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Karin Boklund-Lagopoulou
& *Alexandros Ph. Lagopoulos*

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Introduction: The role of methodology in semiotic theory building

Katrin Pärn

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INTRODUCTION

The role of methodology in semiotic theory building

Karin Boklund-Lagopoulou & Alexandros Ph. Lagopoulos

What are the criteria for a well-built scientific theory? Each scientific field incorporates four levels of operations. The first level is that of *epistemology*, the integration, explicit and conscious or implicit and empirical, of any theory into one of the larger paradigms marking a historical period. The second level, *theory*, is founded on this paradigm and defines the key concepts and axes of investigation of the field. From theory follows in a systematic manner the third level, *methodology*, which allows research to proceed to concrete operations on the basis of the framework installed by theory. Finally, *techniques* follow from methodology or are articulated with it in a systematic manner, and give their final form to the above operations. *Only then* is it possible to formulate concrete results; only with this level is the value of a theory demonstrated. Debates are possible about the level of theory, and their outcome may be more or less convincing, but this is only intellectually rewarding. The final value of a theory follows from its completeness on all four levels, whence its capacity to respond in a satisfactory manner to the data selected and lead to reliable empirical results.

The French structuralist and semiotic explosion of the sixties and seventies, together with its rediscovery of the East European tradition and related tendencies such as the Tartu-Moscow School, introduced semiotics into a wide spectrum of disciplines, from anthropology to the humanities and the arts. Almost simultaneously began the diffusion of Peircean semiotics and the emergence of zoosemiotics, later expanded to biosemiotics and global semiotics. Then came poststructuralism and postmodernism, both of which have been extremely influential in the last 40 years; like classical structuralism, they were diffused throughout the humanities and the arts and even more widely in the social sciences. More recently, we have had social semiotics, cognitive semiotics, and existential semiotics.

This impressive diffusion was not without negative effects for semiotics (as Eero Tarasti also notes in his review article in this issue). While semiotics revitalised the multiplicity of fields with which it came into contact, it was also frequently absorbed by their traditional habits. Semiotic

terminology became part of their everyday vocabulary, but in a rather imprecise manner, thus losing its systematic character. While the French tradition keeps semiotics within the cultural domain, zoosemiotics, biosemiotics and cognitive semiotics extend it to or found it on biology. Thus, the domain of semiotics is today an evolving, splitting and conflicting kaleidoscopic domain. There is little communication between these different and heterogeneous tendencies. In addition, many researchers make eclectic choices from irreconcilable paradigms, adding to the confusion in the field. Last but not least, all of the conflicting theories are not well formed, since they have not all developed all four levels of the scientific enterprise. A decisive step for the operational use of a theory is, as we stated above, that it is able to move beyond the endorsement of an epistemological background and the adoption of theoretical principles to the formulation of an explicit and systematic methodology, able to generate or be articulated with specific techniques.

This is the reason why the present issue of *Punctum* focuses on methodology. It does not aspire to any synthesis, since this does not seem possible under current conditions. But the editors feel that the explicit formulation, by the different approaches competing in the semiotic sphere, of the manner in which they deal with the basic requirements of theory-building represents a step towards a better mutual understanding of both differences and possible partial convergences, links or bridges.

The introduction that follows attempts to participate in the debate we hope will be generated by the papers included in the issue, by pointing out their different rationales, convergences and divergences, and additional issues relevant to the discussion.

Katre Pärn's paper moves on a sophisticated epistemological level and aims to define both the epistemological status of semiotics and its core methodology. Methodology is, for Pärn, the key factor in determining the position of a discipline in the system of the sciences. She opposes the narrow view of science derived from the natural sciences, which leads to the relegation of the study of culture and society to the status of non-scientific disciplines, and points out that that this division revolves around methodology ('science' is that which follows 'scientific' methodology). She also opposes the view that the natural sciences use a nomothetic approach, while the humanities, labelled 'non-scientific' disciplines, use an idiographic approach, noting that this has not been the case historically. There are, in fact, many instances of the use of a nomothetic approach outside the natural sciences, as we can see from the linguistics of Ferdinand de Saussure and Noam Chomsky, as well as the narrative theory of Algirdas Julien Greimas.¹

Pärn is critical of the view that the theories of the natural sciences are of a different nature from those of the humanities and social sciences. She attributes the difference between the two domains in the last instance to the different nature of their objects. She recognizes that the natural sciences attempt to provide a representation of reality, even if their 'adequacy as true representation is uncertain',² but, following Paul Ricoeur, she argues that the humanities

not only have their own mode of reference to the world, but also express the self-reflection of a subject's being-in-the-world. The specificity of the humanities lies in the fact that they use theory as methodology; ideally, a concept-based methodology aiming not at interpretation, but analysis through modelling.

Pärn makes an important observation, namely that 'the humanities study culture and are themselves part of culture'. This is a central position of the Tartu-Moscow School, which has a two-level conception of the model, culture-as-model and the modelling of this model. This school differentiates natural language, the 'primary modelling system', from the cultural systems based on natural language, the 'secondary modelling systems'. Culture as a semiotic object is based in the last instance on language and the secondary modelling systems are built on it, either directly, as in literature, or in a parallel manner, as in music and painting. The two-level conception of the model follows from the idea that there are two points of view on culture: the internal approach, the point of view of the culture itself, and the external approach. The second is a scientific metasystem, a metalanguage describing culture, though it does not escape cultural determination (Uspenskij *et al.* 2003: theses 1.1.0, 1.1.1, 3.2.1, 6.1.3, 6.1.5, 9.1.0).

