту проекцию, я буду ссылаться только на два элемента проекции: на концепт текстуальной истории как возможность достичь внутреннего перемещения в культуре, и семиодиверситет, порождаемый встречей разных знаковых систем. Таким образом я надеюсь прояснить, как ключевые понятия русской семиотики были приняты в контексте моей культуры.

Projektsioonid: kultuurisemiootika Brasiilias

Projektsioon — see on asjadevaheliste suhete dialoogiline mehhanism maailmas või eri süsteemides nii looduses kui kultuuris. Selle asemel, et neid isoleerida, asetab projektsioon nad samasse süsteemi. Selles mõttes loob projektsioon piirideta ökosüsteemi. Kultuurikontekstis annab projektsioon meile võimaluse mõista läbi erinevate märgisüsteemide seoste kuidas erinevad kultuurid võivad seostuda, rikastada ja arendada üksteist. See on kultuurisemiootika põhieesmärk. Sellest seisukohast võimaldab märgisüsteemide olemuse uurimine siduda erinevaid kultuuritraditsioone. Kultuurisemiootika objektiks loetakse seepärast mitte kultuuri, vaid märgisüsteeme ja märgisüsteemide vahelisi seoseid mõistame me kui projektsiooni.

Siin huvitab meid ainult üks projektsiooni liik: slaavi kultuurisemiootika traditsiooni mõistete projektsioon brasiilia kultuurile. Selles mõttes projitseerub vene semiootika kontseptuaalne väli — dialogism, karnevaliseerimine, hübriidsus, piir, ekstrapositsioon, heteroglossia, tekstuaalsus ja modelleerivad märgisüsteemid -samadele brasiilia kultuuriidentiteedi määravatele aspektidele. Analüüsides seda projektsiooni, viitan ma vaid selle kahele elemendile: tekstuaalse ajaloo kontsept kui võimalus saavutada sisemist ümberpaigutumist kultuuris ja semiomitmekesisus, mis mis sünnib erinevate märgisüsteemide kohtumise tulemusena. Sel viisil loodan ma selgitada, mil moel on vene semiootika võtmemõisteid vastu võetud minu kultuuri kontekstis.

Analysing narrative genres

Paul Cobley

London Guildhall University, 31 Jewry Street, London EC3N 2EY, United Kingdom e-mail: cobley@lgu.ac.uk

Abstract. There can be little doubt that human consciousness is now suffused with narrative. In the West, narrative is the focus of a number of lucrative industries and narratives proliferate as never before. The importance of popular genres in current narrative is an index of the demise of authorship in the face of new media and has necessitated the renewal of the term "genre" in narrative analysis over the last hundred years or so. However, this article attempts to make clear that the concept of genre and the notion of a textual formula in narrative are not the same thing. Genre, in contrast to formula, is concerned precisely with the issue of how audiences receive narrative conventions; however, much genre theory has treated genre as a purely textual entity. The current article argues that genre should properly be considered as an "idea" or an "expectation" harboured by readers and identifies in textual-based genre theory of the last two thousand years the perpetuation of ahistoricality and canonisation.

As a term in the analysis of all kinds of narrative discourse — from stories in everyday speech to classical drama, from painting to advertisements — "genre" seems to have been omnipresent. Every consumer of narratives has a rough idea of what "genre" means: a shorthand classification, determining whether a particular text is expected to conform to previous experiences of texts on the part of the consumer. The analysis of genre, however, has tended to treat the concept as an objective entity which can be demonstrated to exist in concrete terms. One reason for this has been the need for analysis to be focused on phenomena which can be shown to be anchored in a text. Yet there are also other reasons for the development of genre's "objective" status which are embedded in the history of the use of the term in theory.

This essay will consider the use of "genre" and suggest, based on an overview of its past fortunes, an agenda for genre's deployment in a "readerly", multimedia environment of narrative production.

Twentieth century genre theory

One of the most common observations made about genre theory is that it stayed in a largely steady state for two thousand years after Aristotle's death before accelerating into flux during the twentieth century. Undoubtedly, "genre" in the two millennia before 1900 was a prescriptive device which provided the means for guiding the act of composition or the terms of reference for post hoc evaluation. Yet while genre theory in the twentieth century came to embody new imperatives, it did not totally abandon the prescriptive impulse.

A number of factors muddied the water in twentieth century genre theory. Firstly, narratives proliferated. Whereas Aristotle and his descendants could rely on the fairly limited set of narrative genres denoted by tragedy and comedy in drama, and epic in poetry, print technology in Europe facilitated the growth of the romance and the novel, the latter of which, especially, had already fragmented into a multi-generic entity by the end of the nineteenth century. In the same way that print allowed narrative to spread through multiple copies of printed books, the new media of the twentieth century effected the dissemination of an unprecedented amount of narratives of all sorts. Raymond Williams, writing about dramatic narrative in the 1970s, suggests that

in societies like Britain or the United States more drama is watched in a week or weekend, by the majority of viewers, than would have been watched in a year or in some cases a lifetime in any previous historical period. It is not uncommon for the majority of viewers to see, regularly, as much as two or three hours of drama, of various kinds, every day ... It is clearly one of the unique characteristics of advanced industrial societies that drama as an experience is an intrinsic part of everyday life. (Williams 1974: 59)

On radio, in film, in print, television and cyberspace, narrative genres flourished. Amidst the diversity of narrative over the last hundred years readers might have been in danger of floundering as a result of their inability to choose what narrative is appropriate for them and what offers the potential of enjoyment.

This signals another way in which genre theory in the twentieth century began to operate in muddy waters. Although it is argued that genre is so intriguing because it has always been a concept "related both to very specialized technical issues and to very broad human ones" (Dubrow 1982: 2), interest in genre has been dramatically bifurcated in recent years. It would be difficult to dispute that theatregoers or the audience for oral storytellers have always been interested to know in advance what type of narrative would be performed for them. Concomitantly, throughout the age of literacy and print, writers and scholars have been only too happy to extol the virtues and enumerate the features of specific genres. Yet, in the twentieth century, the divergence of these ways of knowing about genre became greater as "genre" came to embody both a common sense usage in which moviegoers, novel readers, TV viewers and others saw it as a shorthand for textual classification, and a purely academic usage where theorists searched for textual organization and patterns of (often social) meaning.

Each of these positions in the bifurcation of genre theory have interesting determinants. The academic usage of the term is embedded in the historic development of an analytic mentality in the humanities which is consonant with modernity. This perspective, which, broadly speaking, favours a synchronic investigation of phenomena and a theoretical approach to knowledge over a diachronic and empirical approach, can be seen in the work of Propp and the Formalists in Russia; Ogden, Richards, Empson and Leavis in Britain; the New Criticism, Innis, McLuhan and Frye in North America; the structuralists in France; the Prague Linguistic Circle in Czechoslovakia; and the Copenhagen School in Denmark. The common sense usage of "genre" which developed alongside, but divorced from, twentieth century academic discourse, is determined in a much more nebulous way. On the one hand, its determinants are what Bakhtin calls "primary genres", "certain types of oral dialogue — of the salon, of one's own circle, and other types as well, such as familiar, familyeveryday, sociopolitical, philosophical, and so on" (1986: 65); on the other, its determinants are more akin to "secondary genres", Bakhtin's "literary" or "commentarial" modes, or, more pointedly, the discourses promulgated by the industries responsible for producing narrative genres.

For the humanities in the first two thirds of the twentieth century especially, these latter were problematic. The "mass culture" paradigm posited from opposite ends of the political spectrum (Adorno, Hork-

heimer 1973; Leavis 1930) found the version of genre offered by the "culture industry" both a curse and a gift. It constituted a curse because, in most cases, academic classifications of texts, particularly popular texts, were compelled to feed off prior classifications made by audiences, the industry responsible for the production of a given text, and the set of discourses associated with the publicity attached to texts (including reviews, interviews, film posters, press releases, publishers' notices, etc). Yet it was a gift because it sometimes seemed that analysis would reveal how debased the genres of mass culture were.

It is true that other possibilities existed deriving from attempts to transcend the stalemate illustrated in my caricature of mass culture theory. Film Noir, for example, is one classification of popular texts which originated in academic circles and was then disseminated through a more popular discourse. A number of American films from the 1940s were taken to constitute a set by post-war French critics. These critics had quite cogent reasons based on textual analysis of style for creating their taxonomy, despite the fact that the original audience for these films, not to mention the industry that created them, had not put this body of films into a generic category (Krutnik 1991: 15). Most frequently, though, academic analysis persevered in its dichotomous separation of all genres. Todorov (1973: 13-14), for example, suggests that a certain number of genres already exist and have existed in the past; but, for him, the role of the academic is also to study the fundamental principles of these, in a similar way to that of Frye (1957) and classical poetics envisioning in the process the possible developments of genres. Thus the normative complexion of genre persisted in the century by means of a generative existence, as a set of conditions to assist in the production of a text but not as conditions which must be met to prevent the text falling outside the genre category.

Genre since the 1970s

Major strides in genre theory were made when Anglophone academia began to embrace film as a legitimate object of study. The genre analysis carried out by film theory was initially based on the variable rigour of film critics' observations: the seminal essay on film genre, for example, is often taken to be that of Warshow on the gangster film (Warshow 1962). As film theory matured, however, genre analysis became more circumspect and a fair amount of work published in the

early 1970s came to have an important influence on contemporary theories of genre. For example, a series of articles appeared in 1970 in the British journal *Screen*; these interventions, by Ryall, Buscombe and Tudor, along with Kitses' *Horizons West* (1969), explored some of the key issues still current in genre theory today. These included whether the Western, for example, was constituted by visual elements, or by stock situations, or by plot determinants; whether the industry repeated formulas by audience fiat, and whether "auteurs" were responsible for the construction of meaning in genre films. In a sense, these articles took up Todorov's imperative of *theoretically* exploring genre, paying close attention to how genre texts function.

By laying out the issue of theoretical genres so baldly, these essays acted as the cue for other genre theorists who took up similar questions of genre in other areas beyond film. Thus, attempts were made to map out the structure of, for example, thrillers (Palmer 1978), Westerns (Wright 1975) and adventure, mystery and melodrama texts (Cawelti 1976). The attention to textual detail and the resolutely synchronic bearing of such genre studies indicates that they are. at least implicitly, indebted to Propp (1968) as well as to Todorov. The English translation of Propp's Morphology of the Folktale had been available since 1958 and appeared in book form ten years later. What Propp lent the genre theorists, in short, was the idea that some texts have a structure that can be repeated time and again with different contents while generally carrying the same meaning. Put another way, genre could be considered an empty vessel, a container into which different contents might be poured. As such, genre was assumed to be objectively "there", a specimen with its own immanent and observable structures. Furthermore, the problem of change regarding the "content" of generic texts seemed to be resolved: that which was objectively "there" carried some meaning that ultimately shaped the "content" no matter what that "content" might be.

Palmer's book on thrillers is probably the clearest example of this belief that the mutability of genres had been resolved. Paramount in his analysis is that genre, in its very organizing principles, carries meaning; and, as with Wright and others, it is argued that that meaning is constant, unchanged by the realm of the extra-textual and unmoved by a text's content. Furthermore, there is excellent reason for such a contention. For Palmer, the genesis of the thriller, the key moment that provides the structure of this particular genre, becomes enshrined in its very principles. In an acute and persuasive analysis, Palmer shows that a set of economic and ideological conditions

occurring at the moment that the thriller genre crystallized, in the early- to mid-nineteenth century West, resulted in the inscription of capitalist social relations into the genre itself. The fear of crime, the cementing of views about property and theft, coupled with the forging of a liberal hegemony of *laissez-faire* individualism and entrepreneurial industry all find their generic embodiment in the thriller's hero, his flexible competitive individualism and the threat to the social order from the often "bureaucratic" villain. As such, the genre is constant in its complexion. Indeed, Palmer even refers to the possibility of thrillers with a Trotskyite hero and a multi-national corporation as a villain which, for all their radical rhetoric will remain replays of capitalist social relations simply by virtue of being thrillers (Palmer 1978: 67).

In such a formula, "generic innovation" becomes an oxymoron. The question of the transience of genres, why some genres die out or why certain genres experience revivals remains unanswered (cf. Bennett 1990: 78). This theoretical lacuna constitutes a relatively minor concern, however, in the face of certain dire consequences which can result when such a politically one-sided understanding of genres is espoused. In an essay which continues to be cited and anthologised, Judith Hess Wright offers her own strident interpretation of the "effects" of genre films: "Viewers are encouraged to cease examining themselves and their surroundings, and to take refuge in fantasy from their only real alternative — to rise up against the injustices perpetrated by the present system upon its members" (Hess Wright 1986: 49; anthologised Grant 1995, cited by Neale 2001: 2). The paucity of circumspection in Hess Wright's tone might easily be attributed to the fact that her comments constitute part of an essay which appeared in 1978. However, the passage of twenty years has not been long enough to bury identical sentiments in different quarters: that generic texts have a very limited range of meanings, that the reader can discern only these, that they are meanings which paper over "reality" and, as a consequence, readers (apart from intrepid genre theorists, that is) either believe the unchanging version of the world that generic texts churn out or are distracted from a "proper" perspective on "reality". Here is George Lipsitz, writing in 1998:

Generic conventions encourage the repetition, reconfiguration and renewal of familiar forms in order to cultivate audience investment and engagement. Created mostly for the convenience of marketers anxious to predict exact sales figures by selling familiar products to identifiable audiences, genres also have

ideological effects. Their conventions contribute to an ahistorical view of the world as always the same; the pleasures of predictability encourage an investment in the status quo. (Lipsitz 1998: 209)

In each case, the simplistic prescriptions made in the service of denouncing generic texts are based on a "monologic" version of genre.

Dialogism and genre

Although these last examples are extreme versions of the consequences of one perspective on generic texts, they are nevertheless instructive in the way that they highlight the need to think through the dialogical nature of genre at all stages. Those narrative genres which do not die out are not necessarily "fooling the public" every time, nor are they necessarily stale replays of old formulas. Indeed, as Bakhtin (1986: 87) asserts, "speech genres submit fairly easily to reaccentuation, the sad can be made jocular and gay, but as a result something new is achieved (for example, the genre of comical epitaphs)". Re-accentuated genres partake of changed circumstances experienced by the participants in utterances. In a comment which can be found to apply broadly to all narrative genres, Jauss (1982: 79) asserts that "the literary work is conditioned by "alterity", that is, in relation to another, an understanding consciousness". For genre, this reader-orientated perspective is of immense importance.

The work of the Constanz School has made literary theory aware of the way that a given organization of textual elements does not necessarily have sovereignty over a reader's interaction with it. Instead, the reader is at various degrees of liberty to make of texts what s/he will, and this includes making texts anew. In fact, following the work of Jauss, Iser and others, academic work on the complexity of the reading process and audience/text relations has flourished in the study of TV, film, written fiction and so on (for example Morley 1980, 1986, 1992; Ang 1984, 1991, 1996; Radway 1984; Seiter et al. 1989; Gray 1992; Liebes, Katz 1993; Lull 1990; Gillespie 1995; Hermes 1996; Nightingale 1996). In general, such work has argued that in order for a text to have any interaction with the reader, considerable creative activity — rather than passivity — on the part of the latter is required. Even where there is an "implied reader", a preferred way of reading a text constructed by intentional inscriptions on the part of the enunciator, the real reader can choose to read differently and this "different" reading or construction of meaning will derive from determinants outside texts, including aspects of people's lives (Hermes 2002).

The fact that work on the reading process has been most assiduously pursued in relation to often highly formulaic media texts such as television soap operas or magazines is also crucial for genre theory. Literary-based work on readership has often betrayed its own impetus to valorize literature. Iser's (1974) notion of the "implied reader", for example, is clearly part of a project to delineate "proper" practices of reading as opposed to "aberrant decodings". The same can be said of Eco's (1989) writing on the "open" work or, perhaps to a lesser extent, Barthes' (1978) distinctions in "From work to text". In such cases it is assumed that literary works are, by definition, open to interpretation because they invite a disciplined and skilful reading. Implicitly, generic texts will not be open to interpretation because they invite a form of reading which is, to use Rick Altman's (1987: 4) phrase, "short-circuited". Yet, there is an important distinction here. As soon as the terms of the analysis are shifted to the dialogical relationship of readers and texts, it is difficult to maintain that the seat of genre is purely a textual issue, no matter how much one wishes to distinguish between "literary" and "generic" narratives.

Clearly, all texts carry a multiplicity of meaning or polysemy. A genre text is no different in this respect. It is therefore the potentially wide range of interpretations invited by a genre text of the reader that is short-circuited rather than anything intrinsic to, or immanent in, the text. As Altman is keen to point out, there is a great deal outside the text which determines a genre, such that "genres look different to different audiences" (Altman 1999: 207). For Altman, a cultural commodity such as a genre is "made" through the action of readers who harbour expectations about it. Such expectations are not just created by publicity surrounding a narrative; nor are they, unproblematically, the products of existing belief. Instead, they are the products "also of knowledge, emotions and pleasure" (Jost 1998: 106). Generic meaning is derived partly from competence in reading other narratives in the genre but also from a more diffuse set of knowledges, attitudes, values and experiences brought to the reading of a specific narrative, all of which are in a complex interplay. As such, then, genre is properly an "idea" or an "expectation" harboured by readers.

It is not difficult to see why genre theory has been, until recently, reluctant to make this inevitable move. The unavoidable conclusion

that genre is a set of expectations rather than a thoroughly textual entity undermines the project of much literary and textual criticism. In a sense, the rise and rise of popular narrative genres in the twentieth century is an index of the demise of authorship and, in a way, this has offered an opportunity to analyse contemporary narrative as if it embodied the return of certain of the principles of pre-literate oral narrative. Following the work of scholars of oral culture such as Lord (2000) and Havelock (1963, 1986), these principles are, in short, that the formulaic quality of narrative has a mnemonic intent and that individual authorship as it is known in literate culture is irrelevant. For genre theorists taking their cue from Propp and Frye, it is axiomatic that formula and repetition in generic narrative are more important than the identification of an individual producer. Yet the analysis of formula in the face of the author's death — or, to put it another way, pace auteurism, the "non-birth" of the author in the generic narratives of film, radio, TV and computers (see Cobley 2001a: 171-200) — is a stop-gap, or even retrograde, measure. The real issue is the reconstitution of genre theory as a feature of the public sphere rather than a textual given.

Is it possible, then, to pursue a theory of genre without the preëminence of the text? The work of Altman, Bennett and others suggests to me that it is and that the outstanding questions in such a reconstituted genre theory concern "reading formations", "verisimilitude", "syntactic/semantic aspects of genre", the "dominant" and the foreshortening of generic production in history.

Reading formations

Indubitably, the key difficulty that faces the reconceptualized genre theory is that the breadth of any readerly knowledge or "horizon of expectations" is virtually unassimilable in a theoretical discourse. So much so that while various commentators have felt obliged to pay lip service to the issue most have not been able to incorporate it fully in their arguments. Dubrow, for instance, gives just two examples of generic expectations: readers' knowledge of the age and (in consonance with Hirsch 1967) expectations centred on knowledge about the author (Dubrow 1982: 108). Todorov is more reductive still: "Where do genres come from?" he asks; "Quite simply from other genres" (Todorov 1990: 15). For Jauss, on the other hand, the

horizon of the expectable is constituted for the reader out of a tradition or series of previously known works, and from a specific attitude, mediated by one (or more) genre and dissolved through new works. Just as there is no act of verbal communication that is not related to a generally, socially or situationally conditioned norm or convention, it is also unimaginable that a literary work set itself in an informational vacuum, without indicating a specific situation of understanding. To this extent, every work belongs to a genre — whereby I mean neither more nor less than that for each work a preconstituted horizon of expectations must be ready at hand [...] to orient the reader's (public's) understanding and to enable a qualifying reception. (Jauss 1982: 79)

Jauss, however, is reluctant to venture too far into such a problematic area and, like Dubrow and Todorov, insists on the primacy of aesthetic knowledge in the act of reading, stressing the centrality of taste, subjectivity and perception (Jauss 1982: 23). Broadly, the same can be said of other literary-derived concepts employed to understand readership. Fish's idea of an "interpretive community" (his spelling, see Fish 1980) is more concerned with the forces acting on an audience at the very moment of their interaction with a text rather than with the knowledges, values and experiences which may be at work prior to, and determining, text/reader interactions. Even Altman (1987: 3–5), in his early use of Fish's term in relation to the film musical, is guilty of giving primacy in the production of meanings not to the myriad forces acting on any reader, but to a genre text in its relation to a set of other genre texts.

The work of Tony Bennett (1987, 1990), though, considerably extends the concept of interpretive community by positing instead a space of reading which he calls a "reading formation". He stresses the importance of a number of discursive practices that operate on readers before, and simultaneous with, a textual system, ordering the relations between texts in a definite way "such that their reading is alwaysalready cued in specific directions that are not given by those 'texts themselves' as entities separable from such relations" (Bennett, Woollacott 1987: 64). The reader's knowledge of how texts are organized, and their relations with other texts is largely a knowledge of how various institutions work — the film industry, publishing, broadcasting, advertising. A low level of understanding of relations between these is required for an audience to realize, for example, that an actor is giving an interview on a chat-show at a given moment in time because his/her latest film is currently on general release. Such knowledge, in turn, might be built into a reading of the film.

At the same time, that which seems wholly untouched by institutional relations is often equally the result of similar determinations. For example, Bennett and Woollacott acknowledge Foucault's insight into the author as "the principle of thrift in the proliferation of meaning" (Foucault 1986: 119), the way that a reader's understanding of authorship might be built into the reading of a text. In their study of the James Bond phenomenon they show that Ian Fleming - the original, but merely one of a number of Bond authors — exists not as a real person but as the nodal point of biographical accounts. They conclude that commentaries have "Bondianised" Fleming's life and thus "Flemingised" Bond as a figure for readers, providing one limit to the polysemous nature of Bond texts (Bennett, Woollacott 1987: 89-90). Moreover, this is subject to change over time: as the output of the present Bond author, Raymond Benson, begins to exceed Fleming's there is even the possibility that some future readers will pay little heed to the biography of Fleming.

This attention to the probabilities of change in considering the longevity of Bond after Fleming suggests that the concept of "reading formation" allows for a consideration of reading relations in different time periods. Strategies of reading the Bond texts in the 1950s, particularly national ones, are shown by Bennett and Woollacott to be important within the frameworks of other texts. One method of identifying these frameworks is through reviews: the review in the New York Times of the film version of Dr. No, according to Bennett and Woollacott, effectively sold Bond to the American public as a Mickey Spillane character (Bennett, Woollacott 1987: 83). In Britain, however, hard-boiled novels by Spillane and others, while popular in the late 1950s, did not become a point of reference for the reading of the Bond novels but were "eclipsed by the earlier traditions of the "imperialist spy-thriller" which provide by far and away the most influential textual backdrop against which the novels were initially read" (Bennett, Woollacott 1987: 83).

As is evident, then, the concept of reading formation promotes an understanding of reading as an activity which can no longer be considered merely as the realization of textual meanings but is more suitably viewed, instead, as highly determined by ideological and commercial imperatives. Acknowledgement of the work of a reading formation also permits the analyst to consider texts as "texts-in-history" and "texts-in-use" — that is, as texts that are subject to particular readings rather than as entities with immanent qualities (Bennett 1987). We might tend to commonsensically assume that the

"meaning" of a text is "in there"; but the interrogation of a reading formation consistently demonstrates that a text's meaning is constantly derived from factors outside of itself (in the past and the present).

In general, the task of a dialogical genre theory will be to establish the determinants of the text-reader relations which accrue to specific genres at specific times. Central to this, then, is the analysis of what readers consider to be decorous, appropriate and feasible in a given genre's representation of the world — that is to say, a genre's verisimilitude.

Verisimilitude

Todorov (1977) identifies two kinds of norms by which a work or set of statements is said to have verisimilitude: the "rules of the genre" and "public opinion" or doxa. When somebody bursts into song during a musical, this is not, according to the rules of the genre, an indecorous act at odds with the statements in the text: the song is part of a specific regime of verisimilitude and falls within a range of expectations on the part of the audience that such acts are legitimate within the bounds of the genre. Where "public opinion" is concerned, plainly this consists of a set of expectations and understandings of the world by readers rather than the world as a referent. In this way the doxa is a regime of verisimilitude in itself, constantly shifting according to a complex set of checks and balances which characterize the world of discourse in general.

As Todorov (1977: 87) explains, it is more accurate, therefore, to consider verisimilitude as a principle of textual coherence rather than an area in which there exists some relation between the fictional and the real world. What is fundamental to expectations about the thriller genre, for example, is the maintenance of a general level of "credibility" which matches as closely as possible that which is held by the doxa. The thriller is characterized by its attempt to achieve harmony between the consistency of representation within the thriller narrative and what is believed to be credible — politically, socially, topically — at a given moment by public opinion. It is for this reason that commentators often make the mistake of believing that thrillers are more "realistic" than other texts or that being "true to life" is a specific and objective expectation harboured by thriller readers (Cobley 1997).

The specific regime of verisimilitude inherent in particular genres cannot be stressed enough. In romances, the notion of a world beyond or without romantic love is unthinkable in the text-reader interaction. One of the most deft features of Radway's investigation of romance reading, for example, was her request that the group of readers define "failed" or "near-miss" romances. In response, they identified a subgenre which contravened some of their expectations about romance novels but did not totally abandon the belief in romantic love (Radway 1984: 157-185). Similarly, while the thriller genre maintains a specific regime of verisimilitude which gives the genre a close relation to history and non-fiction (Cobley 2000a: 5-14, 34-44) it is flexible in its tutelage and does not police other expectations in order to maintain them as strict rules. The "rules" of detective fiction, for example, were spectacularly contravened in 1926 by Agatha Christie in The Murder of Roger Ackroyd (cf. Dine 1974, Knox 1974); the rules of other genres have undergone similar contraventions (see Tudor 1976: 22 on the Western).

However, while it is true to say that the parameters of generic expectation under the aegis of verisimilitude may be fluid, they are frequently subject to what seem to be two kinds of textual anchoring process.

Semantic/syntactic aspects of genre

Altman considers two fundamental and inseparable constituents of genre: its "building blocks" and the "structure in which they are arranged". He calls these, respectively, genre's semantic and syntactic aspects (Altman 1986: 30), a distinction which, if as imperfect as it is in linguistics, at least allows for a consideration of print genres' equivalent of filmic iconography. This is to say the semantic dimension does not just consist of the object depicted but includes the methods of realizing the object. In film this will comprise lighting, shots, set design and so on; in writing, this will incorporate all those narrative strategies, such as prose style, which are specific to a text. The syntactic dimension, on the other hand, refers to all those "structural" features identified by previous genre theorists; for example, eventual revelation of the murderer in the "whodunit", a climactic gunfight in the Western, a marriage or consummation of a relationship in the romance.

It is in the relation of the semantic and the syntactic dimensions that meaning is enacted; but as Altman insists, the semantic and syntactic should not be considered as discrete textual zones. Where genre theorists have defined genre in terms of the semantic realm (textual "contents") or, as is more often the case, its syntactic realm (textual "structure", etc.), Altman suggests that we could more profitably understand reader expectations in terms of an investment in the *combined* semantic/syntactic realm. As such, the role of the hero in the generic text — which is repeatedly considered a "syntactic" element by theorists after Propp — should not be considered as separable from supposedly "semantic" aspects such as his/her good looks, his/her "goodness" or, if the text is a film, how the hero is shot or positioned in each scene.

Altman's notion of "semantic/syntactic" as combined, it seems to me, pre-supposes the activity of the reader. The semantic/syntactic combination, of course, facilitates short-circuiting by making certain textual features seem naturally inseparable, a clichéd example being, once more, the idea that the "hero" embodies "goodness". But this does not mean that only the producer of a generic text is responsible for its meaning. Altman criticizes Neale and others for their excessive reliance on an understanding of genre expectations as largely created by the film producer's publicity machine and, through an examination of film publicity, argues strongly that producers' discourse contributes surprisingly little to the generic character of films (Altman 1998, 1999). He also criticizes the "conservative" tendencies of theorists such as Hall and de Certeau who implicitly favour a producer-centred understanding of the generation of meaning in their models of "encoding/ decoding" and "poacher/nomad" respectively. Where they see the users of cultural artefacts as interacting with already produced material, Altman exhorts us to explore the use-orientation of readers. As such, there is a need to study the ways in which a cultural commodity such as genre is "made" through the action of readers who harbour expectations. Such expectations are not just created by publicity; nor are they unproblematically the products of existing belief. As we have noted, the reader's knowledge of other texts' semantic/syntactic functioning which s/he recognizes to belong in the same generic system as the text being read represents an important expectation, one which is bound up with questions of pleasures and knowledge.

The generic dominant

Following on from these comments on a dialogical genre theory—that readers of generic texts operate in a reading formation, that they have expectations of verisimilitude, that they activate already existing knowledges in making sense of textual features in combination—the question no doubt remains as to what makes a generic text different from a non-generic text. The first answer to this question must accord with what has been argued above: the generic character of texts is imputed by a series of extra-textual cues. Yet, in response, it is likely to be asserted that genres still have definable features such as heroes, heroines and outcomes which in some way "dominate" proceedings and have precisely been the object of investigation for textual analysts in the past.

The most systematic formulation of the argument that texts betray a dominant procedure has been offered by work which grew out of Russian Formalism, was taken up by the Prague Linguistic Circle and continued to be a part of Jakobson's theorising (see, for example, Jakobson 1960). Tynjanov's theses on literary evolution survey the issue:

Since a system is not an equal interaction of all elements but places a group of elements in the foreground — 'the dominant' — and thus involves the deformation of the remaining elements, a work enters into the literature and takes on its literary function through this dominant. (Tynjanov 1971: 72)

So, for traditional genre theory, this provides the grounds for understanding any genre consisting of many elements as basically being reducible and subordinate to a dominant procedure, "that which specifically makes it what it is" (Easthope 1983: 24). Hence, Bennett notes, detective fiction is often defined in terms of what Barthes calls the hermeneutic code (Bennett 1990: 99); likewise, Cawelti (1976: especially 42–44) subsumes detective fiction under the procedure of finding out secrets; while Robin Wood, for example, therefore sees the horror film as consisting of one basic formula: "Normality is threatened by the Monster" (Wood 1985: 203).

Yet, as Neale points out

Exclusive definitions, list of exclusive characteristics, are particularly hard to produce. At what point do Westerns become musicals like Oklahoma! (1955) or Paint Your Wagon (1969) or Seven Brides for Seven Brothers (1954)? At what point do Singing Westerns become musicals? At what point do comedies

with songs (like A Night at the Opera (1935)) become musical comedies. And so on. (Neale 1990: 57)

Like Jameson (1982), Derrida (1981) and others, Neale is emphasizing what users of genre have known for years: that genres are continually overlapping (cf. Neale 2001: 2). But there are two further points to be made in relation to this observation. Firstly, identifying even the intersection of genres is fraught with problems, as evidenced by Neale's own assessment of what constitutes the thriller genre being based, conveniently, on the findings of just two critics (Neale 1990: 66). Secondly, the generic quality of a text will not be based on audience recognition of either a semantic or syntactic dominant but on an investment in the combined semantic/syntactic.

The latter point is made at some length in Radway's now classic study of romance readers. Her group of real readers were very concerned with narrative resolution in their reading matter (Radway 1984: 67) as might be expected in relation to interactions with a genre whose dominant seems to be consummation and a happy ending. Yet real readers cannot be relied upon to read strictly according to a dominant procedure. When considering why they read romances Radway's readers predominantly gave reasons to do with relaxation and social life, but also, and third on the list, "To learn about far away places and times" (Radway 1984: 61). Scientifically inconclusive though this data is, it does indicate that any "syntactic" enjoyment of resolution is also inseparable from the supposedly "non-dominant" semantic elements which, in any narrative, are a necessary part of the movement towards resolution. It is significant, too, that none of the readers chose to articulate their preference for romance reading explicitly in terms of the generic dominant alone. Although audience ethnographies devoted to other genres have not always directly addressed the issue of generic dominants, it is still worth mentioning that Gillespie's (1995) study of Asian residents in the South Eastern British town of Southall reports that soap operas provide an arena for discussing the quality of Punjabi family life, while the respective studies of Dallas audiences by Ang (1986) and by Liebes and Katz (1993) demonstrate that there is no such thing as purely syntactic dominance.

It is possible, as Neale (1990, 2001) suggests that the only really demonstrable dominant in the study of narrative genres is narrative itself. Elsewhere, I have argued that as a mode of enunciation, narrative has memorialized and consolidated cultures and that the residue

of this function can be discerned in all the places where narrative is at play, including journalism, history, medical case histories, and not just fiction (Cobley 2001a). Narrative structure — at its simplest an inexorable movement towards an end which is punctuated by detours — is widespread and pervasive. Yet, in the case of individual genres, the notion of the dominant as a constant defining textual feature is difficult to sustain. So, given that genres should be considered as constituted by the expectations of readers, the only way that a dominant can be properly countenanced is as an element in a reading formation.

This approach seems to characterize contemporary analysis of generic texts. Recent writing on the crime or thriller genre, for example, has tackled the issue of the dominant but has avoided the tendency to treat it as a timeless textual phenomenon which marks genre forever. McCann's analysis of the hard-boiled genre argues that a dramatic crisis and revision of American government during the period of the New Deal effectively heightened the innovation which constituted the new form of writing. By focusing precisely on the "public knowledge and civic solidarity" (McCann 2000: 4) which can be argued to be a dominant of classic detective fiction, the hardboiled, he argues, became "a symbolic theater where the dilemmas of New Deal liberalism could be staged" (McCann 2000: 5). In my own The American Thriller: Generic Innovation and Social Change in the 1970s (Cobley 2000a), I argue that the dominant paranoia and fear of conspiracy in the thriller genre as identified by Palmer (1978), Mandel (1984) and others, is not wholly inevitable at all times but is foregrounded because of the dominance of paranoia and conspiracy fears in that decade's particular reading formation (not coincidentally, the same reading formation in which Palmer and Mandel's analyses appeared). Most persuasive of all, perhaps, is Pepper's (2000) The Contemporary American Crime Novel: Race, Ethnicity, Gender, Class which argues that "strategies of domination do not inevitably reduce subjects or agents to powerless ciphers" and that it is dubious to envisage a dominant procedure providing a vision which characterizes a canon of American crime novels because "the 'best' American crime fiction is messy, disturbing, ambiguous, violent, shocking" (Pepper 2000: 18).

Indeed, it is possible that the notion of a textual dominant, even when merely implicit in genre theories, has been the main cause of a crippling problem in genre analysis which has maintained genre theory as one of the last bastions of unthinking ahistoricality. I refer, here, to the issue of generic canons and history.

Generic canons and history

It is clear that any historian of fictional texts has such an unmanageable wealth of material to wade through that constituting the corpus for study involves, necessarily, not considering a huge number of texts. Hence, one of the most influential histories of the thriller, Julian Symons' Bloody Murder, avoids discussing an "enormous mass of more or less entertaining rubbish" (Symons 1974: 10). This occurs time and time again in the literature of genre criticism with a succession of writers accepting a consensus on a central corpus of texts and their relevance to the history of the genre. The reason for this kind of canon construction is clear. Rather than admitting huge sellers who might have made an impact on public consciousness, historians of genres wish to find some way of dealing with the formidable breadth of the popular fiction industry, to look at "representative" texts and, sometimes, to preserve "value". The principle of critical exclusion, however, tends towards the treatment of the text "as if it were a hermetic and self-sufficient whole, one whose elements constitute a closed system presuming nothing beyond themselves, no other utterances" (Bakhtin 1981: 273). In short, the text is denied its place in history, its coexistence with other generic texts and its existence as the product of contemporary readings.

In any examination of genres in history which is grounded in principles of accuracy rather than evaluation there is a need to gain recognition of the *breadth* of a particular genre. In histories of the thriller and detective fiction, for example, there has developed a tacit acceptance of an "interregnum", a period in which little or no detective fiction appeared which most critics believe to exist between Wilkie Collins and Arthur Conan Doyle in the nineteenth-century. Yet, as Stewart (1980: 40) argues, this characterization exists only because the precise, *dominant*, syntactic structure of detective fiction that critics are looking for is not evident at this time. The impulse to canonise according to "good" syntactic structure has the result, therefore, that a huge number of texts which have been popular and important on their own terms are written out of history. As Stewart shows, the texts that appear in the "interregnum" are those that make up the

popular literature of their age and, although bereft of the "classic" syntax, they do not stand divorced and aloof from the development of detective fiction (cf. Greene 1970, Bleiler 1978). Detective fiction in this period was one part of a more general cultural production which is now becoming an object of academic study in its own right: sensation fiction (Stewart 1980: 76).

The very history of a genre is thus constrained by its textually preconceived basis. More recently, however, writers have almost abolished strict boundaries between genres by concentrating on popular reading as a broad phenomenon. Bloom (1996) and McCracken (1998) interrogate popular texts not so much in terms of specific genres but in terms of affiliations across genres. In their sophisticated analyses there is a notable emphasis on the "pulp mentality" of general popular reading as more than a collection of texts. For them, the way that readers in pulp culture partake of diversity is virtually an emblem of the fragmenting effects of modernity. What their work shows is that we need to be aware of the way in which readers can operate with "nomadic" tendencies (Radway 1988) rather than being confined to one generic preference in a reading formation.

A similar argument has also been put forward in a powerful essay by Gallagher (1986). He contends that, in addition to accounting for the breadth of a genre we need to be sensitive to — rather than patronising about — the historical period in which a generic text appeared. Against the critics who think that the Western film has grown progressively more widespread and sophisticated in its narrative structure he demonstrates that the genre has a much more complicated history. In the period 1907-1915, he shows that there were probably more Westerns released each month than during the entire decade of the 1930s, and as a result, the Western and numerous plots associated with it, were very much in the contemporary cinemagoer's consciousness (Gallagher 1986: 205). Early cinema audiences were not only generically literate, they also inhabited a social formation which, it could be argued, was every bit as complex as our own. For Gallagher, historians of the Western (and, by implication, other genres) tend to ignore the evidence of reading practices in preference for a blanket assumption about the period in which genre texts are located.

I have written about these issues elsewhere in relation to the thriller (Cobley 2000a, 2000b, 2001b) but also in relation to musical genres such as punk rock (Cobley 1999). Indeed, popular music provides a simple example of the problem in question. Older colleagues

of mine with teenage children express amazement at the breadth of contemporary popular music production which their offspring consume, protesting that a comparable breadth simply did not exist in periods of their own youth such as the 1960s. However, if nothing else, the phenomenon of CD re-issues and re-mastering in the last decade, a practice which has superseded vinyl deletion, has demonstrated how untrue this perspective is. In genre theory, the issue is simply this: the foreshortening tendency inherent in histories of cultural artefacts carries with it a temptation to deny the breadth of the narrative consumption which has been a constant feature of the cultural landscape of industrial capitalism and mass production. Yet, while this is a difficulty for all histories of cultural artefacts, the problem is particularly acute where genre is concerned. The "short circuiting" process in reading genre can lend itself to a short-circuiting in the analysis of genre. Taking genre as a purely textual phenomenon can foster an understanding of generic texts as formulaic, repetitive, simplistic, unchanging and unproblematically reflective of the ideology of given historical periods rather than, in Bennett's terms, as "texts-in-history"; it also goes hand-in-hand with a view of its readers as naïve, limited, less sophisticated in the past than in the present, and not subject to history.

References

Adorno, Theodor W.; Horkheimer, Max 1973 [1944]. Dialectic of Enlightenment. London: Allen Lane.

- Altman, Rick 1986. A semantic/syntactic approach to film genre. In: Grant, Barry Keith (ed.), Film Genre Reader. Austin: University of Texas Press, 26–40.
- 1987. The American Film Musical. Bloomington: Indiana University Press.
- 1998. Re-usable packaging: Generic products and the recycling process. In: Browne, Nick (ed.), Refiguring American Film Genres: Theory and History. London: University of California Press, 221–232.
- 1999. Film/Genre. London: British Film Institute.
- Ang, Ien 1984. Watching Dallas: Soap Opera and the Melodramatic Imagination. London: Routledge.
- 1991. Desperately Seeking the Audience. London: Routledge.
- 1996. Living Room Wars: Rethinking Media Audiences for a Postmodern World. London: Routledge.
- Bakhtin, Mikhail M. 1981. The Dialogic Imagination: Four Essays. Holquist, Michael (ed.), trans. Emerson, Caryl; Holquist, Michael. Austin: University of Texas Press.

- 1986. The problem of speech genres. In: Bakhtin, Mikhail M., Speech Genres and Other Late Essays. Emerson, Caryl; Holquist, Michael (eds.), trans. McGee, V. W. Austin: University of Texas Press.
- Barthes, Roland 1978. From work to text. In: Heath, Stephen (ed. and trans.), *Image—Music—Text.* London: Fontana, 155–164.
- Bennett, Tony 1987. Texts, readers, reading formations. In: Attridge, Derek; Bennington, Geoff; Young, Robert (eds.), *Post-structuralism and the Question of History*. Cambridge: Cambridge University Press, 63-81.
- 1990. Outside Literature. London: Routledge.
- Bennett, Tony; Woollacott, Janet 1987. Bond and Beyond: The Political Career of a Popular Hero. London: Macmillan.
- Bleiler, Everett Franklin 1978. Introduction. In: Bleiler, Everett Franklin (ed.), *Three Victorian Detective Novels*. New York: Dover, vii–xvi.
- Bloom, Clive 1996. Cult Fiction: Popular Reading and Pulp Theory. London: Macmillan.
- Buscombe, Edward 1970. The idea of genre in the American cinema. *Screen* 11(2): 33–45.
- Cawelti, John G. 1976. Adventure, Mystery, and Romance: Formula Stories as Art and Popular Culture. Chicago: University of Chicago Press.
- Cobley, Paul 1997. The specific regime of verisimilitude in the thriller. In: Rauch, I. (ed.), Synthesis in Diversity: Proceedings of the 5th Congress of the IASS. Berlin: Mouton, 389-392.
- 1999. Leave the Capitol. In: Sabin, Roger (ed.), Punk Rock: So What? The Cultural Legacy of Punk. London: Routledge, 170–185.
- 2000a. The American Thriller: Generic Innovation and Social Change in the 1970s. London: Palgrave.
- 2000b. The American Thriller: A Text in History. (Thomas A. Sebeok Distinguished Lecture Series.) Toronto: Victoria College, University of Toronto.
- 2001a. Narrative. London: Routledge.
- 2001b. "Who loves ya, baby?" Kojak and the Great Society. In: Gough-Yates, Anna; Osgerby, William (eds.), *Tough Guys, Smooth Operators and Foxy Chicks: Analysing the TV Action Series*. London: Routledge, 53–68.
- Derrida, Jacques 1981. The law of genre. In: Mitchell, W. J. Thomas (ed.), *On Narrative*. Chicago: University of Chicago Press, 51–77.
- Dine, S. S. van 1974. Twenty rules for writing detective stories. In: Haycraft, Howard (ed.), *The Art of the Mystery Story*. New York: Carroll and Graf [189–193].
- Dubrow, Heather 1982. Genre. Methuen: London.
- Easthope, Anthony 1983. Poetry as Discourse. London: Methuen.
- Eco, Umberto 1989. *The Open Work*. Trans. Cancogni, A. Cambridge: Harvard University Press.
- Fish, Stanley E. 1980. Is there a Text in this Class? The Authority of Interpretive Communities. Cambridge: Harvard University Press.
- Foucault, Michel 1986. What is an author? In: Rabinow, Paul (ed.), *The Foucault Reader*. Harmondsworth: Penguin, 101–120.
- Frye, Northrop 1957. *The Anatomy of Criticism*. Princeton: Princeton University Press.

- Gallagher, Tag 1986. Shoot-out at the genre corral: Patterns in the evolution of the Western. In: Grant, Barry Keith (ed.), *Film Genre Reader*. Austin: University of Texas Press, 246–260.
- Gillespie, Marie 1995. Television, Ethnicity and Cultural Change London: Routledge.
- Grant, Barry Keith (ed.) 1995. Film Genre Reader. 2nd ed. Austin: University of Texas Press.
- Gray, Ann 1992. Video Playtime: The Gendering of a Leisure Technology. London: Routledge.
- Greene, Hugh (ed.) 1970. The Rivals of Sherlock Holmes. Harmondsworth: Penguin.
- Havelock, Eric A. 1963. Preface to Plato. Cambridge: Belknap Press.
- 1986. The Muse Learns to Write: Reflection on Orality and Literacy from Antiquity to the Present. New Haven: Yale University Press.
- Hermes, Joke 1996. Reading Womens Magazines: An Analysis of Everyday Media Use. Oxford: Polity.
- 2002. The active audience. In: Briggs, Adam; Cobley, Paul (eds.), *The Media: An Introduction*. 2nd ed. Harlow: Longman.
- Hess Wright, Judith 1986. Genre films and the status quo. In: Grant, Barry Keith (ed.), Film Genre Reader. Austin: University of Texas Press, 41–49.
- Hirsch, E. Donald jr. 1967. *Validity in Interpretation*. New Haven: Yale University Press.
- Iser, Wolfgang 1974. The Implied Reader: Patterns of Communication in Prose Fiction from Bunyan to Beckett. Baltimore: Johns Hopkins University Press.
- Jakobson, Roman 1960. Closing statement: Linguistics and poetics. In: Sebeok, Thomas A. (ed.), Style in Language. Cambridge: Harvard University Press, 350–377.
- Jameson, Fredric 1982. Towards a new awareness of genre. Science Fiction Studies 28: 322–344.
- Jauss, Hans Robert 1982. *Toward an Aesthetic of Reception*. Minneapolis: University of Minnesota Press.
- Jost, François 1998. The promise of genres. Reseaux 6(1): 99-121.
- Kitses, Jim 1969. Horizons West. London: Thames and Hudson.
- Knox, Ronald A. 1974 [1929, 1946]. Detective story decalogue. In: Haycraft, Howard (ed.), The Art of the Mystery Story. New York: Carroll and Graf, 194–196.
- Krutnik, Frank 1991. *In a Lonely Street: Film Noir, Genre, Masculinity.* London: Routledge.
- Leavis, Francis Raymond 1930. Mass Civilization and Minority Culture. London: Heffer.
- Liebes, Tamar; Katz, Elihu 1993. The Export of Meaning: Cross-Cultural Readings of Dallas. 2nd ed. Oxford: Polity.
- Lipsitz, George 1998. Genre anxiety and racial representation in 1970s cinema. In: Browne, Nick (ed.), *Refiguring American Film Genres: Theory and History*. London: University of California Press, 208–220.
- Lord, Albert 2000. *The Singer of Tales*. 2nd ed. Mitchell, Stephen; Nagy, Gregory (eds.). Cambridge: Harvard University Press.

Lull, James 1990. Inside Family Viewing: Ethnographic Research on Televisions Audience. London: Routledge.

Mandel, Ernest 1984. Delightful Murder: A Social History of the Crime Story. London: Pluto.

McCann, Sean 2000. Gunshoe America: Hard-Boiled Crime Fiction and the Rise and Fall of New Deal Liberalism. Durham: Duke University Press.

McCracken, Scott 1998. *Pulp: Reading Popular Fiction*. Manchester: Manchester University Press.

Morley, David 1980. The Nationwide Audience. London: British Film Institute.

— 1986. Family Television London: Comedia.

— 1992. Television, Audiences and Cultural Studies. London: Routledge.

Neale, Steve 1990. Questions of genre. Screen 31(1): 45-66.

— 2001. Studying genre. In: Creeber, Glen (ed.), *The Television Genre Book*. London: British Film Institute, 1–3.

Nightingale, Virginia 1996. Studying Audiences: The Shock of the Real. London: Routledge.

Palmer, Jerry 1978. Thrillers: Genesis and Structure of a Popular Genre. London: Edward Arnold.

Pepper, Andrew 2000. The Contemporary American Crime Novel: Race, Ethnicity, Gender and Class. Edinburgh: Edinburgh University Press.

Propp, Vladimir 1968. Morphology of the Folktale. Trans. Scott, Laurence. Austin: University of Texas Press. [Original Russian version: 1928; first English translation 1958.]

Radway, Janice A. 1984. Reading the Romance: Women, Patriarchy and Popular Culture. Chapel Hill and London: University of North Carolina Press.

— 1988. Reception study: Ethnography and the problems of dispersed audiences and nomadic subjects. *Cultural Studies* 2(3): 359–376.

Ryall, Tom 1970. The notion of genre. Screen 11(2): 22-29.

Seiter, Ellen; Borchers, Hans; Kreutzner, Gabriele; Warth, Eva-Maria (eds.) 1989.

Remote Control: Television, Audiences and Cultural Power. London:
Routledge.

Stewart, R. F. 1980. ... And Always a Detective: Chapters on the History of Detective Fiction. Newton Abbot; David and Charles.

Symons, Julian 1974 [1972]. Bloody Murder From the Detective Story to the Crime Novel: A History. Harmondsworth: Penguin.

Todorov, Tzvetan 1973. The Fantastic. Ithaca: Cornell University Press.

— 1977. The Poetics of Prose. Ithaca: Cornell University Press.

— 1990. Genres in Discourse. Cambridge: Cambridge University Press.

Tudor, Andrew 1970. Genre: Theory and mispractice in film criticism. *Screen* 11(6): 33–43.

— 1976. Genre and critical methodology. In: Nichols, Bill (ed.), *Movies and Methods, Vol. 1.* Berkeley: University of California Press, 118–126.

Tynjanov, Jurij 1971. On literary evolution. In: Matejka, Ladislav; Pomorska, Krystyna (eds.), *Readings in Russian Poetics: Formalist and Structuralist Views*. Cambridge: MIT Press, 72–74.

Warshow, Robert 1962 [1948]. The gangster as tragic hero. In: *The Immediate Experience*. Garden City: Doubleday, 127–133.

- Williams, Raymond 1974. Television: Technology and Cultural Form. London: Fontana.
- Wood, Robin 1985. An introduction to the American horror film. In: Nichols, Bill (ed.), *Movies and Methods, Vol. 2.* Berkeley: University of California Press, 195–219.
- Wright, Will 1975. Sixguns and Society: A Structural Study of the Western. Berkeley and London: University of California Press.

Анализ нарративных жанров

Несомненно сознание современного человека погребено под нарративами. На Западе нарратив находится в центре многих прибыльных производств и нарративы распространяются быстрее и шире чем когдалибо раньше. Важность популярных жанров в современном нарративе является знаком смерти автора пред ликом новой медии и привела к необходимости обновления понятия "жанр" в анализе нарратива. Данная статья призвана доказать, что понятия "жанр" и "текстуальное воплощение" не совпадают. В противоположность типу выражения понятие жанра связан с вопросом о том, насколько аудитория принимает нарративные условности. Все же во множестве жанровых теорий жанр рассматривался как чисто текстуальное явление, что привело к узакониванию неисторичности и канонизированности в жанровой теории последних двух тысячелетий, опирающейся на примат текста. Мы считаем, что жанром следует скорее считать читательскую "идею" или "ожидание".

Narratiivsete žanrite analüüs

Kahtlemata on inimteadvus tänapäeval narratiividega üle ujutatud. Läänes on narratiiv keskmeks hulgale kasumit tootvatele tööstustele ning narratiivid levivad kiiremini ja laialdasemalt kui kunagi varem. Populaarsete žanrite tähtsus tänases narratiivis on märgiks autorluse surmast uue meedia palge ees ning on teinud vajalikuks "žanri" mõiste uuendamise narratiivi analüüsis. See artikkel püüab selgitada, et mõisted *žanr* ja tekstuaalne väljendusviis ei ole üks ja seesama. Vastupidiselt väljendusviisile puudutab žanr just nimelt küsimust, kuidas auditooriumid narratiivseid konventsioone vastu võtavad; siiski on paljud žanriteooriad käsitlenud žanrit kui puhtalt tekstuaalset entiteeti, mis on viinud ajalootuse ja kanoniseerimise põlistamiseni viimase kahe tuhande aasta tekstipõhises žanriteoorias. Käesolevas artiklis tõendatakse, et žanrit on pigem kohasem pidada lugejates peituvaks "ideeks" või "ootuseks".

Metaphor and narrative

Marina Grishakova

Department of Comparative Literature, University of Tartu, Ülikooli 17, 50090 Tartu, Estonia e-mail: marina2@ut.ee

Abstract. The paper examines linguistic, cognitive, communicative approaches to metaphor and its functioning in the narrative text. Special attention is paid to the problem of iconicity and the Wittgensteinian notion of "aspect seeing" as relevant to the metaphor studies. It is shown that the extended understanding of metaphor as "trope" or "figure" in the post-structuralist literary theory allows to see metaphor as a textual "interpretation machine". In the process of interaction of narrative and figurative patterns, metaphor functions as a means of perspectivization, i.e. representation of consciousness. In the literary text, perspective changes permanently and the subsequent configurations have an impact on the previous ones: there occurs a permanent "feedback" and correlation.

For Viktor Shklovsky, metaphor was a device of "making strange" or "defamiliarization" (ostranenie) to be unfolded into the plot (sjužet). For example, plots of certain erotic tales or Boccaccio's novellas are erotic metaphors unfolded (Shklovsky 1929: 19–20, 69). Shklovsky's thesis may be properly understood in the context of avant-garde, especially futurist poetics with its priority of the "self-sufficient word" (samovitoe slovo) and linguistic experimentation: a sound combination or the realization of metaphor define the logic of textual unfolding (see Hansen-Löve 2000: 92–164). In his book Theory of Prose, Shklovsky expresses a typically futurist opinion: "the form creates the content for itself" (Shklovsky 1929: 35). Shklovsky's approach may be classified as linguistic reduction, i.e. projection of the linguistic principles on to the text structure. The linguistic reduction is also obvious in Roman Jakobson's opposition of metaphor and metonymy (Jakobson 1971: 239–259) and in the literary analyses influenced by

the Jakobsonian distinction: "[...] the study of tropes and figures [...] becomes a mere extension of grammatical models, a particular subset of syntactical relations" (de Man 1979: 6). For Jakobson, metaphor and metonymy are primarily a manifestation of the paradigmatic and syntagmatic principles in speech. He bases the distinction between the two rhetorical figures on the linguistic principles of selection and combination, substitution and contexture. As D. Lodge justly observes, "'contexture' is not an optional operation in quite the same way as 'substitution' — it is, rather, a law of language" (Lodge 1997: 76). Yet "deletion", suggested by Lodge instead of "contexture", is still problematic since it supposes the pre-existence of the "literal", non-metonymical sentences ("The keels of the ships crossed the deep sea") to be transformed into the metonymical ones ("The keels crossed the deep"). The Jakobsonian scheme, however, proves to be rather powerful since even Paul de Man who criticizes the linguistic approach to tropes cannot avoid its influence while speaking of the interaction of the metaphorical and metonymical order which organizes the narrative. One of the most consistent linguisticallyoriented literary scholars is Michael Riffaterre:

[...] every single word [...] contains a potential narrative and a potential diegesis [...]; each word is a sememe, a complex system of associated semantic features or semes [...] and these semes may in turn be actualized in the shape of lexical representations, of satellitic words gravitating around [...] the original sememe. The lexical actualizations themselves are organized by syntax [...]. These actualizations form what I call a descriptive system [...] a sememe can be seen as an inchoate or future text, and a story as an expanded sememe in which a temporal dimension has been added to spatial syntagms. (Riffaterre 1990: 5)

Along with structural-linguistic and semiotic approaches, certain cognitive theories oppose the traditional Aristotelian substitution and comparison view on metaphor. The interaction theory takes up I. A. Richard's critique of the traditional point of view, which "made metaphor seem to be a verbal matter, a shifting and displacement of words", and his definition of metaphor as "a borrowing between and intercourse of *thoughts*, a transaction between contexts" (Richards 1965: 94). According to Richards, there are always two thoughts copresent in metaphor. In calling these two halves "the tenor" and "the vehicle", he introduces the transfer process into the notion of metaphor. Following in Richards' footsteps, the interactionists

criticized the traditional opinion of metaphor as an "ornament" of speech or a "supplement" being used in case the necessary word is absent in language. They regard metaphor as a conceptual shift or "redescription" (in M. Hesse's terms) which has a heuristic value and therefore may function as a dynamic scientific model. I. A. Richards argues that within a single word a metaphorical collision and interaction of two thoughts occur. Likewise, Max Black discloses the interaction of the principal and subsidiary subject in metaphor: "We can say that the principal subject is 'seen through' the metaphorical expression — or, if we prefer, that the principal subject is 'projected upon' the field of the subsidiary subject" (Black 1962: 41). The interaction theory sees metaphor as a predicative structure dependent on the context and speaker's intention. Metaphor involves a simultaneous manifestation of two ideas, interaction of two semantic fields and, as a result, a conceptual shift prompted by the new connotations acquired by the principal subject. Only dead or trivial metaphors are reducible to literal expressions: "Metaphorical statement is not a substitute for a formal comparison or any other literal statement, but has its own distinctive capacities and achievements" (Black 1962: 37). The cognitive approach has been further developed by George Lakoff (Lakoff, Johnson 1980) for whom metaphor is a cognitive schema which grounds the abstract target domain within the specific basis of the source domain and reflects the space- and world-orientations of the cognitive subject. Yet Lakoff deals mostly with conventional ("dead") metaphors where the similarity and almost identity of the "source" and the "vehicle" are already fixed in language. New meanings are generated by the process of logical unfolding of the cognitive schemata as their natural "entailments". Lakoff's treatment of metaphor implies that metaphoric cognitive schemata may be developed into narratives that govern our social life:

Metaphors may create realities for us, especially social realities. A metaphor may thus be a guide for future action. Such actions will, of course, fit the metaphor. This will, in turn, reinforce the power of the metaphor to make experience coherent. In this sense metaphors can be self-fulfilling prophecies.

For example, faced with the energy crisis, President Carter declared 'the moral equivalent of war'. The WAR metaphor generated a network of entailments. There was an 'enemy', a 'threat to national security', which required 'setting targets', 'reorganizing priorities', 'establishing a new chain of command', 'plotting new strategy', 'gathering intelligence', 'marshalling forces'. 'imposing sanctions', 'calling for sacrifices', and on and on. (Lakoff, Johnson 1980: 156)

According to the conceptual integration theory, a recent outcome of interactionism enriched by Lakoff's elaborations, metaphor is a process of blending of two conceptual spaces. Blending is regarded as a topological operation which is guided by definite generic schemata and involves selective projection and fusion of two spaces. As a result a new space emerges with its own structure: the output is not equal to the sum of the inputs (Fauconnier, Turner 1998, 2000). T. Veale¹ draws a straight analogy between the metaphorical blending and the narrative blending of conceptual spaces. He examines the cinematic narrative from this point of view, e.g., "Star Wars" as blending of the Arthurian sagas and several cinematic narratives with science fiction; "Forrest Gump" as grounding of Voltaire's "Candide"-type story in American history, etc. Veale's computer-based approach retains only a quantitative difference between metaphor as a restricted two-space blending and the narrative as a multi-space blending.

The cognitive approach focuses on metaphor's capacity to "redescribe" reality. As Paul Ricoeur argues, the mimetic function of the narrative is analogous to the metaphoric reference. Although the former is related to the experience of time and the latter operates in the sphere of perception, emotion and evaluation, both re-figure the pretextual cognitive experience. Likewise, M. Black supposes that a "system of associated implications" or "commonplaces" is essential for the rapid and effective activation of metaphor in consciousness: "[...] the important thing for the metaphor's effectiveness is not that the commonplaces shall be true, but that they should be readily and freely evoked" (Black 1962: 40). Paul Ricoeur sees a common cognitive grounds for metaphor and the narrative: metaphor is a new predicative relation, the narrative is a new relation of events schematized by creative imagination (Ricoeur 2000: 7-10). To summarize, the cognitive view on the relations of metaphor and the narrative involves conceptual reduction: it subordinates both metaphor and the narrative to certain cognitive schemata as the linguistic approach subordinates them to certain linguistic principles.

Finally, the communicatively oriented approaches subordinate metaphor and the narrative to a certain communicative teleology. Thus, J. Searle differentiates the language-meaning from the utterermeaning: it is an utterer-meaning imposed on a literal meaning which

¹ Veale, Tony 1996. Creativity as pastiche: A computational treatment of metaphoric blends with special regard to cinematic "borrowing". http// www.compapp.dcu.ie/~tonyv/Pastiche/Pastiche.html.

makes a metaphor (Searle 1979). The rhetorical value of metaphor is reduced to its power of persuasion. Richard Moran in his article "Metaphor, image, and force", referring to D. Davidson's paper "What metaphors mean" and W. Booth's "Metaphor as rhetoric: The problem of evaluation" (both in the collection *On Metaphor* of 1979), suggests considering metaphor in terms of its effect. He attempts to unify developments of interactionism with the speech-act theory. Moran argues that a distinction should be made between the two dimensions of metaphor: its "content" or "initiating beliefs" together with their further implications, and its "framing effect", i.e. framing one thing in terms of another or "the adoption of the perspective". Citing Booth ("The speaker has performed a task by yoking what the hearer had not yoked before, and the hearer simply cannot resist joining him [...]", Moran 1989: 91) and Davidson ("Joke or dream or metaphor can, like a picture or a bump on the head, make us appreciate some fact — but not by standing for, or expressing, the fact" — Moran 1989: 95), R. Moran observes that the framing-effect is responsible for this "compulsion and involuntary complicity" or the "force" of a good metaphor: "but in such cases what is forced, or can't be undone, is not a believing of what is asserted". "It is quite generally true for both philosophy and literature that much of what they aim at is not on the level of specifically altered beliefs but rather such things as changes in the associations and comparisons one makes, differences in the vivid or 'felt' appreciation of something already known, or changes in one's habits of attention and sense of the important and the trifling" (Moran 1989: 100). What is interesting in R. Moran's paper, is an attempt to explain imagistic capacity of metaphor by the framing-effect "that functions cognitively in a manner which is importantly similar to that of an image" (Moran 1989: 112). It means there is no code to determine in advance which features will make part of the comparison. However, the metaphoric juxtaposition of two things is "directional": one component is the "filter" or "subsidiary subject", the other the "principal subject". Therefore it differs from the pictorial juxtaposition where beholder's attention is not strictly controlled or directed. Nevertheless, we would add, as painting always contains some interpretive signs pointing at the relations of things depicted, so the "live" figure of speech always leaves some freedom for the interpretation of its components. Thus, the "pictorial" analogy may be stimulating in the understanding of figurative speech.

The imagistic capacity of metaphor has been compared to the Wittgensteinian notion of "aspect seeing". Wittgenstein's term "aspect" has been discussed as relevant to the study of artistic texts and his notion of "noticing an aspect" as identical to aesthetic perception. In his article "Pictorial meaning, picture thinking, and Wittgenstein's theory of aspects" (Aldrich 1972: 93-103), V. C. Aldrich analyses the phenomenon of "seeing aspects" and draws some conclusions useful for the understanding of "poetic images" and metaphors. He refers to the Wittgensteinian description of "seeing aspects": "It is as if an image came into contact, and for a time remained in contact, with the visual impression" (Aldrich 1972: 97), i. e. "aspect" is a half-percept (half-thought), a half-image. Aldrich supposes that a capacity of an expression to evoke or "conjure up" images depends "on the contextual control on the use" (Aldrich 1972: 94). Following in Wittgenstein's footsteps, he further distinguishes between the "pictorial" (image-exhibiting) and "cognitive" (object-describing) use of expressions, the imaginative and observational mode of awareness, both present in the "plain talk" of non-special conversation and each to be separately developed into the aesthetic and the scientific mode of expression correspondingly (Aldrich 1972: 98-99). M. B. Hester (Hester 1972: 111–123) emphasizes that aspect seeing involves mental activity and imaginative skill and therefore differs from usual passive perception. However, the poetic "seeing as" has to do with the meaning of language, not with a perceivable (visual) form like the Gestalt picture in Wittgenstein's Philosophical Investigations. Hester uses the Wittgensteinian notion of "aspect seeing" in Aldrich's sense of the "image-exhibiting" mode and focuses on the poetic metaphor as "aspect seeing" between the metaphorical subject and the metaphorical predicate: "Both parts of the metaphor retain their distinctiveness, and thus we might say that in a metaphor type-boundaries are transgressed but not obliterated" (Hester 1972: 116-117). Linguistic and textual iconicity, although underrated by M. Hester, is probably the real hidden reason for the analogy between the visual and the poetic "seeing as". Aldrich remarks that the image-exhibiting use of expressions "may be a formulation objectively grounded in, and developing, "experience" of things" (Aldrich 1972: 99). Hester, although more sceptical as regards the straight analogy between the pictorial and verbal "aspect seeing", admits, nevertheless, its efficiency: both visual and metaphorical "seeing as" involve inherent duality, both are there for imaginative notice (an image in contact with a perception), both are tied or controlled by the context, both are "irreducible imaginative accomplishments" (Hester 1972: 119).

The examination of metaphor as "aspect seeing" helps to estimate its temporality. The "aspect" is provisional: "image" and "thought" remain in contact for a time. The figure of speech is located within a certain historical or individual context, it depends on certain generic conventions or/and, within the text, on a lyric or narrative situation. Only a minor part of poetic tropes enter the "common language". M. Epstein even proposes "the third trope" in addition to metaphor and metonymy — "metabole", where the fusion of the "literal" and "figural" meaning is more close and persistent. Cf.: "Metaphor or comparison is just [...] a flash, of varying brightness but inescapably fading, since it is brought into reality from somewhere outside, to illuminate it for just an instant, in order to inscribe it" (Epstein 1995: 43). An "aspect" is accessible only through a certain configuration of textual elements. It belongs not to the formal textual characteristics but to its elusive "content": it is an image or a quality of the "viewed" as experienced by the "viewer".

Increased attention to the iconic component and imagistic capacity of metaphor, comparative investigation of verbal and visual metaphors, interest in the intersemiotic translation open a new perspective in the metaphor studies:

In shifting from one semiotic system to another, a dead metaphor becomes an inventive one anew [...]. Investigation of the visual metaphor [...] have shown how a worn-out expression like /flexible/ (used to indicate openness of mind, lack of prejudice in decision making, sticking-to the facts) can reclaim a certain freshness when, instead of being uttered verbally, it is translated visually through the representation of a flexible object. (Eco 1983: 255)

On the other side, a remarkable development in the metaphor studies is defined by the extended understanding of metaphor as "figure" or "trope" in general and awareness that its nature is supralinguistic: "[...] metaphor is not a linguistic unit but a text-semantic pattern, and semantic patterns in texts cannot be identified with units of syntax" (Hrushovski 1984: 7). The Jakobsonian definition already ranks metaphor as a generic figure: "In the Jakobsonian "reworking" of the rhetorical heritage, metaphor and metonymy are kinds of super-figures, headings under which other things can be grouped together[...]" (Metz 1983: 169). In the poststructuralist literary analyses metaphor acquires a new status of "figure" or "trope" and works as the textual machine of interpretation. As it seems, the structuralist Todorov falls into contradiction while basing his definition of "figure" upon the

linguistic model and at the same time describing it as a semantic entity which gives to the text its "form of substance". Thus, "l'essence est absent, la présence est inessentielle" is, according to Todorov, Henry James' master figure which organizes his works both semantically and syntactically, arranges their composition and points of view. It restructures the hierarchy of the linguistic levels and assumes a unique textual form (Todorov 1971: 250). Further extension of the notion of "figure" occurs in J. Hillis Miller's literary analyses. J. Hillis Miller focuses on the recurrent and repetitive patterns (tropes) in fiction and their interaction with narrative lines. For P. de Man, metaphor is a deceptive, mystifying semantic unity being permanently reconstructed and deconstructed in the grammatical networks and finally turned back upon itself as the basic metaphor of reading/writing.

In other words, text is seen as a process: chains of events, segments of description and commentary are permanently re-shaped by interpretation. F. Kermode argues that narrative "may be crudely represented as a dialogue between story and interpretation. This dialogue begins when the author puts pen to paper and it continues through every reading that is not merely submissive". Therefore all narrative

has something in common with the continuous modification of text that takes place in a psychoanalytical process [...] we may like to think, for our purposes, of narrative as the product of two intertwined processes, the presentation of a fable and its progressive interpretation (which of course alters it). (Kermode 1980: 86).