This two-part classification is related to Hjelmslev's (1961: 114, 120, 123, 125) more complex three-part hierarchical classification of all systems of meaning; Hjelmslev's two lower levels coincide with the two levels of the Tartu-Moscow School. For the purposes of the study of signification, Hjelmslev refers to cultural systems when they are objects of semiotic analysis as 'non-scientific semiotics' and to the metalanguage analysing these semiotics as 'semiology'. There are also other fields that *do not* study signification, but they are, of course, still semiotic. Thus, caution is needed in the use of the term 'semiotic', because any human manifestation is semiotic. Given the above, Pärn's statement that 'models are by definition semiotic structures' is of course correct, but does not imply that all models study signification.

Pärn argues that theories, as systems of concepts, are models and considers the model as a representation; she adds that models need not be mirror-type representations, but 'creative' modelling. The concept of 'representation' thus does not characterise only the natural sciences, but is considered as a general trait of all scientific models. This is why Pärn considers the distinction between 'representational' and 'interpretive' theories as misleading.

A model, for Pärn, represents the structure of its object and the relation between the two is mediated by rules or conventions. This view is in line with the current definition of models in the physical and social sciences:

... models are *structured*, in the sense that the selected significant aspects of the 'web of reality' are exploited in terms of their connection.... what is often termed a model by logicians is called by econometricians a 'structure'... Science has profited greatly from this *pattern seeking*, in which phenomena are viewed in terms of a kind of organic relationship (Chorley and Haggett 1967: 23).

Pärn then goes on to consider the use of metaphorical modelling, ie. the borrowing of an idea, concept or theory from one scientific field for use in another field. She considers that metaphors are not necessarily rhetorical and vague, but can be vehicles of greater complexity than literal concepts, and recommends metaphorical modelling as a dynamic mode of knowledge in the form of a scientific, analytical activity.³ She discusses two different versions of the 'metaphor career hypothesis', used in both the natural sciences and the humanities: one considering that the travelling of a concept as a metaphor from one field to another results in a gradual conventionalisation such that it loses its metaphorical nature, the other believing that it remains a living metaphor.

Pärn finishes her paper by investigating the role of metaphorical modelling for the constitution of semiotics. She notes that metaphorical modelling has had a double function: semiotics has used metaphorical models borrowed from other fields, but concepts have also travelled as metaphors internally within semiotics from the social to the biological domain (in this second case, she points out that the unification thus achieved could be due just to the level of abstraction of the metaphorical model used). Pärn points to the use of mathematics and formal linguistics by semiotics as examples of metaphorical borrowing.⁴

Of particular interest is Pärn's discussion of the difference between the narrow linguistic and linguistico-mathematical approaches to semiotics, and the fertility of a more metaphorical language-oriented approach; she gives as example Christian Metz's efforts to define a 'language of cinema', as contrasted with the more metaphorical use of the notion of cinematic language in film studies today. However, while metaphor seems to be more fertile and interesting as a methodology than the construction of more formal semiotic models, such an approach blurs the distinction between semiotics and other generally postmodern approaches, and thus relativises its position in cultural theory.

Linguistics was indeed the original model science for semiology, and it is thus interesting to see the use that Paolo Fabbri makes of the linguistic model in his analysis of the 'Springtime Meal of the Word-in-Liberty' by the Italian Futurist Filippo Tommaso Marinetti. The concept of metaphor is also central to Fabbri's paper, because the text he analyses is itself overtly metaphorical, 'deconstructing' cooking and dining just as the Futurists deconstructed all the semiotic systems they worked in, including – most spectacularly – natural language.

The Italian Futurists were an avant-garde artistic movement founded by Marinetti in 1909; shortly thereafter it inspired the parallel movement of Russian Futurism. The Futurists were active in practically every medium of art: literature and theatre; painting, sculpture, ceramics, industrial design and graphics; interior design, architecture and urban design; music, film, fashion and textiles. They rejected tradition and good taste, and were fascinated with the dynamism of modern machines, such as the aeroplane and the industrial city. Much of Futurist art is preoccupied with dynamic motion. Marinetti remained the principal theoretician of the movement until his death in 1944, when the movement itself also faded.

To describe the Futurist style of poetry, Marinetti coined the term *parole in libertà* (words in liberty) or *parolibere* (free words); both expressions could perhaps also be translated as 'liberated words'. The words are to be liberated from all forms of syntax, punctuation and meter. *La cucina futuristica*, Marinetti's and Fillia's 1932 book on Futurist cuisine in which the 'formula' for the 'Springtime Meal of the Word-in-Liberty' is to be found, is among other things an application of these Futurist principles to the art of cooking and dining.

Modern interest in the Italian Futurists has been overshadowed, Fabbri points out, by Marinetti's political involvement with Fascism during the 1920s and 1930s. He feels, however, that their ideas are of special interest to semioticians, and indeed that semiotics has a particular contribution to make to the understanding of the Futurist project.

Fabbri's method is in a sense the oldest, best established of all the semiotic methodologies: a scrupulously careful reading of the text itself, its language and structure. Fabbri himself uses the metaphor of the microscope to describe his method of analysis. However, he also pays attention to what the text is *saying*, which in this case leads him to a detailed analysis of the Futurist theory of language and its relation to the linguistics of the early 20th century.

It is fascinating to discover, in Fabbri's paper, the astonishingly close relationship between semiotics and the early 20th-century artistic avant-garde as represented by the Futurists. The Futurists are proto-semioticians: they treat all the expressive media in which they work as sign systems analogous to natural language. Thus, Futurist linguistics is not only about poetry; for them, language is a metaphor for all social conventions, including in this case cooking and dining. The same principles of absolute freedom from constraints, of rejection of traditional forms and conventions, which they advocated for language, were to be applied to all art. Because the Futurists themselves worked in virtually all art forms, Futurism is indeed, as Fabbri puts it, a semio-liberating movement, a movement to free all sign systems from the constraints of convention. This feeling that one cannot say new things while using an old 'language' – traditional forms of expression – is shared by practically all the 20th-century avant-gardes (a point that informs the paper by Rea Walldén in the present volume). Because semiotics also considers all forms of human communication and art as sign systems ultimately analogous to verbal language, Fabbri's semiotic approach has a significant contribution to make to our understanding of the Futurist project, and perhaps also to the history of our own scientific endeavour.

Another central concept discussed by Pärn, 'representation', is the nucleus of the paper by Raúl Gisbert Cantó. His use of Peircean theory is founded on Peirce's best known and most widely used sign typology, that of icon, index and symbol, which depends on the way in which a sign denotes its object.

In Peirce's hierarchy of sciences, the top position is occupied by mathematics; then follows philosophy, the first part of which is 'phenomenology', followed hierarchically by 'semiotic', also part of philosophy and equated with *logic*.⁵ The object of phenomenology, which takes the form of a mathematical logic of relations, is the definition of the universal principles of

experience, that is, of the categories that allow in turn the formulation, in terms of Peirce's semiotic, of the foundation of all kinds of experiences and knowledge, the sign. Peirce founds these principles on the Kantian categories and postulates three categories, which correspond to three different modes of approaching phenomenal entities: *firstness*, considering them in their property of having 'monadic', non-relational, qualities; *secondness*, approaching them as involving a dyadic relationship, in which case each term of the relation has monadic properties; and *thirdness*, seeing them as terms of a triadic relationship, so that dyadic relationships exist between each couple of terms. These phenomenological principles lead, for Peirce, to the constitution of the sign and allow semiotic to formulate all possible types of signs.

The sign for Peirce, that is, whatever conveys meaning, implies a triadic relational structure, which for him is the only relationship that incorporates all three categories. The first term of this relationship, the *representamen* ('sign' in the narrow sense), stands in some manner for something else, its 'object',⁶ which is the second term of the relationship, in such a way that it brings about a response to it, namely the idea it provokes or the interpretation of its meaning by an interpreter, its *interpretant*, which is the third term of the relationship and stands in the same relationship to this object as the *representamen*. This triadic relationship, the sign, is a 'representation'. According to Peirce, the very definition of the *representamen* implies its naming by another *representamen* and this one attracts its own *interpretant* and so on, opening a chain of theoretically *unlimited semiosis*,

Peirce proposes two groups of interrelated classifications of signs. The first group follows from the application of the three universal categories to each term of the triadic sign. The trichotomy into *qualisign*, *sinsign* and *legisign*, which, for Peirce, is the simplest, follows from the application of the categories to the *representamen*. The second trichotomy is the one into *icon*, *index* and *symbol*, and follows from the application of the categories to the object. The third trichotomy, which is the most complex, follows from their application to the *interpretant* and leads to three possible types of *interpretants*, *rheme* (which stands as its object for some purpose), *dicent sign* (which is intended to have some compulsive effect on the interpreter of it) and *argument* (which represents its object in respect of law or habit).

The second group of classifications derives from the relation of these three trichotomies according to a tree-structure – see Fig. 1 (Peirce 1932, vol. I: § 300-353 and vol. II: § 228, 233-264, 303-308; see also Pape 1998; Sebeok 1994, vol. 2: Peirce, Charles Sanders (1839-1914); Eco 1976: 68-69).⁷

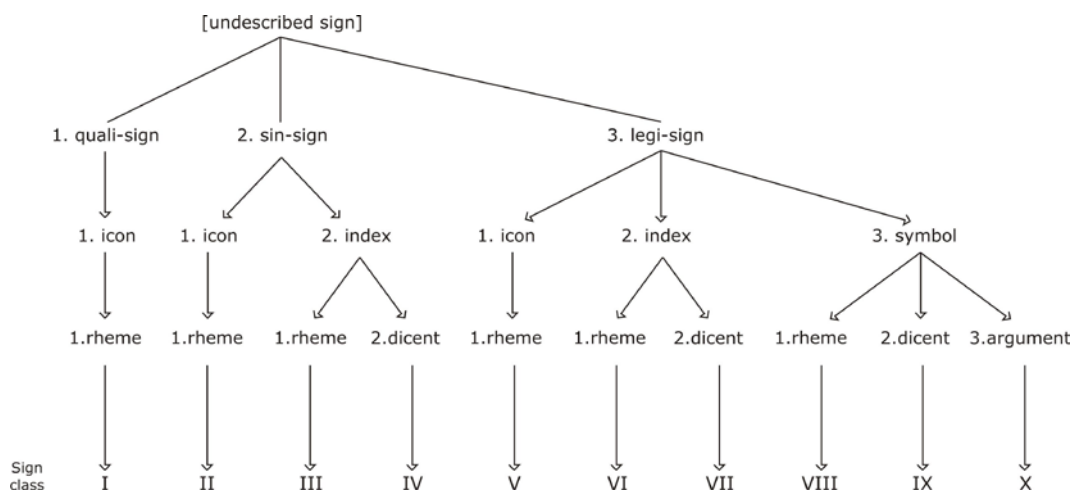


Figure 1. The classification of signs according to Peirce.

Any tree-structure typology defines pure independent types, ie, types that are mutually exclusive. However, Peirce states that ‘it would be difficult if not impossible, to instance an absolutely pure index, or to find any sign absolutely devoid of the indexical quality’ (Peirce 1932, vol. II: § 305). It may be this observation that led him to repeatedly reformulate his typology.