The work of interpretation proceeds not from the superior point of view but from within textuality itself. The text is not an embodiment of certain linguistic or conceptual schemata or principles: the principles themselves are created and transfigured by the double process of narrative production as described by Kermode. In the narrative text, figurative patterns, which fulfil the work of interpretation are guided by the narrative mode (point of view, distance, perspective). The narrative mode mediates between the discourse and the story: it both controls figurative patterns and is controlled and altered by them. As far as the fabula or the story is not an invariant prior to different variants of syuzhet, but a post-factum "mental construction that the reader derives from the syuzhet" (the discourse) (Brooks 1984: 11), the narrative mode controls the reconstruction of the story from the discourse and the interpretative arrangement of narrative levels. Thus,

the narrative mode plays a mediatory role in the process of textual interpretation (modification) resulting from interaction and convergence of narrative and figurative patterns, i.e. from a correlation between the elements of the story and the discourse, the "world" and the "text".

Due to the correlation of the narrative and figurative patterns metaphor can be seen as a way of perspectivization, i.e. a manifestation of a point of view or a representation of individual consciousness. Compound or mixed metaphor (figure) serves the convergence and mutual infiltration of different points of view ("frames of reference" in B. Hrushovski's terms) or different consciousnesses. Thus, in E. Tarle's example cited by B. Uspenskij (Uspenskij 1970: 33) the change of distance is accompanied by the change of perspective achieved by the shift from the metaphorical to the literal language: Parisian newspapers call Napoleon as he is approaching Paris correspondingly "the Corsican monster", "the cannibal", "the usurper", "Bonaparte", "Napoleon", and, finally "His Majesty". B. Gasparov in his analysis of O. Mandelshtam's "Verses about an Unknown Soldier" demonstrates how the motif of the pilot's death in air, extremely significant in the context of the early 20th century culture, is seen in different perspectives as the author's own anticipation of a future catastrophe (Gasparov 1994: 214-223). The story is interpreted in the perspectives of the Apocalypse, romantic poetry and popular cosmology: the Apocalypse of the First World War, hopelessness and tragic beauty of the romantic outcast's solitary death, death as the overcoming of human "time-lag" (in comparison with the speed of light).

By this means, a distinction should be made between the "point of view" and the "perspective". The point of view is a restriction of the "field of vision", a selection of the initial "frames" (cf. Henry James' "the novelist is a particular window" - Miller 1962: 65). The adoption of the perspective is an interpretative operation, which brings about an extension of the field of vision.

In introducing the notions of "slant" and "filter", Seymour Chatman makes an attempt to differentiate a conscious choice and a mere mediating perception or, otherwise, the "narration" (as "knowing" and "telling") and "focalization" (as "seeing"). The "slant" amounts to "the narrator's attitudes and other mental nuances appropriate to the report function of discourse", to "the psychological, sociological, and ideological ramifications of the narrator's attitudes, which may range from neutral to highly charged", the "filter" embraces "the much wider range of mental activity experienced by characters in the story world - perceptions, cognitions, attitudes, emotions, memories, fantasies, and the like". Thus, the "slant" "delimits the mental activity on this side of the discourse-story barrier" whereas the "filter" is "a good term for capturing something of the mediating function of a character's consciousness [...] as events are experienced within the story world" since it "catches the nuance of the choice made by the implied author" (Chatman 1990: 143-144). Chatman's classification proceeds from a strict "distribution of labour" between the narrator who "tells" the story and the character who only "sees" it: as soon as a character starts to "tell", he at once turns into a narrator, and, vice versa, if the narrator limits himself by the passive perception, he does so in a character's capacity within the fictional world. There is a confusion of narrative roles which belong to the story and discourse positions in Chatman's argument. The narrator is involved in the "emplotment", i.e. "goal-oriented and forward moving organization of narrative constituents" (Prince 1987: 72): his narrative role is more or less persistent, at least in a definite textual segment. The discourse position is much more unstable and changeable even within a single sentence (cf. Benveniste's classical analysis of the "I", the subject of speech, as a linguistic construction). If the terms "slant" and "filter" are identical to the roles of the narrator and the character, they just refer to the usual hierarchy of narrative levels: the "distribution of labour" is obvious. Yet it seems that Chatman attempts to combine the narrative roles with discourse positions and operations. It would probably be more fruitful to examine the difference between a conscious selection and mere perception on the level of discourse to see what forms it assumes and what impact it has on the narrative roles.

On the level of discourse manifestation, the perspective is a figurative way of "showing" one thing by means of another thing, e.g., in painting, showing distance by means of color or size relations. It involves a framing effect, i.e. a significant correlation or configuration of heterogeneous intratextual or intertextual elements. Let us take the passage from D. Lodge's "Changing Places" used by Mieke Bal as an example of the "interpretative" focalization:

In the sky the planes look very small. On the runways they look very big. Therefore close up they should look even bigger — but in fact they don't. His own plane, for instance, just outside the window of the assembly lounge,

doesn't look quite big enough for all people who are going to get into it. (Bal 1991: 134)

As Mieke Bal observes, "it is Swallow's view of the airplanes rather than the airplanes themselves which almost completely constitutes the object presented" (Bal 1991: 135). Nevertheless, the description is built upon the realistic remarks on the relative size of planes. It is an insistent repetition of size-designations ("small", "very big", "even bigger", "not big enough for all people who", etc.) that evokes the image of Swallow's "British" sensitivity and his concern with his own plane's reliability and acquires the metaphorical meaning as a manifestation of the novel's general bi-polarity, i.e. the opposition of America ("big") and Britain ("small").

The syntactic-semantic configurations, as shown by Vinogradov in his analysis of The Queen of Spades, are able to acquire a symbolical meaning and to serve as a figurative interpretation of the events or objects described and introduction of an individual angle of vision. Lizaveta Ivanovna's impatient waiting is made manifest by the repetition of identical syntactic constructions and permanent time counting. The latter appears in the auctorial narration after the first Germann's letter has been received by Lizaveta Ivanovna: "na drugoi den", "tri dnja posle togo", "Lizaveta Ivanovna kazhdyi den" poluchala ot nego pis'ma" (Vinogradov 1980: 212). Poor Lizaveta Ivanovna is a passive character totally dependent on the countess' power and Germann's sinister game. Emotion is the main expression of her "narrative activity". Nevertheless, it is precisely her emotion stirred up by the fashionable romantic stereotypes that permits Germann to get into the house. Thus, Lizaveta Ivanovna's waiting introduces a perspective of the romantic secret story: she does not just wait for Germann, she is waiting for a solution of his secret and is sacrificed to this secret, as it happens to Romantic heroine. Within the frame of Romantic interpretation, the protagonist is either a metaphorical "savior" or a "criminal", a Mephistopheles or a Napoleon. Germann's agitation, fervour and avarice are made manifest by the repetition of the conjunctions and the inversion of the adverbs as compared to their "neutral" location in the Russian sentence: "On stavil kartu za kartoi, gnul ugly reshitel'no, vyigryval besprestanno, i zagrebal k sebe zoloto, i klal assignacii v karman" (Vinogradov 1980: 224). Strictly speaking, is not only the narrator's or only Germann's point of view what is presented: the perspective of the daemonic game of Fatum unifies the external evaluative description of Germann's resolute, quick, almost automatic action and the implied stream of his unconscious passions. Certain configurations of motifs metonymically or metaphorically related to a theme or a higherorder motif are also manifestations of a perspective. For instance, in Nabokov's "Mary" the main axis is set by the parallel between shooting a film in the protagonist's former "shadow life" and the house building in his new "real life". The first: "the lazy workmen walking easily and nonchalantly like blue-clad angels from plank to plank high above", and a mob of extras "acting in total ignorance of what the film is about" (Nabokov 1970: 21). The second: "The figures of the workmen on the frame showed blue against the morning sky. One was walking along the ridge-piece, as light and free as though he were about to fly away [...]. This lazy, regular process had a curiously calming effect [...]" (Nabokov 1970: 113-114). The metaphorical motives of easiness, nonchalance, freedom, flight, blue colour, height. sky create the image of an escape and aspiration for the otherworld fusing the horizons of the auctorial narrator and the character. The whole textual segments may be metonymically or metaphorically juxtaposed to each other, e.g. a "metonymical description" or landscape as part of character's consciousness, as shown by S. Rimmon-Kenan (1983: 63-70). Another example is the often-cited fair episode in Madame Bovary. The critics repeatedly indicated the contrast of high romantic feelings and low agricultural details ironically juxtaposed in the scene that gave the idea of montage to Eisenstein. But the contrasting parts are also interrelated by metaphorical similarity: Rodolphe "emancipates" Emma to convince her that marriage is not an obstacle for love of chosen souls. Likewise, the politics "emancipate" the people convincing them to strive for further agricultural achievements. In both cases the emancipation involves corruption: the romantic phraseology conceals the sexual desire in the first case and the work of political machinery in the second case.

In Nabokov's *Pale Fire*, old John Shade fails to see his house from Lake Road although he has seen it many times in his boyhood when his eyesight has been keener: "Maybe some quirk in space // Has caused a fold or furrow to displace // The fragile vista, the frame house between // Goldsworth and Wordsmith on its square of green" (Nabokov 1991: 30). Kinbote the commentator who rents Judge Goldsworth's house contests the exactitude of the Shadean topography:

In seeming to suggest a midway situation between the two places, our poet is less concerned with spatial exactitude than with a witty exchange of syllables invoking the two masters of the heroic couplet, between whom he embodies his own muse. Actually, the "frame house on its square of green" was five miles west of the Wordsmith campus but only fifty yards or so distant from my east windows. (Nabokov 1991: 68)

We cannot fully rely on Kinbote's "real" commentary since he is concerned with reminding to the reader of his being the poet's confidential friend close to him both spiritually and topographically. "Between" does not necessarily mean "a midway situation" and Wordsworth is not the "master of the heroic couplet". Shade's poor sight correlates with Kinbote's psychological unreliability. As a result, a moving house emerges, the house which is sometimes visible, sometimes invisible, situated either in the real space between Goldsworth's house and the Wordsmith campus or in the continued imaginary space, an optical metaphor of miraculous poetical imagination which balances on the border between involuntary blindness and conscious self-deception.

In the literary text, as distinct from the historical or philosophical one, the perspective is changing *constantly* and a new configuration has a retroactive effect on the previous configurations: there is a permanent "feedback". Trope as a means of perspectivization is comparable to the dual- or multiple-voice effect: it allows "to draw non-standard meaning lines" (Hintikka, Sandu 1994: 160) without a clear identification of the speaker.

References

Aldrich, Virgil C. 1972. Pictorial meaning, picture thinking, and Wittgenstein's theory of aspects. In: Shibles, W. (ed.), *Essays on Metaphor*. Whitewater: Language Press, 93–103.

Bal, Mieke 1991. On Story-Telling. Essays in Narratology. California: Sonoma. Black, Max 1962. Models and Metaphor: Studies in Language and Philosophy. Ithaca: Cornell University Press.

Brooks, Peter 1984. Reading for the Plot: Design and Intention in Narrative. New York: Knopf Press.

Chatman, Seymour 1990. Coming to Terms: The Rhetoric of Narrative in Fiction and Film. Ithaca: Cornell University Press.

Eco, Umberto 1983. The scandal of metaphor. Poetics Today 4(2): 217-258.

- Epstein, Mikhail 1995. After the Future: The Paradoxes of Postmodernism and Contemporary Russian Culture. Amherst: The University of Massachusetts Press.
- Fauconnier, Gilles; Turner, Mark 1998. Conceptual integration networks. *Cognitive Science* 22(2): 133–187.
- Fauconnier, Gilles; Turner, Mark 1999. A mechanism of creativity. *Poetics Today* 20(3): 397–418.
- Gasparov, Boris 1994 = Гаспаров, Борис 1994. *Литературные лейтмотивы*. Москва: Наука.
- Hansen-Löve, Aage A. 2001 = Ханзен-Лёве, Ore A. 2001. Русский формализм: Методологическая реконструкция развития на основе принципа остранения. Москва: Языки русской культуры.
- Hester, Marcus B. 1972. Metaphor and aspect seeing. In: Shibles, W. (ed.), Essays on Metaphor. Whitewater: Language Press, 111–113.
- Hintikka, Jaakko; Sandu, Gabriel 1994. Metaphor and other kinds of nonliteral meaning. In: Hintikka, Jaakko (ed.), *Aspects of Metaphor*. Dordrecht: Kluwer Academic Publishers, 151–188.
- Hrushovski, Benjamin 1984. Poetic metaphor and frames of reference. *Poetics Today* 5(1): 5-44.
- Jakobson, Roman 1971. Two aspects of language and two types of aphasic disturbances. In: Jakobson, Roman, Selected Writings, vol. 2. Word and Language. The Hague: Mouton Publishers, 239–259.
- Kermode, Frank 1980. Secrets and narrative sequence. *Critical Inquiry* 7(1): 83–101.
- Lakoff, George; Johnson, Mark 1980. *Metaphors We Live By*. Chicago: The University of Chicago Press.
- Lodge, David 1977. The Modes of Modern Writing: Metaphor, Metonymy, and the Typology of Modern Literature. London: Arnold.
- Man, Paul de 1979. Allegories of Reading. New Haven: Yale University Press.
- Metz, Christian 1983. Psychoanalysis and Cinema: The Imaginary Signifier. London: Macmillan.
- Miller, J. E. (ed.) 1962. Theory of Fiction: Henry James. Lincoln: University of Nebraska Press.
- Moran, Richard 1989. Metaphor, image, and force. Critical Inquiry 16: 87-112.
- Nabokov, Vladimir 1970. *Mary*. (Trans. by M. Glenny in collaboration with the author.) New York: McGraw-Hill Book Company.
- 1991. Pale Fire. London: Penguin Books
- Prince, Gerald 1987. A Dictionary of Narratology. Lincoln: University of Nebraska Press.
- Richards, Ivor 1965 [1936]. The Philosophy of Rhetoric. London: Oxford University Press.
- Ricoeur, Paul 2000 = Рикёр, Поль 2000. Время и рассказ. Том 1. Москва: Университетская Книга.
- Riffaterre, Michael 1990. Fictional Truth. Baltimore: Johns Hopkins University Press.
- Rimmon-Kenan, Shlomith 1983. Narrative Fiction: Contemporary Poetics. London: Methuen.

Searle, John R. 1979. Expression and Meaning. Cambridge: Cambridge University Press.

Shklovsky, Viktor 1929 = Шкловский, Виктор 1929. *О теории прозы.* Москва: Федерация.

Todorov, Tzvetan 1971. Poétique de la prose. Paris: Éditions du Seuil.

Uspenskij, Boris 1970 = Успенский, Борис 2000. Поэтика композиции. Москва: Искусство.

Vinogradov, Viktor 1980 = Виноградов, Виктор 1980. О языке художественной прозы. Москва: Наука.

Метафора и нарратив

В статье дается обзор лингвистических, когнитивных и коммуникативных подходов к метафоре и ее функционированию в нарративном тексте. Особое внимание уделяется проблеме иконичности и использованию витгенштейновского понятия "аспекта" в изучении метафоры. В работе указывается, что расширенное понимание метафоры как "фигуры" или "тропа" в поструктуралистском дискурсе позволяет видеть в метафоре текстовую "машину интерпретации". В процессе взаимодействия нарративных и фигуративных моделей (patterns) метафора является способом перспективизации, т.е. репрезентации сознания. Последующие конфигурации взаимодействуют с предшествующими: в тексте осуществляется постоянная "обратная связь" и корреляция.

Metafoor ja narratiiv

Artiklis antakse ülevaade lingvistilistest, kognitiivsetest ja kommunikatiivsetest lähenemistest metafoorile ja tema funktsioneerimisest narratiivses tekstis. Erilist tähelepanu pööratakse ikoonilisuse probleemile ja Wittgensteini mõiste "aspekt" kasutamisele metafoori uurimisel. Töös näidatakse, et metafoori kui "figuuri" või "troobi" laiendatud mõistmine postrukturalistlikus diskursuses võimaldab metafooris näha tekstilist "interpretatsiooni masinat". Narratiivsete ja figuratiivsete mudelite (patterns) vastastikuses mõjutusprotsessis on metafoor perspektiivi loomise, st teadvuse representeerimise viisiks. Järgnevad konfiguratsioonid on eelmiste mõjuväljas: tekstis toimub pidev "tagasiside" ja korrelatsioon.

Remarks on semantic peculiarities of numerals and on usage of numerals in several kinds of texts

Larissa Naiditch

Institute of Languages, Literature and Art,
The Hebrew University of Jerusalem, Mount Scopus,
Jerusalem 91905, Israel
e-mail: naiditch@h2.hum.huji.ac.il

Abstract. The paper deals with the general peculiarities of numerals. Cases where the sense of numeral cannot simply be explained by the idea of counting, of number, or of order are considered. Special types of texts — folklore on the one hand, propaganda on the other hand — are analyzed. For the latter the examples from two Soviet central official newspapers — *Pravda* and *Izvestija* of May 1986 have been chosen. These texts partially reflect common stylistic features of Soviet propagandistic discourse of the "period of stagnation"; their specificity is caused by the special situation, which obtained in the country in those days — the catastrophe in the atomic power station in Chernobyl. It is claimed that all the considered examples reflect several aspects of meaning of numerals contained in their general semantics. Thus, the development of the evaluative meaning is explained by the semantics of degree contained in the numerals. These data contribute to Frege's idea of relativity of number, but from another, purely linguistic, point of view.

1. General peculiarities of numerals

According to a common point of view that seems to be reasonable, numerals are a part of speech or at least a class of words demonstrating a certain grammatical, semantic, and pragmatic unity (Admoni 1968; Melchuk 1985). They form numeral systems in natural languages and are linguistic expressions of numbers. Numerals and numbers are connected with a very important, universal, and ancient human faculty, that of counting. The latter is interrelated with the

development of the notion of number and of simple arithmetical operations. James R. Hurford, who investigated in his two fundamental monographs different aspects of numerals (Hurford 1975, 1987), considered the cardinality principle, "the disposition to make the sizable inductive leap from a memorized sequence of words to the use of these words expressing the cardinality of collections" (Hurford 1987: 305), an innate capability of man, as the faculty most important for the formation of numerals. Recent studies of numerals in Indo-European languages (Gvozdanović 1992; 1999) reveal etymologies and several principles of ordering of Indo-European numeral systems (those based on "five", on "ten", on "twenty", and on "hundred"), contributing to our understanding of these lexical units. As for the origin of numerals, several hypotheses have been proposed, the most popular of these being the referential/pragmatic, the conceptual/verbal, and the ritual. The latter one, also called "eeny, meeny, miny, mo", is that numerals originated from rituals in which "sequences of words which have no referential, propositional, or conceptual meaning are recited while the human actor simultaneously points (in some way) to objects in a collection [...]" (Hurford 1987: 103-104). According to this hypothesis, the connection of numerals with ancient forms of folklore is evident.

Numbers and their linguistic representations, numerals, are based on a kind of abstraction (Frege 1980: 44–51): the objects being counted are considered as uniform, their differences being disregarded. In saying "three apples" we disregard differences of these apples. Objects having nothing in common could be unified because of their number: three apples and three books are similar because of their "threeness". Abstraction, being a general peculiarity of language, manifests itself already in working out a concept and in the nomination of objects. Frege wrote: "If, for example, in considering a white cat and a black, I disregard the properties which serve to distinguish them, then I get presumably the concept 'cat'" (Frege 1980: 45). For Frege, numbers are principally different from properties of objects like colours. He writes:

Colour such as blue belongs to a surface independently of any choice of ours. The blue colour is a power of reflecting light of certain wavelength and of absorbing to varying extent lights of other wavelengths; to this, our way of regarding it cannot make the slightest difference. The Number 1, on the other hand, or 100 or any other Number, cannot be said to belong to the pile of its own right, but at most to belong to it in view of the way in which we have chosen to regard it [...]. (Frege 1980: 29)

Frege's concept of the subjectivity and the arbitrariness of numbers have been criticized by several philosophers (Resnik 1980: 153-199), especially by Armstrong. They introduced a concept of a single object having, according their point of view, a real basis (Hurford 1987: 132-141). On the other hand, the linguistic relativity of concepts, e.g. this of colours, their dependence on languages, usually referred to as Sapir-Whorf hypothesis, has become a commonplace. In spite of several concepts that seem to show the similarity of numerals to other kinds of words, their specificity is evident. It is not by chance that they show certain closeness to morphological categories. The category of the number also expresses the opposition of one object to many objects. The difference between plural and numeral constructions (e.g. the plural of nouns in Indo-European languages) is that in the plural the quantity is not specified. But this difference is fluid: on the one hand, there exists in several languages dualis denoting two objects; on the other hand, such quantifiers as "several", "many", etc., are similar to numerals (Hurford 1987: 146-158) and may be considered as "unspecified numerals" (Vater 1986: 15; several aspects of interrelations between numerals and quantifiers see also in Reinhart 1997).

Hurford assumed "the semantic representation of any positive whole number n to be n marks on whatever materials medium we can agree to talk about". According to this concept, "the semantic representation of one is l, that of two is l, that of three is l, and so on ad infinitum" (Hurford 1975: 21; 1987: 142–143). He also considers "the semantics of constructions involving numerals in extensional, or denotational, terms". Whereas "the denotation of cat is the set of all cats, the denotation of red is the set of all red things, [...] the denotation of five cats will be taken to be the set of all collections of cats with just five (cat) numbers" (Hurford 1987: 145). "Cardinal meaning' is that which concerns a class or set of objects and refers to a collection with the corresponding cardinality (in the sentence Those five students the cardinality is 'five')" (Hurford 1987: 168). Ordinals refer to cases with "a particular ordered sequence" (Hurford 1987: 170).

In spite of common peculiarities of all numerals, several groups of them are known (Admoni 1968). Besides the common subdivision of them into cardinals and ordinals, there are also additional subgroups: such as collectives (Russ. "dvoe", "troe") (Gvozdanović 1992: 807–811), distributives (Russ. "po dva", Germ. "je zwei", French "ils ont dix francs chacun" (Gvozdanović 1992: 142–145, 418–421, 483), multiplicatives (Germ. "dreimal", French "triple") (Gvozdanović

1992: 93, 328–331, 483–484), proportionals (Germ. "zweifach", Engl. "twice"), aggregatives (meaning "group of 'n'") (Gvozdanović 1992: 236), partitives (into 'n' parts) (Gvozdanović 1992: 237). All these subgroups are based on semantic, in most cases also on morphological and syntactical unity and form systems in corresponding languages. Their semantics seems to be simple, cases of polysemy, homonymy, semantic shifts, etc., seem to be excluded.

But let us consider examples usually neglected in the literature about numerals, cases where the sense of numeral cannot simply be explained by the idea of counting, of number, or of order. The examples are given in English, but they are close to universals, showing only slight differences depending on languages: in 1998; she is seventeen; Louis XIV; Fifteenth Street; the Ninth symphony by Beethoven; bus number nine, bus line (route) number nine (in Russian, expressions like "the ninth bus" correspond to the norm of pragmatic usage); one hundred dollars; second grade (it means in English, and in literal translation from Russian as well, a grade of quality of a product: Russian "vtoroj sort" = 'a poor grade, not the best grade'; in American English it concerns also a school grade).

In all of these examples containing cardinals and ordinals, numerals are of course (more or less) connected with the idea of numbers, but only partially. Thus, in such examples as Louis XIV, Catherine II, etc. numbers are parts of names usual for Emperors, for kings, etc. Numbers here could be replaced by other conventional elements, e.g., adjectives and nouns, that are in these special cases synonymous with numerals, e.g., one and the same Russian Tsar is called Peter the First and also Peter the Great (in Russian: 'Piotr Pervyj' and 'Pjotr Velikij'). The meaning of a place in a sequence typical of ordinals is here not very important; e.g., the fact that Catherine II was preceded by Catherine I is crucial only from the "etymological" point of view. Numerals are used in these names according to tradition and convention, their usage can be explained only on the basis of reasons of designations, by "etymology". In the example of the title of a musical composition, the ninth symphony by Beethoven, the meaning of place in a sequence is probably more salient than in the former examples (the ninth symphony was composed by Beethoven after the eighth), but the conventionality of number is here present as well. Whereas the fact of the sequence-order of composing music by a composer may be crucial for historians of music, for usual hearers the ordinal numeral "ninth" in this context is first of all a title, a name that in this case can be e.g. associated with

the famous melody or with the choir singing a hymn. I would like to remind the reader of an anecdote that is current in Russia, where the comical effect is based on the ambiguity of the numeral. A man comes to a musical concert later; he asks what is being played. "The ninth symphony by Beethoven", is the answer. "Terrible," says the man, "I came ten minutes later and missed as many as eight". The example with numbers denoting a bus line also demonstrates the conventionality of numeral usage. In making a plan of bus lines in a city it is convenient to designate them by numbers. There is a different tradition for train schedules, probably because the railway traffic is not so regular during long-term periods. Interestingly, there are cases when several regular railway routes and the corresponding trains are designated by special "titles" similar to proper names. Once more, the conventionality of numerals in these cases is used in an anecdote well known in Russia. A man (usually it is Vasilij Ivanovich Chapaev, the famous hero of the Civil War, who became a central person of a series of anecdotes) has to take the bus number 25; he is standing at the bus station and waiting until 24 buses pass. As in the anecdote mentioned above, the humor of this story is based on a pun, on the homonymy of the meaning of numerals. The naive hero (the favorite one in anecdotes) does not understand the conventionality of nomination usual in tradition of Russian language.

These cases only partially correspond to the general meaning of numerals. Let us once more refer to Hurford who wrote: "the denotation of the cardinal numeral five is the set of all collections of five things. [...] the denotation of the ordinal fifth is the set of all objects that are in fifth position in some ordered sequence" (Hurford 1987: 169). The semantics of ordinal as a number or a place in a "contextgiven sequence" as in the example given by Hurford "Ivan was the fifth Ukrainian in the queue" (Hurford 1987: 170) manifests itself in our examples rather in the "etymology" (in reasons for designation) than in the sense itself. The similarity of the cases of numeral usage mentioned above to the proper names consists in the fact that they both do not designate classes of objects having common features. Whereas the common feature of all five objects is their "fiveness", and that of all the fifth objects is their place in the sequence, the fifth or ninth, etc., bus lines in different cities have only their names in common, as in the case of proper names (all men called Peter or Daniel have usually only their names in common). The same could be said of several other examples considered above: the Ninth symphony. Louis XIV. Numbers are here labels. As often in such cases, in spite of

all this, additional associations and sememes can be developed. Inside a certain city, buses (or bus lines) possessing a certain number have common features: their route can evoke a lot of additional connotations, e.g. monuments of architecture, passengers living in a certain neighborhood, other possible individual or collective memories, etc. Thus, the trolley bus number one (in Russian "pervyj trollejbus" — 'the first trolley bus') associates in my mind with the central street and the Neva River in St.Petersburg and with the street leading to the University. The symbolism of numbers typical of several cultural traditions also connects numerals with meaning, often in a vague and rather qualificative way, creating oppositions like "lucky — unlucky", "good — bad", etc.

The other examples listed above demonstrate transitional cases (between the usage of numerals described by Hurford and special usage mentioned by us). Thus, a numeral denoting a year is, of course, connected with the notion of sequence, but the development of several additional sememes is possible. Such numerals as 1933, 1937, or 1945, denote not only an order of a year in a sequence following a conventional term, each succeeding the preceding one, but mean for many speakers something more, evoking complicated associations. The usage of numerals in expressions denoting a sum of money, as in several others, is based on conventional units of measurement accepted in several societies. Nomination of age evokes additional connotations — e.g. the age of seventeen means also 'youth', etc. At the same time, a phone number reflects a pure conventional usage of bare numerals (if several numbers are not connected with the corresponding neighborhood), but can be additionally (individually) associated with a kind of rhythm.

The difference between numerals and other parts of speech (or word classes) can be observed in bilingual speakers or speakers using their second language in everyday life. It is known that people usually count in their mother tongue; but a phone number is, according to my observations, often first remembered in the language of everyday speech (even if it is not the original mother tongue). In any case, the acquisition of foreign language words denoting numbers differs from those of other words, reflecting, as can be supposed, differences of mental representation of these classes of lexemes. On the other hand, the similarity of numeral to several other parts of speech can be traced. As was stated above, numerals in several functions of these are close to other "labels", e.g., personal names (as in a children's poem where kittens were called "One, Two, Three, Four, Five").

Being connected with the semantics of a place in a sequence, of quantity, numerals develop additionally the meaning of degree. As noted above, such words as "many", "few", etc. are close to numerals and are included by several scholars in this group of words. The next step in the development of their semantics is the forming of evaluative sememes — one of the universal lexical processes. The trend to the expression of evaluation is an important peculiarity of language, especially salient in adjectives and in some kinds of adverbs. The lexical meaning of the lexeme can be in such cases partially preserved or entirely lost (cf. the history of such words as "very" in English meaning originally 'truly'; "sehr" in German, originally 'painful'; "bol'no" 'painful' in Russian that may be used in the meaning 'very', etc.; to mention recent development - "cool" in modern English meaning a high degree of quality). The development of the additional meaning of high quantity and that of high evaluation (as E. M. Volf stated for the case of the adjective: "It could be added: "and this is good" — Volf 1978: 18-20) may be seen in the hyperbolic usage of such words as "millions", "thousands", "hundreds", etc. In these examples, as in several mentioned above, numerals lose the exactness, which is their chief peculiarity. Special kinds of texts are important in this connection.

2. Numerals in several kinds of texts

It is evident that numerals are often used in scientific texts, e.g., where statistic data are concerned. The addressees of these texts are specialists possessing the corresponding knowledge and capable of evaluating the information. The latter is very important in the case of numerals because they often have relative values, and their comprehension demands certain presuppositions (including the basic knowledge of other statistic data). But numerals are often met also in texts that are almost opposite to those mentioned above; e.g., in fairy-tales, epics, and minor forms of folklore (proverbs, riddles). Let me just list a few instances to illustrate the usage of numerals in Russian proverbs:

"U semi njanek ditja bez glazu" — literally: 'the child with seven nurses is in want of control'.

"Sem' raz otmer' — odin raz otrež'" — literally: 'measure seven times — cut one time',

"Odin s soškoj — semero s ložkoj" — literally: 'one with a (wooden) plough — seven with a spoon',

"Sem' bed — odin otvet" — literally 'seven desasters — one answer'.

"Ne imej sto rublej, a imej sto druzej" — literally: 'don't have a hundred roubles, but do have a hundred friends'.

As in all utterances of this kind, proverbs listed above have figurative meaning; they often reflect directive, illocutionary speech acts. Thus, the first one concerns cases when the lack of success is caused by too many persons doing one and the same job, a type of proverb well known in different national traditions (in English: "Too many cooks spoil the broth") and included in the international classification (Kuusi 1972: 699–735, esp. 718; 1978). The directivity of these utterances manifests itself also in the meaning 'many' or 'too many' (evaluation of quantity) that the numerals possess. "Seven" used in these proverbs is a sacred number traditionally common in folklore and representing here "unspecified" numerals; the sense of utterance would not change if "seven" were replaced by another numeral or by "many".

In epics of different national traditions, numerals denoting large quantities ("forty, hundred, thousand") are often used, whereby the same "sacred" numbers ("three, seven, twelve") are found (Toporov 2000). Thus, in one of the Russian epic songs (bylinas) from Novgorod a stone is described as being "thirty ells wide, forty ells long, and three ells high" (Novgorodskie byliny 1978: 105). In another bylina, the sacred book on the origin of the world is described as being "forty spans long, twenty spans wide, and thirty spans thick" (Evgenjeva, Putilov 1958: 272). In the "Nibelungenlied" the stone that Pruenhilde proposed to throw as a part of the competition for her hand is described by several epitheta concerning its dimensions and weight, then it is added that twelve bold and brave heroes could hardly carry it (Aventiure 7, 449 — Brackert 1993: 100). Several examples from the Old Icelandic Elder Edda (in literal prosaic translation): "We have seven chambers full of swords" (Atlaqvitha, 7 — Neckel 1983: 241); "Seven hundred men went to the hall" (Guthrunarqvitha III, 7 — Neckel 1983: 233), "We were thirty warriors of birth, eleven of us left alive" (Atlamál Gr. - 51; Neckel 1983: 255). In the majority of examples, numerals in epics are connected with epic heroism; they are used in texts where the strength, great abilities, the power, and the wealth of heroes have to be stressed. Thus, numerals in folklore texts are close to epitheta ornantia. The usage of numerals in proverbs can be connected with the general peculiarities of the latter as a genre of folklore and as a type of speech act having directive and figurative rather than direct character. Numerals in epic texts that could in principle be substituted by other ones are partially caused by the peculiarities of this kind of texts, on their formulaic structure based on the principle of "blocks" capable of being substituted in the process of the generation of the text. The "realism" of numerals in these folklore texts is doubtful, in spite of the general possibility of creating corresponding "realistic" images.

Several peculiarities of numerals — those manifesting themselves in folklore texts — cause the possibility of their usage in another genre of texts — in propaganda. Here also formulaic expressions like "millions of people" etc., can be found. The examples to be considered later are taken from two Soviet central official newspapers — "Pravda" and "Izvestija" of May 1986. They partially reflect common stylistic features of Soviet propagandistic discourse of the "period of stagnation". Their specificity is caused by the special situation, which obtained in the country in those days — the catastrophe in the atomic power station in Chernobyl. The scale of the catastrophe was clear only to a few people. Journalists were evidently instructed to veil the real tragic events, and they used typical, well-known means to do it. I have chosen these texts to demonstrate the role of numerals in propaganda because the events became a turning point in the consciousness of many people in the Soviet Union. The whole story shows the change of text meaning caused by an extralinguistic situation: propagandistic texts close to mythological ones became suddenly realistic. Besides, in this special case the attitudes of the addressees can be reconstructed, because of the personal experience of the author of this article. The latter is of special importance as the perception of the text by the addressee is the element that is very quickly lost in most cases.

The accident in Chernobyl occurred immediately before the First of May, the official holiday in the USSR. Traditionally, newspapers published then report on the accomplishments of the Soviet people. May 2 the newspaper "Izvestija" wrote:

"Segodnia set' avtodorog Tadžikskoj SSR sostavljaet 12728 km. Èto bol'še, čem rasstojanie ot Moskvy do centra Kamčatskoj oblasti." - 'Today the highway network of Tajik SSR accounts for 12728 km. This is more than the distance from Moscow to the center of Kamchatka region'.

"Traktorostroiteli objazalis' v dvenadcatoj pjatiletke dat' 520 tysjač traktorov" — 'Tractor constructors committed themselves to producing 520 thousand tractors during the twelfth Five-Year Plan period.'

"Kiev [...]. Zdes' v nynešnem godu vypustjat 285 tysjač mikserov, 60 tysjač kofemolok, 30 tysjač kuchonnych mašin" — 'Kiev [...]. Here 285 thousand mixers, 60 thousand coffee mills, and 30 thousand kitchen units will be produced during this year'.

From the newspaper "Pravda" on the May 1:

"Nefteprochodčiki proburili 10792 m gornych porod vmesto 10500 po objazatel'stvu" — ' Miners bored 10792 M of rocks instead of the 10500 they had committed themselves to producing'.

The magic of high numbers was intended to evoke the corresponding sentiments. Because these texts were essentially addressed to readers not specialized in statistics, the numerals were predominantly perceived as decorative and evaluative elements, like signs of heroic deeds in epics. On the other hand, they were known to be a part of texts of a certain genre — of Soviet propagandistic discourse. Many people skilled in reading these texts developed a specific understanding of them. It did not mean that they knew statistics and were interested in the length of highways and the quantities of produced materials, but they rather regarded all these texts as conventional ones. Numerals could be perceived as one of the elements of such texts, having not much in common with real life and even not destined to reflect the reality. It can be said that numerals in these texts, even in cases when they were true, became signs of lying.

The first information on the catastrophe, published in the lower corner of the newspaper's page, was scanty; it did not contain numbers. On May 1 both "Pravda" and "Izvestija" published a short report, where it was mentioned that two persons had died, 197 persons had been brought to hospital, of which 49 had left after medical examination. On the May 2 it was reported that radioactivity on the territory of the Atomic Power Station and in the village had become 1,5-2 times less, and that 18 persons were in a grave condition. At the same time several articles about incidents in power stations abroad appeared. On the May 4 "Pravda" (p. 5) wrote: "As is known, during the period of 1971-1984 in 14 countries of the world 151 accidents took place in the atomic power stations". On the May 6 (p. 4); "Last year ca. 2300 'incidents' were registered in the USA, according to available data". "Izvestija" 5.05: "Accidents on the Atomic Power Stations. USA Washington. 4th of May. (TASS). Nearly 20 thousand different accidents and technical problems occurred in American atomic stations since 1979 [...] In 1979, 2310 incidents occurred in 68 atomic power stations in the USA. [...]In 1980, the number of accidents increased to 3804, one year later to 4060. In 1983, there

were more than 5 thousand". As late as May 8, the first larger article about the events in Chernobyl containing numerical data on the level of radiation appeared. Whereas the journalists continued to use the Soviet political discourse, the perception of these texts by the addressees suddenly changed. The numbers ceased to be mythological ones. Many people consulted the corresponding reference literature and became well informed about the physical parameters connected with the catastrophe, first of all about different levels of radiation and their possible consequences. It was not mythology that they needed, it was realism.

The examples from newspapers listed above demonstrate the usage of numerals in propaganda. As is known, three types of propaganda may be singled out: "the white", "the gray" and the "black" one (O'Donnell, Jowett 1989: 49-63; 1992: 8-19). "White" propaganda is based on "a source which is identified correctly and communicates accurate information", but presented and evaluated in a corresponding manner. "Gray" propaganda is when the source of information is not always correctly identified; it may contain false data. "Black" propaganda is disinformation, containing lies, all types of deceit. Many interesting examples of the usage of statistics to deceive are collected in the book by Darrell Huff (1954) that is a kind of manual for self-defence against lie with numerals. It cannot be excluded that the examples cited above still remain within the bounds of the "white" propaganda or correspond to the "gray" one. As can be seen from the examples listed above, numerals provide substantial aid in compiling propagandistic texts. Their relativity makes the special manipulations possible, which are needed in propaganda. Thus, it could seem that one incident in Chernobyl is not substantial in comparison with 20 thousand accidents in America (here the trick is based on the comparison of things incommensurable in their degrees). Besides, the numerals provide the illusion of exactness and of truth (e.g. the "exact" number 3804 cited above). The connection of numerals with the qualitative semantics and their magic is also important.

Conclusions

Our considerations permit us to draw the following conclusions. Special types of texts — folklore on the one hand, propaganda on the other hand — are taken into account.

- 1. Numerals presuppose a certain generalization and unification of objects, differences being disregarded. Several examples from propagandistic texts mentioned above are based on this peculiarity of numerals. In the sentence "The last year ca. 2300 'incidents' were registered in the USA [...]" the propagandistic trick consists in equating of cases of different degrees. The subtext consists of the possibility of adding to this series another case — that of Chernobyl, to put it into a set of numerous other cases, i.e. to deny its unique character. In formulas like "millions of people" something similar occurs. People are considered as a mass, the differences of personalities being disregarded. As was stated above, generalization is a common peculiarity of language, needed already in forming a notion; grammatical categories also presuppose generalization and unification. In the latter aspect, numerals are, as we have pointed out above, similar to grammatical number, but they are more "marked", they switch attention from the difference of objects to their unity in a set. Leo Weisgerber showed in his classical article "Der Mensch im Akkusativ" the interrelation between several accusative constructions (those with the German transitive verbs like "erfassen", "eingliedern", "einsetzten", "verpflegen", etc.), and the dehumanization, spiritual subordination of the person (Weisgerber 1963). We could state something similar about "the human person in numeral construction".
- 2. Numerals possess relativity, and this not only in terms of the general arbitrariness of linguistic sign; moreover they depend on scale, on point of view, etc. That is why special knowledge is needed for an evaluation of numerical constructions the fact that is used in propaganda. Thus, the interpretation of information about the tremendous quantity of produced tractors demands additional background data including other numerals, other kind of knowledge, e.g. if this tractors are needed, where and how they have to be used, etc.
- 3. Because of the latter, the exactness of numerals is often rather relative. In many texts they provide an illusion of exactness. In "white" and "gray" propaganda numbers help to create the imitation of objectivity. Numbers are also often used in folklore texts (fairy-tales, epics) that are far from "realism in statistics". The peculiarity of

these texts consists in the combination of fantastic elements and (pseudo-) exactness. In all these cases of numeral usage the addressee is free to interpret it as a mythological or as a realistic element. Evidently, the specificity of the truth factor is well known here, e.g. in the case of fairytales.

- 4. Numerals often develop evaluative meaning, because they contain the semantics of degree. Words like "million", "thousand", etc. in singular and plural forms, and other lexemes denoting considerable quantities are often used in a hyperbolic sense and possess the additional sememe of high quantitative evaluation. They provide the impression of monumentality, something that is often used in propaganda tending to monumentalism. Even such a numeral as "seven" (the traditional ritual number) can mean in folklore texts, as was shown above, 'many'. The semantic shift 'great quantity' > 'high evaluation' or at least the connection of numerals denoting high quantity with stylistic "monumentalism" is evident and reflects the general trend to the development of evaluative semantics in languages.
- 5. The magic of numbers reflecting the ancient belief connected with different sides of life, e.g. with the systematicity of the world picture, manifests itself not only in folklore texts. The traces of such usage of numerals can be observed in several texts, especially those of propaganda containing other features of ritualized texts as well (e.g., epitheta ornantia, epic retardation, repetitions, etc.).
- 6. It could be thought that all cases considered above concern the metaphoric usage of numerals. I would like to claim that all these examples reflect one of the aspects of meaning of numerals contained in their general semantics. These data contribute to Frege's idea of relativity of numbers, but from another point of view.

References

Аdmoni, V. G. 1968 = Адмони, В. Г. 1968. Полевая природа частей речи (на материале числительных). In: Вопросы теории частей речи. Ленинграл: Hayka, 98-106. [The field nature of parts of speech].

Brackert, Helmut (ed.) 1993. Das Nibelungenlied: Mittelhochdeutscher Text und Übertragung. Frankfurt am Main: Fischer.

Evgenjeva, A. P.; Putilov, B. N. (eds.) 1958 = Евгеньева, А.П.; Путилов, Б.Н. (eds.) 1958. Древние российские стихотворения собранные Киршею Даниловым. Москва: Издательство Акадкмии Hayk. [Russian Ancient Poems Collected by Kirsha Danilov.]

- Frege, Gottlob 1980. *The Foundations of Arithmetic*. Trans. by J. L. Austin. Evanston: Northwestern University Press.
- Gvozdanović, Jadranka (ed.) 1992. *Indo-European Numerals*. (Trends in Linguistics: Studies and Monographs 57.) Berlin: Mouton de Gruyter.
- (ed.) 1999. *Numeral Types and Changes Worldwide*. (Trends in Linguistics: Studies and Monographs 118.) Berlin: Mouton de Gruyter.
- Huff, Darrell 1954. How to Lie with Statistics. New York: W. W. Norton.
- Hurford, James R. 1975. *The Linguistic Theory of Numerals*. Cambridge: Cambridge University Press.
- Hurford, James R. 1987. Language and Number. New York: Basil Blackwell.
- Kuusi, Matti 1972. Towards an international type-system of proverbs. *Proverbium* 19: 699–735.
- 1978 = Кууси, Матти 1978. К вопросу о международной системе пословичных типов (опыт классификации количественных пословиц). In: Пермяков, Г. Л. (ed.), Паремиологический сборник. Пословица, загадка. Структура, смысл, текст. Москва: Наука, 53–81.
- Melchuk, Igor A. 1985 = Мельчук, И. А. 1985. Поверхностный синтаксис русских числовых выражений. [The surface syntax of Russian numeral expressions]. Wiener slawistischer Almanach, Sonderband 16. Wien.
- Neckel, Gustav 1983. Edda: Die Lieder des Codex Regius nebst verwandten Denkmälern Bd. 1. 5. verbesserte Auflage. Heidelberg: Hans Kuhn.
- Novgorodskie byliny 1978. Moskva: Nauka. [Bylinas from Novgorod.]
- O'Donnell, Victoria; Jowett, Garth S. 1989. Propaganda as a form of communication. In: Smith, Tedd J. III (ed.), *Propaganda: A Pluralistic Perspective*. Ed. by Tedd J. Smith III. (Media and Society Series.) New York: Praeger, 49–63.
- O'Donnell, Victoria; Jowett, Garth S. 1992. *Propaganda and Persuasion*. Newbury Park: Sage Publications.
- Reinhart, Tanya 1997. Quantifier scope: How labor is divided between QR and choice functions. *Linguistics and Philosophy* 20: 379–397.
- Resnik, Michael 1980. Frege and the Philosophy of Mathematics. Ithaca: Cornell University Press.
- Toporov, V. N. 2000 = Топоров, В. Н. 2000. Числа. In: Токарев, С. А. (ed.), *Мифы народов мира. Энциклопедия. Том* 2. Москва: Олимп, 629–631. [Numbers. In: Myths of Peoples of the World. Encyclopedia.]
- Vater, Heinz 1986. Zur Abgrenzung der Determinantien und Quantoren. In: Vater, Heinz (ed.). Zur Syntax der Determinantien. (Studien zur deutschen Grammatik.) Tübingen: Narr., 13–31.
- Volf, E. M. 1978 = Вольф, Е. М. 1978. Грамматика и семантика прилагательного. Москва: Наука. [Grammar and Semantics of the Adjective.]
- Weisgerber, Leo 1963. Die vier Stufen der Erforschung der Sprachen. Düsseldorf: Pädagogischer Verlag Schwamm, 215–232.

О семантических свойствах числительных и об использовании числительных в определенных текстах

В статье рассматриваются общие свойства числительных как части речи. Особо выделяются те случаи, когда семантика числительного не ограничивается идеей счета, порядка или числа объектов. В связи с этим анализируются примеры использования числительных, с одной стороны, в фольклорных, с другой — в пропагандистских текстах. Так, рассмотрен ряд примеров из газет «Правда» и «Известия» за май 1986 года. Хотя эти тексты типичны для советского политического дискурса, они имеют специфическую особенность: манипуляция числительными должна была скрыть крупнейшую технологическую катастрофу — аварию на Чернобыльской АЭС. В статье показано, что все случаи использование числительных в текстах отражают их общие частеречные семантические свойства. Так, развитие у числительных оценочной семантики связано со значением степени, входящим в их семантическое поле. Выводы, сделанные автором, соответствуют философской концепции Фреге об относительности цифр и чисел, но касаются лишь чисто лингвистического аспекта проблемы.

Arvsõnade semantilistest omadustest ja arvsõnade kasutamisest teatud tekstides

Vaadeldakse arvsõnade kui sõnaliikide üldisi omadusi, pöörates erilist tähelepanu juhtudele, kui arvsõna semantika ei piirdu objektide loendamise, järjestuse või arvu ideega. Sellega seoses analüüsitakse arvsõnade kasutamist (a) folklooritekstides ja (b) propagandistlikes tekstides. On läbi töötatud hulk näiteid 1986. a. mais ilmunud ajalehtedest "Pravda" ja "Izvestija". Kuigi need tekstid on tüüpilised nõukogude poliitilise diskursuse jaoks, on neil siiski ka eripära: arvudega manipuleerimine pidi varjama tõde suurimast tehnoloogilisest katastroofist — avariist Tšernobõli AEJs. Näidatakse, et kõik arvsõnade kasutamise juhud neis tekstides peegeldavad nende üldisi sõnaliigilisi semantilisi omadusi. Näiteks on arvsõnade hinnangulise semantika areng seotud nende tähendusväljas sisalduva järgu tähendusega. Autori poolt tehtud järeldused kattuvad Frege filosoofilise kontseptsiooniga numbrite ja arvude suhtelisusest, kuid siin käsitletakse vaid probleemi lingvistilist aspekti.

Prosody and versification systems of ancient verse

Maria-Kristiina Lotman

Department of Germanic and Romance Philology, University of Tartu, Ülikooli St. 17, Tartu, Estonia e-mail: maria.lotman@mail.ee

Abstract. The aim of the present study is to describe the prosodic systems of the Greek and Latin languages and to find out the versification systems which have been realized in the poetical practice. The Greek language belongs typologically among the mora-counting languages and thus provides possibilities for the emergence of purely quantitative verse, purely syllabic verse, quantitative-syllabic verse and syllabic-quantitative verse. There is no purely quantitative or purely syllabic verse in actual Greek poetry; however, the syllabic-quantitative versification systems (the Aeolian tradition) and quantitative-syllabic versification systems (the Ionian tradition) were in use. The Latin language, on the other hand, has a number of features, which characterize it as a stress-counting language. Since at the same time there exists also the opposition of short and long syllables, there are preconditions for the syllabic, accentual and quantitative principle, as well as for the combinations of these. The Roman literary heritage shows examples of purely accentual. syllabic-quantitative, quantitative-syllabic, as well as of several other combinatory versification systems.

0. Introduction

There are quite many studies which treat the prosody of ancient verse, but the opinions differ even in the most basic questions. Already the term 'prosody' has different meanings for different scholars. Roughly speaking, there are two main kinds of approaches. The first (so-called linguistic approach) treats prosody as certain elements which are superimposed on phonemes (typically, such elements are stress, force

and pitch; another term used for them is suprasegmentals)¹. These elements are paradigmatically opposed to one another, e.g., high vs low pitch in identical environment (Allen 1973: 6), but they can also have secondary values which are defined syntagmatically (Hogg, McCully 1987: 62). The object of the latter treatment (so-called literary prosody) is versification: verse forms, rhythms and patterns. E.g., James Graig La Drière (1943: 455) defines prosody as the general term for analysis of the rhythmic structure of sound in speech, especially in verse. W. S. Allen (1973: 12) offers a kind of synthesis of the above-mentioned treatments, claiming that force, pitch and duration are the most basic features of phonation, as well as the most important constituents of versification which function prosodically in the most languages.

The leading scholars on ancient verse, who usually proceed from the literary approach, generally discuss not the prosodic system, but only separate features of it. Thus, e.g., D. S. Raven in his study on Latin verse, describes in the chapter devoted to prosody the rules of stress and quantity, the law of iambic shortening, elision and hiatus (1965: 22–30), and Martin L. West in his monograph on Greek metre (1982: 7–17), in addition to the rules of quantity, pays also attention to a number of prosodic features. But there is no treatment of how these features join into a system and what is the typological place of the analysed languages among other languages. As for the versification systems of ancient verse, the leading treatments of ancient verse, as a rule, provide no special analysis of these; the Western scholars often regard them implicitly and as a part of prosody.

The present study proceeds from the typology of versification systems, where versification systems are treated as a correspondence between metre and prosody of natural languages, a correspondence that proceeds from metrics and creates the prosody of versification, transforming at the same time the prosody of natural language (Lotman 1998: 1858). The list of the main versification systems is as follows: (1) purely quantitative verse, where only the number of quantities is fixed, but not their positions (there have remained no examples of such verse, however, some of the Sanskrit verses resemble this type); (2) syllabic verse, where metrically relevant unit is the syllable (e.g. Indo-European verse); (3) accentual verse, where the accent is metrically relevant; (4) free verse, where metrically

¹ Cf., e.g., Trubetzkoy 2000, Lehiste 1970, Otake & Cutler 1999, Hogg & McCully 1987.

relevant unit is the phrase; (5) syllabic-quantitative verse, where the number of syllables is fixed; quantity is governed by syllabics (e.g. the Aeolian verse, the Vedas); (6) quantitative-syllabic verse, where both the number and the position of quantities is regulated; (7) accentualsyllabic verse, where the versification is determined both by syllabics and accents, but accents dominate the syllabics; (8) syllabic-accentual verse, where the number of syllables is fixed and accents are subject to regulation; (9) accentual-syllabic-quantitative verse, where all the three principles are applied; (10) quantitative-accentual-syllabic verse, where regulation applies primarily to quantity, but also the configuration of accents; the number of syllables is governed by quantity (Lotman 1998: 2074).

The aims of the present study are a) to describe the prosodic systems of the Greek and Latin languages; b) in accordance with the prosodic systems of given languages, to establish the versification systems for which Greek and Latin have a natural basis and determine which of these systems have been realized in the poetical practice.

1. Prosodic system of the Greek language

The most important features of the Greek language are the following.

- (1) The elementary prosodic unit or prosodeme is not a syllable, but a durational unit — mora. Consequently, Greek is typologically a mora-counting language, where prosodemes are distinguished by pitch (cf. Trubetzkoy 2000: 211).
- (2) In Greek, both vowels and consonants can be prosodically significant. Syllables can be unarrested (i.e. open syllables with short vowels, e.g. $\sigma \hat{\epsilon}$), as well as arrested, either orally (i.e. closed syllables with short vowels, e.g. $\delta\delta\varsigma$) or thoracically (i. e. syllables with long vowels or diphthongs, e.g. $\gamma \hat{\eta}$, cf. Stetson 1951, Allen 1973: 65, 203)². There can also occur the so-called hypercharacterization, i.e. the syllable is arrested both thoracically and orally, cf. e.g. the subjunctive medio-passive form παιδεύωνται.

² The author of the present study proceeds from one of the many interpretations of the syllabic structure, the so-called motor theory, according to which the syllabic pulse can be arrested by thoracic muscles or oral (consonantal) articular stroke, i.e. the syllables ~V and ~VC are both arrested, the former thoracically, the other orally (Stetson 1951). Mihhail Lotman points out that a phonological syllable does not necessarily coincide with a prosodic syllable, cf. the clauses (6c) and (6d) of the present chapter.

- (3) The syllable can be heavy, light or anceps. The syllable is heavy if it is orally or thoracically arrested, otherwise it is light. Quantities are determined by subjective duration, since objectively e.g. the syllables $\pi\eta$ and $\pi\epsilon\rho$ were not isochronous, but they were perceived as metrically equivalent heavy syllables, which were opposed to light syllables. Accordingly, the syllables $\pi\eta$ -, $\pi\epsilon\nu$ -, $\pi\eta\gamma$ and $\pi\epsilon\rho\kappa$ were equivalent to each other and opposed in quantity to the light syllable $\pi\epsilon$ -; while at the same time there was no actual relationship 2: 1 between short and long durations (cf. also Kuryłowicz 1960: 393).
- (4) There is no reduction of unstressed syllables (when vowels meet, an elision of syllables can take place, but such phenomenon characterizes stressed syllables as well).
- (5) The nature of accent is melodic, not dynamic, i.e. an accented syllable differs from unaccented ones not by force, but by pitch. There are three types of accent: (a) the so-called acutus $(\delta\xi\delta\zeta)$ which can occur both on heavy and light syllables, but only on the last three syllables, and on the antepenultimate syllable it can occur only if the final syllable of the word is light, as in e.g. $\pi\delta\lambda\epsilon\mu o\zeta$ (war)³; (b) gravis ($\beta\alpha\rho\delta\zeta$) which replaces acutus in the case when the word is followed by another word without a punctuation mark, cf. e.g. $\gamma\epsilon\omega\rho\gamma\delta\varsigma$ (farmer) and $\gamma\epsilon\omega\rho\gamma\delta\varsigma$ $\delta\gamma\alpha\theta\delta\varsigma$ (a good farmer); and (c) circumflexus ($\pi\epsilon\rho\iota\sigma\pi\delta\mu\epsilon\nu\sigma\varsigma$) which can occur on the last two syllables, but only on a syllable that contains a long vowel or diphthong, and it can occur on the penultimate syllable only if the final syllable is light, e.g. $\delta\hat{\alpha}\rho\rho\nu$ (gift). Roman Jakobson formulates this rule more clearly: "The span between the accented and the final mora cannot exceed one syllable" (Jakobson 1962: 263).
- (6) When vowels meet, several options are possible (West 1982: 10–15):
- a. elision, e.g. the disappearance of the short final vowel before the initial vowel of the following word, e.g. $o\dot{v}\delta'\alpha\dot{v} = o\dot{v}\delta\dot{\epsilon}\alpha\dot{v}$;
- b. correption, where a long vowel or a diphthong at the word-end is shortened before the initial vowel of the next word; this phenomenon is characteristic, above all, to early epic and elegy;
- c. synizesis or synecphonesis, i.e. two or more vowels which initially belong to separate syllables, are amalgamated into one heavy syllable;

³ There are some exceptions to this rule, cf. e.g. Allen 1973: 237.

- d. consonantalization of t and v between a consonant and another vowel in the same word, e.g., Αρθμιάδεω in Arcilochos 29.2;
- e. hiatus, in which case both vowels retain their initial values. Hiatus is usually avoided with elision, crasis or so-called movable v (v $\dot{\varepsilon}\varphi\varepsilon\lambda\kappa\nu\sigma\tau\kappa\dot{\delta}v$) which is added to the ending $-\sigma\iota$ of dat. pl., as well as to the affix $-\sigma\iota$, the endings $-\varepsilon$ ja $-\sigma\iota$ of 3. sg and pl. of verb, the form $\dot{\varepsilon}\sigma\tau\dot{\iota}$, adverb $\pi\alpha\nu\tau\dot{\alpha}\pi\alpha\sigma\iota$ and numeral $\varepsilon\dot{\iota}\kappa\sigma\sigma\iota$. Hiatus is occasionally admitted by epic and elegiac poets.

It is important to mention that in the early Middle Ages fundamental phonological changes took place, one of the most significant changes being the replacement of the melodic accent by the dynamic one. As a result, the distinction between long and short vowels ceased to exist (cf. Roman Jakobson's law that if an independent co-existence of dynamic accent and quantity evolves, one of these elements disappears from the phonological system; Jakobson 1969: 24).

2. Versification systems in Greek poetry

Prosodic features determine which versification systems may evolve on the basis of a given language. Thus, the above-mentioned features indicate that the Greek language which typologically belongs to the mora-counting languages, could meet the conditions for the evolvement of purely quantitative verse, where structure is determined only by the number of moras in a verse; the conditions for evolvement of purely syllabic verse, where the only determined factor is the number of syllables in a verse; and their combinations: quantitative-syllabic verse, where in addition to the number of moras also their configuration is considered; and syllabic-quantitative verse, where the number of syllables is fixed and quantity is subject to the syllabics (Lotman 1998: 2059–2062). The accentual principle has no role in versification, since this kind of melodic accent that is characteristic to Greek, can not create rhythmical oppositions.

In actual Greek poetical practice the purely quantitative and the purely syllabic versification systems are not to be found, however, there do exist the syllabic-quantitative versification system (the Aeolian tradition) and quantitative-syllabic versification system (the Ionian and Dorian tradition).

2.1. The syllabic-quantitative versification system

The Aeolian verse has some features obviously in common with the Indo-European verse: the strict number of syllables (a heavy syllable cannot be replaced by two light syllables, and vice versa); the longer verse is divided into shorter cola (cf. the caesura of the Indo-European verse); in the first two positions of a verse the quantity is irrelevant which is most probably a relic of the Indo-European verse. There are three possibilities for filling the positions: a heavy syllable, a light syllable or a syllable with irrelevant quantity or anceps. There are about 20 basic cola, which are joined into verses and strophes. The most important of these are the so-called glyconic ($\times\times-\cup-\cup-$) and pherecratean ($\times\times-\cup\cup--$), the former of which we shall now consider in more detail.

In the case of this kind of structure we need to distinguish between two principles of versification: a) the syllabic principle which regulates the number of syllables in a verse; b) the quantitative principle which regulates the configuration of durations and is governed by the syllabic principle (Lotman 1998: 2061–2062). When we mark heavy positions as A (the denotation of an abstract metrical element), light positions as B and metrical delimitators as &, we get the following structure: &AAABBABA&. Here, the following syllabic-quantitative correspondence rules apply:

(1) To the position A corresponds one heavy syllable.

$$A \rightarrow -$$

(1a) To the position A_1 corresponds one heavy or one light syllable, but the latter can occur only if the position A_2 is filled with the heavy syllable (West 1982: 30).

$$\begin{array}{c} A_1 \rightarrow \longrightarrow \\ A_1 \rightarrow \cup / \dots \longrightarrow \end{array}$$

(1b) To the position A₂ corresponds one heavy or one light syllable, but the latter can occur only if the position A₁ is filled with the heavy syllable (West 1982: 30).

$$A_2 \rightarrow - A_2 \rightarrow \cup /-- ...$$

(2) To the position B corresponds one light syllable.

$$B \rightarrow \cup$$

⁴ The hierarchy of metre will be marked with additional delimitators.

E.g. Sappho, 94. 3ff:5

πόλλα καὶ τόδ' ἔειπέ [μοι· 'ὤιμ' ὡς δεῖνα πεπ[όνθ]αμεν, Ψάπφ', ἢ μάν σ' ἀέκοισ' ἀπυλιμπάνω.'

2.2. Quantitative-syllabic versification system

The Ionian verse is characterized by the fixed number of moras and the regulated configuration of durations, but at the same time the number of syllables is variable. Namely, the Ionian quantitative-syllabic verse tradition is governed by a principle according to which in certain positions a heavy (i.e. dimoraic) syllable can be replaced with two light (i.e. monomoraic) syllables. There are two kinds of replacements: contraction which is the filling of two light positions with one heavy syllable (e.g. in dactylic measures), and resolution which is the filling of one heavy positions or princeps with two light syllables. At the same time, there exist not only positions allowing two variations, in which case the position is filled either with one heavy syllable or two light syllables, but also positions allowing three variations, the so-called ancipitia, which can be filled by a light syllable which can then be replaced by a heavy syllable, which, in its turn, can be resolved into two light syllables ($\overline{>}$).

There are also other major differences between the Aeolian and Ionian verse structure. While in Indo-European, as well as in the Aeolian versification, the smallest metrical unit was the whole line, in which light and heavy syllables alternated irregularly, then in the Ionian versification this alternation acquired a regularity, where the elementary metrical unit was a verse foot. There were feet consisting of three moras, (iambus \cup —, trochee $-\cup$, tribrach $\cup\cup\cup$), four moras (dactyl $-\cup\cup$, anapaest $\cup\cup-$, spondee —, prodeleusmaticus $\cup\cup\cup\cup$ etc) and five moras (creticus $-\cup$ —, bacchius \cup — etc) — thus, almost all the combinations of syllables were taken into use. Shorter, trimoraic combinations formed metrons in twos and the name of a metre depended on the number of metrons used to form a verse. The

iambic verse with four feet was called, accordingly, iambic dimeter; the one with six feet was called iambic trimeter, etc. Although the number of verse feet was fixed, the number of syllables was not: it was bound to vary due to the equivalence of two light syllables with one heavy. Consequently, e.g. in a hexametrical verse there can occur 12-17 syllables, depending on how many contractions have taken place in a given verse. The number of moras was, however, fixed.

The structure of hexameter can be presented in the form of the following scheme (Lotman 1998: 2059–2060)⁶:

&&AB&AB&AB&AB&AB&&

whereby the following correspondence rules apply:

(1) One heavy syllable corresponds to position A.

$$A \rightarrow -$$

(2) One heavy syllable or the sequence consisting of two light syllables corresponds to position B.

B ->---

 $B \rightarrow \cup \cup$

(2a) One syllable with an irrelevant quantity corresponds to position B6.

 $B_6 \rightarrow \times$

&&ABB&ABB&ABB&ABB&ABB,

⁶ Of course, there exist other possible ways of description. E.g., Morris Halle has proposed the following scheme: SWSWSWSWSS, where to symbol S (strong) corresponds one heavy syllable, but to symbol W (weak) one heavy or two light syllables. The substantial difference is here only in the last foot, which is presented with the structure SS. The main disadvantages of such description are: a) S does not signify the heavy syllable only, but also the strong position, due to this, it is not a suitable symbol, in principle, to signify the last position; b) the scheme does not reflect the quantitative irrelevance of the last syllable. On the other hand, it is possible to depict the structure of hexameter with a following scheme:

Thus, the constancy of the metrical structure is determined by the quantitative principle⁷ and the rhythmical variety depends on the syllabic principle, whereby the latter is subject to the former. E.g., Homeros, *Iliad* 2. 35–36:

"Ως ἄρα φωνήσας ἀπεβήσετο, τὸν δ' ἔλιπ' αὐτοῦ τὰ φρονέοντ' ἀνὰ θυμὸν ἄ ρ' οὐ τελέεσθαι ἔμελλον,

where the first line is composed of 16 syllables, the second one of 17 syllables.

The Dorian verse tradition is even more interesting: here we can find both syllabic-quantitative and quantitative-syllabic verse feet, where resolutions and contractions take place. While in the case of the Ionian versification the smallest symmetrical unit is verse foot and verse line is a symmetrical chain of verse feet, then in the case of the Dorian verse the symmetry often appears only on the strophical and hyperstrophical level. Especially common are the triadic compositions, where the metrically equivalent strophe and antistrophe $(\sigma\tau\rho\phi\phi\hat{\eta}, \dot{\alpha}\nu\tau\iota\sigma\tau\rho\phi\hat{\eta})$ are followed by a different metrical form, so-called epode $(\dot{\epsilon}\pi\omega\delta\delta\varsigma,$ cf. also West 1982: 47). Typologically, however, this kind of versification should be defined as quantitative-syllabic, since due to the occurrences of resolutions, contractions, anaclasises, etc, the syllabics is governed by quantity.

E.g., Ibykos, 282. 10–22, where the strophe and antistrophe are metrically equivalent, but the structure of the epode is different:

νῦ]ν δέ μοι οὖτε ζειναπάτ[α]ν Π[άριν ἢν] ἐπιθύμιον οὖτε τανί[σφ]υρ[ον ὑμ]νῆν Κασσάνδραν Πρι|άμοιο τε παίδας ἄλλου[ς

strophe

Τρο]ίας θ' ὑψιπύλοιο άλώσι[μο]ν ἄμ]αρ ἀνώνυμον, οὐδ' ἐπ[ελεύσομαι ἡρ]ώων ἀρετὰν ὑπ]εράφανον οὕς τε κοίλα[ι antistrophe

⁷ Since the final syllable is anceps, then, in strict sense, also the number of moras is subject to a slight variation, i.e. 23–24 moras per verse. However, most of the metricians treat the verse boundary as a potential prolongation of a syllable, and so, even a light syllable at the end of a line is dimoraic. Cf. also the example below (Hom. II. 2. 35–36), where the first line ends with a heavy syllable, but the second with a light one.

epode

νᾶες] πολυγόμφοι ἐλεύσα[ν Τροί]αι κακόν, ἤρωας ἐσθ[λούς· τῶν] μὲν κρείων ᾿Αγαμέ[μνων ἄρχε Πλεισθενίδας βασιλ[εὺ]ς ἀγὸς ἀνδρῶν ᾿Ατρέος ἐσ[θλὸς π]άις ἔκγ[ο]νος.

3. The prosodic system of the Latin language

The prosodic system of Latin is considerably more problematic than the prosody of Greek. There is no general agreement on the nature of Latin accent. The basic question is: was it melodic, as that of Greek, or dynamic? There is a certain disagreement between verse researchers and phonologists. There are many scholars (cf., e.g., Boldrini 1999: 3-4, but also most French metricians; Allen 1973: 151), who have no doubt that the nature of Latin accent resembled that of Greek. At the same time the phonologists (cf., e.g., Palmer 1954: 211; Niedermann 1945: 20-25; Allen 1973: 151-154) tend to think that at least during some periods Latin accent had to be dynamic, i.e. based on intensity. The latter viewpoint is grounded on copious evidence provided by historical phonology. Namely, the early literary Latin reflects certain changes which had to take place in prehistoric Latin. First, there are many words which show the change or loss of the vowel (syncope) in the second syllable. The timber of a vowel has changed in words sustineo (cf. teneo), conficio (cf. facio) etc; the loss of the vowel can be noticed in reppuli (*repepuli), quindecim (*quinquedecim), valde (valide) (Niedermann 1945: 22). Secondly, in certain short words (ill', nemp', quipp', satin') the final -e disappeared in speech, enclitical forms like 's, 'st pro es and est evolved, as well as the contractions percussust= percussus est, sis= si vis, malo, mavolo= magis volo - all this gives evidence of the tendency to the reduction of unaccented syllables (West 1982: 186-187). Such features indicate that the prehistoric Latin had a dynamic accent, because the loss of unaccented syllables is not typical to languages with a melodic accent (cf. the prosodic system of Greek).

Presumably, the prehistoric accent was fixed on the first syllable. According to the belief of many scholars, the position of the accent on the first syllable as well as its dynamic nature changed in the course of language evolution. In longer words a secondary accent evolved which anticipated an accent on the first syllable of the following word, according to the formula $\le \times | \times ... \text{ or } \le \times | \times ... \text{ By the historical times}$

such accent had become primary, and, in its turn, generated a secondary accent to longer words: commilitiónes, emòriebátur (West 1982: 186). The fact that there is no considerable reduction in classical Latin has sometimes led to the conclusion that during the classical period the melodic component may have become prevalent over the exspiratory (intensity) and thus, the nature of accent became melodic⁸ (Niedermann 1945: 20–25) which is supported, e.g., by the statement of the grammarian Sergius, cited by Varro: "natura vero prosodiae in eo est, quod aut sursum aut deorsum; nam in vocis altitudine omnino spectatur adeo, ut si omnes syllabae pari fastigio vocis enuntietur, prosodia sit nulla⁹" (Grammatici Latini 4. 525. 21–22), but also Cicero: "ipsa enim natura, quasi modularetur hominum orationem, in omni verbo posuit acutam vocem¹⁰" (Orator 18. 57).