Cantó’s paper wants to be a Peircean contribution to adaptation theory. He focuses on cross-media adaptation, namely adaptation from comic books to the cinema, and in particular on characters created by the two major American comic book publishers, Marvel Comics and DC Comics, who have extended their activities to film production.

Using what he considers as Peircean visual semiotics, Cantó examines the signs involved in the depiction, in both comic books and their cinema adaptations, of the urban environment and the heroes’ emblems, costumes and facial features. He focuses on the identification of the types of signs belonging to Peirce’s second trichotomy, icon, index and symbol, and his findings are an opportunity for a fruitful discussion of the implications of applying this typology. The reason is that Peirce formulated an abstract, *context-free* typology of signs, while the object of Cantó’s analysis is much more complex, because it refers to signs inside *texts*, and in addition is *intertextual*. Cantó indicates, for example, that the Superman emblem with a capital S and the bat of Batman are symbols of these superheroes and of their nature, both in the comic books and the cinema, that the costumes of the superheroes are also symbols of them, or that, in the case of Ironman, the light, bright colours and blue sky of the representation of New York convey the meaning of peace, tranquility and a safe city. These identifications are in line with Peirce’s definition of the symbol as ruled by habit, that is, a set of associations, and denoting due to its interpretant.

Cantó connects icon to visual similarity, and in fact this is in general the case with the

material he analyses. However, we should recall that an icon *resembles* or *imitates* its object; thus Peirce considers as icons not only images, but also diagrams based on analogy and metaphors. Cantó gives as examples of an icon the representation of a real city, a frame in a film that adapts a vignette from a comic book or, more specifically, the Gothic style architecture of Gotham city in Batman's cinematic adventures, adapting its form from the comic books. We detect here two different modes of iconic rendering: the one connects the icon with actual *physical* space, while the other is *intertextual*, connecting one medium with another. In the one case the 'object' is physical, in the other it is conceptual. Both cases, though quite different, conform to Peirce's definition.

The index is not frequently mentioned, and this for good reason. Cantó gives the definition of the index as a sign that links two physical objects, and this is true: Peirce refers to a 'dynamical (including spatial) connection'. However, his definition of index should be understood in a wider sense, because it includes, for example, certain grammatical categories, ordinary letters used in algebra, the letters A,B,C, etc. accompanying a geometrical figure or a label on a diagram.⁸ According to him, 'psychologically, the action of indices depends upon association of contiguity'. In the case of matter of facts, he states that:

No matter of fact can be stated without the use of some sign serving as an index. If A says to B, 'There is fire', B will ask, 'Where?' Thereupon A is forced to use an index.... If A points his finger to the fire, his finger is dynamically connected with the fire ... If A's reply is, 'Within a thousand yards from here', the word 'here' is an index; for it has precisely the same force as if he had pointed energetically to the ground between him and B. (Peirce 1932, vol. II: § 305)

Cantó gives the Bat-signal as an example of an indexical sign, because he considers that an index links two physical objects and the Bat-signal is linked to the fact that someone is in danger in Gotham city and needs the help of Batman. He connects the Bat-signal, which is a symbol, with a social situation (danger, help), which is a very wide interpretation of an indexical relation. On the other hand, let us suppose that inside a text – comic book, cinematographic or other – smoke is depicted, the source of which is not visible, because it is hidden by trees. In real life we would here have the cause-and-effect aspect of the index, but this does not hold for a text, because smoke and fire in a text are no longer physical entities. Thus, the use of 'index' for this case would be purely *metaphorical*.

We saw that Peirce's types are exclusive of each other, but according to Cantó, the S of Superman or the bat of Batman is a symbol in the comic book or the cinema, while it is an icon with reference to the adaptation from comic book to cinema. Is this, then, an infringement of the exclusivity of the type?⁹ We do not believe that this is the case, because each identification results from a different viewpoint: the first concerns the sign as *part of a text*,

the second follows from an *intertextual* comparison. The relation of each sign to its object in its own textual context is different from the relation of the signs to each other in the inter-media adaptation.

The methodology used by Cantó exemplifies the usual Peircean approach to textual analysis. It generally consists in analyzing a text through the identification of the isolated types of its signs, that is, the types as theoretical concepts are used simultaneously as methodological, and largely technical, guides during the analysis. Peirce does not advance beyond the individual sign: both the *dicent sign* and the *argument* are, for him, signs and his theory is not preoccupied with the internal relationships of their elements. This leads any attempt at textual analysis to an additive operation, without the possibility of having access to the *structure* of a text.

A different use of Peircean theory is exemplified by the book *Cultural Implications of Biosemiotics* by Paul Copley, reviewed at the end of this issue. Central to Copley's book is Jakob von Uexküll's concept of '*Umwelt*', which is a form of modelling of its environment by an organism as a function of its biological capacity.

The theoretical background of biosemiotics is Thomas Sebeok's combination of Peirce with von Uexküll's *Umwelt*, a synthesis which was first presented in a working paper (no. 5) of the Toronto Semiotic Circle distributed to the participants of the 3rd Congress of the International Association for Semiotic Studies (Palermo, 1984) and later published as Anderson *et al.* 1984. This manifesto proposes a holistic, 'ecumenical' semiotics, with the ambition of unifying the social sciences and humanities with the biological sciences, the dream of logical positivism.¹⁰ For Sebeok, semiosis coincides with life. Biosemiotics studies all kinds of natural processes in all living organisms, from the cellular molecular processes to the level of the organism as a whole. It is this last level that interests Copley, since this is where the concept of *Umwelt* becomes relevant.