Nevertheless, such arguments in favour of a melodic accent are not irrefutable, because the influence of the Greek culture, incl. Greek philology, continued to be immense, and it is quite clear that the prosodic terms of Sergius, Cicero and others had been borrowed from Greek: accentus for προσφδία, acutum for ὀξύ, grave for βαρύ, moreover, there were attempts to apply the whole complicated system of Greek accentuation to Latin (cf. e.g. Grammatici Latini 5. 126). But it is hard to believe that Latin would have developed a melodic accent that in detail corresponded to the Greek accent, thus, it would be more logical to assume that Latin grammarians only with great precision applied the Greek system to the description of Latin (Allen 1973: 151; Palmer 1954: 311–312). The fact that in popular Latin syncopes (e.g. pedicaut pro pedicavit, maldixit pro maledixit) can be found already in the 1st century AD, is also important: i.e., the accent in popular Latin was dynamic.

Consequently, although there are more arguments in favour of dynamic accent in classical Latin, we can not completely exclude the

⁸ Such viewpoint is not supported by several scholars either. E.g., according to W. Sidney Allen (1973: 152) it is unlikely that Latin developed a melodic accent, which only after a few centuries was again replaced by a dynamic accent. Allen argues that dynamic accent does not always result in reduction (cf. syllable counting languages vs tact counting languages; Lotman 1998: 1859), and he also emphasizes the fact that reductions take much more time to develop than the period under discussion.

⁹ "The nature of the prosody, indeed, is that it raises or falls; generally, it can be observed in the pitch of the voice, so that if all the syllables would be pronounced with the same pitch, there would be no accent".

¹⁰ "The nature itself, as if modulating human speech, placed an acute tone in every word".

popular language had dynamic accent, while educated classes spoke Latin with melodic accent. Such situation could be explained by the enormous influence of the Greek language and culture on Roman intellectual elite. 11

There is no doubt, however, that by the 5th century at the latest, Latin had developed dynamic accent: the phenomenon was then described also by the grammarians, e.g. Pompeius: "Illa syllaba plus sonat in toto verbo, quae accentum habet¹²" (Grammatici Latini 5. 126. 31).

An important argument in favour of dynamic word-accent is provided also by Latin poetry which shows clear regularities in concurrences of strong positions and word-accents. E.g., for the Latin hexameter it is characteristic that in the first half of the verse accents do not concur with strong positions, while in the second half they do. Cf. Table 1, where the frequencies of concurrences between strong positions and accents are presented.

Table 1. The concurrences of word-accents in the Latin hexameter (De Neubourg 1986: 147).

| | I | II | III | IV | V | VI |
|-----------|------|------|------|------|------|------|
| Ennius | 78.3 | 33.2 | 18.5 | 33.8 | 79.6 | 85.8 |
| Cicero | 84.5 | 34.2 | 13.4 | 44.6 | 94.9 | 99.2 |
| Lucretius | 76.3 | 41.9 | 21.7 | 47.9 | 93.9 | 97.7 |
| Catullus | 73.5 | 28.2 | 11.0 | 61.5 | 91.2 | 99.5 |
| Vergilius | 68.0 | 33.2 | 24.6 | 37.7 | 99.1 | 99.4 |
| Horatius | 71.4 | 30.3 | 25.0 | 47.0 | 96.9 | 96.9 |
| Ovidius | 79.7 | 36.6 | 14.6 | 47.7 | 99.5 | 99.9 |

Hence, in hexameters, a strong accentual conflict evolved between the first and the second half (although it has to be pointed out, that the first foot has also a strong tendency towards accentual structure). Such phenomenon is usually explained by the Latin accentual rules. Since there is an obligatory word-end at the end of the verse line, the placement of accents is not incidental, but depends on the configuration of heavy and light syllables before the word-end. The strong

12 "The syllable, which carries an accent, is the most sonorous in the whole word."

¹¹ Cf., e.g., the Swedish language that has melodic accent and the Fenno-Swedish language that has dynamic accent.

position in the sixth foot had to be filled with the heavy penultimate syllable of a word which, according to the Latin accentual rules, always carried the stress. The accentuation of last two feet could have been avoided with a monosyllable at the end of a line, thus filling a strong position in a sixth foot with an unaccented ultimate syllable of a word, but monosyllabic words at the end of a line were avoided and even regarded as a serious error of versification (De Neubourg 1986: 71). For example, Servius comments on the end of a Vergilian verse procumbit humi bos with harsh words: est hic pessimus versus in monosyllabum desinens. 13

There exist also opinions according to which such rhythmical contrast was a deliberate artifice of hexametrical poets. Since this verse form was adapted from the language of different phonological basis, the quantitative rules had to be learned as well, and it is only natural that a poet was in such case also aware of the relationship between accent and quantity in his versification. The same applies also to his educated readers. However, more interesting is the reaction of the less educated hearers, who had not learned the quantitative rules: could they grasp the quantitative versification which, to a large extent, was not supported by the configuration of accent? Sidney W. Allen (1973: 339) assumes that a less sophisticated hearer might have perceived the quantity of orally arrested syllables only so far as they were directly connected with accent, and for him the quantity of final syllables was, thus, irrelevant: e.g. the reader may have not been aware of the opposition of final syllables in tange and tangent and the equivalence of the latter form with the form tanges (however, S. W. Allen admits that the length of thoracically arrested syllables that were often connected e.g. with morphological endings, were perceived also independently¹⁴; ibid.). The Roman anonymous epigrams (Carmina Epigraphica Latina, further CEL) include hexametrical poems which interpret both metrical and prosodical rules with great freedom; often

¹³ It is the worst verse, ending with a monosyllable.

¹⁴ Extremely interesting evidence is here provided by the dialogue verses by Plautus and Terence, where heavy syllables occur freely in every position, incl. those where in Greek verse a light syllable was obligatory. A closer examination reveals there is a tendency for the weak position to be filled by not just any heavy syllable, but by an unaccented morphological ending. On the one hand, it could certainly be explained by the avoidance of the concurrences of word-ends and metrical boundaries. which results in a word-end usually occurring inside a feet. On the other hand, we could go even further than W. S. Allen and ask: were the independent thoracically arrested syllables perceived the same way as those thoracically arrested syllables that were directly connected with accent, or were they perceived somehow differently?

the correct pattern characterizes only the end of a line — if not quantitatively, then at least accentually (Allen 1973: 346–347). We can assume that in such cases the authors were less educated poets who were not aware of Greek prosody. Such versification is well illustrated by the following fragment (*CEL* 470. 1–4):

Quat valeas abeas pascas, multos tu habebes amicos. si haliquit casu alite[r] aduxerit aster, aut ili Romai frater es aut tu peregre heris et vocas acliva. quo si tu non nosti amicos...

Even more freedom is seen in the following example, where also the end pattern is often incorrect (CEL 331):

Conrigi vix tandem quod curvom est factum crede. Credis quod deicunt? non sunt ita. ne fore stultu. De incerto certa ne fiant, si sapis, caveas. De vero falsa ne fiant iudice falso. Est equos perpulcer, sed tu vehi non potes istoc. Est vi [p]er [c]livom. qua vi[s] sequi, non [datur ista. Formidat omnes. quod metuit, id sequi satiust. Hostis incertus de certo, nisi caveas. Iubeo et is ei si fecerit, gaudebit semper...

There are numerous violations of both metrical and prosodical structure in this example. Thus, e.g. caveas at verse end, as well as a foot containing a cretic word-group (e.g. est equos in the fifth verse line) or a foot containing a tribrachic word-group (e.g. iubeo et in the last verse line) never would have been admitted in classical hexameter.

It has to be pointed out that there are no such examples in Greek hexametrical poetry: Greek poets follow the metrical rules exactly, admitting, occasionally, some prosodical licences (Allen 1973: 346–347).

The interference of accentual principle is seen even more clearly in early Latin drama, especially in iambic and trochaic verse. Namely, the unaccented syllables tend to fill the weak positions, while in strong positions prevail the accented syllables. Since in early iambic and trochaic verse heavy syllables are allowed also in weak positions,

accent plays often an important role in verse rhythm. ¹⁵ Cf., e.g., Terence, *Adelphoe* 144ff:

Quom placo, advorsor sedulo et deterreo, tamen vix humane patitur; verum si augeam, aut etiam adiutor sim eius iracundiae, insaniam profecto cum illo. Etsi Aeschinus non nullam in hac re nobis facit inuriam.

Such tendency is characteristic to about 80% of Plautian and Terentian iambic and trochaic verse lines.

Let us analyse briefly the law of *brevis brevians* or *correptio iambica* which, while unfamiliar to Greek prosody, was quite common in Latin poetry, especially in early iambic and trochaic versification. Traditionally, it is interpreted as a shortening of an unaccented heavy syllable in the case when a neighbouring syllable carries an accent. Cf., e.g., Terence, *Eunuchus* 8:

ex Graecis bonis Latinas fecit non bonas

where in *bonis* the final heavy syllable has become shortened under the influence of the first accented syllable.

There have been extensive disputes about the actual meaning of this phenomenon. E.g. Sandro Boldrini (1999: 39–46) suggests that it did not mean an actual shortening of a syllable, instead, a syllabic group maintained its quantities, being in certain cases perceived as an iambic unit. The other possible explanation is that in certain cases the accentual principle may have started to dominate the quantitative one, becoming the primary factor in versification.

W. S. Allen (1973: 163–186) represents the viewpoint, according to which the iambic shortening is related not only to verse prosody, but characterizes the phonology of natural language as well¹⁶. In order to prove his opinion, he analyses the accentual matrices of the Latin language and draws some important conclusions. For one, he argues that most likely there was no actual basis in Latin phonology for the

¹⁵ The opposite viewpoint is supported by e.g. Kenneth M. Abbot (1944), according to whom the concurrences of accents and strong positions can fully be explained by Latin accentual rules.

¹⁶ On the other hand, e.g. W. Beare sees the reason for iambic shortening in the difficulty to provide an unaccented syllable, though quantitatively strong, with the necessary metrical force (Beare 1968: 324), i.e. for Beare, this phenomenon is exclusively related to versification.

equivalence - = -. Traditionally, it has been stated that there is a tendency in Latin toward a binary rhythm in which light syllables occur in pairs: e.g. the formation of perfect of the II conjugation, where the form -ui is characteristic to verbs which have a root of a single light syllable, e.g. moneo > monui, deceo > decui, while the verbs which have a root with a heavy syllable, have other formations. e.g. augeo > auxi, mulceo > mulsi etc. Similarly, the infinitive of the verbs of the IV conjugation which have a root consisting of one light syllable, is formed with a short i (which changes into e before r: traditional school grammar places such verbs in the III conjugation). e.g. capio, capere; facio, facere; while the verbs which have longer roots, i.e. consisting of one heavy or two light syllables, like audire. dormire, aperire, sepelire etc, have the infinitive form with long ī. W. S. Allen contends that there are also infinitives which can not be explained by the above-given logic. Namely, the IV conjugation includes also verbs like impedire, fulgurire which have infinitives with long $\bar{\imath}$, but the final syllable of the root is short. S. W. Allen suggests that the form capere is a result of the light and accented final syllable of a root which is not typical to *īre*-infinitives, cf. e.g. audire, aperire, impedire, etc. 17 It means that this phenomenon has not only quantitative, but also accentual basis. Thus, in the case of Latin it is not correct to speak of the purely quantitative equivalence - = -which has no accentual basis, but rather of the equivalence + = 50. This viewpoint is rather strongly supported by the evidence of the early Latin scenic verse.

The explanation for iambic shortening could be provided namely by the accentual matrices preferred in the natural language. W. S. Allen states that words with the pattern of \circ — were in certain conflict with the accentual rules which had been established by the historical times (cf. e.g. $\check{e}g\bar{o}$, $m\check{o}d\bar{o}$ etc, which during the early literary period still had a heavy final syllable, and * $m\check{a}l\check{e}$, * $b\check{e}n\check{e}$ etc, the final vowels of which had been shortened in preliterary times). Thus, the tendency to shorten the second syllable occurred, and as a result its thoracic arrest disappeared and a normal disyllabic accentual matrix was established (while the words with a heavy penultimate syllable maintained the quantity of the final syllable, e.g. $long\bar{e}$).

¹⁷ It must be noted that there are also different examples which are not discussed by W. S. Allen, cf. e.g. *venio*, *venire*; *salio*, *salire* etc.

The main features of the prosodic system of Latin can be summarized as follows.

(1) As in Greek, both vowels and consonants can be prosodically significant. The syllables can be unarrested (i.e. open syllables containing short vowels, e.g. -que), but also arrested either orally (e.g. closed syllables containing short vowels, e.g. id), or thoracically (i.e. containing long vowels or diphthongs, e.g. $m\bar{e}$; Allen 1973: 129). As in Greek, the hypercharacterization occurs here as well.

The phonological opposition of arrested and unarrested syllables, i.e. the distinction of quantities, is a very important feature of Latin versification.

- (2) The reduction of unaccented syllables that was characteristic to the preliterary period, but also to the popular Latin and late classical Latin, e.g. officina < *opificina, auceps < *avicaps.
- (3) The occurrences of enclitical and proclitical phenomena (typologically, this feature is relevant in the comparison with syllable-counting languages, where these phenomena, in general, do not occur).
- (4) The dynamic accent which in the classical period may have been replaced with the melodic accent in the language of more educated classes.
- (5) As is characteristic to languages that have reduction of unaccented syllables, the smallest prosodical unit was not a syllable, but a stress unit (tact). Consequently, Latin belongs typologically to the stress-counting languages (cf. Pike 1949: 34–36), and the distinguishing factor of prosodemes is force.
- (6) Characteristic to Latin is also the gradation of accentual intensity, i.e. there developed secondary accentuation.
 - (7) When vowels meet, the following options are possible:
- (a) elision, i.e. the final syllable of the word is not pronounced if it is followed by a word beginning with a vowel. In Latin the final m was weak (it may have been slightly nasal as in French), and the syllable ending with m was elided. If the second word in a hiatus was es or est, then the elision took place so-to-say "backwards" (so-called prodelision), i.e. the beginning of the second word was not pronounced, e.g. $dictum\ est = dictumst$;
- (b) synizesis, i.e. two or more vowels belonging to different syllables could form one heavy syllable by amalgamation of vowels; this can happen with ea (e.g. eadem), eo (e.g. deorum), ei (e.g. deinde), eu (e.g. meum), ie (e.g. diebus), ua (e.g. tua), ue (e.g. fuere), ui (e.g. fuisti), uo (e.g. suo);

- (c) the consonantalization of i and u, e.g. the famous example from the beginning of the *Aeneid: Laviniaque venit* (on the other hand, the opposite can occur as well, cf. in *silvae* [Horatius Od. I 23.4] v has been vocalized into u);
- (d) hiatus, in which case both vowels retain their initial values. Generally, this is avoided, but exceptions may occur, usually at a caesura or diaeresis.

4. Versification systems in Latin poetry

The described prosodical system provides a basis for considerably more versification systems than in Greek. Both in Latin and in Greek the versification can be based on quantitative-syllabic principle (e.g. hexameter, pentameter, iambic trimeter etc) and the syllabic-quantitative principle (the Aeolian metrics has been widely exploited also in Roman lyrical poetry). In addition to these, there exist, at least in preliterary Latin, but most likely later as well, also possibilities for such versification systems that are based on accentual principle or its participation. The limited bulk of Saturnian verses (a little more than 120 verse lines), which may be the only original Latin verse form (i.e. it evolved before the Greek versification started to have major influence on the Latin versification), seems to prove that these possibilities have been realized in actual poetry — most of them make sense as accented verse. The so-called versus quadratus which is the Latin version of Greek trochaic tetrameter, also shows clear evidence of accentual component (Gasparov 1989: 70). Although in classical Latin a versification based primarily on accentual principle never really evolved, several peculiar versification systems developed, in which the principles of quantity, accent and syllabification were united. Thus, the Latin versification could be compared e.g. with versification systems which have been created to translate ancient poetry into Estonian (e.g., by Ervin Roos or Ain Kaalep) and which combine all the above-mentioned principles (Lotman 1998: 2064-2065).

In Roman poetry the following versification systems can be observed.

4.1. Purely quantitative versification system

This was most likely characteristic to the Saturnian verse (unfortunately, there have not remained enough verse lines to make any fundamental conclusions about its structure). In the case of the Saturnian verse neither the quantity nor the syllabics were relevant, but only the number of accent. Two main types of the Saturnian verse have been distinguished: the so-called *maior* which had five accents and *minor* which had four accents. The structure of the Saturnian verse is illustrated with the following schemes (Lotman 1998: 1869):

&AAAA&

and

&AAAAA&

where one stress unit or tact corresponds to position A.

Cf., e.g., CEL 6:

Honc oino / ploirume / cosentiont / R[omane duonoro / optumo / fuise / viro,
Luciom / Scipione. / filios / Barbati
consol / censor / aidilis / hic fuet / a[pud vos.
hec cepit / Corsica / Aleriaque / urbe,
dedet / Tempestatebus / aide / mereto[d / votam

Theoretically also accentual-syllabic and syllabic-accentual versification systems are possible, moreover, they might have been actually realized in popular poetry (cf. e.g. *versus quadratus*), but there have remained too few possible examples to draw any specific conclusions.

4.2. Syllabic-quantitative versification system

The Aeolian verse metres were quite popular among the classical Roman poets. Although here as well, as in most Latin verse forms, accents tended to occur in certain positions, it should not be considered metrical, but rather rhythmical regularity. Syllabic-quantitative are e.g. the glyconics in Seneca's tragedy *Medea* (75ff)¹⁸:

The Aeolian metres in Latin poetry are not always syllabic-quantitative: occasionally, they allow resolutions or contractions, cf. the glyconic by Seneca (Oed. 891): vita decurrens via, where two light syllables have been replaced by one heavy (Raven 1965: 141). It has to be noted that resolutions were admitted in Aeolian metres already by Sophocles and Euripides (West 1982: 116).

vincit virgineus decor longe Cecropias nurus, et quas Taygeti iugis exercet iuvenum modo muris quod caret oppidum et quas Aeonius latex Alpheosque sacer lavat

where the natural word-accent often coincides with short positions, e.g., virgineus, iuvenum, etc.

4.3. Quantitative-syllabic versification system

This is typical to certain Ionian metres in Latin poetry, e.g., bacchiac and cretic metres which are quite common in early drama. Cf., e.g., the scheme of bacchiac tetrameter (Raven 1965: 123–124):

&&ABB&ABB&ABB&&

where the following quantitative-syllabic rules apply:

(1) To the position A corresponds one light syllable, one heavy syllable or the sequence of two light syllables, but the latter can occur only if the other positions of a foot have been filled with one syllable.

(2) To the position B corresponds one heavy syllable or the sequence of two light syllables, but the latter can occur only if the other positions of a foot have been filled with one syllable.

$$B \rightarrow --$$

$$B \rightarrow \cup \cup / \times ... --$$

$$B \rightarrow \cup \cup / \times --...$$

Cf. e.g. Plautus, Captivi 226ff:

Adcurate agatur, docte et diligenter.

Tanta incepta res est: hau somniculose hoc
Agundumst. TY. Ero ut me voles esse. PH. Spero.

TY. Nam tu nunc vides pro tuo caro capite
carum offerre [me] meum caput vilitati.

There exists also a number of versification systems in Latin which combine quantity, accent and syllabics.

4.4. Quantitative-syllabic-accentual versification system

In this system, the main organizer of verse structure is quantity, which determines the syllabics of a verse line. Certain positions are characterized by an accentual constant. Such versification is typical to, e.g., Latin hexameter (its accentual regularities have already been discussed above). Cf. e.g. Vergilius, *Aeneid* 494ff:

Haec dum Dardanio Aeneae miranda videntur dum stupet obtutuque haeret defixus in uno, regina ad templum, forma pulcherrima Dido, incessit magna iuvenum stipante caterva.

4.5. Quantitative-accentual-syllabic versification system

This is, above all, typical to early scenic iambic and trochaic metres. E.g. the structure of Latin iambic trimeter (senarius) has been organised with quantitative, syllabic and accentual principle.

I Syllabic principle.

The main syllabic rule (which is not violated in Greek verse) is the following: one syllable or a sequence of two syllables corresponds to each position, but the latter one can occur only if the other position of a foot is filled with one syllable.

 $A \rightarrow X$

 $A \rightarrow XX / ... X$

 $B\!\to X$

 $B \rightarrow XX/X...$

In texts by Plautus and Terence this principle is occasionally violated and especially in the first feet proceleusmatics are allowed (Raven 1965: 51–53). Still, in most cases this principle appears to be an important regulator of the syllabism in a verse line.

II Quantitative principle.

The quantitative rules are closely related to the syllabic rules, hence, the quantitative-syllabic correspondance rules are as follows:

(a) One heavy syllable, one light syllable or a sequence of two light syllables corresponds to position A, but the latter one can occur only if a strong position is filled with one syllable.

 $A \rightarrow \cup$

 $A \rightarrow \cup \cup /...X$

 $B \rightarrow --$

 $B \rightarrow \cup \cup /X \dots$

(b) One heavy syllable or a sequence of two light syllables corresponds to position B, but the latter one can occur only if position A is filled with one syllable. The line which is organised by quantitative-syllabic rules, is e.g. Terence, *Adelphoe* 143:

Me aegre pati illi nolui. Nam itast homo.

The word-accent in this case is irrelevant, the number and the quantity of syllables are the only constituents of iambic structure.

III Accentual principle.

The third set of rules involves accentual rules:

- (a) word-accents tend to occur in strong positions;
- (b) word-accents tend to be avoided in weak positions;
- (c) in resolved feet word-accent tends to occur in the first syllable of the resolved strong position, i.e. the most common form in iambic verse is xxx, but in trochaic verse xxx. About 80% of analysed iambic and trochaic verse lines are in correspondence with this rule, e.g. Terence, Adelphoe 804 ff:

Communia esse amicorum inter se omnia.

DE. Facete! nunc demum istaec nata oratiost.

MI. Ausculta paucis nisi molestumst Demea!

Principio, si id te mordet, sumptum filii
quem faciunt, quaeso hoc facito tecum cogites...

IV Accentual-quantitative-syllabic rules.

And finally, the most complicated one is the accentual-quantitative-syllabic rule. Namely, on certain occasions, when the stressed syllable occurs in a strong position, the quantity of the rest of the syllables in a given foot may become irrelevant and the foot may become the subject to accentual rules. This rule causes e.g. the phenomenon which is traditionally treated as iambic shortening. Cf. e.g. the accentuation in the third foot of iambic verse in Ter. Adelph. 4:

Indicio de se ipse erit, vos eritis iudices.

or the accentuation in the first foot of trochaic verse in Plautus, Amphitruo 281:

Eam quoque edepol etiam multo haec vicit longitudine.

But the so-called iambic shortening is not the only case where the accentual structure prevails over quantity. There are numerous other examples, e.g., Ter. Adelph. 106:

Iniuriumst, nam si esset unde id fieret,

where in the fifth foot instead of iambus we find a trochee, but the accentual structure still remains iambic.

As in hexametrical verse, also in iambic trimeter the rhythmical regularities of the last two feet are different from the first half of the verse. However, here the situation occurs, actually, the other way round: the end of the line has a tendency to quantitative structure, while the middle part of a verse has clear accentual structure.

The situation where different parts of verse structure are subject to different mechanisms of versification, is not unique. The study of verse history reveals a number of analogical instances where verse structure is organised by several principles of versification, while some of them dominate at the beginning of the verse, others at the end of the verse.

First, such features are characteristic to the structure of Indo-European verse. It was an isosyllabic verse, i.e. the number of syllables was metrically relevant and the primary element of metrical structure was syllable. Thus, the verse was organised by the syllabic principle. Word-accent played no role whatsoever, i.e. there was no regularity in the arrangement of accented syllables. On the other hand, quantity was relevant to some degree: there was a certain regularity in the alternation of heavy and light syllables. This regularity occurred mainly at verse ending, thus creating the so-called quantitative cadence, while the quantity of the first half of the verse was unregulated (West 1982: 2–3).

The second instance of such type is the medieval Latin verse. Approximately in the third century AD important phonological changes took place in the Latin language. The distinction between heavy and light syllables disappeared and thus the main opposition, which until then had served as the basis of versification, ceased to exist. Instead, new principles of versification evolved. The first step was to organize the syllabism of verse lines, hence creating the medieval Latin syllabic verse, where the main constituent of versification is the number of syllables. As a result, Latin verse starts to

resemble its origin, the Indo-European verse. Next, its ending becomes regulated, but not quantitatively (as IE verse), but accentually. One of the earliest examples is St. Augustine's psalm against Donatists. Here are present all the features which are characteristic to medieval verse: isosyllabism, ¹⁹ the irrelevancy of quantity, accentual verse ending, the emergence of rhyme (cf. also Gasparov 1989: 87–90):

Honores vanos qui quaerit, / non vult cum Christo regnare, Sicut princeps huius mali, / de cuius vocantur parte; Nam Donatus tunc volebat /Africam totam obtinere; Tunc iudices transmarinos / petiit ab imperatore...

There are several other examples, e.g., the Aeolian metres in ancient Greek versification or Estonian *regi*song — they both have quantitative-syllabic structure, but nevertheless, the first syllables in a line are quantitatively irrelevant. The closest example, of course, is the versification of early hexameter, where the accentual structure usually coincides with the quantitative structure of the fifth and sixth feet, but contradicts it at the beginning of a line.

Consequently, it can be said that in comparison with Greek verse, more rules participate in the organization of the early Latin verse. Although it is usually treated as a very liberated verse that is far simpler than its Greek model, we can not deny the complexity of its versification system which is the result of several combinatory versification principles.

5. Conclusion

1. The Greek language belongs typologically among the moracounting languages and thus provides possibilities for the emergence of purely quantitative verse, where structure is determined only by the number of moras; of the purely syllabic verse, where only the number of syllables is relevant; quantitative-syllabic verse, where in addition to the number of moras also their configuration is considered, and the syllabic-quantitative versification system, where the number of syllables is fixed and the quantity is subject to syllabics. There is no

The isosyllabic structure is accomplished in the 3rd line with elision (totam obtinere) and in the 4th line with synizesis (petiit).

purely quantitative or purely syllabic verse in actual Greek poetry; however, the syllabic-quantitative versification systems (the Aeolian tradition) and quantitative-syllabic versification systems (the Ionian tradition) were in use.

2. The Latin language, on the other hand, has a number of features, which characterize it as a stress-counting language. Since at the same time there exists also the opposition of heavy and light syllables, there are preconditions for the syllabic, accentual and quantitative principle, as well as for the combinations of these. The Roman literary heritage shows examples of purely accentual, syllabic-quantitative, quantitative-syllabic, as well as of several other combinatory versification systems.

References

Allen, William Sidney 1973. Accent and Rhythm. Prosodic features of Latin and Greek: A Study in Theory and Reconstruction. Cambridge: Cambridge University Press.

Abbot, Kenneth M. 1944. Ictus, accent and statistics in Latin dramatic verse.

Transactions and Proceedings of the American Philological Association 75: 127-140.

Beare, William 1968. The Roman Stage. London: Methuen.

Boldrini, Sandro 1999. Prosodie und Metrik der Römer. Stuttgart: B. G. Teubner.

De Neubourg, Leo 1986. La base métrique de la localisation des mots dans l'hexamètre latin. Brüssel: Paleis der Academiën.

Gasparov 1989 = Гаспаров, Михаил Л. 1989. Очерк истории европейского стиха. Москва: Наука.

Halle, Morris 1970. On Meter and Prosody. (Progress in Linguistics.) The Hague: Mouton.

Hogg, Richard M.; McCully, Chris B. 1987. *Metrical Phonology: A Coursebook*. Cambridge: Cambridge University Press.

Jakobson, Roman 1962. Selected writings I. Phonological studies. The Hague: Mouton.

— 1969. O cheskom stikhe (preimusshchestvenno v sopostavlenii s russkim). Providence: Brown University Press.

Kuryłowicz, Jerzy 1962 = Курилович, Ю. 1962 [1930]. Связь метрики с разговорным языком: Очерки по лингвистике. Москва: Изд. иностр. лит.

La Drière, James Graig 1943. *Prosody: The Dictionary of World Literature*. Shipley, J. T. (ed.). New York: The Philosophical Library.

Lehiste, Ilse 1970. Suprasegmentals. Cambridge: MIT Press.

Lotman, Mihhail 1998. Värsisüsteemidest (peamiselt eesti ja vene värsi näitel). *Akadeemia* 10: 1846–1874; 11: 2058–2078.

Martinet, André 1960. Éléments de linguistique générale. Paris: Armand Colin.

Niedermann, Max 1945. Précis de phonétique historique du Latin. Paris: C. Klincksieck.

Otake, Takashi; Cutler, Anne 1999. Perception of suprasegmental structure in a nonnative dialect. *Journal of Phonetics* 27: 229–253.

Palmer, Leonard Robert 1954. The Latin Language. Norman: University of Oklahoma Press.

Pike, Kenneth Lee 1949. *The Intonation of American English*. Ann Arbor: University of Michigan Press.

Raven, David S. 1965. Latin Metre. London: Faber and Faber.

Stetson, Raymond Herbert 1951. *Motor Phonetics: A Study of Speech Movements in Action*. Amsterdam: North-Holland.

Trubetzkoy 2000 = Трубецкой, Николай С. 2000 [1939]. Основы фонологий. Москва: Аспект пресс.

West, Martin Litchfield 1982. Greek Metre. Oxford: Clarendon Press.

Просодня и системы стихосложения античного стиха

Задачей работы является описание просодических систем древнегреческого и латинского языков, а также анализ систем античного стихосложения. Типологически древнегреческий язык принадлежит к языкам моросчитающего типа, что создает естественные предпосылки для развития как чисто-квантитативного и чисто-силлабического, так и квантитативно-силлабического и силлабо-квантитативного стихосложения. В древнегреческой стихотворной практике чисто-квантитативный и чисто-силлабический стих не встречается, зато представлены силлабоквантитативная система стихосложения (эолийская традиция) и квантитативно-силлабическая (ионийская и дорийская традиции). В латинском языке имеется ряд признаков, позволяющих отнести его к языкам тактосчитающего ритма. Поскольку в нем имеется и оппозиция долгих и кратких слогов, можно говорить о естественных предпосылках для развития как силлабического, квантитативного и акцентного стихосложения, так и различных комбинированных вариантов. Сохранившиеся тексты могут быть отнесены к акцентному (сатурнов стих), силлабо-квантитативному (лирические строфы), квантитативно-силлабическому (гексаметр, ямбический триметр), а также к ряду переходных форм, сочетающих ударение, силлабику и квантитет.

Antiikvärsi prosoodia ja värsisüsteemid

Töö eesmärgiks on kirjeldada vanakreeka keele ja ladina keele prosoodilist süsteemi ning analüüsida värsisüsteeme, mis on vanakreeka ja ladina luule-praktikas realiseeritud. Kreeka keel kuulub tüpoloogiliselt moorasid loendava rütmiga keelte hulka ning seega on selles keeles olemas eeldused puhtkvan-

titeeriva, puhtsüllaabilise, kvantiteeriv-süllaabilise ja süllaabilis-kvantiteeriva värsi jaoks. Vana-kreeka luulepraktikas puhtkvantiteerivat ja puhtsüllaabilist värssi ei leidu, seevastu on esindatud süllaabilis-kvantiteeriv värsisüsteem (aioolia luuletraditsioon) ning kvantiteeriv-süllaabiline värsisüsteem (joonia ja dooria luuletraditsioon). Ladina keelel on aga rida tunnuseid, mis määravad selle kuulumise takte loendava rütmiga keelte hulka. Kuna samas eksisteerib ka pikkade ja lühikeste silpide opositsioon, on ladina keeles olemas eeldused nii süllaabilise, kvantiteeriva, aktsendilise kui ka nendest kombineeritud värsisüsteemide tekkeks. Meie ajani on säilinud puhtaktsendilist, süllaabiliskvantiteerivat, kvantiteeriv-süllaabilist värssi ning samuti rida vorme, milles värsiehituslikeks komponentideks on nii sõnarõhk, süllaabika kui ka kvantiteet.

Translating the seventeen syllables

Elin Sütiste

Department of Semiotics, University of Tartu, Tiigi 78, 50410 Tartu, Estonia e-mail: elin_sytiste@hotmail.com

Abstract. The present paper focuses on the similarities and differences between the formal characteristics of the traditional Japanese haiku and the translated haiku, more specifically, on the relations between the 5-7-5 syllable pattern in the Japanese haiku, and the patterns of syllable arrangement employed in the translations. Due to the influence of the target culture context, there emerge certain conventions in rendering the haiku form, the appearance of which is observed in the body of 420 haiku translations, made by 7 translators. On the basis of the overall frequency of appearance, as well as in respect to individual translators, tentative characterisation is proposed as to which types of syllable arrangement patterns can be considered more formoriented than others in the context of the translated haiku, i.e., an attempt is made to mark the boundary between the "haiku-like" patterns and the "unhaiku-like" patterns.

Introduction

To start out with a *cliché*, translation of the haiku, it would seem, is indeed nearly impossible — its translatability is inhibited in several, it might even be said, countless ways, starting from the problems of language and ending with the nuances of meaning, such as the reverberations of *kigo*, the seasonal word, or *hon'i*, "poetic essence" that refers to the "prescribed treatment of poetic themes and their pertaining lyric sentiments" (Kawamoto 2000: 60), or the implications of *kireji*, the "cutting word", etc.

On the one hand, haiku has been described as "near to being a kind of cipher or code" (Kawamoto 2000: 48) — or, for that matter, Japa-

nese classical poetry in general has been seen as resembling closely the workings of a code: "the code becomes one of the most important levels of interpretation of a poetic text" (Raud 1994: 18). On the other hand, it follows from the extreme suppressed form of the haiku that it is heavily dependent on context: "Japanese three-line poems cannot exist outside a context, and are not understood without one" (Azadovskij, Dyakonova 1991: 99). To bring an example from other similarly "compressed" artistic phenomena, one could parallel the haiku with minimalist music, which, presenting itself in a meagre form in praesentia, may contain sophisticated implications in absentia (Tarasti 1992: 274). A minimal(ist) form is oriented towards activating the recipient to supply the "missing" parts or context. instead of the relatively passive "skimming" through the explicitly presented text — the difference of which is well explained by Barthes's (1975: 4) notions of writerly and readerly texts. The orientation towards activating the reader is observed also in the case of the haiku: "The experienced reader of the three-line poems [haiku]. participating actively in the creational process, himself provides numerous senses, existing outside the written text" (Azadovskij, Dyakonova 1991: 99). The reliance on context is probably the main argument against the translatability of the haiku, for it means that the haiku needs a competent reader, that is, one who is capable of the associations the poem directs to: "Without the traditional reader, the haiku poem is dead, since the context, i.e. the whole layer of the poetic tradition, will not be "activated" [...] Transplanting the genre of the haiku from Japanese soil into any other context means the breaking off with the tradition and the destruction of the poem" (ibid.). However, the history and popularity of haiku translation seems to, in a sense, confirm the opposite: even if we concede that the translation of the haiku cannot take place without a loss (no translation can), it does not necessarily mean that it fails altogether.

The practical impossibility of providing the non-Japanese recipient² with the whole accumulated context of the Japanese poetic tradition can, however, be seen also from a "brighter" perspective.

¹ The quotations from languages other than English that appear in the present article have been translated by the author, unless otherwise indicated.

² However, today even Japanese readers may need "translations" of classical Japanese texts or explanations of poetic traditions, cf Donald Keene's opinion expressed in his preface to Bashō's travel diary Oku no Hosomichi [The Narrow Road to Oku]: "The problem of translating Oku no Hosomichi into modern Japanese is almost as great as translating it into a European language" (Bashō 1996: 9).

Andrew Chesterman, reflecting upon what he calls the "supermemes of translation", compares the viewpoints of equivalence and untranslatability in the following manner:

Translation is, after all, a form of language use; and from this point of view nothing is untranslatable: that is, everything can be translated somehow, to some extent, in some way — even puns can be explained. Semiotically speaking, we could say that communication succeeds to the extent that the message decoded and interpreted by the receiver overlaps with that sent by the sender. Whereas the equivalence supermeme focuses on the overlap, the untranslatability supermeme focuses on the non-overlapping part of the message: each supermeme then assumes that the part it sees is actually the whole picture. (Chesterman 2000: 12)

For a practicing translator, the long-disputed idea of untranslatability is indeed of little help: therefore, instead of focusing upon what cannot be done, translators have often tried to draw the readers' attention to what can. In our present context of haiku translations, where the parts of a message overlapping between the sender and the receiver indeed often seem a great deal smaller than those not overlapping, various translators, instead of "explaining" the original poems, have left this task quite explicitly to the readers. For example, Makoto Ueda in his work "Bashō and His Interpreters" proposes the readers not to just read his translations, but to create their own interpretations:

Ideally, however, individual readers should attempt their own translations according to their own tastes and preferences. [...] I have refrained from making my own comments on the meaning of the poem, so that individual readers can, like spectators of an abstract painting, freely speculate on the implications of the work before them. (Ueda 1991: 11)

As the starting point for a reader's journey towards the poem, Ueda provides him with "the original Japanese poem in roman letters and a word-for-word translation", and, in addition, "when a Japanese word seems to call for an explanation, I have put a note in the section that follows" (ibid.). In other words, Ueda presents his reader only the pieces of a puzzle, but he leaves it to the reader to put the picture together assuring at the same time that a large part of the pleasure of the game is in getting different pictures. Much the same is done also by Toshikaru Oseko, who, in the section about his method of translation, repeatedly conveys his intention to provide as "correct information" as possible, e.g.: "I have tried to translate the text as literally as possible", "I have tried to stick to the original word order if possible", "I have inserted many "kanji" (Chinese characters) to give you the correct information" (Oseko 1990: section 2). Thus, stressing his wish to be as "correct" about the original material as possible, he is trying not to impose his reading or his combination of the original elements on the reader.

As any artistic work, haiku is a complicated whole with different levels and elements, and therefore, in translating the haiku (similarly to any other translation), the question of dominant becomes important—that is, the question about the element a translator considers to be the most important to transfer. In analysing a translation, the discernment of the dominant helps us to explicate the method of translation, to provide explanation for the lost or added elements, for the functions of elements in the structure of the text, and their correspondence to the overall poetic model (see Torop 1995: 103).

Ideas about how one should translate a haiku vary enormously, depending on whether haiku is conceived of primarily as a poetic form, or as a Zen experience that is attached to its form rather accidentally, or as something third. In discussing the forms of verse translation and the translation of verse form, Holmes (1988: 26–27) discerns the following four traditional strategies in the translation of verse forms:

- 1. mimetic, where the original form is preserved
- 2. analogical, where a corresponding form of the target culture is employed
- 3. *organic*, where the semantic material of the original poem is taken as a starting point, which is then allowed "to take on its own unique poetic shape as the translation develops"
- 4. deviant or extraneous, where the resultant form is "in no way implicit in either the form or the content of the original".

In the history of haiku translation, several strategies have been employed: for example, the beginnings of haiku translation into English saw abundant cases of analogical strategy, the effect of which is the "naturalization" of a foreign form. Mimetic strategy, on the other hand, has been an issue of heated debates already for decades — both in the case of haiku translation and in the case of the original haiku composed in English. In respect to using 17 syllables³ also in haiku composed in English, however, there shows a tendency not to use the mimetic strategy: according to Swede (2000: 13), his studies carried out in the 1980 and

³ Although in discussing Japanese poetry, it would be more accurate to use the term 'mora' instead of 'syllable', in the context of this article this distinction is not of foremost relevance: translations from a mora-counting language into languages that do not count moras inevitably have to change or adapt the source-text form. Very often, the unit 'mora' is substituted with the unit 'syllable' in translations. Thus, in order to avoid unnecessary complications, our discussion will use the term 'syllable' also when referring to Japanese haiku.

1996 reveal that, starting from the 1960s, 80% of the haiku published in anthologies and periodicals have less than seventeen syllables. On the other hand, in the case of original haiku composed in Estonian, it appears that the observance of the 5-7-5 syllable pattern is followed almost exclusively (Lindström 1999: 32). In respect to the translated haiku (although on a much smaller scale), the results of a study concerning 32 translations into English of a single haiku by Matsuo Bashō (Sütiste 2001) display a similar tendency: only four translations retained the original number of syllables (in this case, nineteen), the average number of syllables being 15.

The phenomenon of the translated haiku incorporates features that have originated in the source culture as well as in the target culture: for example, in the case where a translation retains the 5-7-5 syllable pattern (mimetic translation), due to the differences in language prosody, the result can only be similar, not identical in form with the Japanese haiku. Japanese poetry counts, strictly speaking, moras (not syllables; see also footnote 3) that may contain no more than one consonant, whereas, for instance, English monosyllabic words include also such cases as bright or skirt. This difference results in English carrying more information per syllable than Japanese, which together with other factors indicates that "using the 5-7-5 form does not necessarily provide an analogous condition for writing haiku in English". Similarly, Mart Mäger (1979: 130) observes that the first obstacle to the spreading of haiku as a form is the difference between languages: the information a syllable carries is not equal in different languages. Thus, English and Russian translations do not usually follow the number of syllables provided by the original haiku. Estonian, on the other hand, seems to accommodate the 17 syllables, corresponding to the haiku-like amount of content. This phenomenon is similar to the problems that arise in transplanting other poetic forms and metres into such cultural-linguistic contexts that are different from those of the source culture. For example, Mihhail Lotman and Maria-Kristiina Lotman (2000: 139–140) describe the problems related to the rendering of the classical versification systems: during the 19th century, Estonian poetry followed the German models, where quantitative verse was rendered according to accentual principles (i.e., long syllable was represented by an accented syllable, short syllable by an unaccented syllable). In the 20th century, it was found that

⁴ Imaoka, Keiko 1995. Forms in English Haiku. http://www.lowplaces.net/keiko_forms.html

classical quantitative verse could, in principle, be rendered quantitatively also in Estonian; however, such attempts were not too successful as the poets, having started out following the quantitative principle, tended to "slip back" into the older and more natural syllabic-accentual patterns. Likewise, in the case of haiku, it is observable that in the translation, source culture features interfere with target culture features. For one, a translated haiku may strive to retain the original number of syllables, at the same time adding such target culture characteristics as word accent, or the translation may deviate from the original number of syllables since the translator finds that the source culture form is not suitable for transmitting the content either because of the strategy adopted by the translator, or because the informational content of the seventeen syllables in Japanese is not comparable to that in another language, or because it is considered to be most important in haiku translation to transmit the "haiku spirit" or a Zen experience that need not retain the rigid 5-7-5 syllable structure⁵, etc.

In the following, however, I will maintain the following position: disregarding what kind of experience it conveys, haiku will here be regarded as a poetic form with a certain structure. With this view of haiku in mind, it is held that to be regarded as a "haiku-like" translation, it has to possess some characteristics that would be perceived as "haiku-like". However, the boundary between a "haiku-like" translated haiku and an "un-haiku-like" translated haiku is not very clear. Although numerous studies have been carried out and heated debates have been held on the subject of haiku in languages other than Japanese (especially English), in the case of the translated haiku, main attention has been concentrated upon the question of correspondence between the content and the form adopted, not so much upon the degree of similarity/dissimilarity between the original form and the translation form. The following will be an attempt to find some clarity in this issue, and this will be done by considering once

⁵ Cf Y. Yamada-Bochynek (1985: 437): "Syllable counting [...] is one of the major concerns in establishing haiku in English. It seems, however, more important to have a haiku cadence, which is not the product of a mechanical 5-7-5 count but more necessarily the result of the expression of a "haiku-moment"."

⁶ It should be noted that under "haiku" as a poetic form the traditional haiku is presupposed, not versions of modern haiku that may deviate from the classical structure.

In principle, the reverse is also possible: the translation may look like a haiku and count as one, even if the source text has not been a haiku.

more the long-debated subject of the number of syllables and lines in haiku translation. Thus, I will be dealing with the translation of haiku form rather than content, and I will occupy myself only with the issue of the number of syllables and lines, and will not include the questions of kireji, the "cutting word" or kigo, the seasonal word, which could, at least to some degree, be categorised under form issues as well.

Syllables

While the 5-7-5 syllable pattern is, no doubt, one of the strongest markers of the form "haiku", it is not always regarded as the most essential feature to be transmitted. This becomes evident when we look at the actual translations. For the purposes of the present work, I assembled a corpus of 420 haiku translations (all together 1260 lines) made by 7 different translators (including two non-English sets of translations, by Masing and Markova, into Estonian and Russian, respectively), 60 translations by each translator.8 The corpus was assembled with an idea to ensure a degree of variety, i.e. among the translators, there are scholars of Japanese literature (e.g., K. Yasuda), professional translators of Japanese literature (e.g., V. Markova), poets (e.g., P. Donegan), a scholar who translated haiku out of his personal interest, not so much for publishing (U. Masing), etc. The majority of translations are of Bashō — the most renowned and the most translated haiku poet. However, also other poets are included, and the only translators, who are not represented by any of Bashō's haiku, are P. Donegan and Y. Ishibashi — their texts are assembled from their volume of translations of a woman haiku-poet Chiyo-jo. The sets of translations have not been selected by any specific criteria: the texts were assembled by taking the first sixty translations from the beginning of their appearance in each respective book or selection. Within this corpus, some translators try to preserve the original 5-7-5 syllable pattern, some try to retain occasionally the overall number of 17 syllables, still others do not care much for neither — it appears that great differences exist in the preferences of individual translators: for example, while Masing retains the 5-7-5 syllable pattern in the fifty-

⁸ These sets of translations are assembled from: Markova 1973: 45–65; Masing 1997: 7–39; Bownas, Thwaite 1972: 111–119; Yasuda 1985: 183–195; Blyth 1984: 106–130; Keene, in Bashō 1996: 19–171; Donegan, Ishibashi, in Yamane 1996: 27–147.

five translations out of sixty (an instance of the employment of the mimetic startegy), Donegan, Ishibashi, on the other hand, have no translations adhering to this type of syllable organization. The observance of the 5-7-5 syllable pattern is described in Table 1, with the middle column showing the number of translations following the 5-7-5 syllable pattern (per the set of sixty translations by each translator), and the last column showing the same number in percentages:

Table 1. The observance of 5-7-5 syllable pattern by individual translators.

| | 5-7-5 | % of 5-7-5 |
|--------------------|-------|------------|
| Masing | 55/60 | 92 |
| Yasuda | 31/60 | 52 |
| Keene | 18/60 | 30 |
| Blyth | 2/60 | 3 |
| Bownas, Thwaite | 2/60 | 3 |
| Markova | 2/60 | 3 |
| Donegan, Ishibashi | 0/60 | 0 |

It might be thought that if translators in trying to adhere to the 5-7-5 pattern cannot manage to organize the syllables exactly in this fashion, then they are still likely to group the syllables somehow differently to maintain at least the overall number of seventeen syllables. However, as we see from Table 2, the adding of other 17-syllable translations to the ones that follow the 5-7-5 syllable pattern, does not change much in the general picture.

Table 2. The observance of the 17 syllables.

| | 17 syl. | % of 17 syl. |
|--------------------|---------|--------------|
| Masing | 56/60 | 93 |
| Yasuda | 31/60 | 52 |
| Keene | 22/60 | 37 |
| Blyth | 8/60 | 13 |
| Bownas, Thwaite | 4/60 | 7 |
| Markova | 3/60 | 5 |
| Donegan, Ishibashi | 1/60 | 2 |

Tables 1 and 2 give us some general information in respect to the individual translators' preferences: thus we can say that, for example, Masing is very much oriented towards retaining the original syllable pattern, while Donegan, Ishibashi and Markova are not, and while other translators are left somewhere in between. Also, when compared to the before-mentioned studies made by Swede (see above), it appears that, together, the translators into English display a similar percentage of *not* observing the number of seventeen syllables (78%) as the haiku poets of Northern America (80%).

However, the above tables fail to describe other formal features that may also be relevant in the case of translated haiku. Judging by the existing translations, it seems unreasonable to expect that each and every translation follow the exact syllable pattern of the original. What is often done instead is that translators try to follow a general idea of haiku as a short poem that is organized into three symmetrically balanced lines. I regard the above characterization as essentially pertaining to the approximation in form of a translated haiku to the Japanese original. "Symmetrically balanced" is an important keyword: there is no use in observing 17 syllables, if we organize them into lines of, say 9-5-3 (which is, incidentally, an actually existing example⁹) — the outcome will probably be perceived as an approximation of haiku form, but not a very close one. It follows then that it does not only matter how many syllables are there in one line or all together, but it is the relation between the number of syllables in one line and another that is important. Since there are translators who do not observe the exact 5-7-5 or the total of seventeen syllables very keenly and yet their translations can be regarded as "haiku-like", it seems that there has to be left space for the "acceptable" deviations that do not affect the general perception of the translation form as that of a haiku. Thus, our next step will be to look into the matter of lines in haiku translations

On the very day of Buddha's birth,
A young deer is born:
How thrilling!
Haiku by Bashō; translated by R. H. Blyth (Blyth 1984; 114).

Lines

Whether rendering the form of haiku by following an exact number of syllables or not, it is true that the majority of haiku translations follow the pattern of three lines. However, this matter has not passed without disputes either: not all translators have seen the three lines as the main option in haiku translation. For example, there are translators who favour translating haiku into one line, mainly on the grounds that the original Japanese haiku were written in monolinear form. Besides monolinear form, attempts have been made to translate haiku into two and four, also five lines e.g.:

Nothing in the cicada's voice Gives token of a speedy death. 10

A black crow Has settled himself On a leafless tree Fall on an autumn day.¹¹

Busy cicadas chirp and cry
On brilliant August days,
Zzurr, zzurr—
In this ignorant haze
They think they'll never die. 12

The choice to translate haiku into the form of one, three, or any other number of lines, is a matter of choosing a poetic model a translator wishes to employ (cf. Ueda 1991: 10): "each translator's style seems to have been determined by two main factors: his conception of the basic nature of hokku and his choice of English poetic models"). In Gideon Toury's words, it has to do with the striving towards the prospective *acceptability* of the translated text in the target culture:

Being members of the target culture, or tentatively assuming the role of ones, translators are more or less aware of the factors which govern the acceptability of texts and textual-linguistic features in that culture, or a certain sector thereof. To the extent that they choose to subject themselves to these factors and resort to the appropriate translation strategies, the act itself is executed

¹⁰ Haiku by Bashō; translated by B. H. Chamberlain (Ueda 1991: 10).

Haiku by Bashō; translated by N. Yuasa (Toury 1993: 24).
Haiku by Bashō; translated by F. L. Huntley (Ueda 1991: 11).

under the initial norm of acceptability; whether the end-product will indeed be admitted into the target system or not. (Toury 1993: 16)

In the case of the first haiku translations into English at the end of the 19th and the beginning of the 20th century, there were attempts namely to relate haiku to some literary forms already known in the target culture; thus, Japanese haiku was sometimes paralleled with epigram, as becomes evident already from such titles as B. H. Chamberlain's "Bashō and the Japanese epigram", or William Porter's anthology of translations A Year of Japanese Epigrams, etc. (Kawamoto 2000: 47; Yasuda, Kuriyama 1983: 80). A similar tendency has been observed in the attempts to translate haiku also into other cultures, for example, Chinese: for Chinese readers, a traditional poem would minimally consist of at least four pentasyllabic lines, hence, "from the standpoint of this tradition, a haiku will no doubt seem like a bicycle with a missing wheel" (Kawamoto 2000: 164). Thus, the following haiku by Bashō:

natsukusa ya tsuwamono domo ga yume no ato The summer grasses—
Of brave soldiers' dream
The aftermath. 13

has been rendered into Chinese in the form of a pentasyllabic quatrain, the approximation of which is the following English translation:

The lord's flourishing lands once served as the field for bloody battle; Looking on them now, the summer grass is lush, and fame is just a fleeting dream.¹⁴

Syllables in three lines

However, as mentioned before, the majority of haiku translations follow the three-line pattern nowadays. Similarly to other variants, this choice also has its justification: thus, for example, Oseko preferres translating the haiku into three lines "with the original 5-7-5 syllable count in mind" (Oseko 1990), and Ueda bases his translations on the

¹³ Translated by D. Keene (Bashō 1996: 87).

¹⁴ Original translation by Peng Enhua, here quoted from Kawamoto 2000: 165.

interpretation of haiku as a "three-phrase poem" (Ueda 1991: 11) — both arguments rather naturally yield a three-line poem in English. On the other hand, while the preference in favour of three lines certainly reflects the attempt to follow the poetic devices of the source culture, it should be also remembered that, by now, haiku has become an acceptable poetic form also in the West, so that there is no need to "justify" its three-line form in the target culture's terms anymore, and a large part of haiku translations take it as a natural model to rely on.

Also, in the corpus used in the present work, ¹⁵ all translations follow namely the three-line model. However, the ways three lines are organized are rather diverse, and we could say the patterns used fall into two large groups, symmetrical and asymmetrical patterns.

Symmetrical patterns

Patterns of syllable organization are considered symmetrical in the following cases:

1. "Exact" symmetry

1a. "Exact" symmetry AA,

where A marks the equal number of syllables for the first and the last lines, and B marks the middle line, with B containing more syllables than A (e.g., 6-8-6; 4-7-4, etc.).

Example:

| In its eye | 3 |
|----------------------------------|---|
| the far-off hills are mirrored — | 7 |
| dragonfly!16 | 3 |

In the present corpus, this type of "exact symmetry" is used extensively: not taking into account translations that follow the 5-7-5 syllable pattern, 78 translations are organized according to this pattern.

¹⁵ Since it is the aim of the present work to explore the significance of some formal features in the translation of haiku, and since the use of 5-7-5 syllable pattern is by definition one of the primary (formal) characteristics of haiku so that a translation following this pattern can be said to already observe the formal haiku structure, then in the following section concerning syllable arrangement patterns those translations that follow the 5-7-5 syllable pattern have been excluded from further observation as already representing the haiku form, and therefore not needing in further clarification (within the limits of the present discussion, of course).

16 Haiku by Issa; translated by H. G. Henderson (Keene 1996: 431).

1b. "Exact" symmetry A>B<A.

which is the reverse of the previous type. A marks the equal number of syllables for the first and the last lines, and B marks the middle line, with B containing less syllables than A.

Example:

| "Country bumpkin" | 4 |
|-------------------------------|---|
| People call me, — | 3 |
| How cold it is! ¹⁷ | 4 |

This type of symmetry is used much less than the previous one: there are only 15 translations that follow this model.

1c. "Exact" symmetry AAA,

where A marks the equal number of syllables in all three lines. 18

Example:

| I will bind iris | 5 |
|-------------------------------------|---|
| Blossoms round my feet — | 5 |
| Cords for my sandals! ¹⁹ | 5 |

This type is not used extensively at all: there are only 6 examples of its use in the present corpus.

2. "Relative" symmetry

I propose to see as belonging into this category such haiku translations which are not strictly symmetrical, but which nevertheless leave a general impression of symmetry.

2a. "Relative" symmetry AC,

where A and C mark the first and the last line, respectively, and where A and C are of unequal length, and where B marks the middle line that contains more syllables than A and C.

Example:

| To bird and butterfly | 6 |
|----------------------------------|---|
| it is unknown, this flower here: | 8 |
| the autumn sky. ²⁰ | 4 |

¹⁷ Haiku by Issa; translated by R. H. Blyth (Blyth 1984: 352).

¹⁸ Of course, it is debatable whether this type can be considered symmetrical at all, since the axis is not differentiated from the other two lines.

¹⁹ Haiku by Bashō; translated by D. Keene (Bashō 1996: 71).

²⁰ Haiku by Bashō; translated by H. G. Henderson (Keene 1996: 384).

This is the type of "relative approximation" to the 5-7-5 syllable organization of the haiku, and one that is used the most extensively in the present corpus: there are 100 examples (almost one fourth of the entire corpus) of the usage of this model.

2b. "Relative" symmetry A>B<C.

which is the reverse of the previous type. A and C mark the first and the last line, respectively, while A and C are of unequal length, and B marks the middle line that contains less syllables than A and C.

Example:

| the sandal maker | 5 |
|---|---|
| has come — | 2 |
| the first cherry blossoms ²¹ | 6 |

This type is used rarely: only two translators of the present corpus have used it, 12 times all together.

Asymmetrical patterns

Among asymmetrical patterns belong the following groups:

1. Type AB

la. Asymmetry AAB,

where A marks the first two lines of equal length, and B marks the third line of different length than that of the first two lines.

Example:

| A falling flower, thought I, | 7 |
|---------------------------------|---|
| Fluttering back to the branch — | 7 |
| Was a butterfly. ²² | 5 |

This type of asymmetry has been exploited rather extensively, by all translators, all together 39 times. However, within this type also variations occur: in the first subgroup, A is longer than B (e.g., 8-8-6), and in the second, B is longer than A (e.g., 6-6-8). Although the patterns of the first subgroup are used by six translators, and the

²¹ Haiku by Chiyo-ni; translated by P. Donegan and Y. Ishibashi (Donegan and Ishibashi 1998: 111).

²² Haiku by Moritake; translated by K. Yasuda (Yasuda 1985: 183).

patterns of the second subgroup only by three of them, the translators who follow the patterns of the first subgroup most often, do the same also in the case of the second subgroup.

1b. Asymmetry ABB,

where A marks the first line that is of different length than that of B, and where B marks the second and the third line that are of equal length.

Example:

| On a bare branch | 4 |
|----------------------------|---|
| A rook roosts: | 3 |
| Autumn dusk. ²³ | 3 |

Although a little less than the previous type, this one has been used also rather often, 27 times, and by the majority of translators. This type allows also two variants: one where A is longer than B (e.g., 7-6-6), and the other where B is longer than A (e.g., 6-7-7). The first type has been employed less, 8 times by 3 translators. The second type has been of more use: five translators have followed this pattern, all together 19 times.

2. Type ABC

2a. Type A>B>C,

where A represents the first line, which is longer than B, the second line, which, in its turn, is longer than the third line, C

Example:

| Making the uguisu its spirit, | 10 |
|-------------------------------|----|
| The lovely willow-tree | 6 |
| Sleeps there. ²⁴ | 2 |

The type is not very popular with translators, although there are examples of this. In the present corpus, this syllable organization has been used by four translators, all together 13 times, to a large extent by Blyth and Donegan, Ishibashi.

²³ Haiku by Bashō; translated by G. Bownas and A. Thwaite (Bownas, Thwaite 1972: 111).

²⁴ Haiku by Bashō; translated by R. H. Blyth (Blyth 1984: 111).

2b. Type A<B<C.

which is the reverse of the previous, and where A represents the first line that is shorter than the second line B, which, again, is shorter than C, the third line.

Example:

| fortune straw — | 3 |
|--|---|
| even the dust | 4 |
| looks beautiful this morning ²⁵ | 7 |

This type is used more often than the previous one, being employed by three translators, 19 times in total.

3. Marker of the 5-7-5 syllable pattern: 5-7-x or x-7-5,

where x marks the variable number of syllables in the first or in the last line, respectively. This is another significant element in a translated haiku to mark the "haiku-ness" of the translation: the retaining of a "part" of the prototypical 5-7-5 syllable pattern, in the form of 5-7 (in the first and the second line) or 7-5 syllables (in the second and the third line). ²⁶

Examples:

| 5-7-x | | x-7-5 | |
|---|---|-------------------------------------|---|
| If only we could | 5 | Spring rain: | 2 |
| Add a handle to the moon | 7 | Telling a tale as they go, | 7 |
| It would make a good fan! ²⁷ | 6 | Straw cape, umbrella. ²⁸ | 5 |

²⁵ Haiku by Chiyo-jo; translated by P. Donegan and Y. Ishibashi (in Yamane 1996: 41).

²⁶ It could be argued that while the usage of either 5-7-x or x-7-5 syllable combination in a translation is regarded here as a device for marking the form of the original haiku, the same could also be stated about the usage of, for example, 5-5 or, indeed, any instance of a 5- or a 7- syllable line. However, while in principle this may be true, it is considered here that the combination of 5-7 or 7-5 syllable lines in a translation is closer to the original haiku form than other possbile combinations with a 5- or 7-syllable line, since the former include *two different* markers (a 5-syllable line and a 7-syllable line) of the haiku form instead of one.

²⁷ Haiku by Sōkan; translated by K. Yasuda (Yasuda 1985: 183).

²⁸ Haiku by Buson; translated by G. Bownas and A. Thwaite (Bownas, Thwaite 1972: 119).

This device is observable in the case of five translators, however, two of these are especially telling: while other translators' use of the device is minimal, Yasuda and Keene both employ it 16 times.

All the types described above, together with the instances of 5-7-5 syllable pattern, as well as the appearances of 5-7-x and x-7-5, are presented in Table 3. The table displays the number of instances an individual pattern is employed by a particular translator, within the body of sixty translations per each translator (if in the case of a particular translator there were no appearances of a pattern, the respective cell was left unfilled in order to convey its absence more conspicuously). The first row of patterns presents the number of appearances of the pattern 5-7-x or x-7-5, which forms a part of other patterns, ²⁹ and is therefore not characteristic of an entire translation. This row is marked in bold to avoid its confusion with other types that are characteristic of entire translations. It should also be noted that the type AA includes all instances of "strict symmetry" of this type, except the instances of the prototypical pattern 5-7-5.

Table 3. Instances of syllable arrangement patterns in the translated haiku.

| Patterns | Masing | Yasuda | Keene | Markova | Bownas, Thwaite | Blyth | Donegan, Ishibashi | Total |
|--|--------|--------|-------|---------|--------------------|-------|-----------------------|-------|
| 5-7-x/x-7-5 | 2 | 16 | 16 | 1 | 2 | | | 37 |
| 5-7-5 | 55 | 31 | 18 | 2 | 2 | 2 | | 110 |
| A A | 2 | 7 | 15 | 29 | 14 | 6 | 5 | 78 |
| A C | 2 | 19 | 24 | 21 | 11 | 10 | 13 | 100 |
| AAB | 1 | 2 | 1 | 4 | 7 | 10 | 15 | 40 |
| ABB | | 1 | | 2 | 11 | 6 | 7 | 27 |
| AAA | | | 1 | 1 | 2 | 1 | 1 | 6 |
| A>B>C | | | 1 | | 2 | 6 | 4 | 13 |
| A>B <a< td=""><td></td><td></td><td></td><td>1</td><td>6</td><td>3</td><td>5</td><td>15</td></a<> | | | | 1 | 6 | 3 | 5 | 15 |
| A <b<c< td=""><td></td><td></td><td></td><td></td><td>5</td><td>8</td><td>6</td><td>19</td></b<c<> | | | | | 5 | 8 | 6 | 19 |
| A>B <c< td=""><td></td><td></td><td></td><td></td><td></td><td>8</td><td>4</td><td>12</td></c<> | | | | | | 8 | 4 | 12 |

As the pattern 5-7-x and x-7-5 may naturally form a part of the 5-7-5 syllable pattern, the latter is excluded from the discussion here. Apart from 5-7-5, the pattern 5-7-x and x-7-5 can, in principle, appear within all the types except AAA, A>B<A, A>B<C.

The above-described discernment of types gives us a tentative overview of which kinds of syllable organization are preferred and which ones are avoided in haiku translations in general. Thus, we can say that, within the present corpus, the least followed pattern is AAA with the lines of equal length, and the next least used patterns are A>B<C and A>B>C. On the other hand, the most exploited syllable arrangement model (apart from 5-7-5) is AC, that is here named "relative asymmetry" (type 2a above), where the middle line is longer than the first and the last lines. Although this type does not follow the original haiku form exactly, it still transmits an impression of a "haiku-like" form.

The forms of syllable organization reveal significant information about the translation dominants of individual translators. The observance of the prototype model of haiku, i.e. the syllable pattern of 5-7-5, of course gives us the first understanding about the degree a translator tries to retain the form of haiku: from the first glance it becomes obvious, for example, that Masing is extremely formoriented,30 as fifty-five of his sixty translations follow the 5-7-5 model. On the other hand, we can also see that, for example, Donegan, Ishibashi or Blyth or Markova are evidently not oriented primarily towards rendering the form of haiku, which means that their dominant lies somewhere else. However, the observance of neither the 5-7-5 syllable pattern nor the overall number of seventeen syllables does not reveal the more specific degree to which individual translators try to convey the haiku form, while the possible patterns of syllable organization inform us, e.g. that while a translator may not follow the exact haiku form, he/she may try to approach it as frequently as possible by using the type of "relative symmetry" AC. The frequency of appearance of different patterns explicates also which patterns are regarded by translators as more similar to haiku than others: from the above-given information, we can guess that the form ABB is considered more appropriate for rendering a haiku than, for instance, the form AAA. The study of this corpus also confirms one's intuitions concerning translation strategies: for instance, we can infer that the more different types of pattern organization a translator uses, the less determined he/she is in the choice of a specific form in which to render a haiku.

³⁰ Cf U. Masing's own opinion: "In Estonian, it [a haiku] could be written also as in 4+6+4, 3+5+3, if there is no wish to write in 5+7+5, [but] all kinds of "free" forms are not haiku. A sonnet in *vers libre* is not a sonnet!" (Masing 1989: 1000).

Since the adherence to the 5-7-5 syllable pattern is the primary "key" to judging an individual translator's orientation towards translating the form of the haiku, it can also provide us with an imaginary axis or scale, with Masing occupying its one extreme end and Donegan, Ishibashi the other. Towards Masing's end we can also place Yasuda and Keene who both show a strong tendency to follow the 5-7-5 pattern, as well as the combinations of 5-7-x and x-7-5.

Yasuda and Keene, who (next to Masing) follow the 5-7-5 syllable pattern more often than others, use almost exclusively the "relative symmetry" pattern AC and the "strict symmetry" pattern AA in their other translations. They also display a marked tendency to employ the combinations 5-7-x or x-7-5, e.g. in the patterns 5-7-6 or 4-7-5: it appears then that although a large part of their translations does not follow the 5-7-5 syllable pattern or the overall number of 17 syllables, many of their translations appear marked as "haiku". The same feature may also be seen in the cases of some other translators, but then only minimally (1-2 times); however, with both Yasuda and Keene it is observable 16 times.

We could thus say that these three translators (Masing, Yasuda, Keene) constitute the more form-oriented group among the present corpus. However, the other end of the imaginary scale is "fuzzier", mainly because the tendencies towards one or another type are not as clear-cut as with the more form-oriented group.

Next to the translators who display a strong tendency towards following the 5-7-5 pattern, there are others who do not display such tendency: Markova; Bownas, Thwaite; Blyth (all of them use this pattern two times), and Donegan, Ishibashi (do not use at all). Blyth and Donegan, Ishibashi use the "relative symmetry" pattern AC to some extent (10 and 13 times, respectively), but to about the same degree they observe also the pattern AAB that is used less by other translators. Compared to these two types, their adherence to the "strict symmetry" type AA is weaker, approximately the same as their observance of the types ABB, A>B>C, A<B<C, A>B<C, and also A>B<A — all of which appear rarely (or not at all) with Masing, Yasuda and Keene. It follows quite naturally that we can place Blyth rather safely together with Donegan, Ishibashi at the "liberal" end of the imaginary scale.

Now, while we have more or less cleared the issue with five of the translators, there are still translators who are left in-between: Markova and Bownas, Thwaite. Neither Markova nor Bownas, Thwaite follow the 5-7-5 syllable pattern very keenly: similarly to Blyth, they have only two translations that adhere to this model. However, differently from Blyth, their other translations display a tendency towards these models that are used by the more form-oriented translators, rather than those used by Blyth and Donegan, Ishibashi: both follow extensively the patterns of "strict symmetry" AA and "relative symmetry" AC. However, here also appear differences: for one, Bownas, Thwaite use the type ABB as many times as the type of "relative symmetry" AC — this seems to bring him closer to the translation preferences of Blyth and Donegan, Ishibashi; besides, his translations feature all together eight types of syllable organization out of nine. Markova, on the other hand, follows the two types -- "strict symmetry" AA and "relative symmetry" AC - almost to the exclusion of other types: while in the case of Bownas, Thwaite the relation of these two types to the other types used is 25:35, in the case of Markova the relation is 50: 10. Since the variety of types that Markova uses is also smaller than that of Bownas, Thwaite, we may conclude that Markova is considerably closer to the form-oriented group, while Bownas, Thwaite are closer to Blyth and Donegan, Ishibashi.

When comparing the results obtained by simply looking at the observance of the 5-7-5 syllable pattern and the overall number of 17 syllables, to the results of the analysis of syllable arrangement patterns, there appear some changes. While Masing, Yasuda and Keene have retained their positions as the most form-oriented translators, and Donegan, Ishibashi have retained the position of the most "liberal" translators, more clarity has been acquired in respect to the "in-between cases", i.e. Bownas, Thwaite, Blyth and Markova. Judging by the analysis of syllable arrangement patterns, Blyth and Bownas, Thwaite tend to render the haiku form with about the same liberty as Donegan, Ishibashi. Markova, on the other hand, compared to the previous results, appears to "have become" more formoriented - although, in general, she does not render haiku in their original 5-7-5 syllable pattern or in the overall number of 17 syllables, her translations are still rather form-oriented, which is the result of observing the patterns of "exact symmetry" AA and "relative symmetry" AC.

Thus, it could be tentatively suggested that a translation, in order to mark the haiku *form*, does not necessarily have to follow the 5-7-5 syllable pattern or the overall number of 17 syllables. It might be enough for a translated haiku to prefer some type of syllable arrangement over another to be considered haiku-like. It appears that the

syllable patterns more suitable for marking the form of translation as that of a haiku (of course, besides the 5-7-5 syllable pattern) are the "relative symmetry" pattern AC and the "exact symmetry" pattern AA, and to a lesser extent also the patterns AAB and ABB — the latter could be regarded as the border-cases between the "haiku-like" and the "un-haiku-like" translations.

In the context of the present study, it may only be assumed that there exist specific reasons for the preferences towards some syllable arrangement patterns over the others: for instance, a haiku may be regarded as "something less" or "something more" than just a poem, and in both cases the retaining of the original form would not seem to be excessively important. For example, one of the translators who have regarded haiku as most likely something less than a poem, is B. H. Chamberlain who is said to have referred to the haiku as nothing more than "a litter of bricks, half-bricks in fact" (see Ueda 1991: 9). On the other hand, among those who view haiku as essentially more than "just a poem" belongs R. H. Blyth, for whom the measure of any poetry, or in fact, of any human activity, is Zen. 31 The same kind of understanding is characteristic, incidentally, also of many Western haiku poets. To bring an example, for an American haiku poet J. W. Hackett haiku is "fundamentally existential, rather than literary", or, in other words, "primarily an experience, rather than a form of poetry", as well as "ultimately more than a form (or even a kind) of poetry: it is a Way — one of living awareness" (quot. Blyth 1998: 351, 352). Most of the time, however, also the advocates of Zen in haiku proceed from an understanding of haiku as a "short poem", generally also together with the articulation of the poem into three lines.³²

Conclusion

In comparison to an original haiku, a translated haiku may allow itself some more freedom and still be acceptable as a (translated) haiku. However, the area within which a translated haiku can still be said to have retained the source text's "image", is rather difficult to define. The above has been an attempt to approach the formal boundary

³¹ For Blyth's interpretation of Zen (and poetry, including haiku), see e.g. Blyth 1984, 1998; Franck 1978, Imamura 1995.

³² See, however, the previously quoted translation by F. L. Huntley of Bashō's cicada-haiku in which Huntley is said to have recognized "an arc of Zen" (Ueda 1991: 11).

between "haiku-like" and "un-haiku-like" translations: observing the use of different syllable arrangement patterns of individual translators, there appear to exist significant differences in the preferences of different translators, as well as in the frequency with which one or another pattern is used. Translators, who try to retain the form of the original, tend to use (besides the 5-7-5 syllable pattern) two symmetrical patterns almost to the exclusion of others. More liberal translators, again, tend to use more different patterns and do not display as strong preferences towards any particular patterns as the more form-oriented translators do.

However, although the above attempt to understand the significance for a translated haiku of using different syllable organization patterns has been quite revealing with respect to the general dominants individual translators observe in their work, there are many questions left that need further investigation. For one, the above study does not reveal anything particular as to the influence of other parameters of haiku upon the preferences in the choice of syllable organization patterns in translated haiku. Another aspect worth studying is the possible replacement of the syllabic principle with the accentual one in haiku translations. In addition, one might also be curious to learn what would be the outcome if some other non-English translators were also included; what would be the results if a similar experiment were conducted with respect to Estonian or Russian translators only, i.e. are Masing's and Markova's results dependent on their individual styles only, or are there involved any general linguistic-cultural factors, etc.

References

Azadovskij, K. M.; Dyakonova, E. M. 1991. Bal'mont i Yaponiya. Moskva: Nauka.

Barthes, Roland 1975. S/Z. London: Cape.

Bashō, Matsuo 1996 [1689]. Oku no hosomichi / The Narrow Road to Oku. Translated by Donald Keene. Tokyo: Kodansha International.

Blyth, Reginald Horace 1984 [1963]. A History of Haiku. Volume One. From the Beginnings up to Issa. Tokyo: The Hokuseido Press.

--- 1998 [1964]. A History of Haiku. Volume Two. From Issa up to the Present. Tokyo: The Hokuseido Press.

Bownas, Geoffrey; Thwaite, Anthony 1972 [1964]. The Penguin Book of Japanese Verse. Bungay: Penguin Books.

Chesterman, Andrew 2000 [1997]. Memes of Translation: The Spread of Ideas in Translation Theory. Amsterdam: John Benjamins.

- Donegan, Patricia; Ishibashi, Yoshie 1998. Chiyo-ni: Woman Haiku Master. Tokyo: Tuttle Publishing.
- Franck, Frederick (ed.) 1978. Zen and Zen Classics by R. H. Blyth. New York: Vintage Books.
- Holmes, James S. 1988. Translated!: Papers on Literary Translation and Translation Studies. Amsterdam: Rodopi.
- Imamura, Kyoko 1995. The Integration of Eastern and Western Spirituality in Blyth's Zen in English Literature and Oriental Classics. In: Koji, Kawamoto; Yuan, Heh-Hsiang; Yoshihiro, Ohsawa (eds.), The Force of Vision 6: Inter-Asian Comparative Literature. Tokyo: International Comparative Literature Association, 151–159.
- Kawamoto, Kōji 2000. The Poetics of Japanese Verse: Imagery, Structure, Meter. Tokyo: University of Tokyo Press.
- Keene, Donald (ed.) 1996 [1955]. Anthology of Japanese Literature: from the earliest era to the mid-nineteenth century. Rutland: Charles E. Tuttle.
- Lindström, Kati 1999. Eesti haiku pärastsõjaaegses "Loomingus": žanri põhielementide määratlus ja tüpologiseerimise katse jaapani haiku taustal. (Unpublished seminar paper.) Tartu: Tartu Ülikool, Department of Semiotics.
- Lotman, Mihhail; Lotman, Maria-Kristiina 2000. Tekst ja mälu (värsistruktuur ja selle semantika). In: Pärli, Ülle (ed.), *Kultuuritekst ja traditsioonitekst*. Tartu: Tartu Ülikool Kirjastus, 133–150.
- Markova, Vera 1973. Hokku: Yaponskie trehstishiya. Moskva: Hudozhestvennaja literatura.
- Masing, Uku 1997. *Haikud: Jaapani luulet Uku Masingu tõlkes*. Tartu: Ilmamaa. 1989. Kaks kirja haikude asjus. *Akadeemia* 5: 999–1002.
- Mäger, Mart 1979. Luule ja lugeja. Tallinn: Eesti Raamat.
- Oseko, Toshikaru 1990. Bashō no haiku / Bashō's Haiku: Literal Translations for Those Who Wish to Read the Original Japanese Text, With Grammatical Analysis and Explanatory Notes. Vol. 1. Tokyo.
- Raud, Rein 1994. The Role of Poetry in Classical Japanese Literature: A Code and Discursivity Analysis. Tallinn: Eesti Humanitaarinstituut.
- Swede, George 2000. Towards a Definition of the English Haiku. In: Swede, George; Brooks, Randy (eds.), *Global Haiku: Twenty-Five Poets World-Wide*. Oakville: Mosaic Press, 10–34.
- Sütiste, Elin 2001. A Crow on a Bare Branch: A comparison of Matsuo Bashō's haiku "Kare-eda-ni..." and its English translations. *Studia Humaniora Tartuensia* 2.B.1. http://www.ut.ee/klassik/sht/2001/sytiste1.pdf
- Tarasti, Eero 1992 [1990]. Johdatusta semiotiikkan. Helsinki: Gaudeamus.
- Тогор, Peeter 1995. Total'nyj perevod. Tartu: Tartu Ülikool Kirjastus.
- Toury, Gideon 1993. "Translation of Literary Texts" vs. "Literary Translation": A Distinction Reconsidered. In: Tirkkonen-Condit, Sonja; Laffling, John (eds.), Recent Trends in Empirical Translation Research. Joensuu: University of Joensuu, 10–24.
- Ueda, Makoto 1991. Bashō and His Interpreters: Selected Hokku with Commentary. Stanford: Stanford University Press.
- Yamada-Bochynek, Yoriko 1985. Haiku East and West: A Semiogenetic Approach. Bochum: Studienverlag Dr. Norbert Brockmeyer.

Yamane, Tadashi 1996. Chiyojo toki no uta / Chiyo-jo's Haiku Seasons. Trans. Donegan, Patricia; Ishibashi, Yoshie. Matto City.

Yasuda, Kenneth 1985 [1957]. *The Japanese Haiku*. Rutland: Charles E. Tuttle. Yasuda, Kenneth; Kuriyama, Shigeisha 1983. Haiku. In: *Kodansha Encyclopedia of Japan*, vol. 3. Tokyo: Kodansha, 78–82.

Переводя семнадцать слогов

В статье рассматриваются изменения формы при переводе японского хокку в иной языковой и культурный контекст, когда на поэтическую форму начинают влиять особенности и традиции другой культуры. Поэтому при переводах хокку часто пользуются некоторыми конвенциональными формами, в которых не соблюдаются все характерные для оригинального хокку черты. В то же время, чтобы перевод был узнаваемым как хокку, он все же должен сохранить и определенные формальные черты хокку. Наши наблюдения основываются на 420 переводах хокку. В центре внимания находится количество слогов и параметры их распределения по строкам, на основе которых предлагаются разные модели упорядочивания слогов в переводах. Дается предварительная классификация типов переводных хокку по линии ориентированности на форму.

Tõlkides seitsetteist silpi

Käesolev artikkel käsitleb vormimuutusi, mis tekivad jaapani haiku tõlkimisel teise keelelis-kultuurilisse konteksti. Kuna tõlkimisel hakkavad luulevormi mõjutama teise kultuuri iseärasused ning traditsioonid, kasutatakse haiku edastamisel sageli teatud kokkuleppelisi vorme, mis ei järgi kõiki algupärasele haikule iseloomulikke jooni. Samas, selleks et tõlkehaiku oleks käsitletav sama vormina kui algupärane haiku, peab ta siiski säilitama teatud tunnused, mis on iseloomulikud ka algupärasele vormile. Artiklis tehtavad vaatlused põhinevad käesoleva töö tarbeks kogutud 420 tõlkehaikul. Tähelepanu keskmes on silpide arvu ja ridadesse paigutumise parameetrid, mille alusel pakutakse välja tõlkehaikude erinevaid silbikorrastusmudeleid. Mudelite üldise ja individuaalse esinemissageduse alusel esitatakse esialgne iseloomustus, milliseid tõlgitud haikude tüüpe võiks pidada rohkem vormile orienteerituks kui teisi.

Social semiotic contributions to the systemic semiotic workpractice framework

Rodney J. Clarke

Department of Information Systems, University of Wollongong NSW 2522, Australia e-mail: rodney_clarke@uow.edu.au

Abstract. The workpractices associated with the use of an information system can be described using semiotic theories in terms of patterns of human communication. A model of workpractices has been created called the systemic semiotic workpractice framework that employs two compatible but distinct semiotic theories in order to explain the complexity of information systems use in organisational contexts. One of these theories called social semiotics can be used to describe atypical workpractice realisations, where a user renegotiates one or more canonical sequences of activities typically associated with a specific system feature. In doing so the user may alter the staging of the workpractice, redefine the goal of the workpractice, or renegotiate the usual role they adopt within the workpractice. Central concepts in social semiotics are explained and applied to an actual atypical renegotiated workpractice associated with the loan of materials to students in a small operational level information system called ALABS.

1. Introduction

This paper describes the contribution provided by social semiotic concepts in the development of a systemic semiotic framework suitable for theorising workpractices in organisational contexts. In contrast to traditional approaches to workpractice analysis which utilise processes, business processes, or process modeling, systemic semiotics defines a workpractice as consisting of one or more text types and zero or more action types. We exclude action types from this discussion concentrating instead on text types in workpractices. The

term systemic semiotics, coined by Fawcett (1987), designates a composite of two related sets of theories. The first theory is called social semiotics (Lemke 1988; Hodge, Kress 1988; 1985; Thibault 1991). A social semiotic description of texts associated with workpractices is provided in (2). The second theory is a semiotic model of language called systemic functional linguistics or SFL (Halliday 1985; Hasan 1985; Martin 1992). An SFL description of the texts associated with workpractices has been described elsewhere (Clarke 1996, 2000). Although these two theories are historically related to each other, they draw upon different theoretical traditions. As a consequence, a number of core concepts are defined differently. However, the framework described here can be used to analyse workpractices in organisations, including those associated with systems use, by identifying theoretical affinities between sets of concepts in social semiotics and SFL. These theoretical affinities are used as the basis for describing workpractice texts associated with information systems use in organisations. In (5), the framework is applied to the use of an actual systems feature in order to demonstrate how social semiotics can augment SFL descriptions of workpractices under unusual or atypical situations.

2. Social semiotic elements

Social semiotic concepts used in the systemic semiotic workpractice framework are based primarily on the work of Bakhtin. Interestingly, Bakhtin's development of translinguistics was a result of his studies of the novel, which at the time was a relatively recent literary genre. He focused on developing a dynamic theory of language and meaning emphasising the interrelationship between three categories: (i) the active and productive capacity of language; (ii) the evaluative nature of meaning; and (iii) social subjectivity. According to Todorov's (1984) reading of Bakhtin's work, the first category involves discourse which is theorised in terms of the production of actualised meaning in a communicative event (text), as a responsive interaction between social beings. The second category involves the fact that an apparently initial utterance is never actually the first utterance in any sense. In effect, every word or utterance looks back to the word or utterance it is answering, while simultaneously looking forward to the anticipated word or utterance it will partly determine in advance. This is the dialogic property of language attributed to workpractices, see below. The third category involves the social basis of meanings since Bakhtin viewed language and thought as intertwined. For Bakhtin, language cannot exist without thought, nor can thought exist without language, consequently both are social not individual. The development of social constitution of the individual (see Dore 1995: 151–176), referred to as *social subjectivity*, is having a profound impact on a range of disciplines, including psychoanalysis (Henriques *et al.* 1984). Re-theorising communication using translinguistics means that the analytical emphasis is placed on understanding communicative processes operating as organisational practices in specific organisational contexts. Elements of the theory are described in turn, discourse in (2.1), texts and genre in (2.2), subject positions and reading position in (2.3), and social subjectivity in (2.4).

2.1. Discourse

The concept of *discourse* (Bakhtin 1981: 426, 428; Althusser 1971; Foucault 1972) was introduced as a way of thinking about how ideology functions in culture, institutions, and ourselves, although discourse has proved to be a much more flexible concept than ideology. A useful definition of discourse is provided by Kress (1985: 6–7):

Discourses are systematically-organised sets of statements which give expression to the meanings and values of an institution. Beyond that they define, describe and delimit what it is possible to say and not possible to say (and by extension-what it is possible to do or not to do) with respect to the area of concern of that institution, whether marginally or centrally. A discourse provides a set of possible statements about a given area, and organises and gives structure to the manner in which a particular topic, object, process is to be talked about. In that it provides descriptions, rules, permissions and prohibitions of social and individual actions.

In organisational settings, discourses dictate how members of organisations, objects or activities, are defined, what values are ascribed to them, and the particular sets of options that might apply to them in a specific situation. In part, discourse theory suggests that much of our experience of organisation has already been preordained. In effect, members of organisations will already be locked into specific courses of action, which are already in part predetermined if they comply with the available discourses.

As a consequence, members of organisations are actively involved in a kind of "collective" and unacknowledged blindness to entire courses of action. This collective blindness is inscribed in the discourses that circulate within organisations, predisposing but in no way determining, what constitutes appropriate organisational behaviour. It is important to note here, that discourses never directly operate on members of organisations or others. Discourses inform texts, which in turn are "read" by members of organisations or others in specific organisational contexts, that is discourses must have participants in order to function.

Discourse are inescapable, operating in organisations, institutions and society. Academic institutions and disciplines are no exception. In a large number of modern "scientific" disciplines, including modern management and its related disciplines of information systems and accounting, the psychological individual is viewed as the origin of meaning in social and cultural practices (Clarke 1992). An example of this in information systems discipline is the process model of communication, especially its interpretation by Weaver (1972), as having attained the status of "commonsense" (Belsey 1980). This is possible because a particular type of discourse, referred to as liberal-humanist discourse, operates throughout western culture, including the academy. The effect of this type of discourse is to naturalise, that is to allow to operate unchallenged, the view that individuals are single, unified, originators of meanings. In turn, liberal-humanist discourse has influenced academics and practitioners to uncritically reproduce these discourses as "commonsense" when creating theories about information systems. Theorising speakers as the originators of meanings favours those who can speak in specific circumstances, and issues of power and control in organisations are often discussed from just such an individualist standpoint. Power in organisations is treated as if it were a commodity: the possession of individuals. This individualism obscures the way organisations operate as product and process. Even the discipline of organisational behaviour, becomes reduced to a study of individuals compared to standards of behaviour against which dysfunctional characteristics can be treated and new functional behaviours reinforced. These standards are accepted as an objective reality, permitting the production and social use of these discourses to be left untheorised. As these traditional models pass into the literature and are adopted and enacted by practitioners, the "commonsense" nature of the individual producers and consumers of information is reproduced.

2.2. Texts and genre

Social semioticians view language as a social process. Following Kress (1985), the argument for this is that, (i) language derives meaning from the social activities in which it is embedded, that (ii) knowledge is communicated in social contexts, that (iii) activities have social agents and goals, and that (iv) language, knowledge and activities utilise relationships defined and inextricably bound to value systems in the specific cultures of social institutions. The operational semiotic "unit" of language that may be used to examine the complexity of a specific organisation, is the text. If language derives its meaning from social activities, text is language, which is functional to some extent within the social institution. Halliday (1978) clarifies the distinction between language and text:

[text] looks as though it is made of words and sentences, it is really made of meanings. Of course, the meanings have to be expressed, or coded, in words and [linguistic] structures [...] in order to be communicated; but as a thing in itself, a text is essentially a semantic unit. It is not something that can be defined as being just another kind of sentence, only bigger. (Halliday 1978: 10)

Texts operate in specific social contexts within organisations. Organisations are constantly being reproduced and reconstituted in texts; without this process organisations would cease to exist. A text may be defined as "a structure of messages or message traces which has a socially ascribed unity" whilst discourse "refers to the social process in which texts are embedded [...] text is the material object produced in discourse" (Hodge, Kress 1988: 6). Texts can be critically examined to reveal discourses in operation and the contestation of meanings in institutions, see Halliday (1978), Belsey (1980), Kress (1985, 1988), and Hodge, Kress (1988).

Any utterance in a social setting is referred to as a text and always operates in specific social settings within organisations. The term "text" is used to indicate that organisational activity involves language or is reproduced in language. The plural form of the term is generally used to simultaneously signify two important aspects of the theory. First, organisational practices generally produce more than one text. If studying a specific workpractice a tape recording of what was said between the interactants would form one text, which might be then used to produce a transcript of what transpired during the enactment of the workpractice. Collecting associated written texts would also assist in understanding what took place (forms and documentation). All of these kinds of texts can be thought of as "products". Second, meaningmaking occasions are "processes". Its constituent messages, and consequently the text itself, can never have a single, fixed meaning. This point requires further consideration. Belsey (1980: 26) states that whilst language provides the possibility of meaning, any text exhibits multiple meanings because meanings never remain static. However, the most significant factor determining the plurality of meaning is that a text's possible set of meanings will vary according to the way discourses are recognised by readers. So it is possible to have a single position from which a text is intelligible, because, as Belsey (1980: 19-20) puts it "texts are rooted in specific discourses". Meanings are subjective only to the extent that the contradictions and the superimposition of discourses construct different sets of meaning in specific situations for each member of an organisation. These points are taken up more fully below.

Apart from being simultaneously a product and process, a text will also utilise genres and other social conventions to assist in the construction of meaning. Of particular interest here is the category of genre, the specific staging of a text. Examples of genres commonly found in organisations include memo, calendar, invoices, interviews, meetings and so on. Knowing, the purpose that a text serves in a particular social setting enables us to anticipate to a surprising degree of accuracy both the overall text structure and also its internal organisation of messages. As a part of our lived experience within institutions (Martin 1992), we learn to ascribe certain kinds of meaning to certain kinds of texts. Specific genres assist in constructing or reinforcing some of the meaning of the text, how it is to be "read", identifying the agent(s) of the text, and specifying the audience. Members in organisations understand texts in social contexts because they have prior experience of them, since meanings are conventional, requiring familiarity not intuition (Belsey 1980; 26).

2.3. Subject positions and the reading position

Social subjects are *positioned* (with respect to themselves and others) in relation to particular discourses and practices. Because of social positioning, a member of an organisation will tend to assume specific roles in interactions and texts. Kress (1996: 311) refers to this as a

"[...] habitual, though socially determined, conjunction of a certain subject position and certain textual and reading practices. That conjunction determines the use of certain forms of language". Accordingly, discourses and texts always address subjects. They will usually appear coherent since parts of the text work together to construct its meaning. Texts will appear meaningful to a reader who adopts the particular configuration of discourses which is negotiated in and by the text. Texts address and position social subjects by constructing a reading position which instructs the social subject "about who, what, and how to be in a given social situation, occasion, interaction [...]" (Kress 1985: 39). A reading position is the dominant position from which a specific text appears meaningful, and usually coherent. In adopting the reading position of the text, the subject gives tacit agreement to the negotiation of discourses constructed in the text, and is referred to as a compliant subject. Reading positions and subject positions are interrelated by the operation of discourses (Kress 1985: 37). Occupying the reading position, the subject is defined and described by, and may identify with, the discourses of the text. The idea of social subjects is based on Althusser's (1971) concept of the interpellated subject where subjects recognise themselves being called or interpellated in the text. Compliant subjects are actually positioned by the text so that they do not see any contradictions it may contain. Compliant subjects in organisations may be socially rewarded depending on the circumstances. However, subjects may resist the obvious reading position in the text. If the subject views the semiotic practices as operating from a different position then they are referred to as a resisting subject.

The term negotiation refers to the ways in which specific texts construct meanings. Negotiation commonly involves the textual construction of (some of) the major discourses operating in the organisation (and society). Various discourses in a text need not necessarily be in harmony with each other- they may be in conflict since texts are both the material realisation of sign systems, and also the site where this change constantly takes place (Hodge, Kress 1988: 6). All participants negotiate texts according to the specific discourses, which define and delimit permissible subject positions. In other words, discourses position social subjects/participants to comply with or to resist particular readings, that is, to see only some as "natural". This process of negotiating specific subject positions may generate conflict and contradiction, a kind of social dissonance.

2.4. Social subjectivity

Having defined the concept of discourse, and seen that members of organisations negotiate specific sets of meanings (discourses) in specific social occasions (texts), we turn our attention to the final major concept used in a social semiotic theory of workpractices, that of social subjects. Organisations are conventionally viewed as consisting of collections of individuals. By recognising that individualism is a commonsense category (Belsey 1980), our responsibility becomes one of questioning the prevailing assumptions implied by it. We will adopt the term social subject to replace "participants".

Because subjects are socially and discursively formed, each will bring to organisations different sets of institutional and linguistic experiences (Kress 1988). It is possible for those who share similar institutional experiences (for example, workplaces, schools, and churches) and similar linguistic experiences (nationality, class) to appear to comply with similar discourses. However, as no two subjects will share identical discourses, it is unlikely that they will consistently share the same meanings. Kress notes:

[...] the individual participant in communication is significant [...] as both socially formed and socially agentive. Individuals are formed by and in their institutional and linguistic experiences and histories; in most or all encounters the meanings we encounter, produce, contest, and reshape are socially, culturally and institutionally given. Yet they are encountered, contested and reshaped, imposed perhaps by individuals as social agents in communication. (Kress 1988: 127)

Following Henriques *et al.* (1984), theories of the subject emphasise how the social domain constitutes "subjectivity". *Subjectivity* refers simultaneously to the condition of "individuality" and self-awareness, which is continually formed and reformed under changing social, economic and historical circumstances. Furthermore, social subjects are considered dynamic and multiple- not as single, isolated individuals. For an illustration of this type of theorisation, see Urwin (1984), who applies certain ideas of Foucault with revised theories of Lacan. It is often the case that readers encountering this concept for the first time recoil in horror at the thought that they are socially constituted, not unified, individual free agents. This effect is discursively produced! It is the operation of liberal-humanist discourse that constructs the subject of psychology known as the "individual". Dore (1995:

151-176) provides an excellent description of social subjectivity and describes why we can never be outside of "discourse". Rather than being determined by discourses, we are socially agentive because of them. This apparent contradiction is resolved by recalling that: (i) discourses never directly operate on social subjects but in turn are "read" by them in specific organisational contexts, and that (ii) discourses must have social subjects in order to exist. Bound up with the concepts of discourse, text and social subjectivity is the concept of positioning, see (2.3).

By using social semiotic concepts, a model has been produced based on Clarke (1991: 57) which addresses some of the issues identified in classical process models of communication readily used in the information systems literature, see Figure 1. In the following sections, these concepts will be applied to describing the atypical behaviour of an actual systems features, based on Clarke (1997).

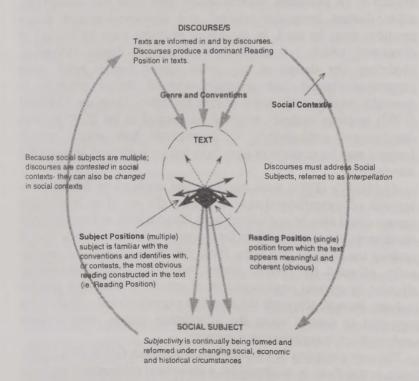


Figure 1. Social semiotic relationships between discourse, text and social subject (based on Clarke 1991: 57).

3. Integration and separation in systems use

Having introduced the necessary concepts, these are then applied to the use of an information system in support of a workpractice. Goldkuhl (1993) questions a prevailing assumption within the information systems (IS) discipline that designers should work to create a tight integration between workpractices or activities in organisations, and the information system features designed to support them. While current design practices assume integration, he notes that there have been periods throughout the history of IS design when a separation between workpractices and systems features has been assumed- a conclusion easily substantiated in the literature. Goldkuhl (1993) proposed that IS designers simultaneously consider each system feature from two positions. Integration assuming system features are tightly coupled to a workpractice, and separation — assuming system features are loosely coupled to a workpractice. In order for system designs to be evaluated simultaneously from these two standpoints. either distinct integration-oriented and separation-oriented design practices must be used, or alternative practices must be applied or developed which can facilitate this kind of design evaluation. Modelling the design of any given system feature twice using integration-oriented and separation-oriented design practices is generally impractical in terms of time and effort. However, Goldkuhl (1993) employs methods, originally developed in the ISAC systems development methodology, to demonstrate how several system features may be considered from both integrationist and separationist standpoints.

Goldkuhl's (1993) work has important implications for the development of organisational semiotics, since the *use* of an information system could also be considered from integrationist and separationist standpoints. A movement from the domain of system design to that of systems use requires two steps. First, substitute the *planned functionality* afforded by *systems design* with the *actual functionality* afforded by *systems implementation* of specific information systems features. Second, substitute the *proposed organisational activity* to be supported or created using the information system, with *enacted workpractices in organisational contexts*.

The only exception to a general agreement with Goldkuhl's (1993) thesis, is that there is, or should be, a *dialectical relationship* between integration and separation in design and, by extension, systems use. Williams (1988: 106–108) defines "dialectic" in terms of the "conti-

nual unification of opposites, in the complex relation of parts to wholes" [emphasis own]. As there appears to be no complex relation evident between Integration and Separation, there is cause to question the existence of a dialectical relationship between these concepts in systems design and by extension in system use. In the following section, integration and separation will be reconsidered as a dichotomy to be deconstructed using Derrida's reading tactics (Norris 1982).

4. Systems use as dialogic

In the previous section, Goldkuhl's (1993) thesis was applied to systems use although doubts are raised about the dialectical relationship presumed between these approaches. Here, this dialectic is deconstructed using Derrida's reading tactics (Norris 1982) to reveal that the relationship between workpractices and systems features is actually a dialogic one. Integration and separation appear to be endpoints along a simple cline or grade- the degree of binding between a workpractice and a system feature. Consequently, in systems design and use, a "large" degree of integration presupposes a "small" degree of separation, and visa versa. In demonstrating that integration and separation are in an inversely proportional relationship rather than a dialectical relationship, the relationship between these entities appears to be a dichotomy. Dichotomies in social theory often function to suppress one of their terms, that is, dichotomies are not equally balanced. Derrida's deconstruction provides a set of reading tactics for interrogating dichotomies (Norris 1982).

The first deconstructive tactic used to interrogate the integration/ separation dichotomy, is reversal, that is we reverse the relative positions of the two terms in privileging separation. Reversal enables us to demonstrate that integration and separation are not logically necessary or unalterable in their relationship to each other. As noted earlier, Goldkuhl (1993) uses the literature to disrupt the dominance of integration, while at the same time valuing the repressed term separation. However, such an operation still preserves the dichotomous relationship between the two terms. Derrida's second deconstructive tactic is referred to as displacement. The repressed term separation must be displaced, not out of the dichotomy altogether but by positioning it within the core of the dominant term as its logical condition. This makes explicit the unacknowledged debt that the dominant term of integration owes to the secondary term of separation. By demonstrating that the integration/separation dichotomy may not be logically necessary, the tactic of displacement foregrounds the fact that the dichotomy could be replaced by entirely different concepts.

The third reading tactic for interrogating dichotomies is the creation of a relevant hinge term which is "outside" the binary opposition between integration and separation but which participates in both terms. A hinge term may be derived from texts being examined or it might be a neologism devised to interrogate a specific dichotomy. The function of the hinge term is to provide a logical precondition from which the dichotomy is constructed. The hinge term is in effect that which is leftover, unrepresented and uncontained by the dichotomy. Parenthetically, we have used the term "reading tactics" as a way of avoiding using the term method since Derrida's "reading tactics" do not suggest, for example, any candidates for the hinge term. The hinge term employed here to interrogate the dichotomy is negotiation. Negotiation is the logical precondition from which the integration/separation dichotomy is constructed in information systems theory. In using this term we foreground the fact that integration or separation between workpractices and information systems features is never historically fixed, but rather is always at risk. As a hinge term, negotiation is compatible with Goldkuhl's (1993) aim of describing a "dynamic view" of the relationship between information system features and organisational activities. The choice of the term negotiation is strategic because it enables the relationship between workpractices and information systems to be theorised as dialogic according to Mikhail Bakhtin's sense of the term (Todorov 1984), and as applied in Clarke (1992).

In applying Bakhtin's concepts to information systems in organisations, workpractices may be defined as texts that conform to Bakhtin's notion of the *dialogic*. The characteristic of workpractices as "negotiated", proposed above, accords with Bakhtin's theories of *text* (Todorov 1984). This is demonstrated in the ways that relevant social subjects actively renegotiate workpractices, so that workpractices may exhibit more than one preferred realisation. However, the imposition of information systems into workpractices often acts to create an opposite tendency toward what Bakhtin refers to as the *monological*, or "the reduction of potentially multiple 'voices' (or characters) into a single authoritative voice [...][reducing the production of actualised meaning which] is sometimes inescapable" (Fowler 1987: 58–60).

5. Application to workpractices

Translinguistics — the name Bakhtin coined for his investigations into language — is useful as a means for theorising how systems position users and others in organisations, and for providing a dynamic view of systems use. However, it does not provide methods for the analysis of actual work texts (for example transcripts) in specific situational and cultural contexts. Bakhtin was critical of the traditional linguistics of his day, developing substantial critiques of formalism and structuralism in linguistics. Specifically, he viewed traditional linguistic theories as monologic in that they attempting to account for discourse as if it consisted of single meanings. Therefore, translinguistics resists the kind of operationalisation necessary in a design discipline such as information systems.

In order to study texts associated with workpractices, we need methods that can be applied to the task. As a consequence SFL is used to analyse transcripts associated with workpractices. The development of social semiotics, can be seen as a theoretical move to situate systemic functional linguistics within a broader critical framework using the work of Bakhtin as a foundation (in Todorov 1984), Althusser (1971), and Foucault (1972). Given the historical relationship between them (Hodge, Kress 1988; Kress 1985, 1988) and the pragmatic importance of combining them (Fawcett 1987), the use of social semiotics together with systemic functional linguistics is a conservative pairing of theories compared to many multiple theory research strategies routinely employed in field research (Burgess 1982: 163-167). Denzin (1970) cautions against the "theoretical incongruence" that results by attempting to use incompatible theories in conjunction with one another and advocates the use of theoretical triangulation. This is a commonly used approach in multiple theory research strategies in which researchers investigate how different theoretical approaches are linked to one another within individual studies, and evaluate the advantages and disadvantages of combining theories in the course of a particular study. In order to permit social semiotics and systemic functional linguistics to be used in conjunction with each other, various theoretical affinities or links between compatible theoretical entities, have been developed (Clarke 2000).

It is necessary to consider an example that reveals the advantages of combining these theories in organisational semiotic studies of workpractices in workplaces. SFL genre theory was used to extract from

interviews the qualitative, typical arrangement of stages (shown as dashed circles) in the enactment of a student loan work practice associated with the ALABS system (Clarke 2000), forming the genre digraph in Figure 2a. Related realisations of this workpractice are shown using alternative paths above or below the typical so-called base line sequence that starts with the triangle on the left hand side of Figure 2a and finishes on the right hand side with the upside down triangle. From a social semiotic perspective, negotiating the typical arrangement of stages in a workpractice corresponds to an adoption of the dominant reading position of the system feature. The reading position is adopted by users who comply with the dominant discourses informing the workpractice, that is, the discourses which produce the "coherence" of the workpractice. From this position, the system feature will appear to be the most obvious, natural, and uncontested negotiation of the workpractice. In adopting the dominant reading position, users comply with those discourses that produce centripetal forces tending to a monological or integrationist instance of systems use.

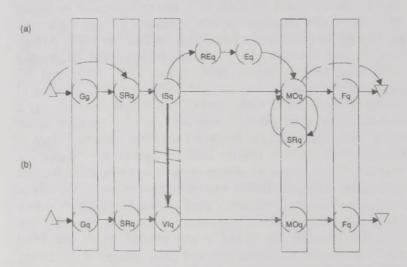


Figure 2. ALABS Student Qualitative Digraph, version 1 (a), and a qualitative sequence showing a negotiated separation between the workpractice and the ALABS Student Loan system feature (b). Codes for qualitative elements and their functions: Gq, Greeting — phatic initiation; SRq, Service Request — request for loan services; ISq, Identification Sought — student-id or equivalent retained; REq, Regulations — student regulations; Eq, Enrolment — enrolment of student requestor; MOq, Materials Out — items provided; Fq, Finish — phatic conclusion.

Current SFL genre theory emphasises a synoptic view of genre, and as a consequence it is not well suited to explaining divergences from the typical arrangement of stages in workpractice genres. One such departure from the typical staging of the workpractice is shown in Figure 2b. Usually students are required to provide a student identification card, which is subsequently retained at the point of borrowing. One student, who was known to the staff members responsible for the facility, had forgotten to bring their identification card. The card was necessary in order for the loan to be logged with the ALABS computer system. Normally students without cards are not loaned items. But in the case of a known student, the staff member in charge of the system might request some other form of identification. If available this would be retained and the loan would have to be recorded manually (offline). Unfortunately, this particular student did not have any other form of identification at all. The student provided their expensive watch as security against the loss or theft of the item. They renegotiated the *Identification Sought* stage into an entirely new element — the Value of the retained Item. Such a maneuver exceeds the descriptive capacities of SFL.

In contrast, translinguistics provides a dynamic view of text and genre that can be of use in theorising these atypical realisations of workpractice genres, as an adoption by users of a non-dominant. resisting subject position. At times users may: (i) re-negotiate one type of workpractice into a different form of workpractice, which still has the same overall purpose although realised by different means, or (ii) re-negotiate a workpractice into a completely different form. These new forms may not be organisationally sanctioned. As a consequence. resistant readings of a workpractice and its associated system features run the risk of failure in organisational contexts, in so far as the pragmatic goals of the workpractice may not be achieved. In some contexts, resistant readings may be viewed as an infringement of workplace regulations, best practice agreements or relevant acts of parliament. However, in some circumstances the adoption of a nondominant (resisting) subject position may lead to a successful renegotiation of the workpractice. By adopting a non-dominant subject position, users mobilise discourses, which produce centrifugal forces tending to a dialogic or separationist instance of systems use. Here, an associated information system may be used in an unorthodox way, or effectively bypassed using a manual work-around.

6. Conclusions

In order to theorise the relationship between workpractices and systems features in use, we take as a point of departure a view of systems design developed by Goldkuhl (1993). He proposed viewing systems design practices simultaneously from two dialectically opposite thought models he referred to as Integrationist and Separationist. The argument he provides can also be applied to the enactment of workpractices associated with information systems. By using the "reading tactics" formulated by Derrida (Norris 1982), the dialectical relationship between integrationist and separationist views proposed by Goldkuhl (1993) is retheorised in social semiotic terms as "negotiation" or a dialogic relationship (Vološinov 1985). Despite developing a social semiotic theory of workpractices, Bakhtin's translinguistics purposefully resists efforts at operationalisation. As a consequence, relevant concepts from systemic functional linguistics (Martin 1992) — a semiotic model of language — were selected in order to be able to undertake applied studies in information system use. Although no simple mapping exists between concepts in Bakhtin's Translinguistics and SFL, theoretical affinities have been tentatively established between a number of fundamental concepts, with the latter enabling workpractice texts to be analysed in detail (Clarke 2000). However, the contribution that social semiotics makes to the systemic semiotic workpractice model is that it provides a dynamic and discursive view of workpractices in organisational and institutional contexts.

References

- Althusser, Louis 1971. Lenin and Philosophy and Other Essays. London: New Left Books.
- Bakhtin, Mikhail 1981. Discourse in the Novel. In: Holquist, Michael (ed.), *The Dialogic Imagination: Four Essays by M. M. Bakhtin*. Austin: University of Texas Press, 259–422.
- Belsey, Catherine 1980. Critical Practice: New Accents. London: Methuen.
- Burgess, Robert G. 1982. Multiple strategies in field research. In: Burgess, Robert G. (ed.), Field Research: A Sourcebook and Field Manual. (Contemporary Social Research Series.) London: Allen & Unwin, 163–167.
- Clarke, Rodney J. 1991. Discourses in systems development failure. In: Aungles, Stanley (ed.), Information Technology in Australia: Transforming Organi-

- sational Structure and Culture. Sydney: University of New South Wales Press, 45-62.
- 1992. Some applications of social semiotics in information systems discipline and practice. In: MacGregor, Robert; Clarke, Rodney J.; Little, Stephen; Gould, Ted; Ang, Ang (eds.), Information Systems as Organisational Processes- ISOP'92: Proceedings Third Australian Conference on Information Systems, 5–8 October. Wollongong: Department of Business Systems, University of Wollongong, 67–79.
- 1996. The persistence of systems in organisations: Genre analysis of systems decommissioning. In: Holmqvist, Berit; Andersen, Peter B.; Klein, Heinz; Posner, Roland (eds.), Signs of Work: Semiosis and Information Processing in Organisations. (Foundations of Communication and Cognition Series.) Berlin: Walter de Gruyter, 59–91.
- 1997. Organisational semiosis: Rethinking integrationist and separationist views of information systems. In: Sankey, María R.; Gimate-Welsh, Adrían; Pellegrino, Pierre (eds.), La semiótica. Intersección entre la naturaleza y la cultura (Semiotics Bridging Nature and Culture): 6th International Congress on Semiotics, Guadalaharo, Mexico, July 13–18, 1997 (Abstracts). Guadalaharo: IASS/AIS, 102.
- 2000. An Information System in its Organisational Contexts: A Systemic Semiotic Longitudinal Case Study. Unpublished Ph.D Dissertation, Department of Information Systems, University Of Wollongong, Australia.
- Denzin, Norman K. 1970. The Research Act. Chicago: Aldine.
- Dore, John 1995. The emergence of language from dialogue. In: Mandelker, A. (ed.), *Bakhtin in Contexts: Across the Disciplines*. Evanston, Illinois: Northwestern University Press, 151-176.
- Fawcett, Robin 1987. Foreword. In: Ventola, Eija, The Structure of Social Interaction: A Systemic Approach to the Semiotics of Service Encounters. London: Frances Pinter Publishers, xvii-xix.
- Foucault, Michel 1972. The Archaeology of Knowledge. London: Tavistock Publications.
- Fowler, Roger (ed.) 1987. A Dictionary of Modern Critical Terms. London: Routledge.
- Goldkuhl, Göran 1993. On the Relations Between Information Systems and Organisational Activities: Integration and Separation As Thought Models. (VITS Research Report, June 1993, LiTH-IDA-R-93-18.) Linköping: Department of Computer and Information Science, Linköping University.
- Halliday, Michael A. K. 1978. Language as Social Semiotic. London: Edward Arnold.
- 1985. An Introduction to Functional Grammar. London: Edward Arnold.
- Hasan, Ruqaiya 1985. The structure of a text. In: Halliday, Michael A. K.; Hasan, Ruqaiya (eds.), Language, Context, and Text: Aspects of Language in a Social-Semiotic Perspective. Geelong: Deakin University Press, 52-69.
- Henriques, Julien; Hollway, Wendy; Urwin, Cathy; Venn, Couze; Walkerdine, Valerie 1984. *Changing the Subject: Psychology, Social Regulation and Subjectivity*. London: Methuen.
- Hodge, Robert; Kress, Gunther 1988. Social Semiotics. Cambridge: Polity Press.

- Holquist, Michael (ed.) 1981. The Dialogic Imagination: Four Essays by M. M. Bakhtin. Austin: University of Texas Press.
- Kress, Gunther 1985. Linguistic Processes in Sociocultural Practice. (ECS806, Sociocultural aspects of language and education.) Geelong: Deakin University.
- 1988. Language as social practice. In: Kress, Gunther (ed.), Communication and Culture: An Introduction. Kensington: UNSW Press, 79–129.
- 1996. Social processes and linguistic change: Time and history in language. In: Cobley, Paul (ed.), *The Communication Reader*. London: Routledge, 299–313.
- Lemke, Jay L. 1988. Towards a social semiotics of the material subject. *Sydney Association for Studies in Society and Culture, Working Papers* 2(1-2). Sydney: University of Sydney, 1-17.
- Martin, James R. 1992. English Text: System and Structure. Amsterdam: John Benjamins.
- Norris, Christopher 1982. Deconstruction: Theory and Practice. London: Methuen.
- Thibault, Paul J. 1991. Social Semiotics as Praxis: Text, Social Meaning Making, and Nabokov's Ada. (Theory and History of Literature 74.) Minneapolis: University of Minnesota Press.
- Todorov, Tzvetan 1984. *Mikhail Bakhtin: The Dialogic Principle*. Trans. by Wlad Godzich. (Theory and History of Literature 13.) Minneapolis: University of Minnesota Press.
- Urwin, Cathy 1984. Power relations and the emergence of language. In: Henriques, Julien; Hollway, Wendy; Urwin, Cathy; Venn, Couze; Walkerdine, Valerie, Changing the Subject: Psychology, Social Regulation and Subjectivity. London: Methuen, 264–322.
- Ventola, Eija 1987. The Structure of Social Interaction: A Systemic Approach to the Semiotics of Service Encounters. London: Frances Pinter Publishers.
- Vološinov, Valentin Nikolaevich 1985 [1973]. Verbal interaction. In: Innis, Robert E. (ed.), *Semiotics: An Introductory Reader*. London: Hutchinson University Library, 47–65.
- Weaver, Warren 1972. Recent contributions to the mathematical theory of communication. In: Shannon, Claude E.; Weaver, Warren, *The Mathematical Theory of Communication*. Urbana, Illinois: University of Illinois Press.
- Williams, Raymond 1988. Keywords: A Vocabulary of Culture and Society. London: Flamingo.

Социосемиотический вклад в системный семиотический анализ практики действия

Практики действия, привязанные к определенной инфосистеме, можно описывать при помощи семиотических теорий, изучающих образцы [patterns] человеческой коммуникации. Создается модель практик

действий (системная семиотическая рамка практик действия), которая пользуется двумя сравнимыми, но в то же время разными семиотическими теориями, чтобы демонстрировать сложность использования инфосистем в организационных контекстах. Одну из этих теорий можно назвать социосемиотикой и ее можно использовать при описании нетипичной практики действия, когда пользователь меняет один или два из тех канонических порядков действия, которые обычно связываются с каким-нибудь специфическим свойством системы. Таким образом пользователь может изменить исход какой-нибудь практики действия, переформулировать цель или варьировать путем переговоров свою роль в этой практике. Разъясняются центральные понятия социосемиотики, которые применяются и на таком нетипичном случае практики действия как выдача учебных матерьялов в малой инфосистеме оперативного уровня, называемую ALABS.

Sotsiosemiootiline panus tegevuspraktika süsteemsesse semiootilisse analüüsi

Vaadeldes infosüsteeme kasutavaid tegevuspraktikaid kui inimsuhtluse mustreid saab neid kirjeldada semiootilise teooria abil. On loodud tegevuspraktikate mudel, mida nimetatakse tegevuspraktikate süsteemseks semiootiliseks raamistuks ning mis kasutab kaht võrreldavat, kuid samas eripärast semiootilist teooriat, et selgitada infosüsteemide kasutamise keerukust organisatsioonilistes kontekstides. Üht neist teooriaist võib nimetada sotsiosemiootikaks, ning seda saab kasutada ebatüüpilise tegevuspraktika kirjeldamiseks, kus kasutaja muudab üht või mitut kanoonilist tegevusjärjekorda, mis on tavapäraselt seotud teatud kindla süsteemitunnusega. Seda tehes võib kasutaja kas muuta mingi tegevuspraktika realiseerimist, määratleda ümber teatud tegevuspraktika eesmärgi või läbirääkimise kaudu muuta oma tavapärast rolli tegevuspraktikas. Selgitatakse sotsiosemiootika keskseid mõisteid, mida ühtlasi rakendatakse ühele ebatüüpilise ümbermääratlemisega seotud tegevuspraktikale, mis käsitleb õppematerjalide laenamist õpilastele väikeses operatiivse tasandi infosüsteemis nimega ALABS.

Sociosemiotic perspectives on studying culture and society

Anti Randviir

Department of Semiotics, University of Tartu, Tiigi 78, 50410 Tartu, Estonia e-mail: randviir@ut.ee

Abstract. The article analyses the position of sociosemiotics in the paradigm of contemporary semiotics. Principles of studying sociocultural phenomena are discussed so as they have been set for analysing the inner mechanisms of sign systems in the semiology of F. de Saussure on the one hand, and for studying sign systems and semiotic units as related to referential reality in the semiotics of C. S. Peirce on the other hand. Three main issues are touched upon to define the scope of sociosemiotics: the general methodology of sociosemiotics, its particular methods, and possible objects of analysis. The relevance of the features of objects in different humanitarian disciplines (cultural unit, historical fact, social fact, institutional fact, social process, etc.) is surveyed to define the object of study in sociosemiotics. Also, the article comments on the description of social organisations via cultural processes and on relations between an individual and society as controllable by social action models.

Introduction: Semiotics and the logic of 'subsemiotic' disciplines

It has become a commonplace to distinguish between different areas of semiotics by the objects of those fields. Notions like 'semiotics of literature', 'semiotics of advertising', 'semiotics of space', 'semiotics of music', etc. are often used according to such logic that as if presumes that all of a sudden a new range of objects has appeared, or, vice versa, sociosemiotics has as if arrived belatedly at the Great Delivery of Objects, and thus must find something new to study in order to justify its existence. It seems necessary to explicate why these

possible understandings are incorrect and to propose ideas concerning rescuing the currently fuzzy discipline of sociosemiotics from its present vagueness. The solution will probably influence the unwritten principles of dividing the general semiotic field as well.

To begin with, we should not constrain ourselves with the mere distinction between Saussurean semiology and Peircean semiotics. Rather, their influence on the emergence of e.g. cultural semiotics, biosemiotics, etc. should be observed. As mentioned above, in the contemporary semiotic discourse it has become common to distinguish between different 'subsemiotic' disciplines according to the objects dealt with (e.g. the general situation in semiotics as currently concerned with to three main fields labeled as cultural semiotics, biosemiotics and sociosemiotics). The structure of these fields is organized according to a more subtle differentiation between research objects (e.g. in the general area of cultural semiotics we can find literary semiotics, semiotics of theatre, semiotics of advertising, cinema, etc.). There are virtually no limitations to the branching of semiotics in this manner and therefore we can even come across such terms as semiotics of traffic signs or refrigerator semiotics (see, e.g., Vihma 1995). However, this seems confusing, especially at a time when semiotics is becoming more and more institutionalized (e.g., wide variation in organization of chairs in departments, programs and curricula), which presupposes at least some common understanding of semiotics as a unified discipline that should be comparable to areas with a longer history of institutionalization that is manifested on a scale ranging from relevant text-books to organizations. Furthermore, the ad hoc labeling of 'subsemiotic' disciplines according to their objects does not seem to be grounded due to their intrinsic inseparable nature (e.g., it would hardly be fruitful to study semiotics of theatre, not paying attention to, for example, the latter's literary or artistic aspects). Unified understanding of the semiotic paradigm is thus essential already from the educational point of view.

Another way to create a division of the 'subsemiotic' branches of research would be to follow the logic of information channels (e.g., the optical channel; see Landwehr 1997, the acoustic channel; see Strube, Lazarus 1997, the tactile channel; see Heuer 1997, etc.). Also terms like 'visual semiotics', 'semiotics of space' and the like point at the possibility of differentiating between objects on the basis of the channels of human perception by which the world is turned into signs. However, it is doubtful that these channels can be actually studied separately (see, e.g., Krampen 1997). Also, different areas of semiosis

have been articulated that lead to, and are included in, the cultural processes of anthroposemiosis: microsemiosis, mycosemiosis, phytosemiosis, zoosemiosis (see Wuketis 1997).

Sociosemiotics — a term relatively frequently used in contemporary semiotic discourse— is a recent development in semiotics. However, when we attempt to delimit its field, we meet a puzzling situation: there hardly exists either any clear-cut definition of the theoretical paradigm of sociosemiotics, or any outline of the range of its genuine objects. Amongst the very few existing definitions of sociosemiotics we can refer to the one by Alexandros Lagopoulos and Mark Gottdiener who state: "sociosemiotics is materialistic analysis of ideology in everyday life" (Gottdiener, Lagopoulos 1986: 14). This approach, however, seems to be both tautological as well as 'too materialistic'. Since in semiotic analysis we cannot escape from the everyday life and consummation of signs already at the stage of collecting data (see, e.g., Danesi, Perron 1999: 293ff), nor from the necessarily pragmatic angle of semiotic studies. Furthermore, it is apparent that all sign systems are inevitably ideological by nature and that this is revealed in our everyday behavior through the transformational rules guiding overt behavior.

Sociosemiotics is a topic often considered with caution and left undefined, although at the same time the term appears in the titles of numerous publications (e.g., Halliday 1978; Hodge, Kress 1988; Alter 1991; Flynn 1991; Riggins 1994a; Jensen 1995; etc.). Thus, if we use the notion at all, the first task to be completed is the clarification of the boundaries of sociosemiotics. To do this, the historical developments of the humanities are to be considered, especially as these converge, crisscross and diverge during the tense period at the turn of the 19th and 20th centuries. In this perspective special attention has to be paid to (cultural) anthropology, semiology and semiotics, early sociology and other social sciences. The next step would be examination of the contemporary state of semiotics and reasons for the activation of different 'subsemiotic trends' as related to the mentioned prevailing trends in semiotics, in order to distinguish the grounds for the (re)creation of a (new) field of sociosemiotics.

Jerzy Pelc (1997) approaches the topics listed above from a more general viewpoint, trying to vivisect semiotics from the larger to smaller parts. According to Pelc, there exist more general levels of semiotics, such as framework and metastructures, and applied semiotics that also includes the field of sociosemiotics (Pelc 1997: 636). Pelc's argument follows the ideas of Morris (1946) in that "the

application of semiotics as an instrument may be called 'applied semiotic'" and "applied semiotic utilizes knowledge about signs for the accomplishment of various purposes" (Pelc 1997: 636). Pelc mentions that:

one may also have in mind not only semiotic methods but also definitions and statements contained in theoretical semiotics which then becomes a common basis for various applied semiotics. (Pelc 1997: 636).

This again points at the impossibility of introducing different trends of applied semiotics without support from, and integration with, general theoretical semiotics. Likewise, there should always be a *ground* for creating the above-named subsemiotic disciplines. Thus, it may still be questionable to a degree, whether we can use the term 'applied semiotics' because of a necessary strong link with the theoretical aspect (otherwise, the applications obtain such an *ad hoc* nature that they start lacking common methods and principles). Hooking again up with Pelc's discourse:

each individual applied semiotics has its own theoretical foundations. And since some of the applied semiotics are humanistic disciplines (e.g. semiotics of theater), others are social (e.g. sociosemiotics), still others natural (e.g. zoosemiotics) or formal sciences (e.g. the study of deductive formalized systems), their theories too differ as regards methodology. (Pelc 1997: 636).

It seems, however, that Pelc's understanding of the general and the subsemiotic disciplines follows the realization of the need to pay attention to the intrinsically reflective nature of different semiotic trends with regard to the general semiotic paradigm. One must avoid distraction that may emerge if the sociosemiotic trend is considered as being theoretically "to a great extent characterized by features typical of theories in the social sciences" (Pelc 1997: 639). In addition to such a complementary aspect, it seems that it is exactly the theoretical connection with the general foundations of semiotics that should always be kept in mind. Other social sciences can offer the methodological aspects the principles of which are similar to those corresponding to old and basic semiotic presuppositions that have often been forgotten in actual studies (e.g. cultural semiotics and the pragmatic aspect of semiotics; see also Kavolis 1995: 8-9). So, if the realm of objects is, in the end, inseparable from the social realm due to their being semiotically conjoined and integrated, we may simply conclude that sociosemiotics should straightforwardly study all sociocultural phenomena. Such research should include the methods of all disciplines that allow the study of the different levels of sign production and exchange as presented by Bally and Sechehaye according to Ferdinand de Saussure. These levels include psychological, physiological and physical processes (Saussure 1959: 11-12), and link up both with Charles Peirce's discourse on logical and semiotic processes, as well as the above-mentioned areas and channels of semiosis. And regardless of difficulties in finding discussions of communication as a strict term in de Saussure's and Peirce's work, we can maintain that contemporary study of communication, together with different models and schemes of description, involves the above mentioned levels and processes of interaction in the same way as brought forward in sign creation and exchange. These aspects of communication also extend from the individual level up to general societal systems. The processual stages of sign exchange as communication have been more clearly articulated by Claude Shannon and Warren Weaver in their classical model of communication that is the source and basis for the majority of communication schemes today (Shannon, Weaver 1949). Other types of communication models center on the functions of interaction as presented by Roman Jakobson (Jakobson 1960).

The scope of sociosemiotics

It is impossible to overlook the fact that the terminology extensively used in several traditions of semiotics contains a considerable number of controversies. Even if we have posed studying of meaningful units and artifacts in sociocultural settings and communication chains of different types of integrated sign systems as the broad task of sociosemiotics, still the problem remains how to delimit both the units of study as well as the contexts of their emergence. Thus, an attempt should be made to find answers to three main sets of essential questions: (a) what are the principal starting points from which to find meanings and meaningful structures; (b) what are the methods of studying these meanings and meaningful structures; (c) what is or are the things to be studied.

In a way the last question has already been touched upon, when speaking in a broader perspective of how to distinguish between different objects of study. The methodological perspective concerns the question how to recognize semiotic, or rather sociosemiotic meaningfulness in the realms and units under inspection. In literature on semiotics we occasionally meet the term socialness. Among others a collection of articles edited by Steven H. Riggins (1994a) could be mentioned, that is based on the standpoint that "objects are a cause, a medium, and a consequence of social relationships" (Riggins 1994b: 1). Things, objects of common life are social in their essence, and, accordingly, there must be a criterion in semiotics that can be called socialness. It is interesting to note the similarity of such reasoning with Russian Formalism and the idea of turning attention to 'literariness' instead of 'literature'. A central characteristic in discovering the socialness of objects is interaction. Interaction is not restricted to communication between objects and people or the usage of objects in communication, but involves a considerably wider range of phenomena and aspects. Objects are often classified according to their pragmatic function and value of use, but they also serve as means of interaction between people. Objects are meaningful units and as such depend on their concrete communicative context and act of use. Objects may be involved in an individual's 'unilateral' communication with the social, cultural and physical environment, and they may be used for exchange of messages between several persons. However, from the point of view of semiotics, differentiating between the situations of object use in terms of unilateral communication and interaction of more than one individuals does not seem to be productive. The formation of the semiotic subjects as counterparts in communication and thus in interaction both with and by objects is always social, linking the individual to the societal, since objects have gained their 'starting-point meaning' due to sociocultural circumstances. For example, even when looking at furniture in private rooms or viewing intimate things that are special tokens for an individual person only or for a very limited group of individuals, we confront items that may be just ordinary commodities for the rest of the community, while the particularized meanings ascribed to them still derive from social experience, memories, cultural values or the similar. With the Saussurean term to describe distinct elements (and distinctiveness of elements) of a semiotic system in mind, value, indeed, derives from interaction with other elements of the system, and this interaction is activated and dynamically directed by the users of the system. This becomes obvious in such examples as symbols of the nation kept in a wallet, the national flag kept on the top of a desk at home, etc. Culture, cultural phenomena, human sign systems are

indeed social in this sense; artifacts are social in their meaning (and dynamic in this meaning) by virtue of integrated use of all cultural semiotic systems. Socialness always derives from social interaction that leaves objects behind also as tokens of itself. Thus 'the socialness of things' may at first seem a trivial expression, but it serves to indicate that human beings have charged most artifacts with such a burden of cultural and individual history and meanings that it has become difficult to identify oneself without those objects. Therefore a description of the socialness of things should involve an analysis of the identity discourse of both individuals and larger sociocultural groups in various dimensions of the criteria possibly used for determination of social units (language, social order, artifacts, chronotope, ethnic structure, etc). The connection of artifacts and social structures in all possible types of communication further leads to the theme of identity, socialness and cultural fetishism in the widest sense that seems to be already an independent sociosemiotic theme.

An idea of the semiotic power of objects is widespread, one may recognise it in Karl Marx's notion of 'material communication of men' (derived from Freud), and often also in (cultural) anthropology - e.g. exchange systems of goods, tokens and commodities. (Some instances in cultural anthropology demonstrate also semiotically especially interesting cases of people, mostly women, being 'objectified' as units of communication in exchange systems.) Separation of such 'material communication' from Freud's communicationalsemiotic dimension of interaction seems too artificial, for artifacts are but one form of sign-vehicles. Artifacts are subject to social facts that, in Emile Durkheim's expression, are characterized as: "Every way of acting which is general throughout a given society, while at the same time existing in its own right independent of its individual manifestations" (Durkheim 1938: 13). It is a separate question where exactly those meaning-loaded realities external to the individual exist, and it has been discussed at length in that branch of cultural anthropology that looks upon cultures as symbolic systems. This trend is represented by, e.g., Clifford Geertz (Geertz 1973) and David Schneider (Schneider 1968), the main idea being that meanings do not exist in the 'heads of social actors', but 'in-between their heads'; i.e., meanings are not personal, but social. Considering Durkheim's social fact and semiological studies of approximately the same period, we can refer to a relevant comparison presented by Roy Harris (Harris 1991). Harris compares the notion of social fact to issues connected with Saussure's langage. A question may be posed as to the possible mutual influence of both authors on each other in terms of these two concepts. Langage and social fact may seem similar as they point at approximately same level of abstraction in comparison with the individual use of sign systems. However, it is to be borne in mind that according to Saussure language can be examined through parole, in the same way as the fundamental level of all sign systems can be reconstructed through case analyses of individual usage acts. Durkheim's social fact, on the other hand, cannot be ultimately clarified, because individual uses of social facts are, for him, far too imperfect to provide data regarding sociocultural superstructures. Harris claims that:

[...] there is no basic difference between the Durkheim of *Les règles de la méthode sociologique* and the Saussure of the *Cours*, granted the interpretation of Saussurean *langage* as something 'universal to the human nature' and of *langue* as a social production in the sense that every language presupposes a particular culture or community whose purposes it serves. Moreover, the implication is that for Durkheim such facts as are 'universal to human nature', even though they clearly affect people's social behavior, lie outside the scope of sociology (Harris 1991: 225–226).

However, for contemporary semiotics which is an interdisciplinary science in its perspectives on studying sociocultural phenomena, these differences need not be important any more and seem to have merged with new units of study. On the one hand, it has been proposed that the means and ends of cultural analysis are *cultural units* (Schneider), on the other hand, we can refer to *historical facts* (Uspenskij) that constitute sociocultural contexts and influence the functioning of semiotic systems in a constructed semiotic reality. Schneider defines cultural units in the following way:

A unit [...] is simply anything that is culturally defined and distinguished as an entity. It may be a person, place, thing, feeling, state of affairs, sense of foreboding, fantasy, hallucination, hope or idea. (Schneider, 1968: 2)

Therefore cultural units that exist in semiotic reality include both concrete and abstract reference and they need not necessarily be connected with referential realities. Cultural units are constructs that make up culture and have been created in a sociocultural system. Sociocultural contexts are not constructed only in terms of cultural objects and artifacts (Riggins 1994a), institutions (Berger, Luckmann 1972) and language (Halliday 1978, Searle 1995), but also as reflec-

tive systems that continually make and remake their identity discourse in terms of historical facts (Uspenskij 1988). Historical facts represent the 'game between the present and the past' in which:

from the viewpoint of the *present* there is executed a choice and understanding of the past events — inasmuch as memory of them is preserved in collective consciousness. By this the past is organized as text readable from the perspective of the present. [...] Correspondingly reception of history turns into one of the main facts of the evolution of the 'language' of history, i.e. of that language in which communication is enacted in the historical process. (Uspenskij 1988: 73–74).

Umberto Eco seconds the anthropological view in a semiotic perspective by defining the cultural unit semiotically as a semantic unit inserted into a system (Eco 1976: 66-68). This implies the social nature of any semiotic study and any semiotic unit, inasmuch as there would be no objects of study for semiotics outside the sociocultural context of use of a cultural unit in a (semiotic) system. One could agree with John Searle in calling socioculturally meaningful units institutional facts in contrast to noninstitutional or brute facts in the sense that the first are "dependent on human agreement" and "require human institutions for their existence" (Searle 1995: 2). Maybe the Sapir-Whorf hypothesis of linguistic relativity would indicate low attention of Searle to segmentation of external contexts into meaningful segments. However, Searle dwells on such an argument himself and admits that "in order to state a brute fact we require the institution of language, but the fact stated needs to be distinguished from the statement of it" (Searle 1995: 2).

Culture as a (socio)semiotic system

If we do not want each study to end with the conclusion that know-ledge of the conscruction of the sociocultural reality cannot be obtained from the disintegrated nature of the appearances of the integrated, yet ungraspable whole, we should accept the standpoint that through strict analysis of — preferrably reflective — outcome of sociocultural semiotic conceptions about the semiotic reality of a socium through different types of behavior, we can make inferences about the regularities of behavior and about the Weltanschauung, semiotic systems and the similar, of the given sociocultural group.

When trying to define the content of culture for contemporary semiotic analysis, we cannot overlook the development of cultural anthropology during the 20th century. It is interesting to notice that European cultural anthropology has had such roots in early sociology and Saussurean semiology that are revealed in structural anthropology. Furthermore, principles of semiology, structuralism and formalism are evident in the parallel development of cultural semiotics. Semiology is important both as regards structural anthropology as well as cultural semiotics, being a factor directing such trends of culture studies toward analyzing sign systems as cognitive social systems. A gradual increase in emphasizing the description of cultural phenomena as an outcome of individually (or communally) articulated social sign systems essentially meant approaching those schools in cultural analysis that are associated with the cognitive trends in cultural anthropology. Those trends expose a steady movement from the late 19th century description of cultures as sets of artifacts organized according to cultural patterns toward the interpretation of cultures as ideational systems. This means that cultures were not 'made' any more only on the metalevel through organizing relations between cultural phenomena in scientific discourse. While cultures can be viewed as 'theories' in Kluckhohn's sense (Kluckhohn 1961) throughout the development of the humanities, an increased attention to them as abstractions existing already on the level of the cultural object has been characteristic of schools analyzing cultures as ideational or semiotic systems. Sociocultural systems are reflective systems and the overt behavior revealed in culture traits depends on the covert behavior directed by cognitive structures such as image schemata, values, behavioral schemes, etc. Thus, the aim of understanding cultures is to describe them as systems of knowledge, intersemiotic sign systems, reflective systems. To interpret the ideas of the cognitive anthropologist Ward H. Goodenough (see, e.g., Goodenough 1961, 1980, 1981), cultures are sets of decision standards, intellectual forms, perception models, models of relating, interpretation models. preference ratings and organizational patterns. For a unified cultural anthropology these cognitive structures converge into sociocultural systems that have been defined by Roger M. Keesing as systems that "represent the social realizations or enactments of ideational designsfor-living in particular environments" (Keesing 1974: 82).

If we take the object of sociosemiotics and semiotic study of culture in general to be sociocultural systems in the above-defined sense, we have established a broad principle according to which to understand the aim of analyzing similar systems. We have determined that artifacts and overt behavior are mediated by sign systems that have been built on the communal agreement behind which lie sociocultural values, socially constructed cultural tradition, etc. Logically, the next step would be to determine the units of concrete study; i.e., to select the 'adequate', the 'representative', 'valuable' sign systems that would enable us to reconstruct in a reliable way the semiotic reality of a social unit on the basis of data collected by observation. But before that the most crucial and painstaking task is to explicate the definition of a relevant social unit. When talking about 'cultural semiotics', 'sociosemiotics' or other subsemiotic trends, we by default assume analyzing sociocultural phenomena in a certain semiotic community. In cultural semiotics the rather useful term 'socium' has often been used to refer to a concrete community that can be described as a coherent unit in terms of social organization, location in time and space, distinct culture, and often an individual natural language. How to determine a sociocultural system is a most troublesome problem: which criteria are to considered as distinctive — language, culture, territory, social organization, nationality or some other possible category? It is a difficult task to find suitable definitions to each of them, but it is fairly obvious that all of them are in fact socioculturally constructed categories. Solutions can be wideranging, from analyzing cultural phenomena as texts representing cultural epochs defined in terms of coherence between cultural texts to actual determination of social groups. Social congregations can and have been distinguished in most general terms as social organizations coherent in membership sentiment that is due to shared visions of culture and cultural well-being. Ideal culture and cultural ideals have been considered as defining features in understanding society as a community whose members share the vision of Good Life (see, e.g., Redfield 1960) that also determines the perspective of norms as standardized mass habits of behavior according to the imagination of 'how things ought to be' (see Hoebel 1960). In spite of their essence seeming vague at first glance, it can still be maintained that sociocultural visions that influence everyday behavior form a basis on which the members of a sociocultural community can actually be quite exactly delimited and counted: according to Kluckhohn (1961), society refers to a group of people in which individuals interact with one another more than with other individuals; it consists of people who cooperate in order to achieve certain goals.