Two interrelated issues are raised by biosemiotics. The first issue concerns terminology: what do we mean by semiosis? If we mean any form of transmission of information at any organic level, this would lead us to define semiosis as coincidental with life, which for Sebeok it is. This is very far from the understanding of semiosis as the ability to produce and use sign systems. The second concerns the relationship between humans and other biological organisms. After Darwin, it is a truism that humans are animals, yet it is also clear that they are in important ways different from other animals. Since one major difference between humans and other animals is that humans use language, what exactly do we mean by language? Clearly, it is unlikely that we will be able to resolve these issues here, but we shall try to be clear about our use of terminology.

Copley uses the term 'semiosis' in Sebeok's sense and insists on the continuity between all living organisms, but he is also explicit on the discontinuity between humans and simpler life-forms, a discontinuity which he attributes to the co-evolution of brain, language and culture. Humans are of course 'organisms', but they have been transformed through culture into

social subjects. John Deely, who like Sebeok is frequently cited by Cobley, writes on the human *Umwelt*, which for him becomes a linguistic *Lebenswelt*:

Thus the objective [ie. consisting of 'objects'] world of human beings, the human *Umwelt*, is unique among all the species-specific *Umwelts* of other animals in being singularly malleable – transcendent to biology.... The human animal is *like* all other animals in living in an actual objective world or *Umwelt*; but the human animal is *unlike* all other animals (at least on this planet) in that its actual objective world admits of an indefinite number of alternative possibilities some of which can be actualized in turn. Thus human society is not only, like every society of animals, hierarchical; this hierarchy is *civil* as well, in that it can be embodied in different patterns of government.... (Deely 2001: 8-10)

Cobley also follows Deely on the issue of reality. As Cobley mentions, Deely differentiates between 'objects' and 'things' in relation to the *Umwelt*. 'Things' are mind-independent elements of the physical environment (which he confusingly calls 'subjective') and exist beyond the *Umwelt*, which is the 'objective' environment as a network of relations, a 'semiotic web' modelling the world. Things either are or are not known by a knower, while objects exist only in relation to a knower, a 'cognizing organism', being self-representative and thus opposed to the sign as other-representative; things that are known are both things and objects. Deely attributes to the *Umwelt*, which he considers as relatively independent from the physical environment and as the 'totality of objectification [ie. of objects] ... being grasped in itself', the quality of Firstness. Objects are 'semiotised', things are not.

The concept of 'things' poses the issue of the reality of 'reality'. The thing, for Deely as for Cobley, is not an ontological entity, a 'thing-in-itself' in Kantian terminology, but has an existence different from the relation through which it is known. For Cobley, the idea of *Umwelt* leads to the conclusion that reality is inaccessible as such, because it is necessarily conceived through *Umwelt*; but he also believes that the human *Umwelt* cannot be entirely out of contact with reality, since otherwise humans would not be able to survive.

Deely holds a view of *Umwelt* as the product of sensation (perception) as well as understanding, which is the possibility of going beyond sensation and perception to consider objects as such, in this hierarchical order from the simpler to the more complex; sensation is the medium through which the physical environment is partially included within the *Umwelt* (Deely 2001: for example, 5-6, 8 note 7, 8-10, 356, 379, 384, 448, 558-559, 585, 647, 696-697, 944).

Thus, Deely's view of *Umwelt* is static, presupposing an immobile observer passively perceiving its *Umwelt*. However, the relation of the organism to its environment is dynamic and the *Umwelt* is the result of the interaction of the organism with the constraints of its environment. This is an important factor, as will be seen below.

The co-evolution of brain, language and culture, what Copley calls the 'difference in degree' that became a 'difference in kind' between humans and other organisms, had of course been suggested before the arrival of biosemiotics. According to André Leroi-Gourhan, phylogenetically, the fundamental criteria of humanity are the co-evolution of the liberation of the hand during locomotion; the vertical position, which caused a neuro-psychic development of the human brain different from a simple increase in volume; the development of language; and movable tools. He differentiates between the physical ability to organise sounds or expressive gestures and the intellectual ability to conceive expressive symbols transformable to sounds and gestures. Thus, Leroi-Gourhan envisages the possibility of 'intelligent' expression without the use of symbols (semiosis in the cultural sense). He attributes intelligence already to the *Australopithecus species*, due to the combination of technical progress and language, and observes that the result was '*un langage de niveau correspondant à celui de leurs outils*' (163); as for the Neanderthals, he believes that their language probably did not differ much from our own (Leroi-Gourhan 1964: 33-34, 126-127, 162-165).

A very similar position as concerns the ontogenetic development of humans has been proposed by Jean Piaget. According to his constructivist approach (which he called 'genetic structuralism'), human mental structures are the result of the passage from simpler to more complex structures such that the superior structure is derived from the inferior through transformation, but the superior also enriches the inferior by integrating it. It seems to us that Copley's concept of 'nesting' intends to express this complex process. The point of departure of the cognitive structures is, for Piaget, the general coordination of actions, that is, *sensory-motor* coordination, which appears *before* language. Before this function develops, there is no differentiation between subject and object and there is centration on the body. There is no consciousness of the existence of the schemes of the sensory-motor intelligence and these are not yet concepts, due to the lack of a semiotic apparatus. Thus, the semiotic function implies conceptual structures which emerge from certain connections of the sensory-motor schemes. We see that this sensory-motor intelligence *could be misunderstood as semiosis*, which for Piaget only appears in the human child (at the age of 18-24 months) and certain higher primates. The development of semiosis in this sense is due to social life, the progress of preverbal intelligence and the internalisation of imitation leading to representations. Piaget finds an amazing parallelism between the psychogenesis and biogenesis of the cognitive tools (Piaget 1968: 53-56, 1970: 24, 102 and 1972: 15, 18, 23, 102).¹¹

Copley also raises the issue of ethics. The book review expresses strong doubts about the possibility of anchoring ethics in biology with the aim of offering a more solid basis for it than what Copley calls 'voluntarism'. Ethics is deeply culture-specific. However, since the publication of *The Limits to Growth* (Meadows *et al.* 1972), an attempt has been made to formulate a kind of universal ethics which would not be based on voluntarism, though this ethics finds its foundations not in biological mechanisms but in the cultural values of environmentalism, with

its corollary of sustainability and sustainable development. Contrary to the limited radius of semiotics, environmentalism is institutionalised on a very high and universal level.