Defining the aims of a social organization, we again come to the crossroads of cultural anthropology, psychology and semiotics: the dynamism between humans as biological organisms and humans as cultural beings is revealed in the tasks of the social organization. In terms of Jurgen Ruesch, "social organization is designed to achieve a designated purpose and to prevent conflict" (Ruesch 1972: 25). Ruesch maintains that:

The purpose of social organization is to: define group tasks; delineate boundaries in time and space (to each his own); establish priority systems (value systems); provide for emergencies (protective services); make new rules (legislature); interpret the rules (judiciary); reinforce the rules (law enforcement); allot positions within the organization (civil service); make decisions (executive); initiate and implement group action (exploration of outer space); and regulate exchange with other groups (competition, cooperation). (Ruesch 1972: 25–26)

The build-up and the relevant tasks of a social organization also reveals in general principles the latter's connection to the cultural processes that can be witnessed in both intra- and intercultural interaction. On the one hand it is clear that the social organization is structured to meet the various needs of an individual; on the other hand, it is obvious that an individual is connected to a certain social reality via socialization. The following question might concern the relation between the individual and a social organization in terms of their possible influence on the behavior of each other. How an individual can influence the social organization (s)he belongs to is quite a specific question already, and today we can more often speak about how a social organization communicates with its individual members. A further specific problem is added by the media that represents a third party in shaping the relationships between a social organization and its members. But first: a social organization can communicate and operate with its members by certain social actions. These engagements can be called social operation or action models (see e.g. Ruesch 1972: 401), and their features depend on how a given sociocultural system sees its social organization in terms of categories. In turn, success in guaranteeing the totality and coherence of a social organization depends on the explicit determination of the constituents of a society (e.g. native, labor, ethnic, linguistic, kinship or other elementary groups) and application of the relevant social operational action models. If operational models are applied to irrelevant societal categories or used in inadequate manner as regards the sociopsychological

needs of an individual, they rather disintegrate the society than congregate one (see Figure 1). Individual sociopsychologial needs ought to be understood as dynamism between the needs of an individual (in A. Maslow's terms) and her/his understanding of his/her obligations to the social whole.

The connection between a social organization, its sign systems and individual variations in uses of semiotic tools offered by a sociocultural system can be studied, based on culture and its semiotic mechanisms. In other words, the coherence of a social organization can be measured by the integration of its members' cultural behavior. This is a topic originating already from Noam Chomsky's linguistic competence and leading to the current notion of semiotic competence; nevertheless, it indicates the structure of social organizations as based on cultural processes. Cultural processes that influence the structure of society and semiotic reality include, for example, acculturation, accommodation, integration, adjustment and integration with their several specific variations. Cultural processes may be influenced by social action models that finally determine cultural distances between different sociocultural groups. Cultural distance, in its turn, is measurable by comparing different features of both overt and covert behavior (see an example in Ruesch 1972: 186). These features are connected with the above discussed cultural units and institutional facts and sociocultural deep structures with and by which individuals operate with the various dimensions of environment. And inasmuch as such semiotic entities are revealed in the output of different semiotic systems, their analysis should focus on the specific instants of variability in the distinctive features by which concrete enunciations bring forward the possible meanings of semiotic entities, in order then to reach their conditionally middled meanings. It is then possible to describe the grounds for and norms of the formation of paradigmatic groupings of meaningful units as valid for individuals in a particular social, cultural, temporal, geographic, linguistic environment. The alike analytic operations concern the rules of possible syntagmatic combinations and is connected with both the extent and the boundaries of a particular semiosphere as linked with sign systems. Here we must keep in mind the principle of arbitrariness governing the relation of sign systems and (semiotic) reality that, however, is limited by a given sociocultural context; therefore this arbitrariness, as described by de Saussure, is restricted for individuals and their use of semiotic systems in concrete referential realities is socioculturally regulated.

The idea of culture as an abstraction existing already on the object level, together with the principle of controllable data and analysis that would insure congruence between 'culture' as a metalevel theoretical construct and the understanding of semiotic phenomena by the users of a given semiotic community, points at another perspective in sociosemiotics. This perspective is concerned with the development of semiotic vocabulary and discourse in the reflective discourse of a given sociocultural group. This topic involves the usage of explicitly semiotic vocabulary in natural languages in everyday communication (see, e.g., Voigt 1998; Randviir et al. 1998), but also in the reflective output of culture. The latter aspect points at difficulties that often emerge when an attempt is made to draw a line between the scholarly viewpoint and the object level. Yet treatment of behavioral norms. culturally 'adequate' communication patterns, image schemata and the like is present in the majority of cultural texts, starting with myths. epics, lyrics, etc. Probably it would even be unfair to label some of such texts as 'scholarly pertinent', while letting others fall into the category of mere cultural phenomena. All reflective praxis is metacommunicative and thus, following E. Durkheim's logic, we can simply talk about different forms of reflective practices. Reflectivity is evident in religious practices, science, the institutional structure of a society, educational system, socialization process, instructions for the latter etc. Reflectivity is essential for the formation of social groupings and societies, inasmuch as it concerns the factor of sentiment binding individuals into a sociocultural system. In discussing formation of social organizations, we are to keep in mind several possibilities or criteria on the basis of which these can be founded: language, culture, statehood, territory, nationality, etc. All these categories are clearly conditional and follow Kluckhohn's logic of culture as an abstraction. Perhaps the only possibility to identify the membership of an individual is his/her subjective understanding as proposed by Ernest Gellner:

^{1.} Two men are of the same nation if and only if they share the same culture, where culture in turn means a system of ideas and signs and associations and ways of behaving and communicating.

^{2.} Two men are of the same nation if and only if they recognize each other as belonging to the same nation. In other words, nations maketh man; nations are the artifacts of men's convictions and loyalties and solidarities. (Gellner 1983: 7)

Thus, on the one hand, people make up social organizations in order to support their identity discourse and satisfy their needs, and on the other hand social organizations ought to make up such a system that would provide individuals with tools to handle both infrastuctural, social and purely semiotic environments. Sociocultural organizations offer their members meaningful past and future visions, determining thereby also respected behavioral patterns for everyday interaction. Sociocultural organizations are by nature reflective organizations, both in respect to presenting sociocultural systems to other similar ones, and representing themselves in the course of formation of cultural traditions (as revealed, e.g., in education). The degree of reflectivity may increase and decrease, and this is often connected with some type of culture change. Cultural change, being a result of the situation of stark contrast between the existing cultural patterns and changed environmental (natural, technical, social, political, etc.) conditions, demands higher reflection upon the cultural core and mainstream in order to keep the identity discourse stable or to reestablish it according to an alternative principle (e.g., to replace the territorial or political principle for the national or linguistic one). However, this reflection must be again a social process in the sense of demanding close cooperation between different social groupings of a society. In the opposite case, national sentiment and social integration will decrease and society as a totality of subsystems will disintegrate (e.g., the case of several post-Soviet republics, including Estonia, in the new sociocultural and political world structure). The success of an identity discourse and cultural reflection as a social representation process depends on the clarity of understanding the structure of society in terms of partnership existing social organizations and groupings. This is the case concerning cultural change in the situation of overlapping boundaries in national, territorial and political terms.

The situation is different when we inspect the development of cultural or linguistic organizations of diaspora, as connected with the core cultures of both the new cultural space and the territory of origin. Such sensitive situation of cultural change also evokes the reflective praxises of immigrants and their intense search for identity. Emigration, especially forced emigration, amplifies the topic of acculturation and individual involvement in new sociocultural groups. Cultural and national identities obtain heightened importance, and it is representatives of such emigrants who often produce enunciations of understanding cultural and national identity. For example, a well-known Estonian cultural thinker Oskar Loorits has stated that it is most

important to preserve 'Estonian behavior' and 'Estonian thinking' in diaspora, paying attention to the 'national characteristics of Estonians', listing among them "diligence or 'assiduity', durability or 'persistence' and 'tenacity', self-control or 'fortitude' and being content with little or 'modesty'" (Loorits 1953: 88). These gain especially great importance in comparison with the foreign *others* and awareness of them becomes more acute. Regarding the process of acculturation and national identity in diaspora, we can again refer to Loorits as a cultural critic disclosing features of Estonian-*ness* with his reference to the 'negative sides' of the Estonian national character that pale beside those of foreign communities:

in the character of foreigners (who have developed in much better conditions!) we can find much more egoistic stubborness and malicious glances, much more insidious spitefulness and more sly pulling legs, much more urging intriguing [...] (Loorits 1953: 88–89)

If cases are viewed in which its is the cultural or linguistic identity that is crucial for the identity of a social group, we can witness the very formation of European cultural, social and political landscape as based on the principle of nation states. According to E. Gellner's statement, "nationalism is primarily a political principle, which holds that the political and the national unit should be congruent" (Gellner 1983:1). However, like all possible criteria of defining social groups or communities, the sentiment determining membership feeling depends on social communication and is thus fundamentally connected with the ways in which available sign systems are used. Identies are constructed largely by the medium, and we can agree with Gellner in that:

The most important and persistent message is generated by the medium itself [...] That core message is that the language and the style of the transmissions is important, that only he who can understand them, or can acquire such comprehension, is included in a moral and economic community, and that he who does not and cannot, is excluded. (Gellner 1983: 127)

Thus all sociocultural communication, whether we inspect face-to-face interaction, mass media, communication through objects or other media, is also metacommunicative and therefore provides sociosemiotic analysis of a community's semiotic reality with valuable information. Semiosis as a mediation process is social, and in fact it comprises syntactic, semantic and pragmatic analysis already on the

object level. In this sense the object of social semiotics includes reflective practices that are social by virtue of cognitive processes and also because of the sign systems that can be used to articulate those processes. Thus, the field of sociosemiotics involves analysis of using culture and sign systems, and also sociosemiotic reflective thought through which bearers of a culture become aware of their sociocultural reality and sign systems. Sociosemiotics should treat the use of sign systems and meanings in sociocultural contexts, just as it should inspect the evolution of semiotic vocabulary and thought in society. This points at possibilities of control of descriptive discourse and the nature of sociosemiotic research as representing features of both general semiotics theoretically, and other social sciences in methodological perspective.

References

- Alter, Jean 1991. A Sociosemiotic Theory of Theatre. Philadelphia: University of Pennsylvania Press.
- Berger, Peter L.; Luckmann, Thomas 1972 [1966]. The Social Construction of Reality: A Treatise in the Sociology of Knowledge. Harmondsworth: Penguin Books.
- Danesi, Marcel; Perron, Paul 1999. Analyzing Cultures: An Introduction and Handbook. Bloomington: Indiana University Press.
- Durkheim, Émile 1938 [1895]. The Rules of Sociological Method. New York: Free Press.
- Eco, Umberto 1976. A Theory of Semiotics. Bloomington: Indiana University Press.
- Flynn, Pierce J. 1991. *The Ethnomethodological Movement: Sociosemiotic Interpretations.* (Approaches to Semiotics 95.) Berlin: Mouton de Gruyter.
- Geertz, Clifford 1973. The Interpretation of Cultures: Selected Essays. New York: Basic Books.
- Gellner, Ernest 1983. Nations and Nationalism. Oxford: Basil Blackwell.
- Goodenough, Ward H. 1961. Comment on cultural evolution. *Daedalos* 90: 521–528.
- 1980 [1970]. Description and Comparison in Cultural Anthropology. Cambridge: Cambridge University Press.
- 1981 [1971]. *Culture, Language, and Society*. Menlo Park: The Benjamin/Cummings Publishing Company.
- Gottdiener, Mark; Lagopoulos, Alexandros P. (eds.) 1986. The City and the Sign: An Introduction to Urban Semiotics. New York: Columbia University Press.
- Halliday, Michael A. K. 1978. Language as Social Semiotic: The Social Interpretation of Language and Meaning. London: Edward Arnold.

Harris, Roy 1991 [1987]. Reading Saussure: A Critical Commentary on the

'Cours de linguistique générale'. La Salle: Open Court.

Heuer, Herbert 1997. Der taktile Kanal. In: Posner, Roland; Robering, Klaus; Sebeok, Thomas A. (eds.), Semiotik: Ein Handbuch zu den zeichentheoretischen Grundlagen von Natur und Kultur. Vol. 1. Berlin: Walter De Gruyter, 300–306.

- Hodge, Robert I. V.; Kress, Gunther 1988. Social Semiotics. Cambridge: Polity Press.
- Hoebel, Edward A. 1960 [1956]. The nature of culture. In: Shapiro, Harry L. (ed.), *Man, Culture, and Society*. London: Oxford University Press, 168–181.
- Jensen, Klaus Bruhn 1995. The Social Semiotics of Mass Communication. London: Sage.
- Jakobson, Roman 1960. Closing statement: Linguistics and poetics. In: Sebeok, Thomas A. (ed.), *Style in Language*. Cambridge: MIT Press, 350–377.
- Kavolis, Vytautas 1995. Civilization Analysis as a Sociology of Culture. Lewiston: The Edwin Mellen Press.
- Keesing, Roger M. 1974. Theories of Culture. *Annual Review of Anthropology* 3: 73–97.
- Kluckhohn, Clyde 1961. Mirror for Man: A Survey of Human Behavior and Social Attitudes. Greenwich: Fawcett.
- Krampen, Martin 1997. Models of Semiosis. In: Posner, Roland; Robering, Klaus; Sebeok, Thomas A. (eds.), Semiotics: A Handbook on the Sign-Theoretic Foundations of Nature and Culture. Vol. 1. Berlin: Walter De Gruyter, 247–288.
- Landwehr, Klaus 1997. Der optische Kanal. In: Posner, Roland; Robering, Klaus; Sebeok, Thomas A. (eds.), Semiotik: Ein Handbuch zu den zeichentheoretischen Grundlagen von Natur und Kultur. Vol. 1. Berlin: Walter De Gruyter, 288–294.
- Loorits, Oskar 1953. Pagulaskodude kasvatusmuresid. Vadstena: Tõrvik.
- Morris, Charles 1946. Signs, Language, and Behavior. New York: George Braziller, Inc.
- Pelc, Jerzy 1997. Understanding, explanation, and action as problems of semiotics. In: Posner, Roland; Robering, Klaus; Sebeok, Thomas A. (eds.), Semiotics: A Handbook on the Sign-Theoretic Foundations of Nature and Culture. Vol. 1. Berlin: Walter De Gruyter, 617–667.
- Randviir, Anti; Tarasti, Eero; Voigt, Vilmos 2000. Finno-Ugric semiotics: Cultures and metacultures. *Sign Systems Studies* 28: 425–438.
- Redfield, Robert 1960 [1956]. How human society operates. In: Shapiro, Harry L. (ed.), Man, Culture, and Society. London: Oxford University Press, 345–371.
- Riggins, Steven H. (ed.) 1994a. The Socialness of Things: Essays in the Sociasemiotics of Objects. (Approaches to Semiotics 115.) Berlin: Mouton de Gruyter.
- 1994b. Introduction. In: Riggins 1994a: 1-6.
- Ruesch, Jurgen 1972. Semiotic Approaches to Human Relations. (Approaches to Semiotics 25.) The Hague: Mouton.
- Saussure, Ferdinand de 1959. Course in General Linguistics. Bally, Charles; Sechehaye, Albert (eds.). New York: Philosophical Library.

- Searle, John R. 1995. *The Construction of Social Reality*. New York: The Free Press, Allen Lane.
- Shannon, Claude E.; Weaver, Warren 1949. The Mathematical Theory of Communication. Urbana: The University of Illinois Press.
- Schneider, David M. 1968. American Kinship: A Cultural Account. New York: Prentice-Hall.
- Strube, Gerhard; Lazarus, Gerda 1997. Der akustische Kanal. In: Posner, Roland; Robering, Klaus; Sebeok, Thomas A. (eds.), Semiotik: Ein Handbuch zu den zeichentheoretischen Grundlagen von Natur und Kultur. Vol. 1. Berlin: Walter De Gruyter, 294–300.
- Uspenskij, Boris A. 1988. Istorija i semiotika: Vosprijatie vremeni kak semioticheskaja problema. Sign Systems Studies (Trudy po znakovym sistemam) 22: 66-84.
- Vihma, Susann 1995. Products as Representations: A Semiotic and Aesthetic Study of Design. Helsinki: The University of Art and Design.
- Voigt, Vilmos 1998. A magyar jelek és jelrendszerek évszázadai. In: Voigt, Vilmos; Géza, Balázs (eds.), A Magyar Jelrendszerek Évszázadai. Budapest: Magyar Szemiotikai Társaság, 5–12.
- Wuketis, Franz M. 1997. Anthroposemiose. In: Posner, Roland; Robering, Klaus; Sebeok, Thomas A. (eds.), Semiotik: Ein Handbuch zu den zeichentheoretischen Grundlagen von Natur und Kultur. Vol. 1. Berlin: Walter De Gruyter, 532-548.

Социосемиотические перспективы при изучении культуры и общества

Рассматриваются разделы семиотики и, соответственно, позиция социосемиотики в парадигме современной семиотики. Дается обзор принципов исследования социокультурных знаковых систем в том виде, как они даны, с одной стороны, в семиологии Ф. де Соссюра (анализ механизмов внутри знаковой системы) и, с другой стороны, в семиотике Ч. С. Пирса (изучение знаковых систем и знаковых единиц по отношению к означиваемой действительности). При определении предмета социосемиотики важны три главных вопроса: общая методология социосемиотики, ее методы и возможные конкретные объекты анализа. Прослеживаются признаки (единица культуры, социальность, исторический факт, социальный факт, институционный факт, социальный процесс и т.д.) возможных объектов разных наук о культуре с целью выяснения возможности их применения к определению объекта социосемиотики. Рассматривается и описание социальных организаций посредством культурных процессов и соотношений индивида и общества так, как эти соотношения можно регулировать социальными моделями действия.

Sotsiosemiootilised perspektiivid kultuuri ja ühiskonna uurimisel

Artiklis vaadeldakse semiootika alajaotusi ja sotsiosemiootika vastavat positsiooni kaasaja semiootika paradigmas. Vaadeldakse sotsiokultuuriliste märgisüsteemide uurimise põhimõtteid nii, nagu need on sätestatud ühelt poolt märgisüsteemisiseste mehhanismide analüüsimiseks F. de Saussure'i semioloogias ning teiselt poolt C. S. Peirce'i semiootikas märgisüsteemide ja märgiliste üksuste uurimiseks suhestatuna viidatava reaalsusega. Käsitletakse kolme peamist küsimust sotsiosemiootika määratlemiseks: sotsiosemiootika üldine metodoloogia, meetodid ja võimalikud konkreetsed analüüsiobjektid. Jälgitakse eri kultuuriteaduste võimalike objektide tunnuste (kultuuriühik, sotsiaalsus, ajalooline fakt, sotsiaalne fakt, institutsiooniline fakt, sotsiaalne protsess jne) asjakohasust sotsiosemiootika objekti määratlemisel. Käsitlemist leiab ka sotsiaalsete organisatsioonide kirjeldamine kultuuriliste protsesside kaudu ning indiviidi ja ühiskonna seoste reguleeritavus sotsiaalsete tegelusmudelitega.

On signs, memes and MEMS: Toward evolutionary ecosemiotics

Paul Bouissac

University of Toronto 253 College Street, P.O. Box 429, Toronto, M5T 1R5, Canada e-mail: bouissa@attglobal.net

Abstract. The first issue raised by this paper is whether semiotics can bring any added value to ecology. A brief examination of the epistemological status of semiotics in its current forms suggests that semiotics' phenomenological macroconcepts (which are inherited from various theological and philosophical traditions) are incommensurate with the complexity of the sciences comprising ecology and are too reductive to usefully map the microprocesses through which organisms evolve and interact. However, there are at least two grounds on which interfacing semiotics with ecology may prove to be scientifically productive: (a) the very looseness of semiotic discourse can be an important catalyser for multidisciplinary interactions, an important condition for the emergence of truly holistic ecology; (b) the present semiotic conceptual apparatus is not carved in stone. All its notions, frames of reference and types of reasoning can evolve in contact with the problems encountered in evolutionary ecological research. Semiotics, as an open-ended epistemological project, remains a proactive intellectual resource. The second issue raised by this paper is precisely to call attention to the opportunity provided by recent developments for rethinking and furthering semiotic inquiry. An attempt is made to show that counterintuitive theories such as memetics and new frontiers in technology such as nanotechnology, could help recast ecosemiotics along more intellectually exciting lines of inquiry than the mere rewriting of ecological discourse in terms of the traditional semiotic macroconcepts. It goes without saying that memetics and nanotechnology are not presented here as definitive solutions but simply as indicative of possible directions toward a comprehensive evolutionary ecosemiotics that would radically transform the basis of the 20th century semiotic discourse and its ideological agenda.

1. Is ecosemiotics a paper discipline?

[...] ecological relations are based on meaning; they are semiotic.

Ecosystems, no less than cultures, are contingent upon communication.

Alf Hornborg (1996: 53)

The introduction of semiotic models and terminology into the discourse of various disciplines has given rise to compound names on the model x-semiotics such as zoosemiotics (Sebeok 1970), neurosemiotics (Ivanov 1979), and socio-semiotics (McKellar 1987), to mention only a few. Far from referring to corresponding disciplinary institutions, such labels indicate on the part of their proponents a sensibility to the communication dimension of the domains investigated respectively by zoology, neurology and sociology rather than an epistemological reliance on a specified methodology aimed at new scientific discoveries. It mostly consists of interpreting or reinterpreting acquired knowledge through rephrasing propositions in terms of signs, sign categories and other notions used by some semiotic schools. Typically, these hybrid lexicons indicate the interests of some individual semioticians in a variety of scientific discourses in which they perceive some potentially sign-relevant information which they work into their own philosophical arguments (e.g., Koch 1986). More rarely, some individual scientists attempt to integrate their compartmentalized research within the more comprehensive perspective that various brands of semiotics seem to afford (e.g., Deacon 1997, Hoffmeyer 1996). Both sides usually lack a sense of the historical complexity of the "other culture" and interface with a limited subset of information resources. However, these partial and biased recontextualisations appear to play a significant part in constructing overlapping domains which may prove mutually beneficial through a process of "cross-fertilization", although it is sometimes difficult to pinpoint actual results either in the way of changes brought about in the semiotic conceptual apparatus or in the form of experimental strategies that would be inspired by some semiotic notions or models. By and large, semioticians delve in speculative discourse rife with thought experiments and anecdotal examples and only occasionally engage in serious meta-analyses of some sectors of scientific literature in order to garner critical evidence in support of their arguments (e.g., Sebeok 1968). Conversely, some scientists who aspire to break free

from the intellectual constraints of their methods find in semiotics a basis, or an alibi, for their philosophical or religious speculations (e.g., Hoffmeyer 1996). These general strategies provide, nevertheless, opportunities for interactions. But the dialogues that are thus prompted most often remain on the level of inconsequential mutual interpretations and, in some cases, are simply used as mutual status reinforcement strategies. If these characterisations accurately reflect the nature of these disciplinary interfacings, they lead one to wonder whether the many "hyphenated disciplines" are mere sociological or epistemological chimera that exist only on paper, or whether they actually designate agenda that offer promising avenues of inquiry based on new premisses.

However, so much is still to be known that intellectual skepticism and epistemological despondency in this regard should not be in order. The potential for cross-fertilisation should not be discouraged but cannot be taken for granted either. It seems that chances of progress can be assessed on several grounds.

First, the forces of inertia of disciplinary cultures must be taken into account. These forces of resistance have no relevance to the epistemological value of the merging of disciplines. They apply equally within the sciences and within the humanities. For example, the obstacles encountered in the 1990s by attempts to fuse evolutionary biology and developmental biology, a movement known as "evodevo" (Pennisi, Roush 1997), bear witness to the sociological strength of disciplinary incommensurability and resilience, often masking deeper ideological rifts (Kull 2000). It seems at times that institutionalisation of cross-disciplinary domains requires no less than a scientific revolution and the creation of a new scientific paradigm following the pattern elucidated by Thomas Kuhn and aptly summarized in the obituary written by David Hull (1996).

Secondly, the disciplines brought together must meet compatible standards in terms of methodology and level of resolution. For instance, while "neurosemiotics" may sound like a good idea, there is no compatibility between the macrolevel of current semiotic categorisations which are based on phenomenological intuitions and logical reasoning, and the microlevel of description and analysis found in the contemporary brain sciences, even in the branches devoted to the neurological understanding of well-defined cognitive processes (e.g., Calder et al. 2001). Bridged disciplines must have an equivalent capacity for producing counter-intuitive knowledge rather than commonsensical and redundant propositions (Kestenbaum 1998).

Thirdly, there must be a gnoseological or pragmatic urgency that requires epistemological integration and methodological harmonisation between disciplines that initially emerged as separate social entities. When it becomes obvious that some major problems confronting human societies, locally or globally, cannot be solved with the resources of a single discipline, a powerful pressure develops to create at least partial integration of research in the form of a task force for short-term solutions and long-term research and development programs for strategic responses. Among the most obvious cases of this process are the functional, albeit partial, merging of sociology and medicine, history and climatology, and neurology and linguistics. The recent apparition of the word "ecosemiotics" raises the issue of whether it is a symptom of such an urgency or merely an opportunistic phantasy. Is ecosemiotics a paper discipline or does it have epistemological teeth? Does rewriting ecological interactions as communication make a difference or is it a futile stylistic exercise?

2. Philosophy, science or politics?

It is by languaging that the act of knowing [...] brings forth a world.
H. R. Maturana, F. J. Varela (1987: 234)

The emergence of ecology as a domain of specialised research concerned with the understanding of interactions both among organisms and between organisms and their environments was in part a response to the inability of individual disciplines to come to grips with the complexity of problems generated by industrialisation. The unsustainable exploitation of "nature" which had been perceived at first as an unlimited source of riches, drove home the idea that animal, vegetal and mineral resources formed delicately balanced webs of interrelated food chains. These resources were perceived, on the one hand, as controlling each other in a way that prevented extreme variations in the absence of major cataclysms and, on the other hand, as having a conservative impact on the climate, the chemistry of soil, water and atmosphere, and the reproductive rate of species that were deemed relevant to human interests. Monitoring and controlling these resources required the synergy of a vast array of experts from biologists and ethologists to chemists and physicists. For instance, the Departments of Ecology and Evolution at the University of Chicago has a faculty comprising specialists in molecular evolution, population genetics, quantitative genetics, animal behavior, plant and animal ecology, evolutionary theory, systematics, paleontology, and relies also for its curriculum on courses offered in the departments of Organismal and Cell Biology, Biochemistry and Molecular Biology, Molecular Genetics and Cell Biology, Statistics, Geophysical Sciences, Anthropology and Chemistry.

The daunting program of a holistic ecological science — which is still in progress — encountered the resistance of economic and political agencies whose immediate interests are not compatible with the policies inspired by ecological knowledge, which they occasionally label as "bad science". As a result, ecological awareness has taken the form of militancy and has generated a critical discourse and a political agenda aimed at advancing the cause of the preservation of the planet's environment and its biodiversity while often advocating at the same time various forms of social and cultural conservatism. It is therefore important to distinguish scientific ecology as a curriculum and a multidisciplinary research program from political ecology as a set of ideologies and activist movements. It has been shown that both the scientific endeavor and the political agenda have deep roots in 19th century intellectual and political history, reaching into the sources of Romanticism for the latter and holistic approaches to knowledge construction for the former (Nöth 1998).

In this complex and somewhat confusing context, the recent apparition of the notion of "ecosemiotics" (with or without hyphenation) raises the issue of whether semiotics can indeed be justifiably added to the specialties of an ecological curriculum or whether semioticians should look towards the ecological sciences as a source of relevant data, models and methods in order to update their worldview and renew their philosophical arguments. It is the contention of this paper that the second option is a prerequisite for the first one, simply because there is too much discrepancy between semiotics as it stands now and the scientific disciplines upon which current ecological research relies for its advancement. At most, semiotics can provide a flexible epistemological framework for integrating various streams of specialised knowledge as long as its concepts reach an optimal level of resolution and do not remain at the macroperceptual level that characterizes its phenomenology. The first task of semioticians would then be to apprise themselves of today's rather than yesterday's ecological and related knowledge, and see whether they can go beyond the

simplistic reduction of all processes to communication arcs or triadic relations so as to realize that what they call signs and semiosis is the problem rather than the solution.

3. Is semiotics an archaic mode of thought, a mythical discourse or a metalanguage?

How far will semiology go? It is difficult to predict.

Ferdinand de Saussure (1989: 154)

The main notional currency of semiotic discourse has remained basically unchanged since Augustin of Hippo (Deely 1998). There has been reshuffling and reconfiguring within this basic frame. Debates and controversies have spawned new words. Fringe terminologies have been added, notably from information technologies, but they have often been redefined to suit the earlier conceptual apparatus of the philosophy or "doctrine" of signs. While the generalisation of a basic terminology can be a factor of progress in as much as it contributes, like metaphors do, to the heuristic generalisation of models across various domains of experience, it also carries the risk of "freezing" their perception and interpretation at a particular degree of conceptual resolution. It is symptomatic that by and large the mainstream semiotic discourse has remained, on the one hand, rather impenetrable to evolutionary theory, viz. its fascination for Jakob von Uexküll and his anti-Darwinian stance as Konrad Lorenz (1981) pointed out and, on the other hand, fairly indifferent to the advances of the neurosciences, viz. its continuing obsession with Sigmund Freud and his Gallic epigones in spite of compelling criticisms (Clare 1985). Moreover, semiotics has maintained a level of phenomenological reasoning defined at its lower end by 17th century microscope technology. This is probably why the nascent ecosemiotic discourse is evoking renewed visions of the "great chain of beings", sometimes reworked into the rhetoric of Gaian "greenspeak" (Harré et al. 1999) rather than articulating a stimulating theoretical and empirical agenda that would command the attention of researchers across disciplinary borders. With its implicit representations of biology, psychology, physics and so on, mostly in folk- or popularised versions, semiotics forms an academic sub-culture which generally finds it difficult to

interface with other disciplines which consider that basic semiotic terminology and conceptual apparatus lack consistent, operational definitions. Its discourse appears to describe a communication utopia which has little appeal to those minds used to wrestling with complex problems in their daily research practice and the "small change" truths they treasure.

The central notions of "sign" and "communication", for instance, are notions "by default", so to speak, in as much as "something" had to be hypothesized in order to account for phenomena that appeared to be intransitive such as causation at a distance, otherwise unexplainable events, or seemingly disproportionate relations between inputs and outputs. These sorts of virtual objects, the sign or the communication act, were conceptually elaborated in a phenomenological world strictly constrained by the power of resolution of human vision that has been finetuned by evolutionary forces. Hominids have evolved as diurnal organisms who heavily depend on close- and medium-range vision for their survival and reproduction. But eventhough the natural human visual apparatus is obviously adaptive, it is so with respect to a limited set of environmental and social conditions, as are the other perceptual hominid adaptations that define the human "umwelt". Ecological sciences are based on controlled representations that so vastly expand the limits of this "umwelt" and increase so much the level of resolution of its phenomenology that it seems legitimate to wonder whether the present conceptual apparatus of semiotics, including its pivotal notions, can preserve the relative relevance it might indeed have had until the recent past for mapping a meaningful integrative perspective onto the information that is now available. Even in its most restricted definitions, the notion of "sign" is a macro-concept that indiscriminately covers a large number of heterogeneous local processes which now are not only becoming visible and describable but can also be simulated through nanotechnologies below the threshold of natural human perception. Can the virtual universe that has been blindly constructed over the past centuries by the discourse of semiotics be anything more than a sort of epistemological mythology? Or do the general questions this semiotic discourse has raised still constitute a credible ground for further elaborations in view of the expanded knowledge brought forth by extreme technologies and counter-intuitive theories? The argument of this paper is that the latter is probable as long as semiotics discards its obsolete models and transforms itself into an evolutionary ecosemiotics in the most radical sense of these terms.

All organisms develop and reproduce within a set of environmental constraints of which other organisms, including conspecifics, form an essential component. The prerequisite for the maintenance of life is the constant processing of information that is relevant to the particular conditions which have shaped specific biological profiles. This shaping through adaptation by natural selection never ceases as the environment, both organic and inorganic, is in constant flow and is prone to irregular catastrophic changes. Evolution is a wasteful process. In some species, for instance Felis leo, only approximately 2% of the cubs reach reproductive age. Drought and floods, predators, parasites, infanticides, epizooties, disruptions of the social group. accidents and the like take their toll. The lucky Serengeti lioness who survives until she comes in estrus is equipped with reliable sensors that allow her to pick up information that matters and to behave efficiently in accordance with the complementary information she garnered from the related group of females within which she has grown up and with which she will later raise her first litter. Whatever the development of this individual may have been, what matters is whether or not she eventually reproduces successfully or contributes to the reproductive success of her siblings. Suppose that, while this lioness is nursing her first litter, a new male happens to displace the resident male and take over the pride. The newcomer will kill the cubs and mate with the lioness who, in such cases, comes quickly in estrus and initiates the courtship ritual. The new litter may have better chance of survival, although it is by no means certain.

The proponents of biosemiotics claim that the whole biological cycle that has been outlined above is a complex semiosic process that takes place both within the organism as it develops and matures, and externally through its interactions with its physical and social environments. They hypothesize that signs necessarily mediate all these processes while they characterize signs in terms of a few abstract relationships. However, the identification of appropriate preys, the coordinated hunting strategies that are characteristic of Felis leo, the monitoring and defense of the pride's territory, the selection of mates, the maintenance of the social bond and the establishment of the ranking order within the group, the collective raising of the young and their assimilating some specific environment-relevant knowledge that has accrued in the group such as the mapping of water holes or the behavior of the local prey, the role of carnivorous predation in the balance and fitness of the herbivorous population and the counterstrategies of the prey species — all these aspects of a successful life

cycle have been analysed, described and often manipulated in terms of perceptual processes, visuo-motor integrative circuits, hormonal functions and pheromones broadcasting, ritualised interactive behavior, genetic inclusive fitness and so on. One may legitimately wonder what kind of epistemological advantage is yielded through the translating of extremely complex representations of biological microprocesses into a discourse made of approximately a dozen words whose definition is so problematic that semantic debates are still raging among semioticians. Any consistent sub-set of semiotic concepts conceivably may provide an embryonic meta-language, a rare commodity in a context marked by disciplinary gaps which are generally considered a liability for the advancement of knowledge. But this translating does not seem to have any explanatory or heuristic value for biologists, still less so for physicists. It certainly blurs important differences and smooths rough edges. In so doing, it reduces information to a few semantic categories through which a redundant meaning is constructed. It brings a virtual closure to the counterintuitive discourse of scientific knowledge that keeps generating anxiety by upsetting long-held certainties that form the basis of the self. Perhaps the relative success of contemporary semiotics can be accounted for by its capacity to provide a virtual holistic perspective. In certain contexts, fallacies may indeed be temporarily adaptive, perhaps for their own sake. Some, now, would call "memes" such fallacies, a move that has not failed to challenge semioticians.

4. Theories by default?

The Idea is an organism, is born, grows and dies like organisms, renews itself ceaselessly. [...] Action is the servant of the Idea.

Jean Piaget (1915: 1)

"Meme", like "sign", is a notion by default. The intriguing constatation that the power of "ideas" or "habits" does not always serve the best biological interest of the organisms who hold them has haunted the human psyche for a long time. Memes and signs are posited because better explanations are lacking. The above quotation, from one of the very first writings by the young Piaget at the beginning of

World War I, The mission of the Idea, bears witness to the frustration of rational minds confronted to the power of myths and slogans. There has been a consistent discourse of alienation that construed the world of ideas as belonging to another order: divine interventions, spirits' influence, transcendant principles, inspirational or irrational causation, cultural norms, structural laws, emergent and evolving algorithms, and the like. Habits, on the other hand, have been sometimes refered to as forming a "second nature", thus indicating a quasi distinct ontology. From the Vedic texts and Plato, to modern reflections on myths, ritual and language, these seemingly unaccountable forces have been described as agencies that spread among humans and control their behavior. Traditionally explained in terms of supernatural interventions through evil possession or divine inspiration, these phenomena were bound to be recast in the context of evolutionism. Early formulations focused on language whose origin has always puzzled humanity. From Charles Darwin's tentative remarks on the evolutionary characteristics of languages and August Schleicher's explicit attempt to construe languages as evolving and developing organisms, there has been undercurrents among linguists who were not entirely satisfied by strictly functionalist view of language. In this respect, Saussure's notion of "langue" and Chomsky early positing of an "innate grammatical competence" were the result of inferring from linguistic behavior the necessary, but hypothetical condition that must be assumed if this behavior is to be understood. It is in this respect that these notions are "notions by default" since they are proposed because no better explanation can be found rather than because compelling evidence of their presence and action is available. They become objects of belief. The ontological status of both "langue" and "linguistic competence", and their Platonician overtone, have been hotly debated. Saussure himself struggled in notes he never wanted to publish with the contradictions implied in his notion of "langue" in which time was of essence while stability had to be assumed, and Chomsky progressively displaced the ontological locus of "competence" from the Cartesian to the Darwinian paradigm. In recent years, Terrence Deacon attempted a reactualisation of earlier evolutionary theory of language, using, somewhat defensively, the notion of "meme" as parasitic agencies and proposing a counter-intuitive perspective on the relation of language (and other behavioral algorithms) to brain characterized as being co-evolutionary. The "meme" is obviously for Deacon still a notion by default, and he has articulated

his scepticism through examining the conceptual interface between "memes" and "signs" (Deacon 1999: 1-2).

The meme "meme" has caught the attention of popularisers and there has been a constant stream of books which cash on the "outrageous" claim that humans are infected and manipulated by "invisible parasitic agencies" and that cultures are nothing but the symptoms of such infectious algorithms. In spite of these scientifically unsound speculations, some researchers have endeavored to use this general view as a source of algorithmic and epidemiological models aimed at investigating various aspects of animal and human copying behavior. Such on-going research will provide some grounds for assessing the validity and fertility of the meme hypothesis. If compelling scientific evidence emerged to meet the nagging age-long suspicion that human brains may be "invaded" by "ideas" that determine behavior which may or may not be adaptive from the point of view of human organisms, this new understanding would at the same time transform our views on signs and semiosis. These latter two notions were indeed devised to account by default for at least some of the phenomena the meme notion is meant to explain. Since semiotics is still a speculative and interpretative discipline, let us heuristically consider that memes and signs designate subsets of the populations that comprise the planet earth's ecosystem.

The lion pride which was evoked above does not have to contend only with preys, predators, diseases, droughts and the like. The various symbolic representations of their species and the behaviours they command among human populations have also an impact which can prove as deadly or as beneficial as anything else. In this respect, ideas and their ritualistic consequences, for instance, are agencies which are participants in the ecosystem dynamic of *Felis leo* as much as Tse tse flies or floods are. The fact that humans carry those ideas does not make any more difference than the fact that some preys may carry parasites which are lethal for the lions feeding on them. Lions, on the other hand, can at times be fatal to the ideas or memes that haunt their niches by destroying their carriers, in particular those who hold the belief that they are immune to feline attacks because of magic or because of utopian worldviews.

Indeed, the memetic hypothesis, which holds that cultures consist of populations of parasitic algorithms able to control their hosts' behavior so as to secure their own replication, does not suggest that memes are immune to the evolutionary constraints which apply to all other organisms and account for their diversity. Actually, as parasites,

the constraints that limit their survival and replication are compounded by the fact that the survival and reproduction of their hosts are prerequisites for their own success. In addition, following the logic of evolution, memes are bound to compete with each other, as well as, in some circumstances, develop forms of mutualism and symbiosis. It is likely that the consideration of memes as individual entities is a mere theoretical abstraction since there is more biological plausibility that memes always operate in complex micro-ecological combinations that show various degrees of resistance to the evolutionary pressures that come from the changing constraints of their hosts' environment.

Similarly sign processes must be assumed to be limited not only by each other's requirements for transmission capacity, redundancy cost and energy consumption, but also by the absolute thresholds of the organisms' available channels and behavioral resources budget. For instance, the cost of signalling must be carefully monitored from several points of view: energetic expense, time constraints, increased degree of vulnerability coming from the disclosing of the source of the signals and the status of the organism which produces it. Evolution has scooped out, so to speak, by elimination most blurred and ambiguous signalling processes. Early memetic speculations have generated some paranoid images inspired by science fiction rather than rational considerations. This can be expected when a notion emerges by default without any means for representation because of its elusive nature. Human imagination processes the trauma of new information, even if it is purely virtual, through available narratives which are often the only way to formalize a problem in terms of familiar data. Memes. like signs, are theoretical fictions extracted by abductive reasoning from reflective experience. They are Mendelian notions because the macro-level of resolution through which they are conceptualized does not make it possible to assess their genotypic structures visually or by any other measurable means. They are however both intellectually compelling and counterintuitive. The history of human knowledge provides countless examples of processes that were deemed immaterial simply because they were invisible. Memetic speculations should be seen as a step toward defining a new frontier of investigation rather than a theory that is either true or false. If memes are heuristically conceived as parasitic or symbiotic algorithms, they must be represented on the same level of resolution as biological signalling processes because it is at this level that they operate, possibly to exploit at their own advantage complex organisms' evolved adaptive signalling and motivational apparatuses. Then, the risk of being thus exploited

could be considered as one of the liabilities of these complex signalling systems. However, it is important to keep in mind that, as often occurs in evolution, some exploitations turn out to be adaptive through mutualism and symbiosis. Semioticians have produced detailed categorisations of signs without distinguishing with sufficient clarity those sign processes that are biologically adaptive from those that are culturally adaptive. There has been a tendency to understand the latter as a continuation of the former, as if they were genealogically related along an axis of evolutionary "progress". At the same time, such "progress" has been consistently assessed as a mixed blessing since the destructions (even self-destructions) committed on behalf of cultural imperatives appear to be out of step with any conceivable logic of survival or inclusive fitness. Memetic considerations offer an epochal conceptual opportunity to question these longheld certainties based on the simplistic notions of mimesis and semiosis. But this epistemological agenda will remain a mere virtuality until appropriate technological means and conceptual models enable the observation and representation of these evolutionary and ecological processes at their relevant level of resolution, that is, on the level on which natural selection operates. This is a necessary condition for evolutionary ecosemiotics to come of age.

5. Memes and MEMS: The new frontier

This fact — that enormous amounts of information can be carried in an exceedingly small space — is, of course, well known to the biologists, and resolves the mystery which existed before we understood all this clearly, of how it could be that, in the tiniest cell, all the information for the organization of a complex creature such as ourselves can be stored.

Richard Feynman (1999 [1959]:123)

Besides an intriguing paronymy between memes and MEMS — an acronym that stands for Microelectromechanical Systems — no attempt will be made here to relate these two notions with each other in any functional way. Naturally, technological ideas and their appl-

ications belong to the putative realm of memes and their presence in ecosystems' dynamic is all too obvious through their dramatic impacts, sometimes called the Baldwin effect. What will be simply suggested here is that MEMS first provide a powerful technological metaphor for the appreciation of the scale of resolution on which evolutionary ecosemiotic processes can be observed, represented and simulated, thus opening the way to a scientific revolution. 1965 Nobel prize Richard Feynman outlined in the 1950s a vision that merged the defining tool-making abilities of humans with their newly acquired knowledge of atomic and sub-atomic representations. His landmark lecture of 1959 to the American Physical Society, entitled "There is plenty of room at the bottom", initiated a movement toward extreme technological miniaturisation. While nanotechnological applications have started to revolutionize contemporary industry, medicine and information technologies, their potential for simulating neurological processes on a commensurate scale will undoubtedly open the way to forms of artificial semiotics in which the ecology of these processes will cease to be a purely speculative exercise but will address actual pressing problems the solution of which is bound to shed light on, and profoundly transform, traditional notions of communication and semiosis. All technological innovations have profoundly impacted the human perception, conception and manipulation of the environment and have altered its ecosystems' communication webs. Since Feynman's days, MEMS have come of age. They are mass constructed on micrometers scales. They can sense, control and actuate. They can operate individually or in arrays and generate effects on the macro scale.

All the interactive processes which are phenomenologically described or simply grossly categorized as signs in the semiotic literature are grounded on the perceptual and cognitive apparatus of organisms who have evolved under a great variety of constraints. Some of these constraints have evolved at the same pace, thus creating the conditions for co-evolutionary processes. The factorisation of all these conditions for understanding a single organism at a given time is a daunting task that mostly eludes human cognitive capacities, which have been shaped by the necessity of handling only those factors that were relevant to immediate survival. Beyond a certain level of complexity humans must rely on their ability to simplify phenomenological data and to conceptually manipulate these simplifications so as to extrapolate from limited experience predictive models and pragmatic algorithms. This evolved competence itself is the object of intense

speculations and no compelling explanatory theory has emerged yet. However, a few assumptions can be reasonably made: the human organism relies mostly on visual information for its physical and social survival; the degree of resolution of its perceptual apparatus constitutes an absolute threshold for the information it can process; awareness (both perceptive and proprioceptive) applies only to a limited subset of this information; tool-making is a determining asset that evolution continues to select, as world wide conflicts between technology and demography tend to show.

All the main concepts of semiotics come from natural philosophy which is dependent on natural perception and awareness. Natural ecology factorises all the "objects" that have a perceptual or proprioceptive definition, that is, they are viewed or imagined as discontinuous representations in space and time, and their transformations usually appear as sudden rather than progressive and continuous because of the way in which adaptive biological clocks determine the phenomenology of time processes. In semiotic discourse, interactions at a distance are causally ascribed to the action of signs emitted from an "object" toward another. These "objects" are foregrounded with respect to a background of gases, waves, radiations, and possibly other forms of matter, that are invisible to the human perceptive apparatus because the latter has evolved within a range of niches in which this background can be treated as a constant, at least during the span of time involved in terrestrial mammalian evolution. In the theorising of organismic interactions, signs and their "parts" and "varieties" have been conceived as a virtual ecology that models and parallels the natural ecology which is accessible to human awareness. Actually, in its popularised forms, semiotics has variously created visions of the world in which natural and artificial "objects" are mixed with natural and artificial "signs" that fill the gaps, so to speak, of human perception. In some extreme cases, these virtual ecologies generate virtual ontologies that extend to the whole universe for the best or the worst of the populations which foster them. Naturally, most of these intellectual appropriations, while being adaptive to a degree at least in the short term, remain virtual and may be totally inconsequential in the sense that such narratives do not generate the conditions for new counterintuitive knowledge since they amount to presupposing that the "problems" are solved. Some brands of contemporary ecosemiotics simply implement such programs with conceptual and terminological adjustments to take into account the parallel discourse of utopian scientific ecology.

But some of these virtual constructs happen to be consequential on the scale of evolutionary time. The dialectic of modelling and observing coupled with tool-making abilities has lead humans beyond the naturally evolved limits of their visual system. This is a very recent event whose consequences have not yet fully impacted human worldviews and awareness. Humans have evolved as mostly visual organisms, that is, at least some individuals have survived long enough to reproduce and natural selection has streamlined well-adapted visual systems which provide sufficient vital information regarding kin recognition providentification and produce avoidance. regarding kin recognition, prey identification and predator avoidance. These adaptations apply equally well to the identification of edible vegetables in a forest and to canned vegetables in a grocery store. The same avoidance behaviors apply to a charging elephant and to a speeding car, with appropriate adjustments. But they do not apply to speeding car, with appropriate adjustments. But they do not apply to sorting out bacteria and viruses, nor to avoiding bullets. In addition to such limitations, this visual system's complexity and its sensitivity to extreme conditions and to aging is an important source of vulnerability. It is far from optimal and its shortcomings have prompted remedial strategies in the form of optical knowledge and technology. Seeing better, further and beyond the natural threshold of resolution has been a powerful motivation for tool-making organisms who come to understand the liabilities of their natural vision. The microscope opened up a realm of experience on a scale that had not been available to humans during the evolutionary process. Of course, scale is a relative notion. What may be non-perceptible for a visual system is a whole rich and diverse environment for another. The non-visible has been consistently construed as immaterial by human efforts to account for causes that elude observation. It would seem that, fundamentally, a notion by default is one that fills a visual gap. The semiotic discourse speaks of the actions of signs as agents whose ontological status is ambiguous, to say the least. The root metaphors of this discourse are relating to ballistic or to the logistics of traffic regulation and cybernetic communication. In the semiotics of communication, the medium is not a marked dimension of the models. But the medium is considered a "less-interesting" component. In the semiotics of signification, the medium is taken for granted. Signs and systems of signs, said to be made of "relations", circulate in a virtual universe, a sort of semiotic "ether", a signifying utopia. But all the processes described as biological sign processes are physical events necessarily involving energy consumption, occupation of determined space and time, and evolutionary risks in as much as organisms who signal

spend energy and disclose by the same token their location and current status. Furthermore, signalling apparatuses carry also a cost that has driven them toward extreme miniaturisation. Packing the maximum number of circuits in a minimum of space, preferably well protected without being too cumbersome, is an evolutionary imperative, a natural nanotechnology, that has shaped the semiotic organs and pushed their dimensions below the threshold of human visual and conceptual resolutions. The cost and potential pay-off of extreme signalling has been well theorized in the framework of the "handicap principle" (Zahavi, Zahavi 1997), but it is likely that this theoretical understanding is not limited to the most obvious cases observed in courtship behavior and mate selection.

In view of advances in the visualisation and understanding of neuronal processes, and in the parallel developments of nanotechnology (which, as it was pointed out above ultimately could enable the observation, representation and simulation of the former), it can be anticipated that the macro concepts of semiotic phenomenology will become obsolete and will be replaced by counterintuitive theories with unpredictable consequences. This is where lies, in my opinion, the contemporary excitement caused by the emerging notion of ecosemiotics. Semiotic algorithms are physically embodied or are nothing. As sets of instructions, they are endowed with a form of dynamism which is able to mobilise or exploit the motivational systems of the human brain with whose structures they are commensurate. Thus, they are bound to compete for space and energy, for survival and reproduction. Only within the conceptual framework of evolutionary ecology, including naturally these elusive but determining organisms that our current ignorance calls signs, symbols or memes, can ecosemiotics be properly established as a comprehensive science.

References

Bouissac, Paul 1985. Neurosemiotics, a definition. Recherches sémiotiques / Semiotics Inquiry 5(3): 323-325.

— 1993. Ecology of semiotic space: Competition, exploitation and the evolution of arbitrary signs. *The American Journal of Semiotics* 10(3/4): 143–163.

Calder, Andrew; Lawrence, Andrew; Young, Andrew 2001. Neuropsychology of fear and loathing. *Nature Reviews* 2(5): 352–363.

Clare, Anthony 1985. Where lies the science? Nature 318: 112-113.

Deacon, Terrence 1997. The Symbolic Species: The Co-evolution of Language and the Brain. New York: W.W. Norton & Company.

— 1999. Memes as signs. The Semiotic Review of Books 10(3), 1-3.

Deely, John 1998. Augustine of Hippo. In: Bouissac, Paul (ed.), Encyclopedia of Semiotics. New York: Oxford University Press, 51–53.

Feynman, Richard 1999. The Pleasure of Finding Things Out. Cambridge MA: Perseus Publishing.

Harré, Rom; Brockmeier, Jens; Mühlhäusler, Peter (eds.) 1999. Greenspeak: A Study of Environmental Discourse. Thousands Oak: Sage.

Hoffmeyer, Jesper 1996. Signs of Meaning in the Universe. Bloomington: Indiana University Press.

Homborg, Alf 1996. Ecology as semiotics. In: Descola, Philippe; Pálsson, Gísli (eds.), *Nature and Society: Anthropological Perspectives*. London: Routledge, 45–62.

Hull, David 1996. A revolutionary philosopher of science. Nature 382: 203-204.

Ivanov, Vyacheslav V. 1979. Nejrosemiotika ustnoj rechi i funkcional'naya asimmetriya mozga. In: Shelyakin, M. A. (ed.), *Semiotika ustnoj rechi*. (Acta et Commentationes Universitatis Tartuensis 481.) Tartu: Tartuskij Gosudarstvennyj Universitet, 121–142.

Kestenbaum, David 1998. Gentle force of entropy bridges disciplines. *Science* 279: 1848.

Koch, Walter 1986. Evolutionary Cultural Semiotics. Bochum: Brockmeyer.

Kull, Kalevi 2000. Copy versus translate, meme versus sign: Development of biological textuality. European Journal of Semiotic Studies 12(1): 101-120.

Lorenz, Konrad 1981. The Foundations of Ethology. New York: Springer Verlag. Maturana, Humberto R.; Varela, Francisco J. 1987. The Tree of Knowledge: The Biological Roots of Human Understanding. Boston: New Science Library.

McKellar, Gordon Bruce 1987. The place of socio-semiotics in contemporary thought. In: Steele, R.; Threadgold, T. (eds.), Language Topics: Essays in Honour of Michael Halliday, vol. II. Amsterdam: John Benjamins Publishing Company, 523-548.

Nöth, Winfried 1998. Ecosemiotics. Sign Systems Studies 26: 332-343.

Pennisi, Elizabeth; Roush, Wade 1997. Developing a new view of evolution. *Science* 277: 34–37.

Piaget, Jean 1915. La mission de l'Idée. Lausanne: Edition La Concorde.

Roush, Wade; Pennisi, Elizabeth 1997. Growing pains: Evo-devo researchers straddle cultures. *Science* 277: 38–39.

Saussure, F. de 1989. *Cours de linguistique générale*. Critical edition by R. Engler. Wiesbaden: Otto Harrassowitz.

Sebeok, Thomas A. 1968. Goals and limitations of the study of animal communication. In: Sebeok, Thomas A. (ed.), *Animal Communication*. Bloomington: Indiana University Press, 3–15.

Zahavi, Amotz; Zahavi, Avishag 1997. The Handicap Principle: A Missing Piece of Darwin's Puzzle. New York: Oxford University Press.

О знаках, мемах и микроэлектромеханических системах: в направлении к эволюционной экосемиотике

В данной статье поднимается вопрос: может ли семиотика придать какую-либо ценность экологии. Короткий обзор эпистемологического статуса семиотики в ее нынешних формах показывает, что феноменологические макроконцепции семиотики (которые исходят из разных теологических и философских традиций) не отвечают в своем объеме комплексности наук, составляющих экологию, и слишком редуктивны, чтоб успешно охарактеризовать те микропроцессы, посредством которых организмы развиваются и взаимодействуют. Тем не менее, имеются по меньшей мере две причины, позволяющие соединению семиотики и экологии быть научно продуктивным: а) именно свобода семиотического дискурса может быть существенным катализатором мультидисциплинарного взаимовлияния, — что является существенным условием для возникновения истинно холистической экологии; б) нынешний понятийный аппарат семиотики не "высечен на камне". Все ее концепты, теоретическое обрамление и модусы доказательств могут развиваться в соприкосновении с проблемами, которыми занимаются в эволюционно-экологических исследованиях. Семиотика как открытый эпистемологический проект остается интеллектуальной сокровищницей. открытой для множества возможностей. Вторая тема статьи имеет целью привлечение внимания к возможности переосмысления и развития семиотического исследования благодаря недавним научным открытиями. Предпринимается попытка показать, что антиинтуитивистские теории (такие, как меметика) и новый уровень технологии (как нанотехнология) позволяют экосемиотике подойти вплотную к решению разных задач, а не просто пересказывать экологический дискурс с помощью семиотических макроконцепций. Меметика и нанотехнология тут приведены не в качестве окончательных решений, а лишь как показатели возможных направлений в движении к всесторонней эволюционной экосемиотике, которая бы радикально изменила семиотический дискурс XX века и его идеологическую программу.

Märkidest, meemidest ja mikroelektromehhaanilistest süsteemidest: evolutsioonilise ökosemiootika suunas

Esmalt tõstatatakse käesolevas artiklis küsimus, kas semiootika võib lisada mingit väärtust ökoloogiale. Lühike ülevaade semiootika epistemoloogilisest staatusest tema praegustes vormides näitab, et semiootika fenomenoloogilised makrokontseptsioonid (mis pärinevad mitmesugustest teoloogilistest ja filosoofilistest traditsioonidest) ei vasta oma ulatuselt nende teaduste komplekssusele, mis moodustavad ökoloogia, ning on liialt reduktiivsed kaardistamaks edukalt mikroprotsesse, mille kaudu organismid arenevad ning on vastasmõius. On siiski vähemalt kaks põhjust, miks semiootika ja ökoloogia ühendus võib olla teaduslikult produktiivne: (a) just semiootilise diskursuse vahadus saab olla multidistiplinaarsete vastasmõjude oluline katalüsaator, oluline tingimus tõeliselt holistliku ökoloogia tekkimiseks; (b) semiootika praegune mõisteaparatuur ei ole kivisse raiutud. Kõik selle mõisted, teoreetiline raamistik ia põhjendusviisid võivad areneda kokkupuutes probleemidega, millega tegeletakse tänapäevases evolutsioonilis-ökoloogilises uurimistöös. Semiootika kui avatud epistemoloogiline projekt jääb võmalusterohkeks intellektuaalseks varamuks. Artikli teine teema on tõstatatud tähelepanu juhtimiseks hiljutiste teadusarengute poolt pakutavatele võimalustele semiootilise uurimise ümbermõtestamiseks ja edasiarendamiseks. Püütakse näidata, et vastuintuitiivsed teooriad (nagu memeetika) ning uus tase tehnoloogias (nagu nanotehnoloogia) võivad tuua ökosemiootika intellektuaalselt enam huvi pakkuvate uurimisteemade juurde kui seda on ökoloogilise diskursuse pelk ümberkirjutamine traditsiooniliste semiootiliste makrokontseptsioonide abil. Memeetika ja nanotehnoloogia ei ole siin muidugi esile toodud kui mingid kindlad lahendused, vaid lihtsalt kui suunaviited laiahaardelise evolutsioonilise ökosemiootika poole, mis muudaks radikaalselt 20. sajandi semiootilise diskursuse aluseid ning selle ideoloogilist kava.

Naming animals in Chinese writing

Han-liang Chang

Department of Foreign Languages and Literatures, National Taiwan University No. 1, Section 4, Roosevelt Road, Taipei, 106 Taiwan e-mail: changhl@ccms.ntu.edu.tw

Abstract. Naming, according to Sebeok, constitutes the first stage of zoo-semiotics. This special but common use of language actually inaugurates more complicated procedures of human discourse on non-human kingdom, including classification of its members. Because of language's double articulation in sound and sense, as well as the grapheme's pleremic (meaning-full) rather than cenemic (meaning-empty) characteristic (according to Hjelmslev), Chinese script is capable of naming and grouping animals randomly but effectively. This paper attempts to describe the said scriptorial "necessity of naming" (Kripke) in classical Chinese by citing all the creatures, real or fabulous, with a /ma/ (horse) radical.

Name, according to Thomas A. Sebeok (1975), is one of the six types of sign, and naming constitutes the first stage of zoosemiotics. This first stage is a logical and semiotic necessity that mediates culture and nature because whatever life species and form one sets to describe, he needs naming to encode it in the first place. Here "encoding" runs the pragmatic gamut of designating, referring to, and describing, as well as covering the semantic area of sense (Sinn) and meaning (Bedeutung). While zoosemiotics serves to mediate ethology and semiotics (Sebeok 1975: 87), naming, one could argue, links zoosemiotics and biosemiotics in terms of language function, and more precisely, linguistic pragmatics.

In fact, the four areas of study of biosemiotics outlined by Claus Emmeche (1992): (1) the emergence of semiosis in nature, (2) the natural history of signs, (3) the horizontal aspects of semiosis, and (4) the semiotics of cognition and language, have to be accounted for by a

natural language which, in Emile Benveniste's words, is at once an interpreting and interpreted system (Benveniste 1981). Furthermore, to be an interpreting system, this natural language has to develop for itself a descriptive apparatus capable of mapping onto its object of study though it remains controversial whether or not there is a metalanguage and object-language distinction in biosemiotics. One could even assert, following Hjelmslev, that area (4) suggested by Emmeche, "the semiotics of cognition and language", serves as a metasemiotics to encode the previous three areas which are its objectsemiotics (Hjelmslev 1969: 121).² As Hoffmeyer and Emmeche (1991: 118) rightly observe, "Biological information is expressed through signs and should be studied as such, i.e. as a special case of semiotics, which we shall term semiotics of nature". The distinct but inseparable relationship between substance and form suggests the epistemological rupture between traditional versions of biology and their "informational" counterpart. Our co-authors allude (Hoffmeyer, Emmeche 1991: 117) to the etymological distinction between morphology and information to see how the idea of bringing something into form in the Latin verb informare already implies an explanatory metasemiotics in biosemiotics.

This meta-semiotics, or meta-language, if one wishes, according to our co-authors, is code-duality, i.e., "the ability of a system to represent itself in two different codes, one digital and one analog". (*ibid.*: 126). The hasty equation of the special feature of living organisms to a meta-language may need an explanation, but this formulation lies at the core of Hoffmeyer and Emmeche's model which has the explanatory power for both nature and culture, life and language. Witness how they describe culture in the same language: "Thus, culture may be seen as built on the code-duality of digital language and analog 'reality'" (*ibid.*: 128).

³ Elsewhere Emmeche and Hoffmeyer (1991: 6) define semiotics of nature the "construction of the analogy between language and the living nature".

¹ Note that in Emmeche (1994: 126) the author leaves out language when he asserts that biosemiotics "concerns itself with signs in biological systems, ranging from communication among animals to the individual cell's genetic code as a sign system of its own".

² Hjelmslev (1969: 121) points out that "the semiologist who describes semiotics that are not languages will be able to make that description in a language", and that "should this not be the case, the semiotic that is used will in any event always be translatable into a language".

This code-duality serves as a model, a master code that manifests itself in both nature and culture, as succinctly represented in the diagram showing the digitalisation of DNA and language (Figure 1).

| primary digital secondary system | | DNA | |
|--|-----|---------------------------|-----------------|
| digital system | | no | yes |
| Language | no | inanimate nature | life sphere |
| | yes | artifical intelligence | human sphere |

Figure 1. The double digital system of nature (modified from Hoffmeyer, Emmeche 1991: 155).

Elsewhere Emmeche and Hoffmeyer observe,

Life has its own 'language'. This language, furthermore, resembles human language in one very essential characteristic: it is built upon a digital code, the code of DNA. Now the Saussurean distinction of parole and langue is a distinction inside language — i.e., both parole and langue belong to the linguistic sphere of the digital code of words. Yet, the phenotype — like the species — is of blood and flesh, and as such its eventual communication belongs to the universe of the analog code. (Emmeche, Hoffmeyer 1991: 31)

In talking about naming animals, I would like to take a cue from this observation of self-reference and code-duality, but freely appropriate them with an anthropo-semiotic transposition. The animal I shall be talking about is the horse, and the code-duality phenomenon I shall be introducing is classical Chinese writing.⁴ Hoffmeyer and Emmeche

⁴ Humans receive information with their senses: sounds through hearing; images and text through sight; shape, temperature, and affection through touch; and odours through smell. To interpret the signals received from the senses, humans have developed and learned complex systems of languages consisting of alphabets' of symbols and stimuli and the associated rules of usage. This has enabled them to

assert that self-reference is a fundamental of life, and any system "must be able to construct a description of itself" (Hoffmeyer, Emmeche 1991: 126). However, I shall transpose this to the opposite cognitive realm, i.e., how human beings refer to the horse rather than how it refers to itself. In fact, insofar as scientific meta-language is concerned, and insofar as the observer and the observed are homogeneous, self-reference and other-reference make little distinction in my paper.

Not a biologist, I have chosen to pick up the written form rather than the biological substance of "horse" for reasons that are discursive rather than scientific. I should like to register my paper in a critical discourse which draws on heterogeneous sources, all of which, however, fall under the heading of a general semiotics. Let me begin with an interesting anecdote, the Russian film theoretician Sergei Eisenstein (1949) was once fascinated by the hieroglyph of horse. Although he believed, rightly, that the original features of hieroglyph can no longer be recognised today, they are crystalised in the present form of writing, i.e., the ideogram (Chang, 1988, 1996). Eisenstein's compromise is to leave that poor little horse alone, sagging its lovely hind legs pathetically. Witticism notwithstanding, the anecdote calls our attention to the process of symbolisation of iconic signs and possibly suggests a special kind of the interaction of analogical and digital forms of language information processing.

The second source that serves as an intertext is Claude Lévi-Strauss's discussion of the naming of four domesticated animals that mediate nature and culture, non-human and human, namely, the birds, the cattle, the dogs, and the horses. In his curious argument, Lévi-Strauss christens birds as "metaphorical human beings" dogs "metonymical human beings" cattle "metonymical inhuman beings" and racehorses "metaphorical inhuman beings" (Lévi-Strauss 1966: 207). Their psycho-sociological differences can be found on the plane of naming: names of birds and dogs are derived from language

recognize the objects they see, understand the messages they read or hear, and comprehend the signs received through the tactile and olfactory senses. The carriers of information-conveying signs received by the senses are energy phenomena — audio waves, light waves, and chemical and electrochemical stimuli. In engineering parlance, humans are receptors of analog signals; and, by a somewhat loose convention, the messages conveyed via these carriers are called analog-form information, or simply analog information. Until the development of the digital computer, cognitive information was stored and processed only in analog form, basically through the technologies of printing, photography, and telephony.

[langue] and thus of paradigmatic character; those of cattle and horses from speech [parole], being taken from the syntagmatic chain. Lévi-Strauss then neatly situates the four animals in a semiotic square (Figure 2), showing their contradictions and contrarieties.

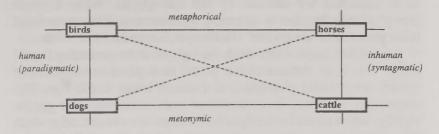


Figure 2. A system of naming animals (from Lévi-Strauss 1966: 208, modified).

It is obvious that Lévi-Strauss's conceptualisation is based on a rather rigid dichotomies between language and speech, syntagmata and paradigmata, metonymy and metaphor, because the roles of mediation of the four domestic animals can be easily transposed and exchanged in different socio-cultural contexts. There are several implications in the structural anthropologist's finding. First, the appellation of animals by proper names can only be an extreme form of domestication and by no means of the concern of zoosemiotics or biosemiotics. Second, the act of naming has extended from common names of animals to proper names and thus put into question the necessity of naming (Kripke 1972). But Saul Kripke has argued, "[C]ertain general terms, those of natural kinds, have a greater kinship with proper names than is generally realized." These include "various species names, whether they are count nouns, such as 'cat', 'tiger', 'chunk of gold', or mass terms such as 'gold', 'water', etc." (Kripke 1972: 327). Strikingly, all the four animals cited by Lévi-Strauss have entered classical Chinese script via the identical function of iconicity and have become cardinal morphemes for an infinite process of grammaticalisation and semanticisation. At least in ancient China, the domestication of real animals by writing witnesses an important transition of cultural history and the birth and sophistication of literacy. This phenomenon is complicated by the totemic trace that /ma/ or [horse] has become a common family name, and quite a large of number of men have horses, mostly stallions and thoroughbreds, as their first names.

Finally, this prolonged digression brings us back to co-authors Hoffmeyer and Emmeche. Earlier I mentioned their code-duality principle of life and language. It may not be a coincidence that they have touched upon the non-alphabetical writing system. "The distinction between analog and digital codes is certainly not a simple one, as is illustrated for instance by the hieroglyphs. While a single hieroglyph may be taken as an analog representation, it becomes digital when presented in written text" (Hoffmeyer, Emmeche 1991: 130).

Let me then begin with a single hieroglyph, that representing [horse] /ma3/. This is an instance of one of the most primitive categories of ancient script called pictograph, in Peircean terms, iconic sign. This single sign is already a self-contained unit, consisting of a graphic signifier which closes on the signified concept, or more precisely, which directly maps onto the semantic level without the mediation of a phonetic signifier. A sign like this is motivated and, according to Louis Hjelmslev (1959), "pleremic", i.e., semantically-full, as opposed to the alphabetical script based on the phonemic or syllabic level which is "cenemic", i.e., semantically-empty. The connection of the horse's signific <ma> to its phonetic /ma3/ may have been a historical accident or marriage of convenience. The phonetic aspect, to be sure, can be segmentalised into smaller units, an initial and an ending, as well as the suprasegmental tone, so can be the graphic aspect segmentalised into graphemic components. But neither of these smaller units has a signfunction. The iconicity of simple pictographs conforms to what Hoffmeyer and Emmeche have termed "analog representation".

Then the next problem would be how a single hieroglyph can become or will become digital in the written text. Our authors are obscure at this point. It may refer to the computerised conversion of analog to digital in processing written text which actually is some kind of transcription of speech, as suggested by the popular term of "written language". The assumption is, of course, the much-abused logocentrism which suggests the tyranny of speech. In fact, one of the most popular forms of written Chinese processing usually begins by (1) alphabetising the non-alphabetical script; (2) parsing and tagging the alphabetised script as if it were English. Other than this, processing Chinese script is extremely puzzling and its input problem is entirely different from that of English and any other alphabetical script. For one thing, the pictographic aspect is made complicated by large numbers of homophones and homonyms. The 40,000 strong words (or characters) in the imperial dictionary compiled in the early 18th century and the 50,000 modern words in use today have only some

400 sounds.⁵ Recent advances have witnessed the digitalisation of the analog script by means of algorithm and other techniques. Unfortunately, achievements so far have been limited to the cognition and processing of individual characters or images, and have not been able to deal with issues of syntax and discourse without alphabetisation. Rather than getting into these, I shall try to tackle the problem of signification by analysing the horse icon. One may recall that Peirce already introduces the concept of interpretant to mediate the sign and its object. The interpretant attributes an "imputed quality" (semantics) to the object which is realised in the sign via the latter's "material quality" (Peirce 1982, 3: 66). The idea of interpretant suggests, among other things, that it requires shared knowledge among users who accept the sign to be used as such. This enables the pictograph to lend itself as morphographeme to form a more complex sign, such as an ideograph, or is loaned to represent visually a morphophoneme, morpheme, or lexia which does not have a grapheme and graphic sign of its own. In both cases, the iconic sign either transforms into an indexical sign or is appropriated as a symbolic sign.

Thus the original iconic sign <ma> is appropriated as a morphographeme and added to another loaned morpho-grapheme which no longer has any semantic function but serves as a morphophoneme. Now an infinite number of horse family members, so to speak, are engendered. These are almost always ideographic, composed by a morphographme of horse <ma>, and a morphophoneme, which is taken randomly from the paradigmatic category, to differentiate one horse from another in pronunciation. They can be classified into at least four groups (Figure 3).

Group 1 consists of some dozen words referring to different kinds of horses, such as the cluster of *liu*, *hua*, *jun*, *ji*, *qi*, *jiao* all denoting thoroughbreds; and the cluster of horses in different Umwelts, such as *can* [left horse of a war chariot], and *fei* [right horse of a war chariot], *yi* [stagecoach horse].

Group 2 include words which "refer" to animals which are perceived, perhaps mistakenly, as belonging to the horse family, such as *luo* [mule], *lyu* [donkey], *luo* [camel] or [llama].

⁵ An international research group was formed in New York in 1976 called the Chinese Language. Computer Society to dedicate itself to Chinese information processing (Yu et al. 1988).

Group 3 contains verbs with a horse morpheme but transformed into verbs, such as *tuo* [carry {on horseback}], *qu* [drive], *jia* [steer], *shi* [drive], *qi* [ride]. The transposition of nominal system to verbal system is made possible by metonymical contiguity.

Group 4 comprises of some curious instances where a morphophoneme added to the [horse] totally erases both the denotation and connotation of horse. An example is *pian*, meaning [cheat].

Figure 3. Classes of words with a <ma>/ma3/ [horse] morphographeme.

Now these four clusters are all generated from two steps. The first step is the transformation of the horse icon from the graphemic level to the morphographemic level; and the second step, paradigmatic substitutions from within the existing language, in particular, lexical system. The principle of differentiation is arbitrary and make-shift. One could say that it is both necessary and contingent; in other words, it is arbitrary a priori, but conventional a posteriori.

Words in Group 4 indicate the script's tendency towards arbitrary symbolisation. It is made possible by the generation of new graphic signs, either through addition or through loan. This category now constitutes the largest group of Chinese words. They can be called hypographs. The hypograph is governed by the principle of appropriation, which allows individual graphic signs to bear secondary meanings. Sometimes, the "signific" of a graph is loaned to coin new graphs; other times, the "phonetic" is loaned. There are also occasions

when the whole graphic sign is loaned by virtue of homophonicity. This multiplication of characters and usages is acclerated by graphoand phono-syntaxisation. Grammatically, most deictics, anaphoras,
prepositions, postpositions, and conjunctions that contribute to
characters' distribution on the axis of syntax fall into this category.
Today the expression which consists of two reduplications of the
horse and tiger icons, /ma/ /ma/ /hu/ /hu/, literally [horse] [horse]
[tiger] [tiger], means, however, "floppy". And the expression /ma/
/shang/, literally [horse] [up], means "immediately". Such expressions
are extremely popular in spoken Chinese. Their generative-transformational process can be certainly approximated by digitalisation,
but the mystery of their etymology cannot be explained by any
method known to us.

References

- Barthes, Roland 1967. Elements of Semiology. Trans. Lavers, Annetten; Smith, Colin. New York: Hill and Wang.
- Benveniste, Emile 1981. The semiology of language. In: Genette, Ashby; Russo, Adelaide (eds.), *Semiotica, Special Supplement*, 5–23.
- Chang, Han-liang 1988. Hallucinating the Other: Derridean Fantasies of Chinese Script. (Working Paper 4, Fall 1988). Milwaukee: UW-Milwaukee, Center for Twentieth Century Studies.
- 1996. Semiographemics: A Peircean trichotomy of classical Chinese script. Semiotica 108(1): 31–43.
- Eisenstein, Sergei 1949. Film Form: Essays in Film Theory. Leyda, Jay (ed.). New York: Harvest-Harcourt Brace Jovanovich.
- Emmeche, Claus 1994. The Garden in the Machine: The Emerging Science of Artificial Life. Trans. Sampson, Steven. Princeton: Princeton University Press.
- Emmeche, Claus; Hoffmeyer, Jesper 1991. From language to nature: The semiotic metaphor in biology. *Semiotica* 84(1): 1–42.
- Hjelmslev, Louis 1959. *Essais linguistiques*. (Travaux du Cercle linguistique Copenhague 12.) Copenhagen: Akademisk Forlag.
- 1969. Prolegomena to a Theory of Language. Trans. Whitfield, Francis J. Madison: University of Wisconsin Press.
- Hoffmeyer, Jesper; Emmeche, Claus 1991. Code-duality and the semiotics of nature. In: Anderson, Myrdene; Merrell, Floyd (eds.), *On Semiotic Modeling*. Berlin: Mouton de Gruyter, 117–166.
- Kripke, Saul 1972. Naming and Necessity. In: Davidson, Donald; Harman, Gilbert (eds.), Semantics of Natural Language. Dordrecht: De Reidel, 252–355.
- Lévi-Strauss, Claude 1966. The Savage Mind. Chicago: University of Chicago Press.

Peirce, Charles Sanders 1982. Writings of Charles S. Peirce: A Chronological Edition. Vols. 1–4. Fisch, Max H.; Moore, Edward C.; Kloesel, Christian J.W. (eds.). Bloomington: Indiana University Press.

Sebeok, Thomas A. 1975. Zoosemiotics: At the intersection of nature and culture. In: Sebeok, Thomas A. (ed.), *The Tell-Tale Sign: A Survey of Semiotics*. Lisse:

Peter de Ridder, 85-95.

— 1994. An Introduction to Semiotics. Toronto: University of Toronto Press.

— 1997. The evolution of semiosis. In: Posner, Roland; Robering, Klaus; Sebeok Thomas A. (eds.), Semiotics: A Handbook on the Sign-Theoretic Foundations of Nature and Culture. Berlin: Walter de Gruyter, 437-446.

Yu, Wellington C. P; The Hoon-Heng; Low Hwee-Boon; Yan Xin; Gao Fang 1988. A Historical Advancement of the Chinese Language Computing. Computing Processing of Chinese and Oriental Languages 4(3): 57-81.

Называние животных в китайском письме

Согласно Себеоку, называние составляет первый этап зоосемиотики. Это специальное, но в то же время обычное употребление языка ведет к более сложным процедурам (в том числе и классификации) человеческого дискурса, касающегося внеположенного человеку мира. Поскольку язык артикулирован вдвойне (в звуке и в мысли) и по причине скорее плерематического чем кенематического (в терминах Ельмслева) характера графемы, в китайском письме имеется возможность называть и группировать животных случайно, но в то же время эффективно. Данная статье пытается описать скрипториальную "необходимость называния" (Крипке) на классическом китайском языке, рассматривая всех животных, как реальных, так и сказочных, в названии которых встречается основа /ма/ (лошадь).

Loomade nimetamine Hiina kirjas

Nimetamine, nagu ütleb Sebeok, moodustab zoosemiootika esimese etapi. See erakordne, kuid levinud keelekasutus juhatab tegelikult sisse inimriigist väljapoole jäävat puudutava inimdiskursuse keerukamad toimingud, sealhulgas ka sellesse kuuluva klassifitseerimise. Keele topeltartikuleerituse tõttu helis ja mõttes ning ka grafeemi pigem plereemilise (tähendusliku) kui keneemilise (tähendustühja) iseloomu tõttu (nagu väidab Hjelmslev) on Hiina kirjas võimalik loomi nimetada ja rühmitada juhuslikult, kuid samas tõhusalt. See artikkel teeb katse kirjeldada eespoolmainitud skriptoriaalset "nimetamise paratamatust" (Kripke) klassikalises hiina keeles, käsitledes kõiki olendeid, nii tegelikke kui ka muinasjutulisi, kelle nimes esineb morfografeem/ma/ (hobune).

Metaphors of nature and organicism in the epistemology of music: A "biosemiotic" introduction to the analysis of Jean Sibelius' symphonic thought

Eero Tarasti

Department of Musicology, University of Helsinki, Vironkatu 1, 00014 Helsinki, Finland e-mail: eero.tarasti@cc.helsinki.fi

Abstract. Metaphors of nature and organism play a central role in the epistemes of the Western culture and arts. The entire project of the 'modern' meant a separation of man from the cosmos and its laws. Signs and symbols are thought to be arbitrary and conventional social constructions. However, there are many returns to iconic imitations of nature and biological principles also in such an esoteric art as music. One of the highest aesthetic categories in Western art music is the so-called 'organic growth' which particularly manifests in symphony. The concepts of 'organic/inorganic' can be used as analytic terms, whereby one might even compare such composers as Jean Sibelius and Gustav Mahler. Music is said to be 'organic' when (1) its theme actors live in their proper Umwelt (or isotopy); (2) all music material stems from the same themes (it is innerly iconic); (3) all musical events follow each other coherently (inner indexicality or the principle of Growth); (4) music strives for some goal (temporality). Moreover the Uexküll idea of a particular Ich-Ton of every organism can be turned back to music. Hence we can say that every musical piece is like an 'organism' which has its Ich-Ton determining which signs it accepts and how it acts in the musical environment of its own and formed by other musical works.

1. On the musically "organic"

A crucial part of the aesthetics of Western art music deals with the concepts of the organic and organicism. In a still broader context,

music is connected to the episteme of "nature". According to Claude Lévi-Strauss, by music we become conscious of the physiological roots of our being. In learned music, a special "pastoral" style was developed to portray nature. For example, many of the so-called topics of the classical style relate to nature and the outdoor life, such as the horn signals in Weber and at the opening of Beethoven's Les adieux. When Adorno said that "Sibelius' music is all Nature" (Es ist alles Natur), this statement referred to many things, but for him it was overall a negative aesthetic category in the musico-social situation in 1937. Closer inspection shows, however, that Jean Sibelius' work ranks alongside the "Nature music" of Beethoven's Pastoral Symphony and the overture to Mendelssohn's A Midsummer Night's Dream. The inconsistency in Adorno's thinking was that, when Sibelius evoked nature it was doomed immediately, but if Mahler did it, then it represented the progressive Hegelian Weltlauf.

Nature appears in so many ways in the aesthetics of Western art music that only Arthur Lovejoy, in his classic *Nature as Aesthetic Norm* (1948), has attempted to list them all. Nature can mean human nature, the cosmic order, imitation of nature, truthfulness, objective beauty, simplicity, symmetry, balance, the primacy of emotion, spontaneity, naivety, primitivism, irregularity, avoidance of symmetry, the expression of artist's voice, the fullness of human life, the savage, the fecundity, evolution, and so on. All of these categories obtain in music.

Along with the development of the idea of absolute music — which meant instrumental music — there emerged the idea of the symphony and symphonism. This notion was in turn intimately related to the idea of organic growth. This aesthetic norm took hold, becoming an influential value in the entire tradition of symphonic music. In some countries, such as Finland, to write a symphony is still considered the high-mark of a career, whereas in France people shrug their shoulders and remark, "Symphonie, c'est lourd, c'est nordique". As is known, Debussy once left a concert hall in the middle of a Beethoven symphony, complaining "Oh no, now he starts to develop".

According to Ernst Kurth there were two important lines of development in the history of Western art music. One was the periodic formal principle, based on the lied and the march and developed by Viennese classicism. It is characterized by clear-cut two-, four-, and eight-bar units, out of which more expansive musical forms could be composed. The other principle was linear art, independent of any strict measures and bar lines, which started with Palestrina's polyphony and

culminated in J. S. Bach's melodies, an example being the freely undulating line of the Chromatic Fantasy. These two principles were the basic forces of musical formation. In addition, for Kurth music was kinetic energy. The aural, manifest form (signifier) of music was not essential; music only appeared by means of or was represented by it. Thus, all of music approaches the status of "nature" if one interprets the latter in a Bergsonian way as *élan vital*, or living energy. For Kurth music was "organic" when it followed a free motor impulse. Quadrangular, periodic rhythm was for him something artificial, a kind of "cultural" filter overlaid upon nature, even though it was based on corporeality in the sense of singing and marching.

At approximately the same time as Kurth, another music theoretician in the German field, Heinrich Schenker, developed his own conception of tonal music, which was also based on "nature". Nature was for Schenker the triad, produced by the natural overtone series, which he called the "chord of nature" (*Urklang*), whose intervals were filled by a primal melodic line plus a bass, together forming the *Ursatz*. Prolongation of the latter by means of artistic improvisation produced the only "good" music. Good music — that is, the only music worth analyzing and listening to — was of course tonal music and particularly German tonal music. Schenker drew his concept of organicism from Goethe and the latter's doctrine of the metamorphosis of plants.

Kurth and Schenker represent two different views of organicism in music. According to Kurth, organicity or "kinetic energy" arises primarily in the ebb and flow of the linear, horizontal movement of music, or in semiotic language, in its *syntagmatic* structure. By contrast, for Schenker the organic appears in the vertical movement from a deep structure towards the surface, from *Hintergrund* to *Vordergrund*, that is to say, in music's *paradigmatic* structure. From the syntagmatic perspective, the organic nature of music obtains by a certain arabesque movement. *L'art nouveau*, for instance, would be an ideally "organic" style period, with its twining arabesques in leaf-like shapes. From the paradigmatic view, organicism is seen as the inner growth and unfolding of music. Stefan Kostka, in his *Materials and Techniques of Twentieth-Century Music*, defines what the organic is in music, as opposed to the inorganic. In a sub-chapter called "Nonorganic approaches to musical form", he writes the following:

A traditional painting depicts something, and if the painting is a good one, every part of the canvas contributes to the effectiveness of the visual message

that the artist is trying to convey. In traditional literature every passage has its purpose — fleshing out a character, setting the mood, developing the plot, and so on. The same is generally true of music in the European tradition: the composition is considered to be greater than the sum of its parts, a work of art in which each passage has a function that is vital to the overall plan of a work. Think of any tonal work that you know well, and imagine what it would be like if its parts, themes, transitions and so forth were randomly rearranged. It might be interesting to see how it would turn out, but the piece would almost certainly not be as effective as a whole. (Kostka 1999: 152–153)

Kostka goes on to emphasize that twentieth-century music evidenced a widespread reaction against the traditional organic view, that is to say, against the idea of a composition as a teleological process. He singles out the so-called "moment" form of Stockhausen as the antithesis of organicity.

In a broader sense, however, the organicism of music can be connected with the general problem of the arbitrary, conventional articulation of a sign system versus the iconic or indexical articulation of same: all *grammars*, including musical ones, are in Saussurean theory arbitrary and constructed, based on a set of particular rules. These rules can further be made explicit and thereby artificially generate music endlessly, according to the model, or *langue*.

Contrary to this approach — which exemplifies the idea of nonorganic form — is the view of music as a design or Gestalt, terms used by the Canadian composer and music semiotician, David Lidov. Grammar, as a set of static rules, can of course never be organic. Only can design or gestalt be related to something living. In support of this view, we can note that reformers and inventors of musical grammars, such as Schoenberg, rarely number among "organic"-sounding composers. Nevertheless, in some cases even music written according to serial techniques can sound "organic", as do symphonies by Einojuhani Rautavaara.

This leads us to ask, At what point do we experience music as being organic? Is it the case that organicity, when experienced consciously, no longer seems as organic as it did before? In other words, is the organic an unconscious category, such that we should return to Rudolph Réti's ideas on the thematic process? In some cases it seems that organicity is the consequence of a certain activity of the musical enunciator, whether composer or interpreter. If too much deliberation goes into the composition, then the resulting music is no longer organic. Only when composition takes place in a trance or under inspiration is the result organic. Such a case would involve a special

dialogical relationship between the utterance and the act of uttering, between the text and its producer.

Yet even this definition does not help us to clarify what "organic" means as a quality of a musical text. Why is one composition organic and another one not? One explanation is that all mechanical repetition and potpourri-like formations are inorganic. This idea is advanced by Boris Asafiev in his intonation theory. As late as in Beethoven's symphonies "a composition became an organically and psychologically motivated whole, which unfolds as growth and development" (Asafiev 1977, vol. 2: 489). As a an example Asafiev points to the overture to Wagner's *Die Meistersinger*. It is a hidden symphony, whose parts — sonata allegro, andante, scherzo, and finale — have been blended together in such a way as to follow each other logically. They occur, one after the other, as various phases of a cycle, as a single line of development (Asafiev 1977, vol. 2: 490). Asafiev also calls such an organic form "dialectic".

If such a fusion is to be taken as particularly "organic", then it is exemplified by such pieces as Liszt's B-minor Sonata, Schubert's Wanderer Fantasy, Sibelius' Seventh Symphony, as well as the blending together of the first movement and scherzo in the latter's Fifth Symphony. Reminiscent of Asafiev's view is Carl Dahlhaus' interpretation of Beethoven's symphonic form, when he insists that musical form is not like a scheme that can simply be filled with individual themes (Dahlhaus 1985: 369). Beethoven did not compose "in" form but "with" form. He may, for example, shift transitional material or aspects of the main theme into a subordinate theme. The difference between Schubert and Beethoven is thus clear. In Schubert the form is associative, potpourri-like, but in Beethoven it is "developing variation" (which term Dahlhaus borrows from Schoenberg): the idea of connecting certain motivic passages to each other, is experienced by the listener as a musical logic and as a counterpart to mere association.

In semiotic terms, syntagmatic linearity alone is not sufficient — neither inner iconic similarity nor mere inner indexicality. The musical form has to be experienced as somehow goal-directed, or in Kantian terms, als zweckmässig, otherwise the music is not organic. Asafiev, too, pays attention to the goal-directedness of music, distinguishing between two types of telos or finalities in the symphonic literature: either the cheerful and free fusion of the personality with the cosmos (Beethoven) or spiritual pain and isolation amidst the crowd, oblivion, and tragic destruction. For Asafiev, musical finality

is achieved when some leading idea is revealed, which captures attention and out of which the growing waves of development emerge (Asafiev 1977, vol. 2: 483). This Asafievian ideal is almost literally realized in Sibelius. In the Fifth Symphony, for example, there is a struggle to the end between these two forms of finality, and the listener remains unaware of which solution the composer has chosen.

Thus, in order for music to be organic, it is not enough that there be motivic and thematic unity, i.e., that the music consist of more than fortuitous variation. Nor is it enough that these variations follow each other indexically and smoothly. Music has to progress towards some goal or *telos*; music must be directional. But is not all music as a temporal art directed towards something? Here we do not mean the primary temporality of music but temporality as "marked", as Robert Hatten (1994) might put it. In organic music, musical time is organized towards a certain goal.

How is this goal created? That is, How does a listener know that the music has a goal and a direction? Leonard B. Meyer, in his Explaining Music (1978), presents a theory of melody that emphasizes well-formed melodic shapes. There are certain musico-cognitive archetypes, the breaking or deficient fulfilment of which causes the listener to remain waiting for the right solution, the correct design. (On this view, Lidov's theory of design would be sufficient to explain the organic nature of music.) For instance, if we hear at the beginning a "gap-fill" type of melody, then a telos of music is created by the unfilled gap, which may not be completed until the very end of the piece. This tension keeps the music in motion and produces the kinetic energy, the catalysing impulse. An example is the opening of Sibelius' Fifth Symphony, where a motive sounds that is incomplete in three respects. Firstly, this motive, which Tawaststjerna calls a "bucolic signal", is first rhythmically syncopated and heard in a strange 12/8 meter. Secondly, its verse structure is irregular, as Lorenz Luyken has remarked (1995: 42-43). Thirdly, it is based on an open fifth-fourth intervallic shape, which causes the listener to remain waiting for these gaps to be filled.

Harmonically the music hovers around the six-four chord of the E-flat major, a device similar to that which occurs at the beginning of Beethoven's Sonata Op. 31 No. 3. Beethoven lets the phrase cadence on the tonic rather soon, however, whereas Sibelius delays it until the very end of the symphony. There we also hear the fifths and fourths filled with a stepwise scale passage and leading tones: it is the great and relieving climax of the whole work, all the more since we have

been oscillating between various tragic alternatives just before it arrives. The extremely restless and ambiguous theme on the Neapolitan chord ceases its wandering and is filled with a scale in E flat minor (which the sketches show to be one of the symphony's founding ideas). But even at the end of the symphony, where the tonic is confirmed with a cadence, rhythmic balance is still not reached, since not all of the cadential chords are on strong beats. There is a particular irony in this, a musical pun, the wish to show that this is not altogether too serious — a rare moment in Sibelius! The situation recalls what happens in a play when the clown returns and addresses the audience directly to recite the final words, or as in the closing morality segment of Mozart's Don Giovanni.

Music thus has its own *telos*, which sets energies in motion. They emerge from musical designs, gestalt qualities, of which we expect the completed form. According to Jan LaRue (1970), music has a special dimension of *growth* that binds all the other musical parameters together — this term in itself sounds rather "organic".

Can "organicism" arise from some other quality of the musical texture? For instance, Sibelius' music typically has fields that constitute the elements for the so-called "space dramaturgy" analyzed by Luyken (1995). Sibelius' music often seems to be driven into a kind of fenced-in area, from which there is no exit. The formation of such fields was already evident in early Sibelius, for instance, in En Saga (in Finnish: Satu), realized by means of a simple repetitive form. That is to say, the same melody or theme recurs until, by repetition, it loses its character as a musical subject that distinguishes itself from its surroundings, its musical Umwelt. The music itself becomes a subjectless environment. This is a particularly Sibelian way of deactorializing the music, so as to make it an impersonal and vegetative natural process in which no thinking or feeling subject can be seen. In the Fifth Symphony, such a field is formed by the chromatic lament motives in the first movement (score numbers J-M), which one hears for a very long time. (Such a situation is not far from Ligeti's field technique, which in turn is not the same as the "sonoristic" fields of the Polish school; see Mirka 1997.) But this predominantly "static" field arises from a continuous, micro-organic process. How does one enter into such a field, and how does one get out of it? In the Fifth Symphony the field is simply exhausted: one does not leave it by means of a musically determined "escape route", such as modulation (as occurs in the Second Symphony with the D-minor field in the Finale which leads into the parallel major).

The question of the organic nature of music can also be interpreted as a question of the right method of analysis. One can imagine that methods based on musical "functions" would better take into account the organic quality than do tectonic, segmentational, mechanistic models (to which unfortunately the major part of music-semiotic analyses belong). The basic problem of organic music does not at all concern how music can be divided into smaller pieces but rather how the music coheres.

Boris Asafiev viewed music as consisting of three main functions: *initium, motus*, and *terminus*. In Greimassian semiotics these correspond to the so-called aspectual semes: inchoativity, durativity, and terminativity. In Claude Brémond's narratology, they parallel the three phases of storytelling: virtuality, passage/non-passage to action, achievement/inachievement. According to Asafiev the musical organic process always presupposes these three basic phases. Quite similar theories have been developed elsewhere.¹

But there may be still other means by which music becomes organic. I have elsewhere introduced the biosemiotics and doctrine of Umwelt by Baltic biologist Jakob v. Uexküll, whose ideas have been provoking lively discussion among semioticians quite recently. What if we were to take his ideas seriously in music? As is known, his theory is based on the idea that every organism functions according to a preestablished "score" which determines the nature of its Umwelt. The organism connects to that world by two processes, Merken and Wirken. Every organism has its particular Ich-Ton which is determinant of its being and acting. We can see in this concept an analogy to music, and say that every theme, every musical motive, every intonation lives in its own, characteristic musical Umwelt. An organic composer takes into account expressly the relationship of a musical event to its musical environment. A good example of the relationship of a theme to its *Umwelt* would be the variations of the Andante theme in Beethoven's Fifth Symphony. There the main motive is continually shifted into new, interesting-sounding milieus; the listener pays more attention to these environments than to the theme itself.

In the classical tradition, melody and accompaniment are derived from the same material (as at the beginning of Schumann's C major Fantasy, where the accompaniment figure is the same as the

¹ Another, interesting "narratological" view of music can be found in the analysis manual of Ivanka Stoianova, used in her music courses at Paris University VIII. Stoianova takes her ideas mostly from her teachers in Moscow.

descending theme in the upper register), in which case the organic nature of music lies in the interaction of musical event and its environment. By contrast, the postmodern style — early examples of which are Poulenc's Concerto for Two Pianos and even Stravinsky's neoclassicism — uses quotation techniques and avoids the aforementioned organic unity. The environment of the theme must be alienating. That is to say, if the context is tonal, then the citation has to distinguish itself as something dissonant. And if the context is atonal, the citation has to be distinguished by its tonality. In Sibelius' Fifth Symphony, even in the earlier version of 1915, there is a strangely dissonant, piercing variant of the so-called Neapolitan theme which is superimposed on the "Swan theme" — this is one of the rare futurist and fauvist moments in all of Sibelius' output. There the theme really appears as if it were in a wrong isotopy or musical Umwelt.

Are there other means by which music can become organic? Wilhelm Furtwängler in his writings paid attention to the biological foundation of all music. However, the use of the term "biology" in music is metaphorical and thus as ambiguous as the concept of "nature" when applied to any art form. To Furtwängler, the so-called "absolute" music of the classical period was much more than functional, casual music. Dahlhaus remarks that Vienna's musically rich and many-sided *Umwelt* enabled the emergence of the classical style. But Furtwängler believes that there was something else as well:

It is not only casual music bound with life [...] it is not directly connected with the ballet, play or drama, but can also well be so. What it touches, it changes. It gathers into it the fullness of the entire organic life and reflects it there like in a mirror. It creates from itself the extremely broad world of independent musical forms — lied form, fugue, sonata form are only its basic types. It is able to do so because it is enough for itself. It naturally corresponds to man's biological presuppositions. (Furtwängler 1951: 27)

Furtwängler then asks, What are these biological presuppositions? They are based on the alternation of tension and relaxation:

The ascending and descending movement of tension and release reflects the rhythm of life: as long as we breathe, one activity is at rest, the other one in motion. The state of rest is more original and primal [...]. One of the basic doctrines of modern biology is that in complicated bodily activities [...] the relaxation of tension has a decisive meaning. (Furtwängler 1951: 27)

This is certainly an acceptable view. In my own theory of semiotics I speak of two basic modalities, 'being' and 'doing', derived from Greimas' model. But they also concern the definition of the organic in music (Tarasti 1994). What brings about being and doing in music? What gives us the impression that we either simply 'are' in music or that something is happening? These questions can be answered by observation of the temporal, spatial and actorial articulations in music. These articulations belong to the music of all cultures, not just to Western art music.

Furtwängler, however, relates 'being' (relaxation) and 'doing' (tension) strictly with tonality: "The state of rest in music in its full cogency is only produced by tonality. Only it is able to create an objectively existing state of rest (subjectively we can of course consider any personal impression as rest)". Furtwängler is thus bound to a certain musical ontology. The deepest level of music for him is always tonal, since it is based on the natural determining force given by the triad. It is the beginning and the end of everything.

Furtwängler's tonal ontology is a long-abandoned position, but in the context of our essay it has a certain meaning. Even some semiotically oriented scholars base their theories on a "biological" ontology, though without joining it any longer to tonality as a kind of ahistoric, universal principle. Ivanka Stoianova, for instance, thinks that musical form has two aspects: processual and architectonic. The processual aspect refers to musical enunciation, and the architectonic evokes the musical utterance as a ready-made text, as an art-work outside time. Thus we get two musical counterforces: the kinetic aspect, which is based on motion, change, process; and a static aspect, which is based on immobility, stability and architectonics. Musical form as a process, as aural manifestation, and the presence of an aural architecture are two sides of the same artistic activity.

Architectonic form — the external mould as described by Réti and Kandinsky — seems to be an effort to immobilize the stream of music. All musical style periods, from the classical to the romantic to the avant-garde, include such an immobilizing effect, which stems from architectonic form. The means of stopping the musical stream consist of hierarchic, historically determined formal schemes, whereas processuality appears in transformations and emergent contrasts, such as developing variation. For Stoianova, the 'being' of music is not precisely as it is for Furtwängler. It is not an ontological or teleological end-state of music toward which everything strives, but is rather the stopping of "normal", and hence, "biological", musical time.

In this sense, generative models are epistemologically contradictory. The idea of a surface that is gradually generated from a deep structure is based on hierarchies, and thus on something static and architectonic, hence something which stops the musical movement. This has as its consequence the static, atemporal character and artificiality of generative analyses. They are mechanistic elucidations of musical grammars using hierarchic axiomatic rules. But at the same time, the idea of a generative course contains the thought of a process, in which the immanent is in the end made manifest. The generative course thus refers to a basic semiotic force of the whole universe: the movement from content to expression. Whether Greimas' generative course or Chomskian schemes, generative models can make explicit the "organic" course of processes of meaning, but at the same time they contain an inorganic and architectonic aspect, which is a strange principle when applied to phenomenal musical experience and belongs in this sense to the project of the "modern".

We can try to clarify further what the "organic" in music is, with a more detailed formal and style analysis. A good example is provided by Veijo Murtomäki's (1993) study of organic unity in Sibelius' symphonies. He confirms the importance of organic metaphors among all the representatives of the so-called "dynamic" form theory in German musicology. He mentions Kurth, Schenker, Halm and the continuation of their thought in Schoenberg and even Anton Webern. The musical views of the latter are permeated by the metaphor of a biological organism that develops from a single, initial idea. From it emerges the inner unity (zusammenhangen) of music. (It is interesting to note even here the contradictory tendency of these reformers of musical grammars and pioneers of the "modernist" project, who used models of thought inherited from romanticism. In addition, Schoenberg and Webern were certainly different persons as theoreticians and composers. How a serial piece can be organic remains in this context unanswered.) In any case, Murtomäki lists in his study five ways in which music can be organic, with special emphasis on how Stoianova's immobilizing forms — such as sonata, symphony, string quartet, and so on — become organic or processual by means of cyclic technique. For Murtomäki, organicity obtains when a composition with more than one movement is made to sound like a whole, and this in turn is the same as cyclicity. Cyclic procedures can be either external or internal; that is, they can either unify the materials or join parts together: (1) first, movements may be linked by similar thematic openings; (2) either thematic "germs" or cells are moved almost imperceptibly from one movement to another, or themes appear in an easily recognizable guise in the later movements; (3) a special motto or *idée fixe* may appear in every movement; (4) the principle may be one of family unity: the parts are connected with metamorphoses of the same theme; (5) the most sophisticated way is continuous variation, a method of metamorphosis in which new ideas result from a process of transformation.

The last-mentioned case is the most exciting one. When do we experience in music that some process "generates" or gives birth to another event? Put another way, when do we experience that some event T is the consequence of a former event P? Does event T serve as the telos of event P? What precisely does this mean? The finale of Sibelius' Second Symphony is doubtless a good illustration of the idea of a telos, given the way that it is attained only after much struggle. But we can also imagine a process during which the listener does not know what will follow. Only when the result of T is heard after the process of P does one realize. Yes, this is exactly what everything prior to it was working toward. In such a case, one cannot say that T serves as a teleological goal of P, since it is perceived as such only after the fact.

How can we semiotically analyze and interpret such relationships? From a narratological perspective we can consider some event a subject and its goal to be the event, an object, that is searched for by the subject. At first the subject is disjuncted from the object, but then reaches or is conjuncted with it, taking it into possession. For instance, a theme in the dominant key "wants" to be united to the tonic. Yet this does not quite correspond to the truth, since the result of the metamorphosis can in fact be something which its preceding event is not aware of, so to say, or does not even "want". Only the musical superenunciator — the composer — knows that event T is a logical, organic result of process P. Or rather, the subject S is transformed into another subject S_1 or Q or X, when the music steps, as it were, into "otherness", when it shifts to some kind of non-being via the process of becoming. What is involved, then, is an organic, abruptly contrasting shift from a subject S to a subject Q. The subjects S and Q are felt to belong to the same musical Umwelt, in which we move from the Lebenswelt of subject S to that of subject Q.

To end this section on the metaphor of the "organic" as a musictheoretical episteme, we can note that the same thing happens with it as with the notion of "nature", discussed above. As Lovejoy's analysis and our cases show, "nature" can mean almost anything, both order and disorder. In the same way, organic unity and growth can mean almost anything whatsoever. Why, then, do we examine a phenomenon about which we cannot only come to the same conclusion as did the first-year student mentioned by Umberto Eco, who modestly presented "a short comment on the universe"? It is because nature and organic growth have meant something to philosophers and to musical scholars, especially to those studying symphonic thought. They are notions loaded with strong ideological concepts, whose precise meaning can be obscure, but which have been and are still used when we speak about essential things in music. We cannot ignore these terms only because of the uncomfortable fact that their linguistic usage is not always logical and coherent. Next I shall ponder their relevance to Sibelius, particularly regarding his Fifth Symphony.

2. Sibelius and the idea of the "organic"

One could respond to the challenge posed by Adorno, by claiming that Sibelius' music is "organic" whereas Mahler's music is "inorganic". In that case, the terms organic/inorganic would be primarily analytic concepts, such that "organic" music would be based on the following conditions: (1) All the musical actors live in their proper *Umwelt*; in semiotic terms, the themes move in their proper isotopies. (2) All the musical material stems from the same source; that is to say, thematicity, in semiotic terms, would be innerly iconic. (3) All the musical events follow each other coherently; this is LaRue's principle of growth, or the inner indexicality of music. (4) The music strives for some goal; this has to do with temporality and the aspectual semes of beginning, continuing, and closing.

Sibelius' music can be experienced in many ways as "organic". First, many think that the category of Nature is present therein. As Lorenz Luyken has stated, Sibelius' music refers to the pastoral quality, in the manner of Beethoven, Mendelssohn, and Wagner. There is much evidence, on the part of both Finnish and non-Finnish scholars, that the *poiesis* and *aesthesis* of his music is connected to Finland's nature. When Leonard Bernstein introduces Sibelius' mixolydian mode in the Sixth Symphony to an audience of young listeners in New York, he says that it evokes the lonely forests of Finland. When music semiotician Jean-Jacques Nattiez visited Helsinki in April of 1979, he spontaneously started to whistle the

opening motive of the Violin Concerto when looking at the frozen sea from the bridge of Seurasaari in Helsinki. But closeness to nature does not make music innerly, analytically "organic". It is only a category of reception.

What about the level of poiesis? Erik Tawaststjerna carefully studied the sketches of the Fifth Symphony and their elaboration. He connects the Fifth Symphony to Scriabin's ecstatic-mystical view of art and to the Russian composer's empathy with the cosmos. After quoting a poem by Scriabin, Tawaststjerna (1978: 18) says, "But it is not erroneous to think what appealed to Sibelius in Scriabin was precisely the 'cosmic' dimension of his music, which is related also to his efforts to break through the boundaries of tonality". This quotation has to be read in the light of our interpretation of the project of the "modern", insofar as it represents the detachment of man from "cosmos" and insofar as "organic" music means a return to this cosmic unity. For Scriabin it meant going to the extreme limits of tonality (albeit Prometheus closes with an F-sharp major tonic). But in Sibelius the "cosmic" style and rejection of the modernist project meant expressly the acceptance of tonality. The ecstatic E-flat major at the end of the Fifth Symphony is related to the finale of Musorgsky's Pictures at an Exhibition, which also cadences to a similar, waving, clock-like motive. From this we might infer that the organic style and the return to cosmic unity, in the philosophical sense advanced by Charles Taylor (1989) in his *The Sources of the Self*, is not always the same as the return to tonality. This engagement, this embrayage (Greimas' semiotic term), can also take place on levels of the musical text other than spatial ones.

Tawaststjerna's study in fact seems to prove Sibelius' organic symphonic logic is based upon composer's way of elaborating the material; it is clearly the category of *poiesis*. Tawaststjerna is moreover inclined to think that the organic quality of Sibelius' symphonies emerges as a result of a trance-like process guided by the unconscious inspiration of the composer. When discussing the creation of the Fifth Symphony he deals with many of the various ideas found in the sketches, which Sibelius used in his Fifth or Sixth Symphonies. He compares this process to a puzzle whose pieces are fragments of a mosaic "floor of the sky" (Tawaststjerna 1978: 61). In this phase the symphony still essentially appears as a paradigmatic table, and its elaboration is a completely rational, non-organic occupation. But then Tawaststjerna continues:

In the case of Sibelius I am inclined to consider his creative work an interaction of inspirational and intellectual components. Their relationship continuously varies. Basically he was dependent on his inspiration. He had his 'wonderful' trances [...]. The shaping of the themes seems to have happened intuitively. (Tawaststjerna 1978: 65)

Nevertheless, if we think of our aforementioned criteria for organicity, one might state that on a paradigmatic level the organic trait stems from the inner similarity of the musical substance. Tawaststjerna reduces all the motives of the Fifth Symphony to two: the so-called step motive and the swing motive. But even this is not enough: the material has to be put into a syntagmatically coherent order. Only then can we experience music as organic.

Erkki Salmenhaara, another Finnish Sibelius specialist, has a similar view of Sibelius' organic techniques. Like Tawaststjerna, he stresses that organicity emerges in the mind of the composer, who using musical criteria chooses from an endless group of paradigms those which are meaningful regarding the intended musical shape. In his study on the symphonic poem Tapiola Salmenhaara quotes the British scholar Cecil Gray: "The thematic materials in Sibelius [...] seem to regenerate in a way which the biologists call cell division: they are split and broken into seven theme units, when every bar of the original organism is subjected to a development" (Salmenhaara 1970: 37). Therefore under the conventional formal outline of music there looms another shape which is dynamic, processual, or, in our terminology, "organic". In the chapter on "Sibelius' Organic Principle of Variation", Salmenhaara starts to deal with the organic nature of the composer's logic: "By organic development it must be understood that various results of the development — different themes and motives are in an 'organic' connection with each other" (Salmenhaara 1970: 59). What is interesting here is Salmenhaara's term "results". Themes in organic music can be experienced as results of some process which is not the same as the telos, the Kantian Zweck. There are of course processes that from the beginning aim for a certain goal, but there are also processes whose result is not known in advance. For instance, the transition to the Finale of Beethoven's Fifth Symphony, the long pedal point on G, leads finally to the theme of victory, which is something like a product of this process: we know to expect something, but are not sure exactly what. The same thing occurs with

² The differentiation between the static and the mobile recalls Ivanka Stoianova's distinction between architectonic and dynamic forms.

the intermediate section of the *Waldstein*, which leads to the sunrise theme of the last movement. Sometimes the result of the process is quite amazing, as in Sibelius' *Karelia* music, where a long transition takes place before the theme bursts out: the national anthem of Finland. The result does not grow organically from the previous material but is a quotation justified by an extramusical program.

Salmenhaara also defines what is nonorganic music, one example being the variation sets of the classical style. In them the gestalt of the theme remains the same; it is just ornamented — think of Unser dummer Pöbel meint or Ah vous dirai-je Maman by Mozart. On the other hand, Salmenhaara emphasizes that in an organic variation what is crucial is not the goal of the process but the metamorphosis itself. "It is like a self-reflecting process: the main thing is not that the development form bridges among architectonic climaxes, but the aim is for continuous transformation, the constant turning of the motives into new shapes" (Salmenhaara 1970: 60-61). This latter comment is of great interest since it excludes telos from organicity: the organic transformation does not have a goal to strive for; rather, the variation becomes self-reflexive. What kind of phenomenal experience would this evoke? Doubtless a kind of static, slowly changing sound field. Has Salmenhaara unknowingly projected the Ligetian field technique onto Sibelius in order to see him as a representative of a certain avantgarde movement? If organicity were the same as Ligeti's field technique, that would place Sibelius within the panorama of the new music of the twentieth century. The listener easily experiences such fields as a kind of stasis, a limbo from which there is no exit. This situation undeniably occurs in Sibelius' Fifth Symphony, especially at score letters J and K. The Allegro moderato section of K-P, and also the fluttering, Mendelssohnian figuration of the strings in the last movement, contain such self-reflexive organic transformation.

It is essential to this line of reasoning that we speak about music as shapes or Gestalts but not as grammar, recalling David Lidov's two principles of "grammar" and "design". There are composers, such as Arnold Schoenberg, who have concentrated on reforming musical grammars. Then there are composers whose main contribution is at the level of gestalt, who make innovations even when the grammar remains the same. Debussy, Stravinsky, Sibelius seem to belong to this line. Therefore Adorno could not appreciate them. His hyperrational music philosophy is definitely bound with the project of the "modern" in the aforementioned philosophical sense. Music is grammar, conventional, arbitrary, and it has to maintain this aura of artifi-

ciality in order to be progressive. Music which functions via iconic shapes would mean a rejection of the critical distance and consciousness of the listener. Since over the course of time humankind has become disconnected from nature and cosmos, one must remain constantly aware of this primal negation and difference. The return to unity with the cosmos, with nature, would mean the return to a lawless and barbarous original state (the Germany of the 1930s is an example). It is always regression. The idea of organic music is precisely to return the listener to the cosmos, to natural principles which appear as the art of pre-linguistic gestalts. Organic music is prelinguistic, non-verbal, in the profound sense of the word. It is impossible to reduce Sibelius' music to the language-likeness of tropes or rhetorical figures.

There is, however, one difficulty in defining the organic, and it is clearly noticed by Salmenhaara when he says, "[...] organic transformation has one special feature which is difficult to analyze, namely, it is *musical* by nature. Precisely here we have the difference between the motivic techniques of Sibelius and Schoenberg. The music of the latter is theoretical and technical in nature rather than based on musical gestalts" (Salmenhaara 1970: 62). The twelve tones of a row can be manipulated in many ways which do not have a meaning-creating shape. Seen in this light, organic music is precisely music of *design*.

How, then, can we prove that music based on a complicated motivic technique is organic? Only a tiny part of all possible motivic transformations is really used. Only those motives which are musically meaningful are taken into account, and that is why the organic unity of these motives is also noticeable to the listener. The musical construction does not follow any external system — just purely musical logic.

Hence the term "organic" means the same as the "musically logical" which in turn means the "musically meaningful". So we have fallen to a circle. What does it mean for something to be "very musical"? Sometimes it means the rendering of the emotional content of music, or that the musical performance in some way touches or speaks to us. But if we say that a musical text is "musical", that reveals very little indeed. We cannot only look at the text, the score. We must consider the entire situation of musical communication, not only the utterance, but the utterer as well. Only the choice of the human "brain" or enunciator or composer can make any music organic. Thus, what is involved is a quality that is made manifest by

the musical enunciator, in the dialogue between musical material and the persons who deal with it. Insofar as the musical mind intuitively filters and shapes musical materials into a certain gestalt quality, music becomes organic. Neither mere mathematical structure nor grammaticality suffice to make music organic. Although utterances may be "well-formed" or "grammatical", we do not necessarily experience them as organic. Principles said to stem from the brain of the enunciator have been studied by statistic-mathematical methods in Russia, which methods are derived from the so-called "law of Zipf". The latter says that, when all the notes or words of an art work are counted, they can be shown to follow a certain distribution along the "Zipf curve". Using this model, one can determine when a work is overwritten or underwritten, that is, when it has too many or too few notes. Works written by a great master in one breath, as it were, follow the Zipf law better than those written in episodically. Here the question of the organic is shifted from the textual level into a cognitive question: How does the enunciator pick those elements which on the textual level will become organic?

To begin to answer this question, one might try to apply Uexküll's biosemiotic theory to music. As discussed above, each organism has its own *Ich-Ton*, which determines the kinds of messages it receives from the outside, from the *Umwelt* that surrounds it. If this concept were applied to music, it would mean that every composition is a kind of "model" of a living organism, the latter understood in a certain "as if" sense. The life of such an organism, its 'being' and 'doing', is guided by its view of itself, which helps the organism to choose according to its "inner" score those signs which it sends and receives. If a musical organism consists of motives, these motives constitute kinds of "cells" that communicate with each other, as happens in living organisms. This communication is completely determined by the inner organisation of the organism, its *Ich-Ton*.

Music is the symbolic description of this process. The musical organism that emerges from the brain of the composer somehow takes shape from a certain basic idea or isotopy, what Sibelius called an "atmosphere", which determines which motives are accepted into this inner process and which ones are rejected. When we observe this microlevel of musical "cells" the life of the musical organism, we can follow what some cell or motive or "actor" is doing and how it does so, that is, how it influences other cells. Sometimes the "act" of a motive at first goes unnoticed, becoming influential only later. Sometimes the composer decides upon the *Ich-Ton* of the work as

early as in the opening bars. For instance, the core motive of Sibelius' Fourth Symphony sounds at the very start of the work. In the same way, the "bucolic" horn signal at the opening of the Fifth Symphony is a "cell" which, in order to become a complete gestalt, needs to have its interval filled, and this is heard only at the end of the symphony. So we can say that, in music as in living organisms, one cell "calls out" for another. Precisely this type of inner process in a work makes it organic.

Organicity or organicism is therefore dependent on the enunciator's — i.e., the composer's — consciousness. In organic music, this consciousness in turn follows the biosemiotic principle by which motives communicate with each other according to a certain "inner" score. One may presume that the inner score is different in each work. But one may also claim that in certain respects it is always the same, as Schenker's, Kurth's, and Asafiev's theories assert. Nevertheless, the idea of an organic composition cannot be limited to a single, universal principle. For nature's scope of variation is unlimited, and thus always capable of producing new types of organisms. Basically, however, the organism always decides upon its own Umwelt or relationship to external reality. It is the organism that determines which signals, style influences, motivic borrowings, and so on that it accepts from the style of the time, from other composers, and even from itself. An instance of the latter occurs in Sibelius' moving materials from the Sixth Symphony to the Fifth. That is to say, the Ich-Ton of the Fifth Symphony, its "inner score", allowed certain signs to be shifted into its own "cells", while rejecting others.

We can now return to the thesis presented above, namely, that Sibelius' music is organic and Mahler's is not. The *Ich-Ton* of Sibelius' symphonies determines precisely which musical cells are accepted and adopted into the inner network of musical communication, that is to say, into the "community" of its musical actors. In contrast, Mahler chooses very heterogenous elements; his music's *Ich-Ton* is far more fragmentary than that of Sibelius — it is contradictory and "modern". Mahler's symphonies encompass everything, but do so without the aforementioned selection criteria of the *Umwelt*. His musical actors do not communicate with each other as intensively or as intimately as they do in Sibelius. Rather, Mahler's work is ruled by "unit forms", by topics and musical cells articulated by social conventions. His music adapts itself more to structures of communication than to those of signification.

One of the best-known recent interpretations of Sibelius' Fifth Symphony is the one by James Hepokoski (1993). His central concept for explaining formal issues in Sibelius is the so-called rotation principle. Hepokoski denies the relevance of traditional Formenlehre for Sibelius, since according to the composer his musical form grew from the inside out, as he said often to his secretary Santeri Levas (see Hepokoski 1993: 22). Hepokoski says that it is typical of Sibelius to use repetition to erase, so to speak, the linear time of a work; he does so by letting certain elements, motives, and entire sections recur cyclically again and again. Hepokoski thinks this phenomenon stems from the Finnish Kalevala recitation, as shown in the song Illalle (Op. 17 No. 6). There a figure of 11 notes is repeated 16 times! Hepokoski notices that the rotation idea occurs not only Russian but also in Austrian-German music, such as that of Schubert and Bruckner, In Sibelius, however, the rotation is a process rather than an architectonic scheme or mould. In this sense, such rotation suits well as an example of organic music. In Hepokoski's view, the rotational process starts with some musical statement that serves as the point of reference for later statements. The statement can be extensive at first hearing, containing various themes, motives, and figures which can even differ one from the other. It returns later, when it has been transformed a little, and it can return many times, such that it is heard each time more intensively.

In Hepokoski's theory the rotation principle in Sibelius is connected with the idea of a telos, that is, with the final climax of a piece as the goal of the musical process. Together, these two principles rotation and telos — help explain the form of entire works, such as the Fifth Symphony. From the perspective of organicism, Hepokoski's notion of rotation provides the inner iconicity of a work, and telos serves as the extreme point of maturation of the work, which, so to say, pulls earlier rotations toward itself, causing them to grow and transform. From the beginning, inner processes among musical signs aim for the climax. This view differs from Salmenhaara's, which stresses the self-reflexivity of the transformation process. Hepokoski emphasizes more the syntagmatic nature of music, whereas Salmenhaara adheres to the paradigmatic one. From a biosemiotic perspective, we can consider the telos of a symphony to be the same as its Ich-Ton, which is revealed only at the end. On this view, Sibelius' symphonies constitute symbolic portrayals of his "wonderful ego".

3. Organic narrativity

The present study would not be complete with our relating the organic principle to an important species of musical semiosis: narrativity. Narratologists succeeded in demonstrating that very different texts — texts extremely varied as to their material and to their external shapes — can be based on just a few narrative categories. Here we speak of the narrativity of a symphony on the level of form, not of aesthetic style. If Richard Strauss' Alpine Symphony and *Heldenleben* are narrative on the level of verbal reception, in Sibelius narrativity should be understood in a deeper sense, as a property of dynamic formal processes.

If music is organic, can it also be narrative? Is narrativity like language, rhetoric, grammar and other categories that separate the listener from the world of musical gestalts? Not at all — insofar as narrativity is understood in a broader sense, as conceptualized in Greimas' school. Narrativity is a way of shaping the world in its temporal, spatial, and actorial course. Does "organic" narrativity thus mean that the text is articulated according to some primal narration? That it is a story of man's conjunction with or disjunction from nature and cosmos? Narrativity covers many of the sign processes discussed above. Further, one might assume that, in certain forms, it is precisely the way in which man's Dasein imitates the cosmic principles of nature. Narration can of course focus on description and classification of the inner events of Dasein, but it can also be the way in which the world of transcendental ideas is concretized in temporality. As a temporal art, music is thus one of the best means of narrativizing transcendental ideas.

In closing, I return to Sibelius' Fifth Symphony, in order to make a narratological interpretation that relates to the aforementioned ideas of nature, the project of the "modern", and metaphors of organism. My interpretation stems from two listenings during which this narrative program was revealed to me. The first listening occurred at the beginning of the 1960s, probably at a concert given by the Radio Symphony Orchestra in Solemnity Hall of the University of Helsinki, under the direction of Jussi Jalas. Since I was a teenager at that time, my seat was quite near the front of the hall, on the right side, from which one could clearly see the conductor. Nothing remains in my mind from that performance except its climax: the *Largamente assai* at the end of the finale, the unison orchestral tutti on the note C. There

the dissonance is at its sharpest, and the listener does not at all know where this tragic development might lead — until soon after it the whole symphony cadences and turns toward the tonic E-flat major as its final *telos* (compared to which the E-flat tonic at the end of the first movement was not a real return to home). At this crucial juncture, on the C and its leading tone, the conductor raised himself to full height and trembled all over (something Sibelius is also said to have done; see Tawaststjerna 1978: 147). This corporeal sign has remained in my memory.

The second listening was in the summer of 1998 when Esapekka Salonen, visiting conductor of the Marinsky Theater in Mikkeli, including on his program the Fifth Symphony of Sibelius. By then I was already familiar with the piano score, which naturally deepened the experience. At that hearing, the true climax and solution of the work revealed itself as the events in score letter N, Un pochettino largamento, the E-flat minor section. The melody of that section is the first full theme-actor in the entire symphony, which is articulated in the manner of a lied, in periodic form and with a "normal" cadence. This theme is thus experienced as representing a kind of human subject that shows itself against the backdrop of "cosmic" views. As noted earlier, Sibelius' music often gives the impression of a landscape without any human protagonist. Here the subject enters the stage, and it is the suffering, sentimental subject of Schiller (1978), a subject disjuncted from its object and given to resignation. It is a Tchaikovskian, resigned self, whose story has come to an end and whose speech is finally cut off (N: 16), as if by the dysphoric weight of its emotion. It is a subject who is detached from the cosmos, and yet it is basically the same subject which we heard as early as in the previous movement, where it hovered restlessly, not knowing its fate. Tawaststjerna reduces it to another important theme grouping of the Fifth Symphony, the step-motive, which was one of the very first ideas in the work. Certainly these motives were earlier fragments of a subject, but here in the Un pochettino largamento section the subject steps into the foreground as a complete person who has suffered a catastrophe. At the end of the theme, the E-flat minor turns into major, which is like a deus ex machina solution to the threat of impending tragedy. The subject is rescued, so to speak, by being shifted to another cosmic level of nature. The latter is represented by the wellknown swing-motive, which according to Tawaststjerna belongs to the other central motivic group of the symphony. The association of this motive with nature is obvious already from the viewpoint of poiesis, as evidenced by Sibelius' diaries, in which he mentions swans in reference to this theme.

This theme thus symbolizes nature and cosmos for the whole symphony. But just when we have reached it, as a safe haven and salvation of the individual from tragedy, even this level falls into a crisis. The swing-theme is led into deeper and deeper dissonance via modulations that move still further away from the tonic. The themeactor whose fate we were following was thus not safe, as we had thought. What is now involved is nature's crisis, Sibelius' Götterdämmerung. The crisis culminates in the above-mentioned C, after which the music leads to a cadence on the tonic of E-flat major with many ensuing chromatic tones — an answer to the gap opened by the "bucolic" motive of the first movement. Therefore the answer which has been kept secret is finally revealed in full light. Perhaps representing a kind of rescue on the cosmic level, it is impossible describe this moment verbally. In any case, there remains yet one more surprise: six sforzando chords punctuate the ending, played by tutti orchestra. These resume the problem of the horn signal and its solution, but the effect is very surprising, lightening, consciously alienating — all is only play; we can sigh in relief.

Yet this description holds true only for the final version of the symphony. In the earlier version, from 1915, the subject-theme appears to the very end as detached, disjuncted from the cosmos, as an individual and alienated theme-actor who does not unite with the cosmic order. As a symbol of the modernist project, it constantly evokes it existence by means of dissonances. Its relation to the ambiguous Neapolitan motive is quite clear as early as in section D of the Finale, when the swing-theme bursts out and the subject-theme is heard as a savage, illogical, and dissonant counterpart, such as one hears in the riotous simultaneities of Charles Ives. There the subjecttheme obviously belongs to the same family as the descending and ascending leaps of fourths in the Neapolitan motive in the first movement (see B: 5-6). The impression is even one of bitonality, and was noticed at the first performance of the work. Otto Kotilainen spoke of a "strange, piercing signal which [...] gives an upsetting impression" (Tawaststjerna 1978: 141). The effect is completely modernistic, and it also represents, in the philosophical sense, the subject of the project of the "modern", which is alienated by its separation from the cosmos.

The gradual unfolding of the subject-theme in its various "rotations" is indeed one of the most characteristic events of the whole

symphony. It is the central narrative moment. In the 1915 version, the theme never seems to find its proper isotopy, its own Umwelt. It difference remains until the end, when it returns in the Un pochettino largamente, and even there it is still the tragic and isolated theme actor, who is destined for destruction. But in the Un pochettino largamente section it takes on an extremely appealing sensual shape, as if a last gesture is made to serve as the counterpart of the swing-theme. This is related to the idea of the return to the cosmos. In the 1915 version, this subject-theme does not merge with nature in the end, as it does in the final version of symphony. It remains as the pedal point of the strings, to remind one of its existence — even the six chords at the end are heard against this pedal. In the philosophical-semiotic sense, the 1915 version keeps to the modernist project in its narrative program. The separation of the subject from cosmos holds to the very end. By contrast, in the version of 1919 the subject fuses with the cosmic level. Thus, even in the narrative sense, this symphony represents the "organic" in music.

References

Asafiev, Boris 1977. *Musical Form as a Process*. Vol. 2. Trans. and commentary by Tull, J. R. (Dissertation at the Ohio State University.) Ann Arbor: University Microfilms International.

Dahlhaus, Carl (ed.) 1985. Die Musik des 18. Jahrhunderts: Neues Handbuch der Musikwissenschaft, Band 5. Regensburg: Laaber Verlag.

Furtwängler, Wilhelm 1951. Keskusteluja musiikista. Mäkinen, Timo (ed.). Porvoo: WSOY.

Hatten, Robert S. 1994. Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation. Bloomington: Indiana University Press.

Hepokoski, James 1993. Sibelius: Symphony No. 5. Cambridge: Cambridge University Press.

Kokkonen, Joonas 1992. Ihminen ja musiikki: Valittuja kirjoituksia, esitelmiä, puheita ja arvosteluja. Jyväskylä: Gaudeamus.

Kostka, Stefan 1999. Materials and Techniques of Twentieth-Century Music. 2nd ed. New Jersey: Prentice Hall.

LaRue, Jan 1970. Guidelines for Style Analysis. New York: Norton.

Lidov, David 1980. Musical Structure and Musical Significance. (Working paper, Toronto Semiotic Circle.) Toronto: Victoria University.

Luyken, Lorenz 1995. "... aus dem Nichtigen eine Welt schaffen...": Studien zur Dramaturgie im symphonischen Spätwerk von Jean Sibelius. (Kölner Beiträge zur Musikforschung.) Kassel: Gustav Bosse Verlag.

Mâche, François-Bernard 1983. Musique, mythe, nature ou les dauphins d'Arion. Paris: Klincksieck.

Meyer, Leonard B. 1978. Explaining Music: Essays and Explorations. Chicago: University of Chicago Press.

Mirka, Danuta 1997. The Sonoristic Structuralism of Krzysztof Penderecki. Katowice: Music Academy of Katowice.

Murtomäki, Veijo 1993. Symphonic Unity: The Development of Formal Thinking in the Symphonies of Sibelius. (Studia Musicologica Universitatis Helsingiensis.) Helsinki: Department of Musicology, University of Helsinki.

Peirce, Charles S. 1955. *Philosophical Writings of Peirce*. Buchler, Julius (ed.). New York: Dover.

Salmenhaara, Erkki 1970. *Tapiola. Sinfoninen runo Tapiola Sibeliuksen myöhäistyylin edustajana.* (Acta Musicologica Fennica 4.) Helsinki: Suomen Musiikkitieteellinen Seura.

Schiller, Friedrich 1978 [1795]. Über naive und sentimentalische Dichtung. Stuttgart: Reclam.

Tarasti, Eero 1994. A Theory of Musical Semiotics. Bloomington: Indiana University Press.

Tawaststjerna, Erik 1978. Jean Sibelius 4. Helsinki: Otava.

Taylor, Charles 1989. Sources of the Self: The Making of the Modern Identity. Cambridge: Harvard University Press.

Uexküll, Jakob von 1940. Bedeutungslehre. Leipzig: Barth.

Метафоры природы и органицизм в эпистемологии музыки: "биосемиотическое" введение в анализ симфонической мысли Яна Сибелиуса

Метафоры природы и организма играют центральную роль в западной культуре и искусстве. Весь проект "современности" означает отделение человека от космоса и его законов. Знаки и символы являются арбитрарными и конвенциональными социальными конструкциями. Тем не менее, имеется и много возвращений к иконической имитации природы и биологических принципов — даже в таком виде эзотерического искусства как музыка. Одной из высших эстетических категорий западного музыкального искусства является так наз. "органический рост", который частично наблюдается в симфонии. Понятия "органическое/ неорганическое" использовали как аналитические термины при сравнении творчества Яна Сибелиуса и Густава Малера. Музыку называют "органической", если 1) ее тематические акторы пребывают в подходящем Umwelt (или изотопии); 2) весь музыкальный матерьял восходит к одной основе (т.е. является внутренне иконичным); 3) все музыкальные события когерентно следуют один за другим (внутренняя индексальность или принцип роста); 4) музыка стремится к некоей цели (темпоральность). Так и идея Юкскюлля о частном Я-тоне (*Ich-Ton*) любого организма возвращается к нам в музыке. Итак, мы можем сказать, что каждое музыкальное произведение является будто бы "организмом", Я-тон которого определяется воспринимаемыми знаками и тем, как он соотносится со своим собственными музыкальными окружением и формируется другими музыкальными прозведениями.

Looduse metafoorid ja organitsism muusika epistemoloogias: "biosemiootiline" sissejuhatus Jean Sibeliuse sümfoonilise mõtte analüüsi

Looduse metafoorid ja organitsism on kesksel kohal läänemaises kunstis ja kultuuris. Kogu "modernsuse" projekt tähendab inimese eristumist kosmosest ia selle seadustest. Kuigi märgid ja sümbolid on arbitraarsed ja konventsionaalsed sotsiaalsed konstruktsioonid, pöördutakse siiski sageli looduse ja bioloogiliste printsiipide ikoonilise imitatsiooni juurde, ka sellises esoteerilises kunstiliigis nagu muusika. Üheks tähtsamaks esteetiliseks kategooriaks õhtumaises muusikakunstis on nn. "orgaaniline kasv", mida võib tihti täheldada sümfooniates. Mõisteid "orgaaniline/mitteorgaaniline" saab kasutada analüütiliste terminitena Jean Sibeliuse ja Gustav Mahleri loomingu võrdlemisel. Muusikat nimetatakse "orgaaniliseks", kui (1) tema temaatilised aktorid elavad neile sobivas omailmas (või isotoopias); (2) kogu muusikaline material on pärit ühest allikast (st on seesmiselt ikooniline); (3) kõik muusikalised sündmused järgnevad koherentselt teineteisele (sisemine indeksiaalsus või kasvu printsiip); (4) muusika püüdleb teatud eesmärgi poole (temporaalsus). Nii tuleb ka Uexkülli idee iga organismi privaatsest mina-toonist meile muusikas tagasi. Niisiis võime väita, et iga muusikateos on kui "organism" oma mina-tooniga, mis määrab, milliseid märke ta vastu võtab, ja kuidas ta toimib nii omaenda muusikalises ümbruses kui teiste muusikateoste poolt loodud keskkonnas.

Outline of an Uexküllian bio-ontology

Morten Tønnessen

Department of Philosophy, University of Oslo, P.O.B. 1020 Blindern, N-0315 Oslo, Norway e-mail: morten.tonnessen@hfstud.uio.no

Abstract. Traditionally, ontology, or at least western ontology, has been an anthropocentric enterprise, that takes only human experiences into account. In this paper I argue that a prolific biocentric ontology can be based on Uexküll's Umwelt theory. Uexküll offers the basis of an ontology according to which the study of experiences is a much wider field than it is as depicted by classical ontology and contemporary philosophy of consciousness. Based on the thoughts of the contemporary philosopher Thomas Nagel I claim that there might very well be lifeforms that are totally unimaginable to us. I argue that this view is compatible with the Umwelt theory, and that it should be adopted by biosemioticians. Furthermore, I argue that a biosemiotic possibilism should be implemented. Followingly, one should not claim to know which characteristics of living beings are universally and necessarily valid, but restrict oneself to statements about life as we know it.

If only people did not have to hear the eternal hyperbole of all hyperboles, the word World, World, World, when really each person should speak in all honesty only of Men, Men, Men.

Friedrich Nietzsche (1980: ix)

I will not, in this paper, give an account of Uexküll's views on space and time and specific sensory qualities. His theory on these subjects is properly dealt with in his own writings. Instead, I will make some remarks on the prospects and limits of Umwelt research. In this connection I will make use of some views held by the contemporary philosopher Thomas Nagel.

But let me start making some general remarks on how Uexküll could influence philosophy. As for ethics, the Umwelt theory could, through its description of the uniqueness of any given Umwelt, provide a justification of the intrinsic value of all sensing beings. Animal ethics as well as ethical theories of biodiversity could be enriched by adopting the Umwelt theory. The Umwelt theory could even give birth to a brand new field within philosophy, which could be framed "the philosophy of experiences". The subject matter of this field would be all kinds of experiences that are present in the biosphere; questions concerning what an experience is and how they can be classified. The philosophy of experiences would differ from ontology in that its focus would be on the phenomenon of experiencing, not on what is experienced. Philosophy of consciousness, which deals only with conscious experiences, could be considered a special branch of this field

Bio-ontology

I will use the notion bio-ontology for an ontology that takes not only human experiences into account, but non-human experiences as well. Bio-ontologists in general would probably claim that bio-ontology is the general field, whereas what is nowadays called "ontology" should in fact be considered to be a special branch of bio-ontology. Consequently, one could claim that what I call "bio-ontology" should really be called "ontology", whereas ontology that restricts itself to human experiences should be called "human ontology" or "anthropo-ontology".

It should be pointed out that the Uexküllian bio-ontology as I depict it is limited to sensory experiences. I have chosen this strategy — to give an outline of an ontology that is limited to sensory experiences — first of all because this is what is in line with Uexküll's biological approach. Furthermore because such an ontology will contain all the sensory qualities that we use to cloth our ideas and conceptions. So a purely sensory ontology might not be that poor, after all.

Uexküll and ontology

Plato, Descartes and Kant can be regarded as the chief proponents of the anthropocentric paradigm within classical ontology. According to them, the phenomena that are experienced by human beings are the only phenomena that are worth paying attention to. It is in one sense a striking paradox that Uexküll considered himself a follower of Kant. It must be stressed that Uexküll was only Kantian in his subjectivist approach, not in his biocentric approach. His theory of experiences is, with its reach, substantially different from Kant's theory. He explicitly declares (in Uexküll 1928: 9) his departure from Kant's conception. The crucial difference between Kant and Uexküll is that Uexküll regards non-humans as subjects, as well as objects, of ontology, while Kant merely regards them as objects of ontology. Kant held that only rational beings, that is, subjects of cognition, are subjects of ontology, and that human beings are the only organisms that are rational beings. Uexküll, on the other hand, held that all sensing creatures (perhaps including plants — see Kull 2000) are subjects of ontology because they are autonomous entities that perceive and act. As a result, Uexküllian ontology will depict a world that is much richer in experiences, and, possibly, in qualities, than the Kantian ontology. If Uexküll's personal inclinations, or strategy for approval, had been different, he might just as well have called himself a critic of Kant.

Uexkülls Kantian postulate that all experience is relative to the subject implies that it does not make sense to talk about the qualities of an object without taking into account the subject that perceives the object. According to Uexküll, it is impossible to construct meaningful concepts about an objective world, that is, a world consisting only of objects. Such a world — consisting of *Dinge an sich*¹ — is simply not possible to imagine. This does not necessarily imply that an objective world does not actually exist, but at least it implies that it cannot be perceived, or described in language. Followingly, the subject matter of an Uexküllian ontology is the subjective worlds² of all sensing beings. The subject, rather than the object, is the starting point of ontology.

While traditionally the phenomenal world has been conceived of as one undivided world, with Uexküll, "the phenomenal world" only depicts the sum total of all the individual phenomenal worlds. He

¹ Things in themselves (Kant).

² Uexküll: "Subjektive Welten", "Erscheinungswelten", "Eigenwelten", "Umwelten".

emphasizes that any given subject can only grasp, and indeed experience, a small part of the phenomenal world. Now, to what extent is it possible for a certain subject, say a scientist or a philosopher, to grasp the phenomena that do not appear in his own subjective world, but in an alien Umwelt?

The privileged part in Umwelt research

I find it useful to distinguish between a direct experience of phenomena and an indirect experience of phenomena. A direct experience of phenomena is what is present when the phenomenon in question is part of your own Umwelt. An indirect experience of phenomena takes place when you do not actually experience the phenomenon yourself, but only through a mediator, e.g. a concept or a model. I will argue that these two categories of experience are qualitatively different in all cases, even though, evidently, concepts can be more or less precise, and models can be more or less accurate. But even the most precise concept, and the most accurate model, is in a crucial sense completely different from the experience of the phenomenon itself (Uexküll 1910: 128). The qualities the scientist perceives are simply not the same as the qualities that the alien subject perceives. If the scientific concept or model is a good one, there will be a certain resemblance between the two, but they will never be identical. In this sense, the living being, the object of scientific inquiry, will always be the privileged part in Umwelt research, because it alone has direct access to the phenomenon.