There is an interesting antecedent to this ideology. Martin Heidegger rejects humanism and existentialism for their anthropocentrism, ie. focusing on human existence as the source of values, and demands a higher standard for the humanity of man beyond the one that man is the measure of things, arguing that what is essential is not the human being, but being as a whole, and that humans have a responsibility to all existing things. Augusto Ponzio and Susan Petrilli's bioethics, on which Cobley bases much of his discussion, is founded on Sebeok's global semiotics and considers the individual life as connected with all other forms of life, thus subscribing to the Heideggerian position. Bioethics, or otherwise 'semio-ethics', has a different starting point from the eco-ethics of environmentalism, but subscribes to the same set of goals, being thus a newcomer to the environmentalist paradigm.

Jacques Fontanille and Didier Tsala-Effa are representative figures of the Greimasian School of Paris and in line with its theoretical approach rely heavily on the linguistics of Louis Hjelmslev, which they discuss extensively. Their paper represents a radical rethinking of the field of semiotics and gravitates around the methodological requirements for this task. They pose from the beginning the need to relate epistemology, theory and methodology, to link semiotics with anthropology as science of meaning and to account for the cultural singularity of the objects of study.

Their proposal is founded on an epistemological principle we find in Saussure (1971: 23), later called the 'law of relevance' (*loi de la pertinence*): the selection of a single point of view for the definition of a scientific field. In the second volume of their *Dictionnaire*, Algirdas Julien Greimas and Joseph Courtés observe that two tendencies are discernible in the current stage of research. The first is to accept that social facts are irreducible to purely semiotic ones and are studied by a set of special theories (such as sociology, economics, and political science), in which case semiotics would be compelled to simply invest stylistically these external realities. Although they do not approve of this choice, in the first volume of the *Dictionnaire* they write that there is no doubt that language can be *correlated* with the traditional social classes. In the same volume, in the entry on sociolect, they refer to social stratification, which they see as composed of classes, strata or social groupings, and consider them to be '*phénomènes extra-sémiotiques*' to which semiotic configurations *correspond*. However, they contrast this approach of a correlation between language and social classes in traditional societies to modern industrial societies, arguing that in the latter social stratification has shifted to forms of living (dress habits, culinary behaviour, dwelling, etc.), which is based on signifying practices appertaining to the domain of non-linguistic semiotics. This is also the position they opt for in the second volume of the *Dictionnaire*, in which they defend a sociosemiotics integrated within general semiotics, conceiving of the social in semiotic terms.

It seems obvious that the reason for this decision is the maintenance of the semiotic rele-

vance, since, as they explain in the first volume, seen from this angle, the correlation of semiotics with the social sciences would no longer result in an *interdisciplinary* socio-semiotics, the bringing together of two heterogeneous fields, but would remain pure semiotic *intertextuality*. They explicitly state that they choose methodological coherence over interdisciplinarity.¹² They argue that, given that communication activates the complex articulation of semiotic systems undertaken by competent subjects, enunciation (the production of semiotic texts) can be better studied through the enunciate (the texts themselves) than through random sociological variables (Greimas and Courtés 1979: *Sociolecte*, *Sociosémiotique*, and 1986: *Sociosémiotique*).¹³ The problem which Fontanille and Tsala-Effa have set themselves, then, is to elaborate a formal semiotic methodological framework for the study of ‘forms of life’.

Following the Saussurean principle of relevance (as Greimas himself always insisted), Fontanille and Tsala-Effa limit their analysis purely to the domain of *meaning*. They rely on Greimas’s semiotics, and Hjelmslev’s linguistic theory as the foundation of Greimasian semiotics (see also Ablali 2003: 55-95), and with these prerequisites they build a methodological proposal which they posit as the operational epicentre of semiotic analysis. The paper is divided into two main parts, the one exploring the interface between semiotics and linguistics, the other that between semiotics and anthropology.

In their search for a formal link between semiotic systems and cultural practices, Fontanille and Tsala-Effa turn to Hjelmslev’s form-substance division, which he extends to the concept of ‘purport’ (*matière*). They argue, following Hjelmslev, that this concept has two parallel meanings. In the case of expression, the linguistic substance of expression covers, on the one hand, the physical phenomenon preceding *langue*, the ontological substance or purport¹⁴ (as pointed out by Saussure, see ‘*matière plastique*’ – Saussure 1971: 155), and on the other the recognition of sounds. In the case of content, it covers the ontological purport of content, also pointed out by Saussure (see ‘*nébuleuse*’, ‘*idées confuses*’, ‘*pensée chaotique*’ – Saussure 1971: 155-156), as well as the content substance, gathering from the former whatever is relevant to have access to the form. The authors conclude that the form is not isolated from existential realities, which, as we shall see below, is of major importance for their argumentation.