To Uexküll, the statement that biology and other fields of scientific inquiry are human disciplines is non-trivial. A human discipline, in Uexküll's setting, is a discipline that is coloured and limited by the qualities of the human Umwelt. What biology reveals to us is the relationship between living beings and their related objects, not per se, but as they appear to human beings. Pobojewska (2001: 327) makes a similar point. However, one should keep in mind that the phenomenal sphere of science is much richer than the phenomenal sphere of any given human being (for a presentation of the idea of the Umwelten of species, see Uexküll 1928: 267). Its potential material includes all the functional cycles of all scientists. Consequently, a science aiming at widening its scope should recruit, or make use of, persons with abnormal abilities, such as savants.

The limits of Umwelt research

Umwelt research is based on three important assumptions that concern the relationship between the organism and its Umwelt:

- (1) The Umwelt of an organism or, what sensory qualities an organism is capable of perceiving is directly dependent on the constitution³ of that organism.
- (2) The Umwelt of an organism is just as complex as the constitution of that organism (Uexküll 1909: 249).
- (3) The Umwelt of the observed organism differs just as much from our own Umwelt as the constitution of that organism differs from our own constitution (Uexküll 1909: 248; 1928: 105).

Followingly, the study of the constitution and environment of a specific organism can result in an outline of its Umwelt. Two kinds of Umwelten are particularly difficult to depict: Complex Umwelten and Umwelten that are substantially different from our own Umwelten. Since Uexküll considered the human Umwelt to be more complex than any animal Umwelt (Uexküll 1909: 248), he does not seem to have asked to what extent we can grasp non-human Umwelten that are as complex as or more complex than human Umwelten. This, on the other hand, is a question that is central to the contemporary philosopher Thomas Nagel⁴.

Thomas Nagel is, unlike Uexküll, a realist, but he acknowledges that "[t]he way the world is includes appearances, and there is no single point of view from which they can all be fully grasped" (Nagel 1986: 26). In What is it like to be a bat? he writes that "one might [...] believe that there are facts which could not ever be represented or comprehended by human beings, even if the species lasted forever—simply because our structure does not permit us to operate with concepts of the requisite type" (Nagel 1993: 171). Nagel (1993: 166) claims that conscious experience is a widespread phenomenon, and that it occurs in countless forms "totally unimaginable" to us throughout the universe: "There is probably a great deal of life in the universe, and we may be in a position to identify only some of its forms, because we would simply be unable to read as behaviour the manifestations of creatures sufficiently unlike us" (Nagel 1986: 24). If Nagel is correct, the Umwelt scientist will have access only to a small

³ Uexküll: "Bauplan", "Organisation".

⁴ Nagel has read Uexküll, but not referred to him (e-mail to the author, from February 19, 2001), and, consequently, does not use the notion "Umwelt".

part of the existing Umwelten, and we will never be able to picture the real richness of the phenomenal world in an adequate way.

I would like to point out that Nagel's statement that there are lifeforms that are totally unimaginable to us might be valid even if one does not suppose that there is extra-terrestrial life. At least there are experiences that in one sense are totally unimaginable to us, e.g., experiences related to the sonar sense of bats. Even though we can get a certain impression of the sonar sense through studies of the bats constitution and behaviour, our concepts about it might be doomed to be vague. Nagel concludes that reflection on what it is like to be a bat seems to lead us to the belief "that there are facts that do not consist in the truth of propositions expressible in a human language". He holds that "[w]e can be compelled to recognize the existence of such facts without being able to state or comprehend them" (Nagel 1993: 171).

Now, is Nagel's view in accordance with Uexküll's Umwelt theory? Certainly it could be in accordance with the three basic assumptions that Uexküll sets forth concerning the relationship between the organism and its Umwelt. Nagel's view would imply that there are organisms that have constitutions that are so different from ours that their Umwelten are totally unimaginable to us. Uexküll himself does not, to my knowledge, make clear whether his assumptions are to hold for all life whatsoever, that is, whether they are to be regarded as universally valid. But let us assume that they are. Is the belief that there might be lifeforms totally unimaginable to us compatible with Umwelt theory? I think it is. At least, Uexküll does not explicitly state that there are no such lifeforms. But he does state that there are lifeforms of which our models will not be accurate.

According to Uexküll, the study of unicellular and other small organisms is relatively simple. The study of organisms with space-and time-schemas, on the other hand, is a different matter. Our concepts about objects that such organisms relate to are necessarily vague⁵. One reason for this is that the only material that is available to the scientist is the phenomena in his own Umwelt. Any object that he observes is coloured by his own impression of it. The impression that

⁵ Uexküll 1910: 129: "Dann sind wir gezwungen, die Objekte, auf welche die Tiere mit Sicherheit reagieren, durch immer mehr und mehr vereinfachte Nachbildungen zu erfaßen [original: "erfeßen"], die in einfachster Weise die Bewegungen des Originals nachmachen".

the organism itself has of its Umwelt is out of his reach⁶. All the Umwelt scientist can do, when he observes an organism, is to try to make clear which of the elements in his own Umwelt are also present in the Umwelt of that organism (Uexküll 1910: 128). And there seems to be a lot of elements in non-human Umwelten that are not present in human Umwelten (Uexküll 1928: 232–233). Now, what if there were two Umwelten, one of them belonging to a scientist and the other to an alien creature, that had no common elements? Then we would simply be unable to read as behaviour the manifestations of those creatures. Nagel would be right.

Unfortunately, neither the belief that there might be lifeforms that are totally unimaginable to us, nor the belief that there cannot in principle be any lifeforms that are unimaginable to us, are falsifiable. If lifeforms that are totally unimaginable to us do in fact exist, we will never know. And if they do not exist, we would not be able to discover it, nor would we be able to prove that they could not possibly exist.

Consequences for biosemiotics

In "Biosemiotics and formal ontology", Frederik Stjernfelt (1999) claims that certain characteristics of living beings are of universal validity. Even though I do find speculation about what characteristics of living beings, if any, are universal, interesting, I consider claims that certain characteristics are in fact universal to be unfounded, and impossible to justify. For practical purposes, however, one should presume that semiosis is a universal characteristic of living beings, because without semiosis, there can be no recognition.

Biosemioticians should adopt Nagel's view (Nagel 1986: 92) that "[a]bout some of what we cannot conceive we are able to speak vaguely [...] but about some of it we may be unable to say anything at all, except that there might be such things". The puzzles that result from Nagel's view on creatures very unlike us call for a biosemiotic possibilism. A biosemiotic possibilism could be part of a progressive research programme, because it would not restrict biological inquiry to characteristics that we are already familiar with. Finally, rather than

⁶ Uexküll 1910: 128: "Wir wissen, daß diese Umwelt ihr eigentümliches Gepräge durch uns selbst erhält. Das Gepräge, das das fremde Subjekt seiner Umwelt gibt, können wir niemals kennen lernen".

claiming that the characteristics of living beings that we are familiar with, or some of them, are universal and necessary characteristics of life, we should simply state that these are the characteristics of life as we know it.

References

- Kant, Immanuel 1975. Kritik der reinen Vernunft. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Kull, Kalevi 2000. An introduction to phytosemiotics: Semiotic botany and vegetative sign systems. *Sign Systems Studies* 28: 326–350.
- Nagel, Thomas 1986. The View from Nowhere. Oxford: Oxford University Press.
- 1993. Mortal Questions. Cambridge: Cambridge University Press.
- Nietzsche, Friedrich 1980. On the Advantage and Disadvantage of History for Life. Trans. Preuss, Peter. Indianapolis: Hackett Publishing Company.
- Pobojewska, Aldona 2001. New biology Jakob von Uexküll's Umweltlehre. Semiotica 134(1/4): 323–339.
- Stjernfelt, Frederik 1999. Biosemiotics and formal ontology. *Semiotica* 127(1/4): 537–566.
- Uexküll, Jakob von 1909. *Umwelt und Innenwelt der Tiere*. Berlin: Verlag von Julius Springer.
- 1910. Über das Unsichtbare in der Natur. Österreichische Rundschau 25: 124–130. [Reprinted in Uexküll 1913: 55–66.]
- 1913. Bausteine zu einer biologischen Weltanschauung. München: F. Bruckmann A.-G.
- 1928. Theoretische Biologie. Berlin: Verlag von Julius Springer.

Границы Юкскюлловской биоонтологии

Традиционно онтология, по крайней мере на Западе, обладала антропоцентристским подходом, при котором учитывался только человеческий опыт. В данной статье доказывается, что продуктивная биоцентристская онтология может опираться на теорию Umwelt Юкскюлля. Юкскюлль предлагает исходные постулаты онтологии, согласно которым исследование опыта намного шире той сферы, которая описывалась до сих пор в классической онтологии и современной философии сознания. Основываясь на идеях современного философа Томаса Нагеля, автор статьи утверждает, что по всей вероятности могут существовать формы жизни, которые мы неспособны даже представить. Доказывается, что это утверждение находится в соответствии с теорией Umwelt, и биосемиотики должны бы ее принять. Более того, эту биосемиотическую

возможность стоило бы и применить. Следовательно, никто не должен утверждать, что знает, какие свойства живых организмов являются универсальными и необходимыми, а должен скорее ограничивать себя в своих утверждениях о жизни в том виде, в каком она нам известна.

Uexkülli bio-ontoloogia piirjooni

Traditsiooniliselt on ontoloogia, vähemalt läänes, olnud inimesekeskne lähenemine, mis võtab arvesse vaid inimkogemust. Käesolevas artiklis näitan ma, et viljakas biotsentristlik ontoloogia võiks põhineda Uexkülli omailma teoorial. Uexküll pakub ontoloogia lähtekohad, mille järgi kogemuse uurimine on märgatavalt laiem ala kui seda on kirjeldatud klassikalise ontoloogia ja kaasaegse teadvuse filosoofia poolt. Lähtudes tänapäeva filosoofi Thomas Nageli teostest, väidan, et vägagi tõenäoliselt võib olemas olla eluvorme, mis on meile täiesti kujutlematud. Ma näitan, et see vaade on kooskõlaline omailma teooriaga ning et biosemiootikud peaksid selle omaks võtma. Enamgi veel, arvan, et seda biosemiootilist võimalikkust tuleks ka rakendada. Järelikult ei tohiks keegi väita teadvat, millised elusorganismide omadused on universaalsete ja möödapääsmatutena üldkehtivad, vaid peaks pigem kitsendama oma formuleeringute kehtivuspiire elule säärasena nagu me seda tunneme

A note on biorhetorics

Kalevi Kull

Department of Semiotics, University of Tartu, Tiigi St. 78, Tartu, Estonia; e-mail: kalevi@zbi.ee

Abstract. This article analyses the possibility to look at living systems as biorhetorical systems. Rhetorics of biology, which studies the rhetoric of biological discourse, is distinguishable from biorhetorics, which attempts to analyse the expressive behaviour of organisms in terms of primordial (unconscious) rhetoric. The appearance of such a view is a logical consequence from recent developments in new (or general) rhetorics on the one hand (e.g., G. A. Kennedy's claim that rhetoric exists among social animals), and from the biosemiotic approach to living systems on the other hand.

It is evident that forest peoples — such as Indians, or Finno-Ugrians — considered animals to be rhetorical. However, it has been unusual to describe the behaviour of organic beings in terms of rhetoric in recent biology. Thus, let us consider simple examples, e.g., in the form of the following questions: (a) does a cat, varying its meowing at the door, persuades its host to open it? (b) does an orchid. with the form and colour and fragrance of its flower, persuades a pollinator to approach and find it? A supposedly negative answer to the latter question, and a quite sceptical one to the former, both by a humanitarian and by a biologist, may refer to the absence of any effort by the plant, and a non-existence of free choice in animals. However, in order to be scientifically certain and precise in discussing questions of this type, one has to specify, on the one hand, whether an organic form is indeed passive in its communication, without an ability to choose and search, and on the other hand, how to define 'effort', and further, 'persuasion'. If so, according to the definitions obtained, living systems may be able to make an effort, and persuade, we may conclude that they are rhetorical systems, from the point of view of biology. Therefore, analysis of these concepts is required, before it will be possible to answer the above questions.

In addition, when speaking of biorhetorics, we need firstly to distinguish rhetoric of biology and biorhetoric. However, in order to define the latter, it is necessary to look at the meanings and boundaries of rhetoric itself.

Rhetorics of biology

Rhetorics² of biology concern the ways biologists express their intentions in their writings or presentations; it is a study of rhetoric in biology.

Rhetorics of biology is currently a rapidly developing field. We can see this, for instance, from a recent book by Leah Ceccarelli (2001), in which an ideological stance of formulations in the texts of such leading biologists as Dobzhansky and Wilson is analysed and compared. Another good example is a special issue of the online *Poroi Journal*³ (published in 2001 and edited by David Depew), which is topically devoted to rhetorics of biology. In addition, a recent meeting of the International Society for History, Philosophy, and Social Studies of Biology included a session *Rhetoric and Biology: The Strategy of Communication in Modern Biological Thought.*⁵

The relationships between biological rhetoric and academic biology are controversial. On one hand, applied rhetorics is used in

¹ At least three independent sources have led me to think about biorhetorics: firstly, conversations with Mihhail Lotman, my colleage at the Department of Semiotics in Tartu, who loves rhetoric and teaches a course on this subject; secondly, letters from Stephen Pain (now in Paris), who is enthusiastically interested in biorhetorics, being its proponent already for a few years. However, his texts on this issue are mostly epistolary. And the last impulsion was given by a book of Richard Doyle (1997) which I recently came across in a bookstore in Toronto. That rhetoric has already been extended to plants (by G. A. Kennedy), I found only when the first version of this brief paper had taken a shape.

² I will distinguish here between *rhetoric* as a practice, and *rhetorics* as a study of this practice.

See http://inpress.lib.uiowa.edu/poroi/.

⁴ The contributors include David Depew, Celeste M. Condit, Richard Doyle, Leah Ceccarelli, Steve Fuller, Chuck Dyke, Cristina S. Lopez.

⁵ This ISHPSSB meeting was held in Quinnipiac University (USA), 2001, its session on *Rhetoric and Biology* being organised by Lilian Al-Chueyr Pereira Martins (from Pontifícia Universidade Católica de São Paulo).

order to teach scientific writing to biology students. On the other hand, a knowledge of rhetorics is required in order to see behind the curtains set by the contemporary science writers, those who play a more important role in contemporary science than ever before. More generally, both green and gender studies include research on specific rhetoric. In addition, the growing interest in rhetoric of biology is an evident sign of a critique — often a hidden critique — of the contemporary views in biology.

A study of the role of metaphors in biological research (and in biology altogether) is one of the central issues for biorhetorics (e.g., Paton 1997). In many cases it has raised a set of questions of whether the use of metaphoric terms in a scientific discourse is just a literary method to add additional power to the statements via a more expressive language, or there is a deeper similarity on the object level. The role of metaphors has been particularly important, of course, in interdisciplinary approaches. Typical examples include the usage of the terms 'organism', or 'natural selection' in all possible fields from chemistry to sociology to study of literature. Throughout the history of biology there has also been another trend of applying humanitarian metaphors in biological realm.

The widespread use of linguistic metaphors in biological science, particularly in molecular genetics, has been noted (e.g., Emmeche, Hoffmeyer 1991; Hoffmeyer 1992: 108). However, the use of linguistic metaphors has been helpful to a certain in developing the understanding (and a theory) of semiosic processes in organisms and their communities already in an ontological sense. In this context (i.e., of both rhetorics of biology and of starting biorhetorics), the book by Richard Doyle (1997) is particularly noteworthy.

Doyle's point of departure is not biology - rather the Department of Rhetoric at University of California Berkeley — but the biological culture he possesses is no doubt professional. Doyle does not emphasise the distinction of terms. His book speaks on both rhetorical aspects of biological research and rhetoric as a feature of life. The latter comes in when he focuses "on the ways in which implicit models of language and textuality helped constitute knowledge in molecular biology" (Doyle 1997: 86). Sometimes when speaking on rhetoric of life, he actually speaks of biosemiotics, the latter term being seemingly unknown to him.

Placing rhetorics

Rhetorics (or rhetoric)⁶ — the art of persuasion, of expression — is an old discipline, dealing with the intentional aspect of communication, the language force, the effort of a message, the work done by semiosis. Not just pragmatic — rhetoric can mean either. However, it is relative to semiotics:

According to its traditional definition as an art of persuasion, designed to capture the attention of an audience and to move it to pursue a particular course of action, rhetoric can be regarded as a precursor of the more general theory of textual semiotics and subsumed under the categories of semiotic analysis. (Rupp 1992: 10).

Rhetoric belongs to the pragmatic dimension of semiotics (Nöth 2000: 394). Indeed, if pragmatics is defined as broadly as Morris does (e.g., Nöth 1990: 52), then this relationship is evidently true. However, from a biological point of view, it is important to distinguish two approaches to pragmatics. These are the aspects of an attempt and of a result. One is originated by needs, by goals, by an organism that expresses signs. The other is dependent of what actually happens, of the results of expressive behaviour.

Persuasion is a communication intended to convince. Persuasion includes not only all arguments, but also refers to non-argumentative forms of communication, such as advertising, threats, appeals to the emotions, etc. Persuasion, according to its standard definition, is the process of consciously attempting to change attitudes through the transmission of some message. If to be conscious of it is an ultimate requirement for persuasion, then there will be no way and no sense to extend it toward a more biological field.

In this context it is interesting to see the developments in the study of metaphor. Initially treated as a restricted rhetorical trope, the concept of metaphor has been later extended into an extremely general figure of communication and knowledge (e.g., Ricoeur 1976, Eco 1986; cf. Richards 1936). A somewhat analogical expansion of a term has taken place with 'intentionality' (Searle 1993) and almost in parallel to these, one may notice a recent trend in a very different area — a reintroduction of the discussion on teleological issues in biology.

⁶ See footnote 2.

Rhetoric extends far beyond speech. Rhetoric has been found in image (Barthes 1977: 33–37), in material culture (Grier 1997), in action (Peshkov 1998). In a way, rhetoric deals with innate needs or wants that are expressed with consideration of the audience.

Thus, asking about the limits of rhetoric, one may notice that rhetorical behaviour is possible also in non-linguistic sign systems. Furthermore, we may notice that rhetorical turns are not always consciously planned — they may appear on the basis of various desires, and the form they take at the level of linguistic expression may be entirely involuntary. To illustrate, we can speak about rhetorical aspects of a child's language. If the rhetorical types take their origin on a prelinguistic level, then it infers that the language ability may not be required at all, at least for certain types of rhetorical behaviour. Consequently, a path is open towards zoorhetorics.

That human expressive behaviour includes ethological universals encompassing the figures of animal behaviour has been well demonstrated by many ethologists (e.g., Eibl-Eibesfeldt 1972; 1979). On the other hand, the audience effects have been described in expressive animal behaviour (Marler *et al.* 1990; Gouzoules *et al.* 1985). Here we may see certain assumptions for the placement of a lower threshold of rhetoric toward more biological area.

Defining biorhetorics

Biorhetorics is a view on, and a study of, living systems as rhetoric devices. This means that living systems are interpreted as analogical to *parole*, and not so much as *langue*. If a living organism is an entity that expresses and intends, then rhetoric is due. Because living systems have needs,⁷ they cannot but express them, and accordingly affect the whole communication between organisms.

Although I know of no systematic work on this view — possibly because none exists — this field does not start with the definition here.

In order to discover the seeds of rhetoric in biology, new rhetorics had to arise. While classical rhetorics emphasised style, delivery, and arrangement, new rhetorics focuses on knowledge-making techniques. According to new rhetorics, or epistemic rhetorics, language is seen as

⁷ On the concept of biological need, see Kull 2000: 339–343.

the medium for all knowledge-making. Correspondingly, if we assume that living organisms may possess knowledge-like qualities — an experience, a habit — then it should also require sign systems, a semiosphere. In this way we approach a topic analogous to rhetorics in the biological domain.

In comparative rhetorics, it has been possible to speak about rhetoric in animals, e.g., "the rhetoric of reed dear stags in seeking rights to mate with females — vocal encounters, stalking, and fights with their horns if one animal does not give way" (Kennedy 1998: 77). According to George A. Kennedy's (1998) approach to general rhetoric, rhetoric exists among social animals. Moreover, he states that humans and animals share a "'deep universal rhetoric", and he also argues that plants share a rhetoric (Kennedy 1992: 109, 112). However, he distinguishes between plant or animal rhetoric as purposive and unconscious, and the human one as purposeful and intentional. Therefore, biorhetoric — if it exists — works on the level of unconscious persuasion, although one may also notice that biosemiotics can be defined as the linguistics of unconscious.

The crucial question of biological sign systems — on which depends whether biosemiotics can be a true part of semiotics — deal with choosing between two alternatives: is biocommunication is nothing more than signals, releasers, etc., absolutely unintentionally released and transferred, or an active process — the process of interpretation that transforms behaviour into signs. Since the latter has become a more viable view in current biosemiotics, it also opens a gate for the intentional aspects of biocommunication, i.e., to biorhetoric.

Indeed, much of animal communication does not seem as being simply information transfer. It is often very likely that animal behaviour is designed from itself to attract, to pay attention, to deceive. A recent analysis of deception in animals has been provided by M. Hauser (1996: 571ff).

In the framework of the semiotic turn in biology currently taking place, the birth of subfields (such as biosemantics, biopragmatics, etc.), and among them biorhetorics, is logical, predictable, and even inevitable. How this niche becomes filled is interesting to see. Thus, moving further from zoorhetoric, we may think, e.g., about endorhetorics, and on several other branches, likewise or analogically, to how these subfields have been established in biosemiotics. If a system has

⁸ See also Lyons 2000: 460.

desires, these may have a reflection in the signs evoked, and rhetoric begins.

If rhetorics has some relevance to biology, one may also ask about the situation with its sister discipline — stylistics. Indeed, the possibility and role of stylistics in biological systems has been pointed out by Sergey Meyen, for instance when he wrote about refrains in biological taxa. Thus, it may become possible to speak on an area that should be called *biostylistics*.

Few notions for biorhetorics

Taking into account the sharp difference between rhetoric and biorhetoric, it is quite improbable that the classical notions of rhetorics are of much use in a biological realm. However, it is reasonable to assume that there exists certain diversity among biorhetorical figures, or biotropes.

Biotropes can be defined as trope-like figures used in biological communication. In order to emphasise the fundamental differences between the biological and human communication, I prefer not to neglect the prefix 'bio-' when speaking on animal communication. The biometaphors should be distinguished from the metaphors used in human speech.

We may hypothesize that one can find and define among the biotropes: biohyperbole (as an example it may be proposed the body enlargement effects through the ruffled up plumage during courtship displays of some birds, e.g., Philomachus pugnax, or Lyrurus tetrix), bio-onomatopoeia (perhaps when Sturnus vulgaris is using the strophes from other species' songs), handicap traits as described by Zahavi (still alternatively interpreted), or threatening poses, warning coloration, and alarm signals as used by many animals. It is also known that intention movements — the incomplete initial phases of behaviour patterns — can be recognised by conspecifics and used in communication (McFarland 1987: 317–318). However, a much more proper candidate for a type of biotrope can be found in mimicry — mimicry sensu stricto, or Bates' mimicry. A semiotic classification of mimicry types (see Maran 2000) may thus serve as a more detailed distinction of biotropes.

The same biological phenomena can be interpreted, of course, in a more traditional neodarwinian way, without any assumption about the

subjective or inner activity of the organisms, and thus, without biorhetoric. The distinction line has a relationship to biological needs — whether these are considered secondary traits that have developed in order to increase fitness, or if these belong to the primary features of organisms responsible essentially for all their behaviour. Biological needs start from the recognition of absence. A result of the recognition of absence is expressed in searching behaviour. The ways an organism expresses its needs (and desires) can be turned into signs recognisable by other organisms of the community. It is very unlikely that there will be no feedback if the other organisms' behaviour in any way affects the appeasing of the needs.

Thus, we may consider evolution as the history of inventing new (bio)rhetoric figures, in order to persuade the surroundings to fulfil the organism's needs. The latter being able to grow in a semiosic chain, maintaining certain relationships to the biological needs without even knowing of them — as in the series of need, desire, craving, want, wish.

A characteristic feature of any rhetoric figure is the effect on the audience, due to the effort expressed by a rhetorical subject. The effort means a semiosic effort here. Douglas (2000: 270) has written about semiotic work and proposed a definition: "semantic work is done whenever the extension of a concept is expanded". What rhetoric does is namely semiotic work.

Where is the difference?

Rhetoric is an aspect of social semiosic behaviour. Thus, the problem raised here has a direct bearing on the relationship between anthroposemiotics and biosemiotics, or in contrast, between human culture and endosemiosis.

Language is a social phenomenon. Indeed, this clear and evident statement claims that there would not be any language without a social system with members who communicate; outside of society, no one can ever invent a language. This is a statement hold by many semioticians (Saussure, Greimas, Eco, Bachtin, Sonesson, i.e., by the representatives of anthroposemiotics, and also cultural semiotics) who put the semiotic threshold somewhere at the place and time of the

⁹ Cf. Young 1936: 251ff.

appearance of humans, with an assumption of the existence of consciousness.

However, what does it actually means? The question is important, since from this it is often concluded that there can be no language or language-like system outside human society, e.g., in simple organisms, not speaking about the semiotic processes inside organisms. In other words, endosemiosis must be impossible.

Thus, what does the social determination and social origin of language mean, i.e., what is the statement about? Most evidently, the proponents of this view emphasise that there should be a higher-level holistic system actually responsible for the behaviour of its elements. This system is usually called culture. Without culture, regardless of how one defines it, it is probably impossible for semiosis to exist.

Therefore, for biosemioticians to approve their statement on the origin of semiosis together with the origin of life, or first cells, requires proof that culture or something isomorphic to it exists in cellular non-human systems, and that there is a culture (or at least anything culture-like) inside organisms as well.

The view of biosemioticians (who usually have biological background) is backed by their knowledge of the vast complexity and individuality of so-called primitive or simple living systems, about the immenseness of the cell, applying W. Elsasser's term. The mechanism of semiosis, as described in the works of anthroposemioticians, is recognised by biosemioticians as something for which an almost exact correspondence can be found in the mechanisms of life of the cell.

The definitions and descriptions of semiotic figures are, as a rule, quite simple from the point of view of their logical structure. This makes these inherently suitable for extension towards more biological application. An assumption of consciousness often becomes declarative, rather than built in into the structure of conceptions. However, the extended semiotics, as well as the extended rhetoric, cannot really erase the difference between the anthropological and biological spheres. After mapping the territory with these extended terms, the distinction has to be built again. The rhetoric as an elite art has little in common with the biorhetoric of an orchid flower.

Therefore, a possible reason for this controversy comes from the oversimplification of models applied and of descriptions made about human semiosis. The solution to this problem requires a task to improve and sophisticate these descriptions, so that the isomorphism with biosemiosis would to a large extent disappear.

My guess is that this is just what will happen. And it means that it will be an improvement in the theory of semiotics as generated by a more biological approach, biosemiotics, from outside of the main field of the science of signs. If this happens, the acceptance of semiosis of living cells will be obvious.

As much as rhetoric is unavoidable for us, there is apparently no

life in which biorhetoric is absent.

References

- Bankov, Kristian 2000. Intellectual Effort and Linguistic Work: Semiotic and Hermeneutic Aspects of the Philosophy of Bergson. Imatra: International Semiotics Institute at Imatra.
- Barthes, Roland 1977. Image-Music-Text. Trans. Stephen Heath. New York: Farrar, Straus & Giroux.
- Ceccarelli, Leah 2001. Shaping Science With Rhetoric: The Cases of Dobzhansky, Schrödinger, and Wilson. University of Chicago Press.
- Douglas, Graham 2000. Catastrophes in semantic space: Signs of universality. Semiotica 132(3/4): 179–280.
- Doyle, Richard 1997. On Beyond Living: Rhetorical Transformations of the Life Sciences. Stanford: Stanford University Press.
- Eco, Umberto 1986. Semiotics and the Philosophy of Language. Bloomington: Indiana University Press.
- Eibl-Eibesfeldt, Irenäus 1972. Similarities and differences between cultures in expressive movements. In: Hinde, R. (ed.), *Non-Verbal Communication*. London: Cambridge University Press, 297–314.
- 1979. Universals in human expressive behavior. In: Wolfgang, A. (ed.), Non-verbal Behaviour: Applications and Cultural Implications. New York: Academic Press, 17–30.
- Emmeche, Claus; Hoffmeyer, Jesper 1991. From language to nature: The semiotic metaphor in biology. *Semiotica* 84(1/2): 1–42.
- Gouzoules, H.; Gouzoules S.; Marler, Peter Robert 1985. External reference in mammalian vocal communication. In: Ziven, G. (ed.), *The Development of Expressive Behaviour: Biology-Environment Interactions*. New York: Academic Press, 77–101.
- Grier, Katherine C. 1997. Material culture as rhetoric: 'Animal artifacts' as a case study. In: Martin, Ann Smart; Garrison, J. Ritchie (eds.), *American Material Culture: The Shape of the Field*. Winterthur: Henry Francis du Pont Winterthur Museum (and Knoxville: University of Tennessee Press), 65–104.
- Hauser, Marc D. 1996. The Evolution of Communication. Cambridge: MIT Press.
- Hoffmeyer, Jesper 1992. Some semiotic aspects of the psycho-physical relation: The endo-exosemiotic boundary. In: Sebeok, Thomas A.; Umiker-Sebeok, Jean (eds.), *Biosemiotics: The Semiotic Web 1991*. Berlin: Mouton de Gruyter, 101–123.

- Ingold, Tim (ed.) 1988. What is an Animal? London: Unwin Hyman.
- Kennedy, George A. 1992. A hoot in the dark: The evolution of a general rhetoric. *Philosophy and Rhetoric* 25(1): 105–121.
- 1998. Comparative Rhetoric: An Historical and Cross-Cultural Introduction. Oxford: Oxford University Press.
- Kull, Kalevi 1998. Organism as a self-reading text: Anticipation and semiosis. International Journal of Computing Anticipatory Systems 1, 93–104.
- 2000. An introduction to phytosemiotics: Semiotic botany and vegetative sign systems. Sign Systems Studies 28, 326–350.
- Lyons, Scott Richard 2000. Rhetorical sovereignty: What do American Indians want from writing? *College Composition and Communication* 51(3): 447-468.
- Maran, Timo 2001. Mimicry: Towards a semiotic understanding of nature. Sign Systems Studies 29(1): 325–339.
- Marler, P.; Karakashian S.; Gyger, M. 1990. Do animals have the option of withholding signals when communication is inappropriate? The audience effect. In: Ristau, C. (ed.), *Cognitive Ethology: The Minds of Other Animals*. Hillsdale: Lawrence Erlbaum Assoc., 187–208.
- McFarland, David (ed.) 1987. The Oxford Companion to Animal Behaviour. Oxford: Oxford University Press.
- Nöth, Winfried 1990. *Handbook of Semiotics*. Bloomington: Indiana University Press.
- 2000. Handbuch der Semiotik. Stuttgart: J. B. Metzler.
- Paton, Ray 1997. Glue, verb and text metaphors in biology. *Acta Biotheoretica* 45(1): 1–15.
- Peshkov, Igor V. 1998. Vvedenie v ritoriku postupka. Moskva: Labirint.
- Richards, I. A. 1936. *The Philosophy of Rhetoric*. Oxford: Oxford University Press.
- Ricoeur, Paul 1975. La metaphor vive. Paris: Editions du Seuil.
- Rupp, Stephen 1992. The challenge of rhetorics. *The Semiotic Review of Books* 3(3): 10–12.
- Searle, John R. 1993. Intentionality: An Essay in the Philosophhy of Mind. Cambridge Cambridge University Press.
- Young, Paul Thomas 1936. Motivation of Behavior: The Fundamental Determinants of Human and Animal Activity. New York: J.Wiley.

Замечание по поводу биориторики

В статье анализируется возможность рассмотрения живых систем в качестве риторических. Риторику биологии, которая рассматривает риторику биологического дискурса, отличают от биориторики, как от взгляда, согласно которому экспрессивное поведение организмов можно описать как первичную (бессознательную) риторику. Появление биориторической точки зрения — логический шаг, вытекающий, с одной стороны, из развития общей риторики (напр. Д. А. Кеннеди утверждает, что риторика свойственна социальным животным) и, с другой стороны, из биосемиотического подхода к живым системам.

Märge bioretoorika kohta

Artiklis analüüsitakse võimalust vaadelda elussüsteeme kui retoorilisi süsteeme. *Bioloogia retoorikat*, mis käsitleb bioloogilise diskursuse retoorikat, eristatakse *bioretoorikast* kui vaatest, mille kohaselt organismide väljendavat käitumist saab kirjeldada kui esmast (mitteteadvuslikku) retoorikat. Bioretoorilise vaate ilmumine on loogiline samm, mis tuleneb üheltpoolt üldise retoorika arengust (nt. G. A. Kennedy väidab, et retoorika on omane sotsiaalsetele loomadele) ja teiseltpoolt biosemiootilisest lähenemisest elussüsteemidele.

A sign is what?

A dialogue between a semiotician and a would-be realist

John Deely1

Everyone knows that some days are better than others. I was having one of those, "other" days, when a colleague approached me to express interest in the forthcoming Annual Meeting — the 26th, as it happened — of the Semiotic Society of America.

"Come on", said the colleague. "Tell me something about this semiotics business."

"What's there to say?" I said, not in the mood for this at the moment. "Semiotics is the study of the action of signs, signs and sign systems." I knew it would not help to say that semiotics is the study of semiosis. So I let it go at that. But inwardly I cringed, for I could see the question coming like an offshore tidal wave.

"Well, what do you mean by a sign?" my colleague pressed.

Who in semiotics has not gotten this question from colleagues a hundred times? In a way it is an easy question, for "everyone knows" what a sign is. How else would they know what to look for when driving to Austin? All you have to do is play on that, and turn the conversation elsewhere.

Maybe it was a change in mood. Maybe it was the fact that I liked this particular colleague. Or maybe I wanted to play advocatus diaboli. Whatever the reason, I decided not to take the easy way out, not to play on the "common sense" understanding of sign which, useful as it is and not exactly wrong, nonetheless obscures more than it reveals, and likely as not makes the inquirer cynical (if he or she is not such already) about this "new science" of signs.

You know the routine. Someone asks you what a sign is. You respond, "You know. Anything that draws your attention to something else. Something that represents another." And they say, "You mean like a traffic sign?" And

¹ Presidential Address to the Semiotic Society of America delivered at the Friday, October 19, 2001, luncheon of 26th Annual Meeting held at Victoria University, Toronto, Ontario, Canada.

Author's address: John Deely, University of St. Thomas, 3800 Montrose Boulevard, Houston, Texas 77006, USA; e-mail: deelyj@stthom.edu.

you say "Sure. Or a word. Or a billboard. Anything." And they say, "Oh. I

think I get it." And life goes on.

But this time I decided to go against the grain, and to actually say what I thought a sign was. So I looked my colleague in the eye for a few moments, and finally said, not averting my gaze in the least, "OK. I'll tell you what a sign is. A sign is what every object presupposes".

My colleague's eyes widened a bit, the face took on a slightly taken-aback expression, and my ears detected an incredulous tone in the words of reply:

"A sign is what?"

"What every object presupposes. Something presupposed by every object", I said again.

"What do you mean? Could you explain that?" The colleague seemed serious, and I had no pressing obligations or plans for the moment, so I said "Sure, but let's go outside." I opened my office door and indicated the stone table and bench at my disposal in the private fenced area at the end of the driveway that comes to the outer door of my office.

My colleague had no way of knowing, but in my private semiosis of that moment I could only recall the SSA Presidential Address given some seventeen years previously by Thomas A. Sebeok, wherein he compared the relations of semiotics to the idealist movement with the case of the giant rat of Sumatra,² "a story for which, as Sherlock Holmes announced, the world is not yet prepared."

In that memorable speech, Sebeok had taken the occasion "to indulge in personal reminiscences, comment on the institutionalization of our common cultural concerns, and then to prognosticate about the direction toward which we may be headed." Now, some seventeen years later, this mantle of SSA President had fallen to me; and the institutional status of semiotics in the university world, healthy and promising as Sebeok then spoke, had in American academe become somewhat unhealthy and parlous in the succeeding years, even as the interest in and promise of the intellectual enterprise of semiotics had succeeded beyond what any of us in the 80s could have predicted in the matter of the contest as to whether the *general conception* of sign study should be conceived on the model of Saussurean semiology or (picking up the threads and pieces in this matter left by the teachers common to Peirce and Poinsot⁴) Peircean semiotics.⁵

It is true enough that I was in a position, as an associate of Sebeok's since the late 60s, and particularly as the only living SSA member who had

² Sebeok 1984a: 18.

³ Sebeok 1984a: 3.

⁴ Beuchot and Deely 1995; Deely 1995.

⁵ See Petrilli and Ponzio 2001: 4–11, esp. 6 & 10. The mistaking of "a part (that is, human signs and in particular verbal signs) for the whole (that is, all possible signs, human and non-human)" that lay at the heart of this contest had already been identified as a pars pro toto fallacy and made the subject of a landmark anthology of the period: see Deely 1986; Deely, Williams, and Kruse eds. 1986.

personally attended every Executive Board meeting since the founding of the Society in 1976 (and before that in the 1975 preparatory meeting⁶), to indulge in personal reminiscences illuminating how this passage from promising to parlous had been wrought, but the exercise would only be for my expectant colleague across the stone table hugely beside the point of anything reasonably to be expected in the present discussion. Far better, I thought, to imitate the example set by Phaedrus the Myrrhinusian in responding to Eryximachus the Physician at the symposium in the House of Agathon. The present occasion called for nothing less than a furthering of the abductive assignment that our then-elected medicine man proposed as the main mission of semiotics: to mediate between reality and illusion.⁷ Such was my private semiosis of the moment.

I needed no further inducement. For the public semiosis of the occasion in which I found myself I decided then and there to test the interest, intelligence, and patience of my inquiring colleague, and to plunge us together at once into the "illimitable array of concordant illusions" semiotics is centrally preoccupied in bringing to light.

The first illusion under which I was sure my colleague suffered, and which every standard loose answer to the question of what a sign is serves only to further, is the impression that some things are signs while others are not — in other words, that the world of experience can be adequately divided among particulars which are signs and particulars which are not signs. Right away, the situation called for an exorcist rather than a shaman. The ghost of William of Ockham is always present at the outset of these discussions, and, not to under-rate his importance or power, at the outset, at least, it is best to exorcise him. Later on, he can be recalled to further the spirit of the discussion and, indeed, will be essential therefor; but at the outset he mostly causes trouble.

"Look around you", I urged my colleague, "and, like a good phenomenologist, give me a brief inventory of the main types of object that fall under your gaze." Of course, I had already taken into account my colleague's angle of vision, and knew that it fell directly on something that I could see only by turning, something that would be a key to the course of our conversation.

"Well", the colleague noted, "of course there is this side of the building itself whence we exited with its doors and windows; and there is the portico of the driveway with its pillars, the driveway itself, this marvellous tree which

⁶ The First North American Semiotics Colloquium, convened July 28–30, 1975, "at the University of South Florida for the purpose of founding a Semiotic Society of America", as the jacket of the volume memorializing the colloquium (Sebeok ed. 1977) announces.

⁷ Sebeok 1984a: 21: "the central preoccupation of semiotics, I now hold, is ... to reveal the substratal illusion underlying reality and to search for the reality that may, after all, lurk behind that illusion."

⁸ as Sebeok put it in 1984a: 21.

gives us shade, and this fence which gives us privacy. How did you get such a setup for your office?"

"Stick to the point", I said, "and tell me if you see for your inventory anything which could be called a sign."

"Of course. Out there, beyond the driveway and over toward the sidewalk,

is the sign that identifies this building as Monaghan House."

"Yes", I said, "there is so-located a sign. But", I counseled, "you should read it more with your eyes than with your memory, my friend. Take a closer look."

"Of course", my colleague said, hand to forehead, squinting and abashed. "The sign has been changed to say 'Sullivan Hall'."

"Indeed it has", I agreed. "Are there any other signs in your inventory?"

"No", the colleague said. "From here, that is the only sign as such that appears."

"Ah so", I said, "but in your preliminary inventory you concluded by asking how I had managed such a setup for my office. So what you saw around you, even before you misidentified the sign for the building, led you to think of something not actually present in our perception here, namely, my office."

"What do you mean? Your office is right there", said the colleague, pointing to the nearest door.

"To be sure. But for that door to appear to you as 'Deely's office door' presupposes that you know about my office; and it is that knowledge, inside your very head, I dare say, that presents to you a particular door, which could in fact lead to most anything, as leading in fact to my office. So one door at least, among those you noted in this side of the building, even though you did not inventory it as a sign, nonetheless, functioned for you as a sign of my office" (the office, after all, which cannot be perceived from here, being an object which is other than the door which indeed is here perceived).

"I see what you mean", the colleague said. "So any particular thing which leads to thought of another may be called a sign."

"Perhaps", I said, "but not so fast. Tell me first what is the difference between that former Monaghan House sign and my office door, insofar as both of them function in your semiosis as representations of what is other than themselves?"

"Function in my semiosis?"

"Forgive my presumption in bringing in so novel a term. 'Semiosis' is a word Peirce was inspired to coin in the context of work connected with his Johns Hopkins logic seminar of 1883, from his reading in particular of the 1st century BC Herculanean papyrus surviving from the hand (or at least the mind) of Philodemus the Epicurean. Cognizant no doubt of the reliable

⁹ Cf. Peirce (ed.) 1883.

¹⁰ Philodemus i.54-40BC.

scholastic adage that action is coextensive with being, in the sense that a being must act in order to develop or even maintain its being, with the consequent that we are able to know any being only as and insofar as we become aware of its activity, Peirce considered that we need a term to designate the activity distinctive of the sign in its proper being as sign, and for this he suggested the coinage 'semiosis'. So whenever in your own mind one thought leads to another, it is proper to speak of an action of signs, that is to say, of a function of semiosis private to you, of the way signs work, the associations that occur, if you like, in 'your particular semiosis'. In fact, the whole of your experiential life can be represented as a spiral of semiosis, wherein through the action of signs you make a guess (or 'abduction'), develop its consequences ('deduction'), and test it in interactions ('retroduction'), leading to further guesses, consequences, and tests, and so on, until your particular semiosis comes to an end. So" — and here I sketched for him on a scrap of paper a Semiotic Spiral representing our conscious life as animals. 12

Now my colleague is remarkable in a number of ways, one of which is in possessing an excellent knowledge of Greek. So I was horrified but not surprised when my colleague expostulated: "Aha! An excellent coinage, this 'semiosis', though perhaps it should include an 'e' between 'm' and 'i'! For probably you know that the ancient Greek term for 'sign' is precisely on precise precisely on precise precisely on precise preci

Horrified, for I had not expected to be confronted so soon with what is surely one of the most incredible tales the contemporary development of semiotics has had to tell. It was my turn to deal with the tangled web of a private semiosis, my experience in particular on learning through my assignment to team-teach a course with Umberto Eco, ¹³ that there in fact was no term for a general notion of sign among the Greeks. I remember vividly my own incredulity on first hearing this claim. On the face of it, the claim is incredible, as any reader of translations of ancient Greek writings from the Renaissance on can testify. At the same time, the credibility of Eco as a speaker on the subject equalled or surpassed the incredibility of the claim. The evidence for the claim has since been developed considerably, ¹⁴ and I

^{11 &}quot;Agere sequitur esse", in the original. Extended commentary in Deely 1994.

¹² Cf. Figure 1 in *Sign Systems Studies* 29(1): 28 — the semiotic spiral, where A = abduction, B = deduction, C = retroduction.

¹³ Eco and Deely 1983.

¹⁴ At the time, the main evidence in the public record (at least within the intellectual community of semioticians) traced back to 1983, as summarized in the "Description of Contributions" for Reading 6 in Deely, Williams and Kruse 1986: xix. Since then, the substantial work of Manetti 1987 has been added from within semiotics, and the earlier independent confirmation of the original point by Markus 1972 bears consultation. A survey of the point both in its evidence in the ancient Greek context and in its more general import for the Latin Age and for the understanding of

have been forced to deem it now more true than incredible. But how should such a conviction be briefly communicated to a colleague, particularly one

more knowledgeable of Greek than I?

There was nothing for it. "Not exactly so. In truth the term σημείον in the Greek age does not translate into 'sign' as that term functions in semiotics, even though the modern translations of Greek into, say, English, obscure the point. For actually the term σημείον in ancient Greek names only one species of the things we would single out today as 'signs', the species of what has been called, after Augustine, signa naturalia, natural signs." ¹⁵

Looking perplexed, my colleague avowed "I am not so sure that is true. Are you trying to tell me that the word 'sign' as semioticians commonly employ it has a direct etymology, philosophically speaking, that goes back only to the the 4th or 5th century AD? And to Latin, at that, rather than to Greek? To Augustine's *signum* rather than to the σ µEíov of ancient Greece? Surely you jest?"

"The situation is worse than that", I admitted. "I am trying to tell you that the term 'sign', as it has come to signify in semiotics, strictly speaking does not refer to or designate anything of the sort that you can perceive sensibly or point out with your finger, even while saying 'There is a sign'."

Flashing me a glance in equal proportions vexed and incredulous, my colleague said: "Look. I wasn't born yesterday. We point out signs all the time, and we specifically look for them. Driving to Austin, I watch for signs that tell me I am on the right road, and what exit I should take. Surely you don't gainsay that?"

"Surely not", I sighed. "Surely not. But semioticians, following first Poinsot¹⁶ and, more recently, Peirce,¹⁷ are becoming accustomed to a hard distinction,¹⁸ that between signs in the strict or technical sense and signs loosely or commonly speaking, which are not signs but elements so related to at least two other elements that the unreflecting observer can hardly help but take them as signs among other objects which, at least comparatively speaking, are not signs. Let me explain the distinction."

"Please."

The giant rat of Sumatra was veritably on the table, a problem in a culture for which rats are not considered palatable; a problem compounded by my own situation in a subculture about as not yet prepared to entertain

semiotics today is found in Deely 2001, referred to throughout notes to this dialogue as the *Four Ages*.

See the Index entries for σημείον and for NATURAL SIGN in the Four Ages (Deely 2001: 838 & 939).

¹⁶ Poinsot 1632: Book I, Questions 1 and 3. Commentary in the *Four Ages* (Deely 2001: 432–33, 433n58).

¹⁷ Cf. Peirce 1897 and after; commentary in the *Four Ages* (Deely 2001: 433n58, 639-40, 641n90.

See the Index entry SIGN in the *Four Ages* (Deely 2001: 993–94), esp. the subentry "strict sense of being of sign ... distinguished from loose sense", p. 994.

considerations of idealism as the world was in the time of Sherlock Holmes to consider the case of the very giant rat now sitting, beady-eyed, on the table between me and my colleague. Fortunately for me, or unfortunately for my colleague, it happened that the stare of those beady eyes was not fixed upon me, so it could not unnerve me so long as I kept control of my imagination.

Now you must consider, in order to appreciate the turn our conversation takes at this point, that the department in which I teach is affiliated with a Center for Thomistic Studies, and probably you know that the late modern followers of Thomas Aquinas pride themselves on "realism", a philosophical position that holds for the ability of the human mind to know things as they are in themselves, prior to or apart from any relation they may have to us. To refute idealism, these fellows generally deem it sufficient to affirm their own position, and let it go at that, their puzzlement being confined to understanding how anyone could think otherwise. ¹⁹

But semiotics cannot be reduced to any such position as a traditional philosophical realism, even if Peirce be right in holding (as I think he is right²⁰) that scholastic realism is essential to if not sufficient for understanding the action of signs. In other words, the conversation had come to such a pass that, in order to enable my companion to understand why every object of experience as such presupposes the sign, I had to bring him to understand the postmodern point enunciated by Heidegger to the effect that²¹ "as compared with realism, idealism, no matter how contrary and untenable it may be in its results, has an advantage in principle, provided that it does not misunderstand itself as 'psychological' idealism". Best, I thought, to begin at the beginning.

"You would agree, would you not" — I put forward my initial tentative — "that we can take it as reliable knowledge that the universe is older than our earth, and our earth older than the life upon it?"

"So?" my colleague reasonably inquired.

"So we need to consider that consciousness, human consciousness in particular, is not an initial datum but one that needs to be regarded as something that emerged in time, time being understood²² simply as the measure of the motions of the interacting bodies in space that enables us to say, for example, that some fourteen billion years ago there was an initial explosion out of which came the whole of the universe as we know it, though initially bereft of life, indeed, of stars and of planets on which life could exist."

"Surely you're not just going to give me that evolution stuff? And what has that got to do with signs being something that objects presuppose, a

¹⁹ See the *Four Ages* (Deely 2001), pp. 740–41, text and note 9.

²⁰ Peirce 1905: CP 5.423, and c.1905: CP 8.208; commentary in Deely 2001: 616-

²¹ Heidegger 1927: 207.

See the re-definition of "The Boundary of Time" and "Time and Space" in the Four Ages (Deely 2001: xxix-xxxiii, 70-72).

proposition that doesn't exactly leap out at you as true, or even as particularly sensible?"

"Actually it is not evolution, but something more basic that I have in mind. I want to suggest that semiosis is more basic than evolution, and perhaps explains better what has heretofore been termed evolution. But, I admit, that is a bit much to ask at this point. Perhaps indeed I cast my net too wide. Let me trim my sails a bit, and ask you to agree only to this much: there is a difference in principle between something that exists in our awareness and something that exists whether or not we are aware of it?"

"What are you getting at?"

"A distinction between objects and things, wherein by 'object' I mean something existing as known, something existing in my awareness, and by 'thing' rather something that exists whether or not I have any awareness of it."

"But surely you do not deny that one and the same thing may be one time unknown and another time known? This is merely an accident of time, an occurrence of chance, hardly a distinction in principle."

"Ah so. But surely you do not deny that an object of experience as such necessarily involves a relation to me in experiencing it, whereas a thing in the environment of which I have no awareness lacks such a relation?"

"Well anyone can see that."

"And surely you concede that an object of experience need not be a thing in the same sense that it is an object?"

"What do you mean in saying that?"

"Consider the witches²⁴ of Salem."

"There were no witches at Salem."

"Then what did we burn?"

"Innocent women."

"Innocent of what?"

"Of being witches."

"But the people at Salem who burned these women²⁵ thought they were burning witches."

"They were wrong."

"So you say. But surely you see that, if the burners were wrong, something that did exist was burned because of something that did not exist? Surely you see that something public, something objective in my sense — the

²³ Deely 1996, in finem.

²⁴ Witches: women (usually women) who (according to the official views promulgated in medieval and renaissance church documents), in exchange for their worship, were endowed by Satan with supernatural powers. To paradigmize a huge literature: see the gloss on Kramer and Sprenger 1487 in the References.

Actually, the witches at Salem were hung rather than burned, I am told, "death for witchcraft" being the result in either case. My colleague apparently was familiar, as I at the time, only with the more 'colorful' version of the Salem trials.

being of a witch — was confused with something that did exist — the being of a female human organism — and that something existing was burned precisely because it was objectively identified with something that did not exist?"

"I think I am beginning to see what you are getting at", my colleague said; "but what does this have to do with signs?"

"Every mistake involves taking something that is not for something that is", I said.

"True enough", said my colleague.

"So every mistake involves an action of signs."

"Yes", said my colleague. "I see that to see a witch you have to be mistaken; but to see a woman you only need eyes, not signs. It is the truth I am interested in. By your account, all that signs account for is the possibility of being mistaken. What about the possibility of being right? Are you a realist or aren't you?"

"If you grant me that an object necessarily, whereas a thing only contingently, involves a relation to me as cognizant, then, in order to advance my argument that every object presupposes sign, I need to ask you to consider the further distinction between sensation and perception, where by the former I understand the stimulation of my nervous system by the physical surroundings and by the latter I understand the interpretation of those stimuli according to which they present to me something to be sought (+), something to be avoided (-), or something about which I am indifferent (0)."

"I see no problem with that."

"Then perhaps you will grant further that, whereas sensation so construed always and necessarily involves me in physical relations that are also objective in their termini, perception, by contrast, insofar as it assimilates sensation to itself, necessarily involves physical relations that are also objective, but further involves me in objective relations that may or may not be physical, especially insofar as I may be mistaken about what I perceive. In other words, sensations give me the raw material out of which perception constructs what are for me objects of experience, such that these objects have their being precisely as a network of relations only some of which are relations independently of the workings of my mind — and which relations are which is not something self-evident, but something that needs to be sorted out over the course of experience insofar as experience becomes human experience."

"Why do you say insofar as it becomes human experience?"

"Because, for reasons we can go into but which here I may perhaps ask you to assume for purposes of advancing the point under discussion, the notion of a difference between objects and things *never occurs* to any other animal except those of our own species."

"Huh?"

"Well, you're a 'realist', aren't you?"

"Of course."

"What do you mean by that?"

"Simple. That the objects we experience have a being independent of our experience of them."

"But you just admitted that we experience objects which are not things."

"Yeah, when we make mistakes."

"But not only when we make mistakes."

"How do you figure?"

"Is there a boundary between Texas and Oklahoma?"

"Is the Pope Catholic?"

"I take that to be a 'Yes'." I let pass that the Pope at the moment is Polish: transeat majorem.

"Of course there is a boundary between Texas and Oklahoma. I'm no Okie."

"But look at the satellite photographs. No such boundary shows up there. Would you say that the boundary exists objectively rather than physically, but nonetheless really?"

"That's a funny way of talking."

"Not as funny as thinking that social or cultural realities, whether involving error or not, exist inside your head as mere psychological states. Consider that what sensations you have depends not only on your physical surroundings but just as much upon your bodily type. Consider further that how you organize your sensations depends even more upon your biological heredity than it does upon the physical surroundings. If you see that, then you should be able to realize that the world of experience, not the physical environment as such, is what is properly called 'the objective world'; and you cannot avoid further realizing that the objective world of every species is species-specific."

"Species-specific objective worlds? I thought the objective world was the world that is the same for everybody and everything, the world of what really is."

"On the contrary, the world that is 'the same regardless of your species' is merely the physical environment, and it is, moreover, a species-specifically human hypothesis rather than anything directly perceived. Because sensation directly and necessarily puts us in contact with the surroundings in precisely something of their physical aspect of things obtaining independently of us, we can from within experience conduct experiments which enable us to distinguish within our experience between aspects of the world which exist physically as well as objectively and aspects which exist only objectively. That, my friend, is why 'realism' is a philosophical problem, not a self-evident truth. After all, 'reality' is a word, and needs to be learned like any other. You need to read something²⁶ of Peirce."

²⁶ I had in mind the modern distinction between primary and secondary qualities of sensation, and the very different ways in which the scholastic realists of Latin times and Peirce at the end of modern times himself resolved the distinction to the common

"You seem to be veering into idealism." My colleague frowned mightily, hardly in sign of approval.

"Not at all. I thought you liked to acknowledge what is? And certainly an objective world shot through with emotions and the possibilities of error, which is specific to humans and even subspecific to different populations of humans is the reality we experience, not just some physical environment indifferent to our feelings about it? The indifferent physical environment is a hypothetical construct, a well-founded guess, which science confirms in some particulars and disproves in others. For surely you don't think it was science or philosophy that disproved witches, do you? Haven't you read the old papal decrees on the subject, or the theological treatises on how to discriminate between ordinary women and women who are witches?²⁷ It behooves you to do so if you are married or even have a girlfriend."

"But all you are talking about is mistakes we have made, psychological states disconnected from objectivity."

"On the contrary, there are no such thing as psychological states disconnected from objectivity. Objectivity precisely depends upon psychological states which give the subjective foundation or ground for the relations which terminate in the publically experienced interpretations that are precisely what we call objects. The key to the whole thing is relation in its unique being as irreducible to its subjective source always terminating at something over and above the being in which the relation is grounded." I could not help but think of the two main texts in Poinsot²⁸ which had so long ago first directed my attention to this simple point made quasi-occult over the course of philosophy's history by the obtuse discussions of relation after Aristotle.²⁹

"But I thought knowledge consisted in our assimilation of the form of things without their matter."

Now I knew for sure my colleague was indeed a closet Thomist at least, versed in the more common Neothomist version of ideogenesis, or theory of the formation of ideas through a process of abstraction.

"Well", I ventured, "in the first place, that is not a self-evident proposition, but one highly specific medieval theory of the process of abstraction; and further, absent the context of a full-blown theory of relations as

end of vindicating the transcendental equivalence of truth with being — that "communication and being coincide", as Petrilli and Ponzio (2001: 54) put it. See the Index entries QUALITIES GIVEN IN SENSATION, and TRANSCENDENTALS, in the *Four Ages* (Deely 2001: 973, 1005–6).

²⁷ See Kramer and Sprenger 1486.

²⁸ Poinsot 1632: *Treatise on Signs*, Second Preamble, Article 2, 93/17–96/36; and Book I, Question 1, 117/18–118/18.

²⁹ See the summaries of the matter essayed by Grote 1872, as learned as the confusion gets. Cf. the discussion in the *Four Ages* (Deely 2001), pp. 72–78, 226–231, and 423–427.

suprasubjective links³⁰ to what is objectively other than ourselves with all our psychological states, affective as well as cognitive, such a theory is finally incoherent. For any 'form', with or without 'matter', if and insofar as it is 'in me', is part and parcel of my subjectivity, except and insofar as it mayhap give rise to a relation to something over and above my subjectivity, which is by definition what is meant by 'terminating objectively'."

"Could you state clearly your meaning of 'subjectivity' here", asked my

colleague.

"Indeed. Subjectivity is the sum total of everything that distinguishes me from the rest of the universe,³¹ and relations are whatever ties over and above my subjectivity link me to anything other than myself, be that other physical as well as objective or merely objective."

"Merely objective?" my colleague queried with eyebrows raised.

"Merely objective: existing as known and insofar publically accessible but not as such existing physically in the environment³², like the border of Texas with Mexico or the office of President of the United States, and so on. Subjective existence is physical existence, including the whole of one's private psychological states. Objective existence, by contrast, is public in principle, in the way that any two otherwise isolated subjectivities can yet be in relation to a common third."

"But this 'common third', as you put it, surely must be something real?"

"Not at all, if by 'real' you mean existing independently of the workings of mind, something subjective, a physical entity. It suffices that it 'exist' as the terminus opposed to the foundation or ground in subjectivity of some relation, which relation as a relation exceeds the subjectivity in which it is grounded by terminating at something over and above subjectivity as such, something 'other' than that subjectivity. This 'other' may indeed also exist independently of the cognitive or affective relation terminating thereat, in which case it will be a thing as well as an object. Subjectivity, you can see, is what defines things as things. Objectivity, by contrast, obtains only in and through relations, normally a whole network of relations, which give even the things of the physical environment their status as experienced and whatever meaning they have for the lifeform experiencing them. Since objectivity always includes (through sensation) something of the subjectivity of things in the environment, this objective meaning is normally never wholly divorced from the subjective reality of the physical world, but it is never reducible to that reality either."

³⁰ See the Index entries for SIGN and SUPRASUBJECTIVDE BEING in the Four Ages (Deely 2001: 993–94, 1001–2).

³¹ See the Index entry SUBJECTIVE BEING, SUBJECTIVITY in the *Four Ages* (Deely 2001: 1000–1001), in contrast with the entry for INTERSUBJECTIVE BEING, INTERSUBJECTIVITY.

³² See the Index entry OBJECT, OBJECTIVE BEING in the *Four Ages* (Deely 2001: 944-45).

"Surely you are not saying that every object is merely the terminus of some relation?"

"Exactly so — some relation or complex of relations, a 'semiotic web', as we like to say in semiotics. Except your use of 'merely' here seems hardly appropriate, when one considers that the terminus of cognitive and affective relations normally involves something of the subjectivity of things in their aspects as known, even though the terminus of every relation as terminus owes its being as correlate to the fundament to the suprasubjectivity distinctive of the being peculiar to and definitive of relation."

"And where does sign come in?"

"At the foundation, my friend; but not as the foundation. That was the mistake the scholastics made³³ in trying to divide signs into 'formal' and 'instrumental' signs without realizing that our psychological states are no less particulars than are physical objects we point to when we single something out as a 'sign'."

"You are losing me."

"Go back to the σημείον. Consider the howl of a wolf. Would that be a σημείον?"

My colleague pondered, consulting within the privacy of self-semiosis a knowledge of ancient Greek. I awaited the result of this consultation.

"I am not so sure. The $\sigma\eta\mu\epsilon$ ia were always sensible events, to be sure, and ones deemed natural at that. But they were primarily associated, as I remember, with divination, wherein the natural event manifested a will of the gods or a destined fate, or with medicine, wherein the natural event is a symptom enabling prognosis or diagnosis of health or sickness. No, I am not so sure the howl of a wolf would fall under $\sigma\eta\mu\epsilon$ iov, or at least I don't see how it would."

"All right then", I suggested, "let us consider the howl of a wolf first just as a physical event in the environment, a sound or set of vibrations of a certain wavelength propagating over a finite distance from its source within the physical surroundings."

"I see no difficulty in that", my colleague allowed agreeably.

"Now let us suppose two organisms endowed with appropriate organs of what we call hearing, situated within the range of propagation of that sound. What would you suppose?"

"I would suppose they would hear the sound, if they are not asleep or too distracted."

"Let us suppose they hear the sound, the one organism being a sheep and the other another wolf. Now the sound occurring physically and subjectively in the environment independently of our organisms' hearing of it enters into a relation with each of the two organisms. The sound not only exists physically, it now exists also objectively, for it is heard, it is something of which the organisms are respectively aware. It is a kind of object, but what kind? For

³³ See Chapter 8 of the Four Ages (Deely 2001: esp. 388-391)

the sheep it is an object of repulsion (-), something inspiring fear and an urge to hide or flee. For the other wolf, a male wolf, it happens — heeding the advice of St. Thomas to use sexual examples to make something memorable — let us say that the howl reveals a female in heat. Such a sound, no different in its physical subjectivity from the vibrations reaching the frightened sheep, inspires in the male an attraction, as it were (+), what former President Carter might call 'lust in the heart'."

"What are you saying?"

"That one and the same thing occurring in the environment gives rise in awareness to quite different objects for different organisms, depending on their biological types. Sensations become incorporated into perceptions of objects not merely according to what things are in the surroundings but especially according to how the sensations are interrelated within the experience of the perceiving animal as part of its total objective world."

"So this is what you meant when you said that objective worlds are species-specific?"

"Exactly so. Every organism in its body is one subjectivity among others, a thing interacting physically with other things in the environment. But if the organism is a cognitive organism, its body has specialized parts suited to a psychological as well as a physiological response to those physical environmental aspects proportioned to the organ of sense. The psychological response in those cases is no less 'subjective', no less 'inside the organism', than the physical effects of the interaction; but the psychological effect gives rise to a cognitive relation, a relation of *awareness* of something in the environment. But what is that 'something'? The organism, according to its own nature and past experiences, attaches a value to the stimulus and relates that stimulus to its own needs and desires. In other words, the mere stimulus of sensation becomes incorporated objectively into a whole network of experience wherein it acquires a meaning."

"But that is subjectivism", my colleague blustered indignantly. "Values are real, objective, not subjective. You are making them subjective."

"Pay attention", I pleaded. "Of course the values are objective. Anything existing within awareness is objective. They are also bound up with the subjectivity of the physical environment, both in the being proper to whatever is the source of the stimulus and in the being of the cognizing organism. Insofar as the subjectivity of the physical world bespeaks a being independently of whatever I may know, feel, or believe, the values partake of that being. But, as values, they reveal more the being of the organism evaluating than the subjective nature of the stimulus in the environment. They belong as values to the species-specific objective world of the experiencing organism."

"This is troubling", my colleague alleged.

"Let me put you at ease", I offered. "In order for an organism to be aware of something outside itself, there must be inside itself a disposition or state on

the basis of which it is related cognitively (and, I would add, affectively³⁴) to that outside other. If the outside other has an existence of its own quite independent of the cognition of the cognizing organism, then it is a thing, indeed. But insofar as it becomes known it is an object, the terminus of a relation founded upon the psychological states inside the organism. Neither the relation nor the thing become object are inside the knower. All that is inside the knower is the disposition or state presupposed for the thing to exist as known.³⁵ And the relation is inside neither the knower nor the known but is over and above both of them. Compared to the subjectivity of either the knower or the known the relation as such is suprasubjective. But as related cognitively to the knower the thing known is the terminus of a relation founded in the knower's own subjectivity. As terminating the relation it is an object. That same object if and insofar as it has a subjective being of its own is not merely an object but also a thing."

"But what if the object has no subjectivity proper to it?" my colleague probed, thinking, as I suspected from his nonverbal signs, of Salem and witches.

"Then it is only an object, what the scholastic realists used to call a 'mind-dependent being'. So do pay attention: every mind-dependent being is an objective reality or being, but not every objective reality is a mind-dependent being. Some objects are also things, in which case they are mind-independent beings 37 as well as objective realities."

"But I thought an *ens rationis*, what you call a mind-dependent being, was a mere mental reality, a psychological state like error or delusion."

"Hardly. Surely you recall that, according to the scholastic realists so beloved of Peirce, logical entities all are *entia rationis*? And the relations of logic are supremely public, binding upon all? Now it is true that logic reveals to us only the consequences of our beliefs, of our thinking that things are this way or that, not necessarily how things are in their independent being. But the fact that logical relations are public realities, not private ones, that logical relations reveal *inescapable* consequences of this or that belief, not private whims, already tells you that they belong to the Umwelt, not to the Innenwelt, and to the Umwelt as species-specifically human at that."

"Umwelt? Innenwelt? Where does that come from?"

"Sorry. Umwelt is shorthand for objective world. In the case of the species-specifically human objective world it is often called rather a Lebenswelt; but please", I pleaded, "let us not get into that particular right now or we will never get to the bottom of the question you have raised as to

³⁴ See the discussion below of "cathexis" and "cathecting": p. 28, n. 63; and p. 32, n 82.

n 82.

35 See the Index entry FORMAL SIGN in the *Four Ages* (Deely 2001: 893–894).

³⁶ Ens rationis. See the Index entries ENS RATIONIS and MIND-DEPENDENT BEING in the Four Ages (Deely 2001: 883–884 and 934–935, respectively).

³⁷ Entia realia. See the Index entries ENS REALE and MIND-INDEPENDENT OR PHYSICAL in the Four Ages (Deely 2001: 884–885 and 935–937, respectively).

why a sign is best defined at this stage of history as what every object

presupposes."

"But", my colleague interjected, "why in the world do you speak of the definition we are seeking to plumb as best 'at this stage of history'? Surely you know that a real definition tells what something is, and is not subject to time? Are species not eternal?"

"Surely you will allow for more subtlety than that as regards definitions?" I replied hopefully. "After all, even when we try to express in words what a thing is, it is our understanding of the thing that we express, not purely and simply the thing itself? And this is true even when and to the extent that our understanding actually has some overlap, identity, or coincidence with the being of the thing — even when, that is to say, our definition partially expresses a thing objectified, a thing made object or known?"

"I see what you mean. Even a definition supposed real expresses only our best understanding of some aspect of real being, and insofar as this understanding is not exhaustive it may admit of revision or of being supplanted through subsequent advances or alterations of understanding", my colleague allowed.

"I am glad you see that", I breathed aloud, "for, in the case of the sign, there have been at least three, or even more (depending on how you parse the history) revisions of the definitory formula generally accepted, ³⁸ and I expect more to come."

"Don't discourage me", my colleague pleaded. "Let us at least get clear for now about this new formula you deem best at 'our present historical moment'. I get your meaning of Umwelt. What about this Innenwelt husiness?"

"Innenwelt is merely shorthand for the complexus of psychological powers and states whereby an organism represents to itself or 'models' the environment insofar as it experiences the world. So Innenwelt is the subjective or private counterpart to the objective world of public experience comprising for any species its Umwelt."

"That helps, but I fail to see what all this new terminology and idiosyncratic way of looking at things has to do with signs, let alone with signs being presupposed to objects."

"Then let me introduce at this point the great discovery of semiotics, actually first made in the 16th century, or early in the 17th at the latest, 39 although never fully marked terminologically until Peirce resumed the Latin discussion around the dawn of the 20th century. 40 Signs are not particular things of any kind but strictly and essentially relations of a certain kind, specifically, relations irreducibly triadic in character."

³⁸ See the Index entry for DEFINITION OF SIGN in the Four Ages (Deely 2001: 874–

^{875).}See the Conimbricenses 1607, especially in the bilingual edition by Doyle 2001.

See the Conimbricenses 1607, especially in the bilingual edition by Doyle 2001. 40 See the Index entry INTERPRETANT in the Four Ages (Deely 2001: 914–915).

"But surely you are not denying that *that*", my colleague said, pointing to the physical structure renaming the building beside us as Sullivan rather than Monaghan, "is a sign?"

"No, I am not exactly denying that; what I am denying is that what makes what you are pointing to a sign is anything about it that you can point to and directly see with your eyes or touch with your hands. What makes it a sign is that, within your Umwelt, it stands for something other than itself; and because it succeeds (in your Umwelt) in so standing it is for you a sign. But what makes it thus succeed is the position it occupies in a triadic relation; and, strictly speaking, it is that relation as a whole that is the being of sign, not any one element, subjective or objective, within the relation."

"I don't understand", the colleague confessed. But there was interest in the voice, not impatience or indifference. So I was encouraged to continue.

"I suppose we usually think of a relationship dyadically, as a link between two things", I ventured.

"Sure", my colleague interjected, "like the relation between a sign and what it signifies. Why don't you just accept Jakobson's famous formula for defining sign, 41 aliquid stat pro aliquo, one thing standing for another?"

"I am delighted you are familiar with that essay by Jakobson, which has become a classic, 42 one of the landmarks in the semiotic development of the last century", I said, pleasantly surprised again by my colleague's learning. "It took me almost nineteen years to realize a major flaw in that formula, in that the *aliquo* allows for a misunderstanding along Cartesian lines, wherein objects are reduced to ideas in the subjective or psychological sense. I made a major address to the Semiotic Society of America on this point in 1993, 43 showing, or attempting to show, that this classic formula should be revised to read rather *aliquid stat pro alio*, in order to leave no doubt that the sign, unlike an object, 44 stands never for itself but always for another than itself."

"But since you have brought up Jakobson's formula", I continued, "let me remind you that he intended the formula to express the relation distinctive or constitutive of sign, a relation Jakobson felicitously characterized as *renvoi*."

"I had forgotten that expression renvoi", my colleague admitted, "but I don't see how it helps us here."

"Well", I said, "I am slow, proof of humanity. Since my initial proposal for revision of Jakobson's formula eight more years have passed before a second revision occurred to me as necessary."

"A second revision?" queried my colleague.

"Yes. If you will recall, renvoi for Jakobson was not merely the relation of sign to signified, insofar dyadic, as you have suggested. Renvoi was a

⁴¹ Jakobson 1979.

⁴² See Eco 1987.

⁴³ Deely 1993, the SSA Thomas A. Scheok Fellowship Inaugural Lecture.

⁴⁴ Poinsot 1632: Tractatus de Signis, Book I, Question 1, 116/14–117/17; Deely 1986a.

relationship wherein the so-called sign manifested its significate to or for someone or something. So the formula in fact not only needs to be so revised as to preclude the typically modern epistemological paradigm wherein signs as other-representations can be confused with objects as self-representations, as I manifested in my 1993 Sebeok Fellowship inaugural address, it needs also to be revised to include a Latin dative expressing the indirect reference to the effect wherein an action of signs achieves it distinctive outcome."

"You raise two questions in my mind", my colleague said with some agitation. "You say that the sign manifests 'to or for someone or something'. How is 'to' equivalent with 'for'? And how is 'someone' equivalent with 'something'? But before you respond to these two queries, please," my colleague requested, "tell me how would you have the classic formula finally read."

"Aliquid alicuique stans pro alio, one thing representing another than itself to yet another", I suggested, "although the impersonal verb form stat would work as well as the participial stans. Only with a final revision like this could it be said finally, as Sebeok said (as I now see) a little prematurely, 45 that by the term renvoi Jakobson had 'deftly captured and transfixed each and every sign process conforming to the classic formula'; for if a relation is not triadic, it is not a sign relation. Whence the truly classic formula: Aliquid stat alicuique pro alio."

"Very interesting", my colleague allowed. "Now could you answer my two questions?"

"Your questions cut to the heart of the matter. Consider the bone of a dinosaur, which is known as such. It functions in the awareness of the paleontologist as a sign. He recognizes it, let us say, as the bone of an Apatosaurus. Consider that same bone chanced upon by a Roman soldier in the last century BC. Whatever it signified, if anything, to the soldier, it did not signify an Apatosaurus. Agreed?"

"Agreed", my colleague allowed. "In those circumstances it was more an object than a sign, not a fossil at all, so to speak."

"And yet it was a fossil, waiting to be seen through the right eyes. It was not an Apatosaurus sign to someone there and then, in that last century, but it remained that it was prospectively such a sign for a future observer."

"Yes", the colleague conceded, "but that prospective signification was to someone, not to something."

"You raise the difficult question of whether the 'to or for which' of a sign need always be a cognitive organism or not. Let me acknowledge the difficulty of the question, but not try to answer it now. Suffice it to say, for the moment at least, that when an organism interprets something as a sign, that interpretation is required to complete the sign's signification as something actual here and now."

⁴⁵ Sebeok 1984: 9.

"I can see that. A sign requires an interpretation if it is to succeed as a sign and not just be some dumb object. But I don't see how an inorganic substance can provide an interpretation. Come on!"

"So", I continued, proposing to steer the discussion more directly to the point at hand, "pay attention: what you call a sign, which I will shortly manifest is a loose rather than a strict way of speaking, doesn't just (dyadically) relate to what it signifies, it signifies what it signifies (triadically) to or for something else. Always hidden in the sign-signified dyad is a third element, the reason why or ground upon which the 'sign', as you call it, signifies whatever it does signify and not something else." I didn't not see the point, unless my colleague fastened upon it, which happily did not happen, in pointing out here the important distinction between "ground" in the technical Peircean sense redolent of the old objectum formale of scholastic realism and "ground" in the scholastic realist sense of fundamentum relationis. Instead, my colleague called for a concrete illustration, much simpler to provide. I secretly breathed a sigh of relief.

"Give me an example", demanded the colleague.

I hastened to comply, before the absolute point so pertinent here might occur to my interlocutor (inexplicably, my friend Joe Pentony came into my mind).

"I make a noise: 'elephant'. It is not just a noise, but a word. Why, hearing the noise 'elephant' do you not think of a thin-legged, long-necked, brown-spotted animal that nibbles leaves instead of a thick-legged, large gray animal with a prehensile proboscis?" Since my colleague fancied to be a 'realist', it was not difficult to anticipate the reply about to come. Nor was I disappointed.

"Obviously because 'elephant' means elephant and not giraffe", the colleague said, this time a touch impatiently.

"Yes, of course", I granted, "but is that not only because of the habit structures internalized in your Innenwelt which make the noise 'elephant' a linguistic element in our Lebenswelt on the basis of which we are habituated to think first, on hearing the noise, of one particular animal rather than another? So in the experience of any signification is there not only the 'sign' loosely so-called and the signified object, but also the matter of the basis upon which the sign signifies this object rather than or before some other object? You see that?"

"I do."

"Then you see that the relation making what you with your finger point out as a 'sign' to be a sign is nothing intrinsic to the so-called sign, but rather something over and above that subjective structure; to wit, a relationship, which has not one term but two terms, to wit, the signified object for one and,

 $^{^{46}}$ See the Index entry for GROUND, senses A & B, in the *Four Ages* (Deely 2001: 900–903).

for the other, the reason why that rather than some other is the object

signified?"

"I think I do see that. I think. But please explain further, so I can be sure." Realists like to be 'sure'. Infallibility is their ideal goal, as it were, the modern variety at least (rather more naive in this than their Latin scholastic forebears, I might add), ironically the final heirs of Descartes, who prized certainty, in the end, above 'realism'.

"Well, here, history can be a great help. Animals, including human animals, begin with an experience of objects, and objects normally given as outside of or other than themselves. In order to mature and survive, every animal has to form an interior map, an Innenwelt, which enables it sufficiently to navigate its surroundings to find food, shelter, etc. This 'sufficiently' is what we call an Umwelt, and it contrasts in principle with, even though it partially includes something of, the things of the physical environment."

"I think", my colleague marvelled, "I begin to understand your ironic manner whenever the subject of 'realism' in philosophy arises. Realists assume our experience begins with things as such, whereas now I see that our experience directly is only of things as subsumed within objects and the species-specific structure of an objective world! If entia realia and entia rationis are equally objective within our experience, then the sorting out of which-is-which is a problem rather than a given!"

"Exactly so", I answered, delighted at this sudden burst of light from my colleague. "Now if only I can get you to see how object presupposes sign, perhaps we can get some lunch."

"Please do so", the colleague said, "and, now that you mention it, the quicker the better, for I am getting hungry."

"Permit me an *obiter dictum*, nonetheless", I pleaded, "for I think it will facilitate our progress to a successful outcome of the main point before us."

"By all means", the colleague allowed, drawing an apple from a bag and taking a bite.

"Even though you have heretofore deemed yourself a 'realist'," I ventured, "I have noticed from earlier conversations that you have a definite partiality to phenomenology, even though Husserl himself conceded that his position in the end proved but one more variant in the characteristically modern development of philosophy as idealism. ⁴⁷

"So notice two points. First, the phenomenological idea of the intentionality" of consciousness 48 reduces, within semiotics, to the theory of relations, 49 and expresses nothing more than the distinctive characteristic of psychological states of subjectivity whereby they give rise necessarily to

⁴⁷ See Husserl 1929; Spiegelberg 1965: I, 155.

From Brentano 1874. Brief notice in the Four Ages (Deely 2001: 404 and 561n38); extended comment in Deely 1978.

49 Deely 1971, 1975, 1978

relations triadic rather than dyadic in character. But second, and more fundamentally, recall the question with which (among others) Heidegger concluded his original publication of *Being and Time*:⁵⁰

Why does Being get 'conceived' 'proximally' in terms of the present-at-hand and not in terms of the ready-to-hand, which indeed lies closer to us? Why does this reifying always keep coming back to exercise its dominion?

Within semiotics we can now give an answer to this question."
"We can?"

"Indeed. Ready-to-hand is the manner in which objects exist within an animal Umwelt. Human beings are animals first of all, but they have one species-specifically distinct feature of their Innenwelt or modeling system, a feature which was first brought to light in the postmodern context of semiotics, so far as I know, by Professor Sebeok, and in amount in a system or Innenwelt includes the ability to undertake the discrimination within objects of the difference between what of the objects belongs to the order of physical subjectivity and what belongs wholly to the order of objects simply as terminating our awareness of them. Professor Sebeok, Professor

"Actually I don't recall any such discussion in St. Thomas."

"Fair enough, and we don't want to get completely off the track. Later on you might want to look up the point in Aquinas and give some consideration to its implications; for it seems to me that what he is saying is that our original experience includes something of the world of things but definitively cannot be reduced to the order of *ens reale*. Comparative realities and unrealities alike are discovered from within, not prior to, objectivity. The experience of that contrast, indeed, is what transforms the generically animal Umwelt into a species-specifically human Lebenswelt wherein even witches can be mistaken for realities of a definite type, and wherein it may be hard to realize that the mind-independent revolution of the earth around the sun is not

⁵⁰ Heidegger 1927: 437.

⁵¹ See, inter alia, Sebeok 1984.

⁵² Entia realia.

⁵³ Entia rationis.

⁵⁴ In the *Four Ages* (Deely 2001), see the whole of Chapter 7, but esp. pp. 341–357, and the Table on p. 354.

⁵⁵ This term is from Husserl 1936 in particular; in Aquinas's own manner of speaking, he calls the focus or "starting point" of species-specifically human awareness ens primum cognitum, which then subdivides over the course of experience into ens reale and ens rationis. See the Four Ages (Deely 2001), Chap. 7.

unreal whereas the mind-dependent revolution of the sun around the earth is not real."

"What about Heidegger's objective distinction between the ready-to-hand

and the present-at-hand?", my colleague pressed.

"Simple. This is a distinction that does not arise for any animal except an animal with a modeling system capable of representing objects (as such necessarily related to us) according to a being or features not necessarily related to us but obtaining subjectively in the objects themselves (mistakenly or not, according to the particular case) — an animal, in short, capable of wondering about things-in-themselves and conducting itself accordingly. Now, since a modeling system so capacitated is, according to Sebeok, what is meant by language in the root sense, whereas the exaptation of such a modeling in action gives rise not to language but to linguistic communication, 56 and since 'language' in this derivative sense of linguistic communication is the species-specifically distinctive and dominant modality of communication among humans, we have a difficulty inverse to that of the nonlinguistic animals, although we, unlike they, can overcome the difficulty."

"And what difficulty is that?"

"Within an Umwelt, objects are reality so far as the organism is concerned. But without language, the animals have no way to go beyond the objective world as such to inquire into the physical environment in its difference from the objective world. Within a Lebenswelt, by contrast, that is to say, within an Umwelt internally transformed by language, the reality so far as the organism is concerned is confused with and mistaken for the world of things. Objects appear not as mixtures of entia rationis with entia realia, but simply as 'what is', 'real being', 'a world of things'."

"That is the general assertion of 'realists'", my colleague mused. "It also

reminds me of Reid's 'philosophy of common sense'."

"As well it might", I said.⁵⁷ "Descartes and Locke confused objects as suprasubjectively terminating relations with their counterposed subjective foundations or bases in the cognitive aspect of subjectivity, thereby reducing Umwelt to Innenwelt; Reid, in seeking to counter them and, especially, Hume after them, confused public objects with things, ens primum cognitum with ens reale (in the earlier terms of Aquinas), thereby reducing Umwelt to physical environment. But the physical universe of things is distinguished from within the world of objects as the sense of that dimension of objective experience which reveals roots in objects that do not reduce to our experience of the objects. Reality in this hard-core sense of something existing independently of our beliefs, opinions, and feelings is not 'given' to some magical faculty of 'common sense'. There is no 'gift of heaven' facilely discriminating 'the real' for our otherwise animal minds - a gift such as

This distinction, taken from Sebeok, is one of the bases upon which the history of philosophy as a whole needs to be rewritten: see the Four Ages, Chapter 1. See "What to do with common sense?" in the Four Ages (Deely 2001: 547–48).

Reid avers⁵⁸ which only bias or 'some mistaken religious principle' can mislead."

"So you are saying that the reality of objects within experience, for any animal, is a confused mixture of *entia realia* and *entia rationis*, but that this confusion only comes to light in the experience of human animals by means of a species-specific modeling of the world which you call language?"

"That is what I am saying."

"Well, it makes sense, I think; but it is a strange way of speaking. I need to digest this a bit before I can decide where to agree and where to differ. Enough of your *obiter dictum*. I want to get to the bottom of this objects presupposing signs business, and get some lunch."

"Back, then, to history", I urged. "You can see right off that every animal will use what it senses perceptually to orientate itself in the environment. Among these elements sensed some therefore will come to stand for something other than themselves. The most impressive of such sensory elements would be those manifesting the powers that hold sway over human existence, nature, on the one hand, and gods, on the other. So in the ancient consciousness arose the idea of σημείον, a natural event which generates in us the expectation of something else, an element of divination in the case of the gods, a symptom in the case of medicine. ⁵⁹ This idea permeates the ancient Greek writings. But, at the beginning of the Latin Age, Augustine unwittingly introduces a radical variant upon the ancient notion. I say 'unwittingly', not at all to disparage Augustine, but to mark the fact important in this connection that his ignorance of Greek prevented him from realizing what was novel about his proposal, and how much it stood in need of some explanation regarding its possibility.

"Augustine spoke not of σημείον but rather of signum. And instead of conceiving of it as a natural sensory occurrence or event, he conceived of it simply as a sensible event whether natural or artificial. At a stroke, by putting the word 'natural' under erasure, Augustine introduced the idea of sign as general mode of being overcoming or transcending the division between nature and culture. Specifically (and incredibly 60), for the first time and ever after, human language (more precisely, the elements and modalities of linguistic communication) and culture generally came to be regarded as a system of signs (signa ad placita) interwover with the signs of nature, the σημεία or, in Augustine's parlance, signa naturalia.

"To a man the Latins followed Augustine in this way of viewing the sign. But, gradually, problems came to light. In particular, at least by the time of

⁵⁸ Reid 1785: 604–5. A useful — if still presemiotic — discussion of "Thomas Reid and the Signs of the Times" is essayed in McInerny 2001: 52–56.

⁵⁹ See Sebeok 1984b on the latter point, Manetti 1987 on the former.

 $^{^{60}}$ See the discussion of Markus 1972 in the *Four Ages* (Deely 2001: 218–20, and esp. 406n95).

Aquinas, if not a century earlier in Abaelard, ⁶¹ question arose as to which is the primary element in the being of sign: being sensible, or being in relation to another? For, the Latins noticed, all of our psychological states, the passiones animae, put us into a relation to what they themselves are not, and present this 'other' objectively in experience. ⁶² Is not this relation of one thing presenting another than itself in fact more fundamental to being a sign than being a sensible element, whether natural or cultural? And if so, should not the passions of the soul, which, as effects of things necessarily provenate relations to what is objectively experienced, be regarded veritably as signs, even though they are not themselves directly sensible or, indeed, even outside of ourselves, outside of our subjectivity?

"So at another stroke was overcome the distinction between **inner and outer** as regards the means of signification, a landmark event paralleling Augustine's overcoming of the divide between nature and culture. The states of subjectivity whereby we cathect⁶³ and cognize objects, the scholastics proposed, are themselves a type of sign, even though we do not access them by external sensation. Call them 'formal signs', they proposed, in contrast to

62 See the Index entries PASSIONS OF THE SOUL and FORMAL SIGN in the Four Ages

(Deely 2001: 950 and 893-94, respectively).

The centrality of this idea for semiotics, particularly as regards the concept of Umwelt, appears from the following (Parsons, Shils, et al. 1951: 10n13): "A distinction between affect and cathexis is desirable for present purposes. Affect refers to a state of an organism — a state of euphoria or dysphoria or qualitative variants thereof. Cathexis refers to a state of an organism — a state of euphoria or dysphoria — in relation to some object. Thus the term cathexis is broader in its reference than the term affect; it is affect plus object. It is object-oriented affect. It involves attaching affective significance to an object; although it involves attachment to one or more properties of the object, as used here it does not itself refer to a property of the object, but to a relation between actor and object. Furthermore, there is no connotation either of activity or passivity in the actor's relation to the object implied in the concept." On the specifically Innenwelt side, see Murray 1951: 453n. (The distinction Kluckhohn 1951: 395 attempts to draw between cathexis and valuation amounts to no more than the difference between cathexis within a generically animal Umwelt and a species-specifically human Lebenswelt.)

⁶¹ See "The So-Called Dark Ages", Chapter 6 of the *Four Ages* (Deely 2001: esp. 243–247).

discussion (see p. 32 toward bottom, below) manifested a thorough mastery of its usage as pertaining to semiotics, nevertheless, the term is important to the future of semiotics and sufficiently unfamiliar to most readers at the time this transcript was made to warrant a note of explication. An organism responds to an object not only by cognizing it but, at the same time, by *cathecting* that object as desirable, undesirable, or 'neutral', as we have said. The former relation arises from the cognitive representations (or 'ideas'), the latter from the emotional representations (or 'feelings') accompanying or evoked by the ideas. Thus cognition and cathexis are twin processes within zoö- and anthropo-semiosis, "simultaneously given and only analytically separable", as Parsons, Shils, and Olds best noted (1951: 68–69; see also their 1951a: 110).

the signs of which Augustine spoke, which they now proposed to call rather⁶⁴ 'instrumental' signs.

"But by now the discussion was no longer exclusively in the hands of the scholastic realists. The key distinction this time came rather from the nominalists after Ockham; and they were thinking exclusively of particular things, alone, according to their doctrine, belonging to the order of ens reale. in contrast to every relation which is as such an ens rationis. 65 Out of some two centuries of obscurity in which other issues held the center stage. 66 the Latin discussion of the 16th century took a turn in Iberia which was richly to vindicate Peirce's later thesis that an essential difference separated his Pragmaticism from the varieties springing up under his earlier label of Pragmatism, in that to the former scholastic realism is essential, while the latter remains compatible with nominalism.

"The decisive realization came cumulatively in the 16th and 17th centuries through the work of Soto (1529), Fonseca (1564), the Conimbricenses (1607), Araújo (1617), and finally Poinsot (1632), in whose writing the decisive realization approximates unmistakable clarity.⁶⁷ This realization was twofold. One part⁶⁸ lay in the insight that not relation as such, but relation as triadic, constituted the being of the sign, while the sensible element (or, in the case of the formal sign, the psychological element) that occupied the role of other-representation is what we call a 'sign' in the common, loose way of speaking. 69 The other part 70 lay in the insight that it is not anything about relation as suprasubjective that determines whether it belongs to the order of ens reale or ens rationis, but wholly and solely the circumstances of the relation. The Whence one and the same relation, under one set of circumstances ens reale, by change of those circumstances alone could pass into an ens rationis without any detectable objective difference in the direct experience of the animal.

"Then came the virtual extinction of semiotic consciousness that we call modernity, a dark age that did not really end until Peirce returned to the late Latin writings and resumed the thread of their developing semiotic

⁶⁴ See the discussion of this terminology in the *Four Ages* (Deely 2001: 390n71).

⁶⁵ See Chapter 8 of the Four Ages (Deely 2001: esp. 385-393). 66 "The Thicket", in the Four Ages (Deely 2001), pp. 394-408).

⁶⁷ The Four Ages, Chapters 9 & 10. In particular, see the Index entry SEMIOTIC

CONSCIOUSNESS (Deely 2001: 988-89).

⁶⁸ Poinsot 1632: Treatise on Signs, Book I, Question 3 (that the relation of sign to signified and the relation of sign to power are one single relation, thus irreducibly

⁶⁹ See note 18, p. 7 above.

⁷⁰ Poinsot 1632: Treatise on Signs, Book I, Question 2 (that the physical status of the sign to signified component of sign relations is determined by the context in which the sign functions).

⁷¹ See "The Problem of the Nose of Wax" in the Four Ages (Deely 2001), Chapter 8, esp. 369-372 text, and note 24 to p. 370.

consciousness, first by explicitly naming the three elements or terms grounding the triadic sign relation, and then by shifting the emphasis from being to action with the identification of semiosis. The foreground element of representation in the sign relation Peirce termed the *representamen*.⁷² This is what is loosely called a sign, but in reality is a sign-vehicle conveying what is signified to some individual or community, actual or prospective. The other represented or conveyed by the sign-vehicle Peirce traditionally termed the *significate* or *object signified* (in this two-word expression, to tell the truth, the first word is redundant). Whereas the prospective other to which representation is made (emphatically not necessarily a person, as Peirce was the first to emphasize⁷³ and later semiotic analysis was to prove⁷⁴) Peirce termed⁷⁵ the *interpretant*, 'the proper significate outcome' of the action of signs."

My colleague interrupted my historical excursus at this point.

"Do you really mean to call the period between Descartes and Peirce the semiotic dark ages?" he queried. "Isn't that a little strong?"

"Well", I half apologized, "the shoe fits. Nor do the semiotic dark ages simply end with Peirce, I am afraid. They extend into the dawn of our own century, though I am confident we are seeing their final hours. After all, a darkness precedes every full dawn."

"I saw an ad for a new book of yours comparing today's philosophical establishment with the judges of Galileo. That's not likely to get you job offers at the top", my colleague admonished.

"Yes", I sighed; "the ad drew on the *Aviso* prefacing my history of philosophy. It was calculated, well or ill, to sell the book to those disaffected from the philosophical side of modernity, its 'dark side', as distinguished from the glorious development of ideoscopic knowledge that we call science."

"Ideoscopic?"

"Knowledge that cannot be arrived at or verified without experimentation and, often, the help of mathematical formulae", I explained.

"As opposed to what? Common sense?"

⁷² Latin derived, this term should be pronounced "rep-re-sen-tá-men", not "rep-re-sént-a-men", as the Anglophile Peirceans would have it.

⁷³ Peirce 1904.

⁷⁴ Krampen 1981; Deely 1987, 1989, 1993.

⁷⁵ Peirce c.1907: CP 5.473.

^{76 &}quot;Aviso", pp. vii-viii of the Four Ages (Deely 2001).

⁷⁷ See "Synthesis and Successors: The Strange Case of Dr. Jekyll and Mr. Hyde", Chapter 13 in the *Four Ages* (Deely 2001: 540–589, esp. 565–572).

⁷⁸ Also spelled "idioscopic". See the Index entry in the *Four Ages* (Deely 2001: 910).

"No", I explained further, "as opposed to coenoscopic⁷⁹ knowledge, the systematic realization of consequences implied by the way we take 'reality' to be in those aspects wherein direct experimentation, and still less mathematization, isn't of much avail. In semiotics, ⁸⁰ this distinction has been explained as the distinction between *doctrina* and *scientia* as the scholastics understood the point prior to the rise of science in the modern sense. Peirce himself⁸¹ characterized the distinction as 'cenoscopic' vs. 'idioscopic', borrowing these terms from Jeremy Bentham."

"More strange terminology. Why can't semioticians talk like normal people? And by the way, is Peirce's usage faithful to that of Bentham, and is Bentham actually the originator, the coiner, of these terms?"

"Normal is as normal does", I said with mild exasperation. "How can you develop new ideas without new words to convey them? Of course old words used in unfamiliar ways can also serve, but tend to mislead in any case. Surely you won't deny that new insights require new ways of speaking? Perhaps you've been an undergraduate teacher too long.

"Point taken", my colleague allowed ruefully. "But what about the reliability of Peirce's usage vis-à-vis Bentham's coinage of these terms, if he did coin them?"

"As to the exact relation of Peirce's appropriation to the sense of Bentham's original coinage", I said, "I can't help you there. I have never looked into Bentham directly. But I find the distinction in Peirce useful, even crucial, to understanding the postmodern development of semiotics."

"You said just now", my colleague said, returning at this point to my interrupted historical excursus, "that what I would call the 'common sense' notion of sign, a particular thing representing something other than itself, Peirce called technically a *representamen*, and that this is not the sign itself technically speaking but what you rather termed a 'sign-vehicle', functioning as such only because it is the foreground element in the three elements whose linkage or bonding makes up the sign technically or strictly speaking."

"Yes", I allowed, "you have followed me well. What makes something appear within sense-perception as a sign in the common or loose sense is not anything intrinsic to the physical subjectivity of the sensed object as a thing but rather the fact that the objectified thing in question stands in the position of representamen within a triadic relation constituting a sign in its proper being technically and strictly. So that physical structure before the building in your line of vision that tells you this is no longer Monaghan House is a sign

⁷⁹ Also spelled "cenoscopic". See the Index entry in the Four Ages (Deely 2001:

The discussion began with Sebeok 1976, and was picked up in Deely 1976 and 1978a (the former an essay review of Eco 1976, the latter an essay review of Sebeok 1976). The point became an Appendix in Deely 1982: 127–130, an encyclopedia entry in Sebeok *et al.* 1986: I, 214, and is hardly regarded as controversial any longer among those cognizant of the discussion, as Petrilli and Ponzio have remarked (2001: *passim*).

⁸¹ Peirce c.1902: CP 5.424.

not strictly but loosely. Strictly it is the element of other-representation within a triadic relation having you with your semiotic web of experience and private semiosis as a partial interpretant, and this building here housing my office among other things as its signified object. Moreover, note that the physical structure of the particular thing appearing in your Umwelt as a sign may be subjected to ideoscopic analysis, but that that analysis will never reveal its sign-status as such. The recognition of signs as triadic relations in contrast to related things as subjective structures is a strictly coenoscopic achievement, although of course the semiosis of such things can well be developed ideoscopically by the social sciences, and philosophy will then be obliged to take such ideoscopic developments into account if it wishes to keep up with the reality of human experience as a whole."

"Now that is amazing." My colleague seemed delighted.

"What is amazing?"

"That I now see what you mean in saying that a sign is what every object presupposes. You mean that every object as an object depends upon a network of triadic relations, and that precisely these relations constitute the being of a sign strictly speaking. Hence without objects there would be isolated sensory stimuli, but no cathexis, ⁸² no cognition, establishing a world of objects wherein some appear desirable (+), others undesirable (-), with still others as matters of indifference (0)."

"That is only part of it."

"Part of it?"

"Yes. Every sign acting as such gives rise to further signs. Semiosis is an open process, open to the world of things on the side of physical interactions and open to the future on the side of objects. Thus you need to consider further that sign-vehicles or representamens, objects signified or significates, and interpretants can change places within semiosis. What is one time an object becomes another time primarily sign-vehicle, what is one time interpretant becomes another time object signified, and what is one time object signified becomes another time interpretant, and so on, in an unending spiral of semiosis, the very process through which, as Peirce again put it, 'symbols grow'."

"So signs have a kind of life within experience, indeed provide experience almost with its 'soul' in the Aristotelian sense of an internal principle of growth and development! One man's object is another man's sign, and an object one time can be an interpretant the next."

"Now you're getting the idea. Be careful. Next thing you know you'll claim to be a semiotician."

"So signs strictly speaking are invisible."

⁸² In connection with our earlier note on this term (note 63, p. 28 above), we may add here that the importance of introducing this term into semiotics is to provide a marker for Peirce's seminal idea (c.1907: 00035–36) that, within the life of animals, "every sign whatever that functions as such must have an emotional interpretant".

"Yes, and inaudible and intactile, for that matter. By contrast, a sign loosely speaking, an element occupying the position of representamen in a renvoi relation vis-à-vis significate and interpretant, can indeed be seen and pointed to or heard. A great thinker of the 20th century once remarked. 83 perhaps without realizing the full depth of what he was saying, that animals other than humans make use of signs, but those animals do not know that there are signs. The vehicles of signs can normally be perceived (as long as they are 'instrumental' rather than 'formal') and can become rather interpretants or signifieds; but the signs themselves are relations, like all relations irreducibly suprasubjective, but unique too in being irreducibly triadic. Signs. in short, strictly speaking can be understood but not perceived; while 'signs' loosely speaking can be both perceived and understood, but when they are fully understood it is seen that what we call signs loosely are strictly representamens, the foreground element in a given triadic relation through which alone some object is represented to some mind, actually or only prospectively."

"What do you mean 'prospectively'?"

I sighed. "You bring up another story for which the world is not yet prepared."

"I do?" My colleague looked worried, perhaps seeing lunch disappearing in a cloud of verbiage, and having had enough of the case of the giant rat of Sumatra on the table between us, still staring beady-eyed his way.

"Indeed you do. Remember a little while ago when the subject of evolution came up?"

"Indeed I do, and I can tell you that I am happy you didn't insist on going into it."

"Nor will I now, except to say this. Up to the present evolution has been understood mainly as a vis a tergo, building up from below through individual interactions structures increasingly complex and far-flung. A I have a suspicion that this picture is incomplete in just the way that requires semiosis. For the action of signs is distinctive as compared with the action of things in that the action of things takes place only among actual physical existents, whereas semiosis requires at any given time only that two out of the three related elements actually exist. In physical interactions always the past shapes the future, but in semiosic interactions there is an influence of the future upon the present and even upon the past as bearing on the present, so to speak. My suspicion is that wherever you have evidence of such an influence you have semiosis, an action of signs. And since we can see from the semiosis

that the word 'language', when referring to animals, is equivocal. Animals possess a variety of means of communication but no genuine language. I have observed that animals use signs. But, as I also pointed out, no animal knows the relation of signification or uses signs as involving and manifesting an awareness of this relation." See this important article on the point passim.

84 Dennett 1995.

of animal life that the very possibility of semiosis in general is rooted in the indifference of relation to its subjective ground on the one side and to the physical unreality of its object on the other side, ⁸⁵ I venture to guess that a *physiosemiosis*, prior to and surrounding even the biosemiosis of which Sebeok speaks, ⁸⁶ with its phytosemiosis, zoösemiosis, and anthroposemiosis as parts, will prove to be at the heart of what has heretofore been called, *faut de mieux*, evolution."

"Sebeok?" my colleague queried. "This is the second time you have spoken his name in this discussion. Who is he? And is he important for semiotics?"

I could not but chuckle at the relativity of fame. "Of the three most important figures in the later twentieth century development of semiotics", I averred, "Sebeok is the second most famous and the first in importance. He is to semiotics today what Mersenne was and more to philosophy in the time of Descartes. I am astonished you have not yourself heard of him or read something of his work, if not in semiotics then at least in linguistics, anthropology, or folklore."

"Does he accept your notion of sign as presupposed to object?"

"Well, I am reasonably confident that he would, although I have never put the question to him in just that way. After all, it is a formula I have stumbled upon only recently, ⁸⁷ and have not had a chance for extended discussions with Sebeok in quite some time, although I had hoped to arrange a visit this past summer. My main disagreement, if it can be called that, with Sebeok concerns not so much the question of objects in the sense we have discussed but concerns rather the bearing of semiosis upon the very idea of things in the universe. Over the last decade of the twentieth century and into this one, ⁸⁸ Sebeok has envisioned a 'cosmos before semiosis'. In this way of thinking, the idea of 'nonbiological atomic interactions' as well as 'those of inorganic molecules' prior to the origin of life being 'semiosic' appears as 'surely metaphorical', as Sebeok puts it.' ⁸⁹

My colleague frowned. "Surely this Sebeok is right. Inorganic substances do not interpret signs, or involve themselves in *renvoi*!"

It was my turn to frown. "I am not so sure. I think that here Sebeok has been uncharacteristically hasty in his dismissal of a semiosis virtually active in the world of things. The whole question of the 'anthropic principle' is one that implies semiosis from the very beginning of the universe."

⁸⁵ Poinsot 1632: Second Preamble, Article 2, esp. 95/18–96/36; and Book I, Question 1, esp. 117/28–118/18.

⁸⁶ Sebeok 2001a. But see also Sebeok and Umiker-Sebeok 1992, Hoffmeyer and Emmeche 1999, and Hoffmeyer 1996.

⁸⁷ "A New Definition of *Signum*" in the *Four Ages* (Deely 2001: 434–435). But cf. Deely 1996.

xx "The Evolution of Semiosis", in Sebeok 1991: 83-96; reprinted in Sebeok 2001: 17-30.

⁸⁹ Sebeok 1991: 84, 2001: 18.

"An action of signs in the universe prior even to the advent of life? If that's not to indulge in metaphor I don't know what is", my colleague ventured.

"There is another alternative", I said, "a third way between metaphor and organic semiosis, a way suggested, in fact, by the father of systematic semiotics, if we may so speak of the first thinker theoretically to unify the notion of sign under the rubric of triadic relation or, as we are now inclined to say, 'renvoi'. According to Poinsot, "0 it suffices to be a sign virtually in order to actually signify. By this formula, even in the prima facie dyadic interactions of things relations are born sufficient to constitute a semiosis at work in the inorganic no less than organic layers of nature, and prior even to the advent of the organic layers — indeed anticipatory of that advent. This is an argument I began in 1990 or and have continued to develop since under the rubric 'physiosemiosis'."

"Semiosis, signs at work in physical nature as such? That sounds crazy. No wonder some people regard semiotics as an imperialistic development!"

"Well, it is only a guess. But others besides me, 93 to say nothing of Peirce before me, 94 have made analogous suggestions. Time will tell!"

"A discussion for another time. I hate to end a good discussion on a note of shibboleth, but let us go to eat."

I nodded in agreement and started to rise, when my friend raised his hand to stay me.

"One last question, to be answered in the briefest of terms."

"Go ahead."

"Are you saying that to know signs in the strict sense, to thematize sign, as it were, requires a species-specifically human Innenwelt?"

"Just so. For the imperceptible distinction between subjectivity and suprasubjectivity, between relations and related things, is at the heart of linguistic communication so far as it does not reduce to perceptible elements. And it is the point of departure for anthroposemiosis in its difference from all zoösemiosis. All animals are semiosic beings, but only

⁹⁰ Poinsot 1632: *Tractatus de Signis*, Book I, Question 1, "Resolution of Counter-Arguments", esp. 126/3–4, and 126/ 9–22.

⁹¹ Deely, Basics of Semiotics, Chapter 5.

⁹² On the term physiosemiois, then, see Deely 1990, 1991, 1993, 1998, 1999, and 2001b.

⁹³ E.g., Prodi 1977; Koch 1987; Kruse 1994; Corrington 2001. See the umbrella symposium convened by Nöth 2001 to open the new century.

⁹⁴ Besides my own analysis of what I termed "Peirce's Grand Vision" (Deely 1989), Nöth 2001: 16, observes that "renowned Peircean scholars, such as Helmut Pape (1989), Klaus Oehler (1993), and Lucia Santaella-Braga (1994, 1996, 1999), affirm that the origins of semiosis, according to Peirce, begin before life."

⁹⁵ Deely 1980, 2001a.

⁹⁶ Such was the argument of Deely 1994, sharply focused in Deely 2001a.

human beings can become semiotic animals — animals, that is to say, that both use signs and know that there are signs."

"I like that. 'The semeiotic animal': a new definition for humanity as the postmodern age opens. Let us say goodbye to the res cogitans, even as Descartes said goodbye to the animal rationale; and, like good semiotic animals, let us set out in search of sign-vehicles which can lead us to objectified things pleasant to eat. How about the Black Lab?" Now my colleague rose.

I rose with him and together we set out in search of food. We had not far to go, for the Black Labrador is a rather good restaurant not two full blocks from the place of our discussion where my colleague's initial incredulity gave way to the conviction that, while there is yet more to be said, yet at least this much is certain even now: the sign is what every object presupposes.

Since what is last in discovery becomes first in exposition, the last discovery of the moderns in the person of Peirce has become the first theme postmodern philosophy and intellectual culture must come to terms with (since it defines them). It is not a bad discovery, even if compared to the late Latins it was only a rediscovery. Small wonder that, all thought being in signs, the objective universe is perfused with them. It remains to see if even the physical universe may not as giving rise to us consist exclusively of signs. But after lunch ...

References

Anshen, Ruth Nanda (ed.) 1957. Language: An Enquiry into Its Meaning and Function (New York: Harper & Bros.).

Bentham, Jeremy 1816. Chrestomathia: Being a Collection of Papers, Explanatory of the Design of an Institution Proposed to be Set on Foot Under the Name of the Chrestomathic Day School, or Chrestomathic School, for the Extension of the New System of Instruction to the Higher Branches of Learning, For the Use of the Middling and Higher Ranks in Life, in The Works of Jeremy Bentham, ed. John Bowring (Edinburgh, 1838–1843; reproduced 1962 by Russell & Russell, Inc., New York), Vol. 8, pp. 1–191, esp. Appendix No. IV, the "Essay on Nomenclature and Classification", 63–128.

Beuchot, Mauricio; Deely, John 1995. Common sources for the semiotic of Charles Peirce and John Poinsot. *Review of Metaphysics* 48(3): 539–566.

Brentano, Franz 1874. Psychologie von Empirischen Standpunkt, trans. Linda McAlister, A. Rancurello, and D. B. Terrell as Psychology from an Empirical Standpoint (New York: Humanities Press, 1963).

Burks, Arthur W. 1958. Bibliography of the Works of Charles Sanders Peirce. In: The Collected Papers of Charles Sanders Peirce, Volume VIII, ed. Arthur W. Burks. Cambridge: Harvard University Press, 249–330.

- Conimbricenses 1607. "De Signis", being Chapter 1 of their commentary on Aristotle's De Interpretatione, in: Commentarii Collegii Conimbricensis et Societatis Jesu. In Universam Dialecticam Aristotelis Stagiritae. Secunda Pars (Lyons: Sumptibus Horatii Cardon, 1607), 4–67.
- Corrington, Robert S. 2000. A Semiotic Theory of Theology and Philosophy. Cambridge: Cambridge University Press.
- Deely, John 1971. The myth as integral objectivity. *ACPA Proceedings* 45: 61–76. 1975. Reference to the non-existent. *The Thomist* 39(2): 253–308.
- 1976. The doctrine of signs: Taking form at last. *Semiotica* 18(2): 171–193 (essay review of Eco 1976).
- 1978. Semiotic and the controversy over mental events. ACPA Proceedings 52: 16-27.
- 1978a. What's in a name? Semiotica 22(1/2): 151–181 (essay review of Sebeok 1976).
- 1980. The nonverbal inlay in linguistic communication. In: Rauch, Irmengard;
 Carr, Gerald F. (eds.), *The Signifying Animal*. Bloomington: Indiana University Press, 201–217.
- 1982. Introducing Semiotic: Its History and Doctrine. Bloomington: Indiana University Press.
- 1986. A context for narrative universals: Semiology as a *Pars Semeiotica*. The *American Journal of Semiotics* 4(3/4): 53-68.
- 1986a. Idolum: Archeology and ontology of the iconic sign. In: Bouissac, Paul; Herzfeld, Michael; Posner, Roland (eds.), *Iconicity: Essays on the Nature of Culture*, Festschrift volume in honor of Thomas A. Sebeok. Tübingen: Stauffenburg Verlag, 29–49.
- 1987. On the notion of phytosemiotics. In: Deely, John; Evans, Jonathan (eds.), *Semiotics* 1982. Lanham: University Press of America, 541–554. (Reprinted with minor revision in Deely et al. 1986: 96–103.)
- 1989. "The Grand Vision", presented on September 8 at the September 5–10 Charles Sanders Peirce Sesquicentennial International Congress at Harvard University, in: Colapietro and Olshewsky (eds.) 1996: 45–67.
- 1990. Basics of Semiotics (Bloomington: Indiana University Press).
- 1991. Semiotics and Biosemiotics: Are Sign-Science and Life-Science Coextensive? In: Sebeok and Umiker-Sebeok 1992: 45–75. Since revised as Chapter 6 "How Do Signs Work?" in: Deely 1994b: 151–182.
- 1993. "How Does Semiosis Effect Renvoi?", the Thomas A. Sebeok Fellowship Inaugural Lecture delivered at the 18th Annual Meeting of the Semiotic Society of America, October 22, 1993, St. Louis, MO; published in *The American Journal of Semiotics* 11.1/2 (1994): 11–61; text available also as Ch. 8 of Deely 1994b: 201–244.
- 1994. The Human Use of Signs; or Elements of Anthroposemiosis. Lanham: Rowman & Littlefield.

⁹⁷ An earlier edition minus the Greek text of Aristotle was published at Coimbra itself in 1606. This work has just been translated into English and published in a bilingual critical edition: see under Doyle (ed.) 2001.

- 1994b. New Beginnings: Early Modern Philosophy and Postmodern Thought. Toronto: University of Toronto Press.
- 1995. Why investigate the common sources of Charles Peirce and John Poinsot? In: Spinks, C. W.; Deely, John (eds.), *Semiotics 1994*. New York: Peter Lang Publishing, 34–50.
- 1996. A New Beginning for the Sciences. In: Perron, Paul; Danesi, Marcel; Colilli, Paul; Wattanabee, John (eds.), Semiotics as a Bridge between the Humanities and the Sciences (proceedings of the 2–6 November 1995 Symposium organized at Victoria College by Prof. Danesi; Ottawa: Legas Press, 2000), 95–108.
- 1998. How is the universe perfused with signs? In: Spinks, C. W.; Deely, John (eds.), *Semiotics 1997.* New York: Peter Lang, 389–394.
- 1999. Physiosemiosis and semiotics. In: Spinks, C. W.; Deely, John (eds.), Semiotics 1998. New York: Peter Lang, 191–197.
- 2000. The Latin Foundations for Semiotic Consciousness: Augustine (5th century AD) to Poinsot (17th century AD). Recherches Semiotiques/Semiotic Inquiry 20.1-2-3: 11-32.
- 2001. Four Ages of Understanding. The first postmodern survey of philosophy from ancient times to the turn of the twenty-first century. Toronto: University of Toronto Press.
- 2001a. What Distinguishes Human Understanding?, an essay on the intersemiosis of perception and understanding (South Bend: St. Augustine's Press).
- 2001b. Physiosemiosis in the semiotic spiral: A play of musement. Sign Systems Studies 29(1): 27–47.
- 2001c. A new determination of the Middle Ages. In: Doyle (ed.) 2001, [Foreword].
- Deely, John N.; Williams, Brooke; Kruse, Felicia E. (eds.) 1986. Frontiers in Semiotics. Bloomington: Indiana University Press. [Preface titled "Pars Pro Toto", viii-xvii; "Description of Contributions", xviii-xxii.]
- Dennett, Daniel 1995. Darwin's Dangerous Idea. New York: Simon and Schuster. Doyle, John P. (ed. and trans.) 2001. The Jesuits of Coimbra (Conimbricenses) on Signs. Milwaukee: Marquette University Press. (Bilingual critical edition of Conimbricenses 1607, q.v.)
- Eco, Umberto 1976. A Theory of Semiotics. (Trans. David Osmond-Smith.) Bloomington: Indiana University Press.
- 1987. The influence of Roman Jakobson on the development of semiotics. In: Krampen, Martin; Oehler, Klaus; Posner, Roland; Sebeok, Thomas A., Uex-küll, Thure von (eds.), Classics of Semiotics. New York: Plenum Press, 109–127.
- Eco, Umberto; Deely, John 1983, May 30–June 24. "Historiographical Foundations of Semiotics", course taught at ISISSS'83 (Indiana University, Bloomington campus). This course exists in a series of twenty-six untranscribed cassettes created by students in the course.
- Eco, Umberto; Lambertini, Roberto; Marmo, Costantino; Tabarroni, Andrea 1986. Latratus Canis or: The Dog's Barking. In: Deely, Williams, and Kruse 1986: 63-73; see the editorial note on the background of this text, ibid. p. xix.

- Fonseca, Petrus ("Pedro da") 1564. Institutionum dialecticarum libri octo (Coimbra: Apud haeredes Joannis Blauij). The most important edition of this work thus far is the bilingual presentation comparable to Poinsot 1632 (q.v.) of Joaquim Ferreira Gomes, Instituiães Dialecticas (Institutionum dialecticarum libri octo), 2 vols. (Instituto de Estudos Filosoficos da Universidad de Coimbra, 1964).
- Grote, George 1872. Aristotle, posthumous ed. by Alexander Bain and G. Croom Robinson (London: J. Murray), 2 vols.
- Hardwick, Charles S., editor, with the assistance of James Cook 1977. Semiotics and Significs: The Correspondence between Charles S. Peirce and Victoria Lady Welby. Bloomington: Indiana University Press.
- Heidegger, Martin 1963 [1927]. Sein und Zeit, originally published in the Jahrbuch für Phänomenologie und phänomenologische Forschung, ed. E. Husserl. Page references in the present work are to the 10th edition (Tübingen: Niemeyer, 1963).
- Hoffmeyer, Jesper 1996. Signs of Meaning in the Universe. Bloomington: Indiana University Press.
- Hoffmeyer, Jesper; Emmeche, Claus (eds.) 1999. *Biosemiotics*, Special Issue of *Semiotica* 127.
- Husserl, Edmund 1929 [1960]. Cartesian Meditations: An Introduction to Phenomenology, trans. by Dorion Cairns. The Hague: Martinus Nijhoff. (Of a work that appeared in Husserl's lifetime only in French.)
- 1936 [1954]. The crisis of European sciences and transcendental phenomenology. An introduction to phenomenological philosophy, trans. with an Introduction by David Carr (Evanston: Northwestern University Press, 1970) of Die Krisis der europäischen Wissenschaften und die transzendentale Phänomenologie; eine Einleitung in die phänomenologische Philosophie, posthumously edited by Walter Biemel and published in German 1954.
- Jakobson, Roman 1979 [1974]. Coup d'oeil sur le devéloppement de la sémiotique. In: Chatman, Seymour; Eco, Umberto; Klinkenberg, Jean-Marie (eds.), Panorama sémiotique/A Semiotic Landscape, Proceedings of the First Congress of the International Association for Semiotic Studies, Milan, June 1974. The Hague: Mouton, 3–18.98
- Kluckhohn, Clyde 1951. Values and value-orientation in the theory of action. In: Parsons, Talcott; Shils, Edward (eds.) 1951: 388–433.
- Koch, Walter A. 1987. A plea for evolutionary cultural semiotics. In: A Plea for Cultural Semiotics. Bochum: Brockmeyer, 53–131.

⁹⁸ Also published separately under the same title by the Research Center for Language and Semiotic Studies as a small monograph (= Studies in Semiotics 3; Bloomington: Indiana University Publications, 1975); and in an English trans. by Patricia Baudoin titled "A Glance at the Development of Semiotics", in: *The Framework of Language* (Ann Arbor: Michigan Studies in the Humanities, Horace R. Rackham School of Graduate Studies, 1980), 1–30.

Kramer, Heinrich ("Henricus Institutoris"); Sprenger, Jacob 1951 [1486]. *Malleus Maleficarum* ("Hammer of Witches", trans. with Introduction, Bibliography, and Notes by Montague Summers). London: Pushkin Press. 99.

Krampen, Martin 1981. Phytosemiotics. Semiotica 36(3/4): 187-209; substantially

reprinted in Deely, Williams and Kruse 1986.

Kruse, Felicia E. 1994. Is cosmic evolution semiosis? In: Moore, Edward C.; Robin, Richard S. (eds.), From Time and Chance to Consciousness: Studies in the Metaphysics of Charles Peirce. Oxford: Berg, 87-98.

Kull, Kalevi (ed.) 2001. Jakob von Uexküll: A Paradigm for Biology and

Semiotics, a Special Issue of Semiotica 134(1/4).

Manetti, Giovanni 1987. Le teorie del segno nell'antichità classica. Milan: Bompiani. (Trans. by Christine Richardson as Theories of the Sign in Classical Antiquity. Bloomington: Indiana University Press, 1993.)

Maritain, Jacques 1957. "Language and the Theory of Sign", originally published in English in: Anshen (ed.) 1957: 86–101, is reprinted, with the addition of a full technical apparatus explicitly connecting the essay to Maritain's work on semiotic begun in 1937 and to the text of Poinsot 1632 on which Maritain centrally drew, in: Deely, Williams and Kruse (eds.) 1986: 51–62. Page references in this dialogue are based on the 1986 reprint as the most definitve English version.

Markus, R. A. 1972. St. Augustine on signs. In: Markus, R.A. (ed.), Augustine. A Collection of Critical Essays. Garden City, NY: Doubleday & Co., 61–91.

McInerny, Ralph 2001. Thomas Reid and the signs of the times, a subsection of Lecture IV of McInerny's 1999–2000 Gifford Lectures, *Characters in Search of Their Author* (Notre Dame: University of Notre Dame Press), 52–56.

Murray, Henry A. 1951. Toward a classification of interaction. In: Parsons and Shils (eds.) 1951: 434–464.

Nöth, Winfried 2001. Protosemiotics and physicosemiosis. In: Nöth (organizer) 2001: 13–26.

Nöth, Winfried (organizer) 2001. German-Italian Colloquium "The Semiotic Threshold from Nature to Culture", Kassell, Germany, 16–17 February at the Center for Cultural Studies, University of Kassel; papers published together with the Imatra 2000 Ecosemiotics colloquium in *The Semiotics of Nature*, a

This work appeared with a singular Preface, to wit, the Papal Bull Summis desiderantes affectibus of 9 December 1484 (the very first year of the Pontificate of Innocent VIII), a document of highest authority in which Kramer and Sprenger are named specifically as the already-delegated Inquisitors in the matter of witchcraft with renewed emphasis: "By our supreme authority we grant them anew full and complete faculties" throughout the German territories, including, as circumstances warrant, "the help of the secular arm". To this Preface was added an Official Letter of Approbation of the work from the Faculty of Theology of the University of Cologne, dated 19 May 1487.

Summers, in his Introduction (p. xiv) notes that, for nearly three centuries after its appearance, "the *Malleus* lay on the bench of every judge, on the desk of every magistrate. It was the ultimate, irrefutable, unarguable authority. It was implicitly accepted not only by Catholic but by Protestant legislature."

Special Issue of Σημείωτική. Sign Systems Studies 100 29.1, ed. Kalevi Kull and Winfried Nöth.

Oehler, Klaus 1993. Charles Sanders Peirce. München: Beck.

Pape, Helmut 1989. Erfahrung und Wirklichkeit als Zeichenprozess. Frankfurt am Main: Surkamp.

Parsons, Talcott; Shils, Edward (eds.) 1951. *Toward a General Theory of Action*. Cambridge: Harvard University Press.

Parsons, Talcott; Shils, Edward; Allport, Gordon W.; Kluckhohn, Clyde; Murray, Henry A.; Sears, Robert R.; Sheldon, Richard C.; Stouffer, Samuel A.; Toulmin, Edward C. 1951. Some fundamental categories of the theory of action: A general statement. In: Parsons, Shils (eds.) 1951: 3–29.

Parsons, Talcott; Shils, Edward, with the assistance of Olds, James 1951. Categories of the orientation and organization of action. In: Parsons and Shils (eds.) 1951: 53–109.

Peirce, Charles Sanders (ed.) 1883. Studies in Logic by members of the Johns Hopkins University (Boston: Little, Brown, and Co.), 1–11. Facsimile reprint with an Introduction essay by Max H. Fisch and a Preface by Achim Eschbach as Volume 1 in the series "Foundations in Semiotics" under the general editorship of Eschbach (Amsterdam/Philadelphia: John Benjamins Publishing Co., 1983).

— c.1897. A fragment on semiotics, partially printed in CP 2.227–229, 2.244n1.

— c.1902. "Minute Logic", draft for a book complete consecutively only to Chapter 4. Published in CP in extracts scattered over six of the eight volumes, including 1.203-283, 1.575-584; 2.1-202; 4.227-323, 6.349-352; 7.279, 7.374n10, 7.362-387 except 381n19. (For fuller detail, see Burks 293-294.)

 1904. Letter of 12 October from Peirce to Lady Welby. In: Hardwick, Charles S. (ed.) 1977: 22–36.

— 1905. What Pragmatism Is. The Monist 15 (April): 161–181; reprinted in CP 5.411–437, with 5.414–5.435 being editorially headed "Pragmaticism" in CP.

- 1905a. Issues of Pragmaticism., *The Monist* 15 (October): 481–499; reprinted in CP 5.438–463, except 448n1, which is from 1906 [see Burks, entry for 1905(d), p. 298] (Burks p. 297). Also reprinted in The Essential Peirce, ed. Nathan Houser et al. (Bloomington: Indiana University Press; hereafter EP), 2.346–359.
- c.1905. Unsigned letter addressed to Signor Calderoni, in CP 8.205–213.

— 1907. "Pragmatism", Reading 28 in EP 2.398–433.

— c.1907. Ms. 318 in Robin 1967: 36–7, numbered ISP 00002–00350. 101

¹⁰⁰ This journal, founded by Juri Lotman in 1964, is the oldest contemporary journal of semiotics, and, interestingly, appeared in its first three issues [really 2–4, because the first issue, Lotman's "Lekcii po strukturalnoj poetike" came out without cover] under the original version of Locke's coinage, Σημίωτική rather than Σημείωτική: see the extended discussion of the matter in the *Four Ages* Chapter 14.

has never been published in full. Where I have drawn on unpublished sections I have used a photocopy bearing the sheet numbers stamped by the Texas Tech Institute for Studies in Pragmaticism (hence: ISP nos.) on the electroprint copy Ketner with associates had made from microfilm, and then checked against the original in the

Petrilli, Susan; Ponzio, Augusto 2001. Thomas Sebeok and the Signs of Life. Cambridge: Icon Books.

Philodemus i.54–40BC. Περὶ σημειώσεων (De Signis), trans. as On the Methods of Inference in the ed. of Phillip Howard De Lacy and Estelle Allen De Lacy, rev. with the collaboration of Marcello Gigante, Francesco Longo Auricchio, and Adele Tepedino Guerra. Naples: Bibliopolis, 1978, Greek text pp. 27–87, English 91–131.

Poinsot, Joannes 1632. Tractatus de Signis, subtitled The Semiotic of John Poinsot, extracted from the Artis Logicae Prima et Secunda Pars of 1631–1632 (Alcalà, Spain) and arranged in bilingual format by John Deely in consultation with Ralph A. Powell (First Edition; Berkeley: University of California Press, 1985). 102

Prodi, Giorgio 1977. Le basi materiali della significazione. Milano: Bompiani. Rauch, Irmengard 1999. Semiotic Insights. Toronto: University of Toronto Press. Reid, Thomas 1969 [1785]. Essays on the Intellectual Powers of Man. (Baruch

Brophy, ed.) Boston: MIT Press.

Santaella-Braga, Lucia 1994. Peirce's broad concept of mind. European Journal for Semiotic Studies 6: 399–411.

— 1996. Semiosphere: The Growth of Signs. Semiotica 109: 173-186.

1999. A New Causality for Understanding of the Living. Semiotica 127: 497–518.

Sebeok, Thomas A. 1976. Contributions to the Doctrine of Signs (jointly published originally by Indiana University, Bloomington: RCLSS Publications, and The Peter De Ridder Press, Lisse; reprinted with an extended Preface by Brooke Williams, "Challenging Signs at the Crossroads", evaluating the book in light of major reviews: Lanham: University Press of America).

— 1984, June 3. "The Evolution of Communication and the Origin of Language", lecture in the June 1–3 ISISSS '84 Colloquium on "Phylogeny and Ontogeny of Communication Systems". Published under the title "Communication, Language, and Speech. Evolutionary Considerations", in: Sebeok 1986: 10–16.

Harvard archives. Further subdivisions and rearrangements have been made since. Originally an untitled letter-article to the editor of *The Nation*, this ms. has several partial draft endings signed "Charles Santiago Peirce", but no single, consecutive, complete draft as a whole. CP 5.464–496, under a title supplied by the editors of the volume, "A Survey of Pragmaticism" (cf. Burks p. 299) is from this ms. 318. NEM III.1: 481–494 presents a small segment under the title "From Pragmatism". EP 2.398–433, under the title "Pragmatism" (the 1907 entry immediately above), is the most complete, though still partial, presentation of this document.

Pages are set in matching columns of English and Latin, with intercolumnar numbers every fifth line. (Thus, references to the volume are by page number, followed by a slash and the appropriate line number of the specific section of text referred to — e.g., 287/3-26.) This work is also available as a text database, standalone on floppy disk or combined with an Aquinas database, as an Intelex Electronic

Edition (Charlottesville, VA: Intelex Corp., 1992).

- 1984a. "Vital Signs", Presidential Address delivered to the Ninth Annual Meeting of the Semiotic Society of America on October 12 on the Bloomington campus of Indiana University; published in *The American Journal of Semiotics* 3.3 (1985): 1–27.
- 1984b. "Symptom", Chapter 10 of New Directions in Linguistics and Semiotics, ed. James E. Copeland (Houston: Rice University Studies), 212– 230.
- 1986. I Think I Am A Verb. More Contributions to the Doctrine of Signs. New York: Plenum Press.
- 1991. A Sign Is Just a Sign. Bloomington: Indiana University Press.
- 2001. Global Semiotics. Bloomington: Indiana University Press.
- 2001a. Biosemiotics: Its Roots, Proliferation, and Prospects. In: Kull (ed.) 2001; 61–78.
- Sebeok, Thomas A. (ed.) 1977. A Perfusion of Signs. Bloomington: Indiana University Press.
- Sebeok, Thomas A. (general ed.); Bouissac, Paul; Eco, Umberto; Pelc, Jerzy; Posner, Roland; Rey, Alain; Shukman, Ann (eds.) 1986. *Encyclopedic Dictionary of Semiotics* (Berlin: Mouton de Gruyter), in 3 vols.
- Sebeok, Thomas A.; Umiker-Sebeok, Jean (eds.) 1992. Biosemiotics. The Semiotic Web 1991. Berlin: Mouton de Gruyter.
- Soto, Dominicus ("Domingo de") 1529, 1554. Summulae (1st ed., Burgos; 2nd ed., Salamanca; 3rd rev. ed., Salamanca; Facsimile of 3rd ed., Hildesheim, NY: Georg Olms Verlag).
- Spiegelberg, Herbert 1965. *The Phenomenological Movement*. 2 volumes. (2nd ed., rev.) The Hague: Martinus Nijhoff.

Lotman in an interdisciplinary context: A symposium held at the University of Michigan

Andreas Schönle

A symposium *The Works of Iurii Lotman in an Interdisciplinary Context: Impact and Applicability* has been held at the University of Michigan, USA, on October 29, 1999.

The premise of the conference was to bring together scholars from a variety of disciplines who have used Lotman in their work and who could reflect on the ways in which Lotman enriches (or, sometimes, fails to enrich) their discipline, as currently practiced in the United States. The conference organizers, Jeremy Shine and the author of these lines, deliberately sought to invite scholars who had had no personal contact with Lotman, be it as colleagues or students. The emphasis was placed on the late works of Lotman, such as *Universe of the Mind* and *Culture and Explosion*, those in which Lotman attempts to go beyond the de Saussurian foundations of his semiotics. The implicit agenda of the conference, ultimately, was to reclaim some parts of Lotman's works that had not been sufficiently heeded in American academia and that could contribute to a kind of mapping out of the field of post-structuralist Cultural Studies and its various sub-branches.

In a paper called "Bipolar disorders: The semiotics of asymmetry in Lotman, Bakhtin, and Levinas", Amy Mandelker proposed a reading of Lotman's Culture and Explosion in the context of theories of otherness inspired by neo-Kantianism and twentieth-century Jewish philosophy (Franz Rosenzweig, Walter Benjamin, and Emmanuel Levinas). Mandelker drew a parallel between Lotman's concept of explosion and Benjamin's messianic idea of the "angel of history" and interpreted the notion of self-giving (vruchenie sebya) as a reformulation of Kant's categorical imperative and as a reference to the Jewish practice of estrangement exemplified in Levinas's

Author's address: Andreas Schönle, Department of Slavic Languages and Literatures, MLB 3040, The University of Michigan, Ann Arbor, MI 48109-1275, USA; e-mail: aschonle@umich.edu.

emphasis on the self-inflicted violence involved in the response to the suffering of the other. Altogether, Mandelker demonstrated how Jewish metaphysics were inscribed into Lotman's secular post-structuralist semiotics.

In "Lotman, film theory and verse theory", Herbert Eagle analyzed the cross-fertilization between film and verse theory in Lotman's works. Verse theory, as adapted from Iurii Tynianov, provided Lotman with the fruitful concept of double asymmetric encoding, which, when applied to film, yielded the notion of an interweaving of conventional and iconic codes as the underlying principle of cinema. Eagle showed how Lotman's key concepts of indeterminacy, asymmetry, and, ultimately, creativity, emerged out of his analysis of cinema.

Andrei Zorin approached Lotman from the vantage point of the history of mentality and ideology. "Lotman's Karamzin myth and the mentality of the intelligentsia in the late Soviet period" traced how Lotman contributed to elaborate the ethos of late Soviet intelligentsia, which sought a way out of an unbearable alternative between risky dissident activity and self-compromising attempts to bring about reforms within the Communist party. The intelligentsia found a third way in a kind of stoic everyday work ethic and sought to identify in Russian history analogies for its current position. Zorin demonstrated that Lotman projected his behavorial stance onto Karamzin, turning the historiographer into a kind of mirror of, and paradigm for, his own existential choices, which led him to misread key elements of his historiographic writings.

Andreas Schönle analyzed the typological parallels between Lotman's and Stephen Greenblatt's cultural poetics. Both writers attempt to delineate a theory of the relationship between culture and the social sphere that does not fold the cultural into the social and remains sensitive to the intrinsic vigor of culture, to individual agency and creativity. "Social power and individual agency: The self in Greenblatt and Lotman" articulates the differences between Lotman's biochemical and Greenblatt's economic metaphors of cultural exchange. Both authors analyze the homogenizing strategies of power, but Green-blatt's sense for diffuse, plural sources of power contrasts with Lotman's idea of a centralized, unique source. These notions of power determine varying ideas of selfhood. If for Greenblatt cultural life is fluid and complex enough to enable the self to negotiate some degree of autonomy, if only an illusory one, for Lotman, the further withdrawn from the center of culture, the freer one is.

A series of papers addressed Lotman's relevance for historians. In "Lotman for historians: Reading the potentials" James von Geldern pointed to several gaps in Lotman's approach to culture, notably his canon-centered neglect of popular culture, of gender issues, and of the experience of certain social classes. On the example of the urban romance, Geldern tried to illustrate how the opposition between high and popular culture would complicate Lotman's main articulation between center and periphery. Kristi Groberg used Lotman's ideas of the semiosphere to analyze the case of a

multi-lingual ethnic community. In "Lotman as key to understanding Russian-Jewish trilingualism" she discussed the applicability of Lotman's semiotics to ethnic studies.

Finally, Kathryn Babayan was primarily concerned with conceptualizing historical change. She began by observing that theorists such as Lévi-Strauss, Geertz, Barthes, Bourdieu, and Foucault have not developed a framework that could explicate the dynamics of historical change. Lotman's binary model of cultural change, enhanced by the theory of the semiosphere as a site of interaction between multiple languages, offers a way to conceptualize such a process, without loosing a sense of complexity and heterogeneity. Her paper analyzed a case study of conflict in sixteenth-century Iran between Islamic culture and the Nuqtavi messianic movement, which sought a return to Zoroastrianism and championed the Persian past. Lotman's framework enabled her to explain the astonishing endurance of cultural memory in Iran and the syncretic phenomenon of change amidst underlying continuities.

The last group of papers was devoted to attempts to model culture in cybernetics, anthropology, and political theory. To set the stage, Kelly Miller's "Defining the 'thinking brain': Lotman's response to Turing" offered a reading of Lotman's *Universe of the Mind* as a manifesto on artificial intelligence. She placed Lotman's proposal to view culture as collective intellect and to model artificial intelligence thereafter in the context of polemics on the proper modeling of intelligence. Referring at once to analytical philosophy, cybernetics, and semiotics, she analyzed both the advantages and pitfalls of his paradigm, which essentially finds in artistic texts and their asymmetric bi-polar mechanism an externalized isomorph of intelligence. In "Lotman and absent Lotman in ethnography in the U.S. and U.S.S.R." Alaina Lemon compiled references to Lotman in several major American and Soviet ethnographic journals, noting the scarcity of such references, and discussing the reasons for such apparent neglect of Lotman's paradigm in ethnographic scholarship.

From the vantage point of linguistic anthropology, Bruce Mannheim made the case that Lotman's semiotics enabled an understanding of post-colonial culture more adequate than that proposed by neo-marxist approaches. Analyzing a Quechua ritual text, "Lotman, culture, and metalanguage" illustrated how the Indians embedded Christian hymnology into their religious practices and how enigmatic metalinguistic phrases served as keys to submerged pagan codes that endured despite the dominance of Catholic colonial discourse. In so doing, Mannheim demonstrated the existence of a cultural metalanguage despite the absence of explicit metalinguistic lexical registers in the Quechua language.

Finally, Michael Urban analyzed the ways in which political rhetoric in post-Soviet Russia seeks to create political communities by using patently non-sensical discourse to strengthen the identity of a political group. Urban demonstrated how binary oppositions, autocommunication, and non-referential discourse reinforce one another in the production of a discourse aimed

more at creating internal cohesion within a group than communicating any information to an outsider. The paper thus evoked the advantages to be derived from Lotman's analysis of the semiosphere over positivistic political theory, which takes at face value the denotative value of political discourse, and over Habermas' notion of "distorted communication", which mistakes self-directed discourse for communication with the other. The paper thus developed a theory of political culture that refines the simple 'us-them' dichotomy assumed by theorists of inter-group relations.

A lively round-table discussion followed the presentation of these papers. The discussion centered first on Lotman's concept of power, which was contrasted with that by Gramsci and Foucault. Two issues seemed of paramount importance, the correlation between semiotic power and raw disciplinary practices that Lotman fails to address, partly, to be sure, because in the context of Soviet repression, state violence was too conspicuous to need elaboration; and the question of whether power is wedded to unity or not. The ethical implications that emerge from Lotman's works were noted with surprise. Indeed, echoes between the papers by Mandelker, Schönle, and Zorin suggest the degree to which Lotman's stoic existential stance shines through his semiotics and history of culture. Lotman's concept of the semiosphere was again taken up. Participants debated the extent to which the biological metaphors used by Lotman implied an essentialism. Most agreed that the organicist paradigm serves not to essentialize discourse, but to restore to it a sense of the unceasing life, the continuous metabolic exchanges discourses undergo when they are thrown into the world. The round-table also revisited the important idea that Lotman offers a means to conceptualize historical change distinct from, say, Hegelian dialectics or Foucaultian archeological shifts.

Given its broad interdisciplinary basis, the cohesion of the conference was so remarkable that it prompted the organizers to prepare a collective volume based on a selection of papers presented at the conference and augmented by articles solicited specifically for this volume. Provisionally entitled *Lotman and Cultural Studies: Encounters and Extensions*, this collection is now almost ready to be submitted to a publisher. It engages a broad range of theories and disciplines, including literary criticism, the history of mentalities, the history of philosophy and religions, cultural theory, cinema, political science, anthropology, and the history and theory of everyday life. Its contributors hope that it has the potential of making a definite impact on a variety of fields in the humanities and social sciences, extending thereby Lotman's efforts to break disciplinary boundaries.



ISSN 1406-4243 ISBN 9985-56-622-X