An example from the semiotics of space may be helpful to understand the difference between ontological and semiotic substance. Imagine that you are walking in a street, seeing around you the urban environment. The latter as such is the ontological matter ‘out there’. However, you never record the whole environment, but, as a result of your interaction as a socially, culturally and even psychologically constituted person with individual characteristics, you conceive only certain parts of it. It is these parts that are ‘semiotised’ and, as the material vehicle of the urban signifier, become the urban expression substance (belonging to the physical level, which we shall discuss below).

The further development of the argumentation of Fontanille and Tsala-Effa also relies on Hjelmslev. They present crucial points of his theoretical approach discussed in *La stratification*

du langage (see Hjelmslev 1971, first published in 1954); given that they follow this text very closely, we feel a brief presentation of its main points will be helpful in following their argument.

Hjelmslev defines three levels (*niveaux*) of both the expression substance and the content substance. These hierarchically ordered levels are, from the higher to the lower: the level of social ('collective') appreciation, apperception or evaluation; the socio-biological level; and the physical level; all three precede the two *planes* (or *strata*) of the form. A closer scrutiny of these levels reveals their direct debt to Saussure. More specifically, Saussure's circuit of *parole* starts with a mental concept, a fact of consciousness (later to be defined as *signifié*), associated to an acoustic image (later, a *signifiant*), both of a psychic nature in the mind of person A; then it passes to a process that Saussure defines as physiological, focused on the organs of phonation, and continues with the physical process of the sound waves, reaching the ear of person B, where the process is repeated in reverse order (Saussure 1971: 27-29).

This is the point of departure for the three levels of Hjelmslev's substance (though all levels need not be present in all cases). He uses the same term as Saussure for the physical process (and specifies it as 'acoustic'); Saussure's physiological process Hjelmslev calls 'socio-biological'; and Saussure's auditory process is located on the level of social appreciation; the plane of the form is identical in nature for both of them. It seems that Hjelmslev was inspired by Saussure's presentation of the processes of expression and adopted them for the definition of the levels of content in a *symmetrical* manner (which is not an *a priori* necessity). Hjelmslev sees the relation between levels as syntagmatic: the lower level 'selects' or 'manifests', in the sense of *determines* (that is, a unilateral function between the substance as variable and the form as constant) the higher level, and the latter 'specifies' the former; the relation between the level of social appreciation and the plane of the form is also one of selection. The hierarchy for both substance strata is, from the higher to the lower: the level of social appreciation, the socio-biological level and the physical level.

When Hjelmslev (1971: 59) refers for the first time analytically to the levels of the phonic substance, he presents them in a different order, starting with the description of the 'physiological' (socio-biological) level, continuing with the description of the physical level and ending with the auditory description of the level of social appreciation. This order of description, which he alters in his final position (Hjelmslev 1971: mathematical diagram on p. 63), follows faithfully the Saussurean communication circuit. For Fontanille and Tsala-Effa, the multiple levels of organisation of the substance, which give meaning to the semiotic function, allows us to put semiotic analysis in perspective, and is also the foundation of its methodology.

These hierarchical levels and their relationships, for both the expression substance and the content substance, are shown in Figure 2, which represents a different visual rendering of Hjelmslev's diagram.

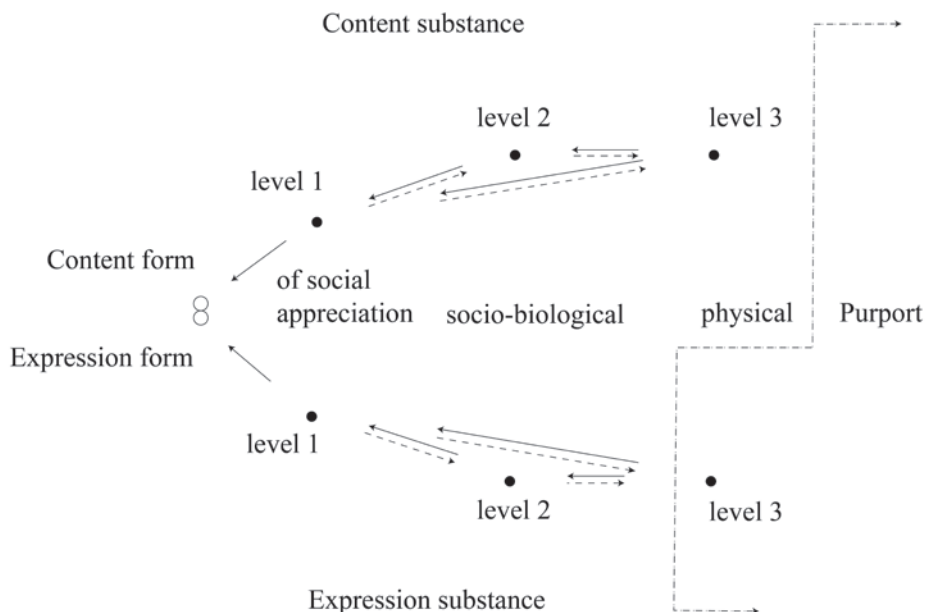


Figure 2. The three hierarchical levels of the substance stratum and their relationships. \longrightarrow : selection. \longleftarrow : specification. $\cdots \rightarrow$: purport.

Substance levels of the expression stratum:

1. Level of social appreciation or apperception. For both the stratum of content and the stratum of expression, this is the primary level and the immediate semiotic substance linked to form. In linguistics it corresponds to the apperception of sounds and their auditory description. Hjelmslev gives as examples the description of sounds as *light vs dark, strong vs weak, long vs short*, etc.
2. Socio-biological level. This level, not always present, is physiological and in linguistics corresponds to the myokinetic and articulatory phonological description, in other words the description of distinctive traits. The examples given by Hjelmslev concern pronunciation and oppositions such as *voiced vs unvoiced, nasal vs oral, rounded vs unrounded*, etc.
3. Physical level. This is the acoustic level, implying the description of *physical* 'things'. It corresponds to the Saussurean description of sound waves and is studied, according to Hjelmslev (1961: 125), by the metasemiology of denotative semiotics.

Since this is philosophically an ontological description and linguistically belongs to phonetics, we conclude that the physical level of the substance of the expression *does not* concern signification. To come back to our example from the semiotics of space, the sound waves are

comparable to the materials from which space is built. Semiotics is concerned with the fact that a particular part of this material continuum is activated from the point of view of signification, not with the physical description of geographical space. As a result, Hjelmslev's expression substances do not all obey the same relevance. Although he explicitly states that all his substances are *semiotic* because they are under the domination of the form, he is well aware that the ontological purport is studied by non-linguistic sciences, leading 'to a recognition of a "form" essentially of the same sort as the linguistic "form", although of non-linguistic nature' (Hjelmslev 1961: 80).

Substance levels of the content stratum

1. Level of social appreciation or apperception. Hjelmslev considers this level as the first duty of the semiotician. It is concerned with the description of public opinion and collective evaluations, covering tradition and uses. Hjelmslev clarifies that this level, like the corresponding level of expression, concerns relatively naive appreciations, in other words, spontaneous valorisations or non-formally codified ideology. He gives as linguistic examples the adjectives 'big', 'small', 'good', 'bad'. At this level, for Hjelmslev, we find the *contact between linguistics* (and manifestly other semiotic fields) *and anthropology*. It is on this kind of interface between semiotics and anthropology that Fontanille and Tsala-Effa propose the constitution of a semiotics of practical situations.
2. Socio-biological level. This level concerns the description of the factors that act on the elements of appreciation. It seems that it can be identified with 'situation' and thus directly associated with socio-linguistics.
3. Physical level. This concerns the description of the cultural understanding of semantic units, which thus constitute a kind of semantic micro-set. Hjelmslev refers to units that can be physically described, such as the nouns 'horse', 'dog', 'mountain' (the example given by Fontanille and Tsala-Effa of the different cultural semantics of the elephant belongs to this level).

Hjelmslev qualifies all the levels as semiotic. As we saw, the three levels of the content substance are within the domain of semiotics, but only two of the levels of the expression substance, since the physical level should be excluded. These five levels, then, are *cultural* levels. In the case of natural language, the socio-biological level for both Saussure and Hjelmslev refers to the myokinetic and articulatory movements of speech; that is, it has as starting point a physiological process, though it is studied by a semiotic metalanguage. Perhaps the term '*socio-biological*' was used by Hjelmslev because of the physiological nature of this process, but it cannot be generalised, because this is not the case for other semiotic systems. For example, the semiotics of space is to a large extent anchored in physical space and has nothing to do with biology. The second component of '*socio-biological*' must originate from the physical level of expression and the obvious term is '*socio-physical*'.

Hjelmslev (1961: 106, 132, 133) defines in very general terms the concepts of 'selection'/'manifestation'/'determination' and 'specification' and does not give concrete examples of their application. Let us take some examples. Concerning the content stratum, Hjelmslev argues that the level of social appreciation 'selects' the content form. For Saussure, on the contrary, his *nébuleuse* is a passive substratum that comes to life only due to its fragmentation by semiosis: the form selects the substance. We can imagine a more complex situation, in which the *nébuleuse* is not passive but corresponds to the world of experience, which is a dynamic world virtually open to semiotisation. In such a case, the substance exerts *pressures* on the form and the latter *selects within* the context of this limitation.

Things are not symmetrical in the case of the expression stratum. The physical sound continuum is not experiential as is the content substance, but belongs to the physical world and culture uses it as an instrument for its own purposes: the physical expression substance does not 'select' the phonemic level, but inversely culture makes *cultural selections* from the physical sound continuum. The process from the physical to the socio-biological here is one of *transformation*. But these gaps in Hjelmslev's theory do not affect the approach of Fontanille and Tsala-Effa.

The anthropological part of Fontanille's and Tsala-Effa's paper relies heavily on Albert Piette's *anthropologie existentielle*, which Piette himself considers to be the empirical aspect of phenomenology; they also refer to Clifford Geertz's 'thick description'. Fontanille and Tsala-Effa agree with Piette's view on the need to focus not on the central and structured part of a task or interaction, which would reduce the diversity of cultural production, but on the part resisting this dominant structuration due to elements belonging to an external situation; it is assumed that, while this focusing reveals particular behavioural residues, it nonetheless manifests the *specificity* of each situation. For Fontanille and Tsala-Effa this phenomenon, in an existential perspective, reflects a mode of existence in a semiotic situation; the latter is of the nature of a phenomenological field, the object of study of which are the variations in intensity and extension of the inner world of the actors. We recognise here the two tensive exponents (*exposants tensifs*) of the modal apparatus (*dispositif modal*) of the semiotics of passion, which on a kind of continuum render the emotional condition of a subject. The authors call the central part of a practice (the structuration of the form) 'major' and the peripheral (the residues due to the substance) 'passive' and consider the focusing on the latter as implying a permutation of the actantial roles.

At this point, Fontanille and Tsala-Effa arrive at the core of their methodological proposal, simultaneously distancing themselves from the Greimasian canonical model which predated the semiotics of passion. The reason is that they consider each corpus studied as heterogeneous and not a priori definable but continuously enriched, and they include in it this passive mode as participating in the specific signification of a situation. They argue that, while current orthodoxy homogenises the corpus, eliminating the marks of subjectivity and enunciation,

this inclusion anchors the textual structure in a *unique and not reproducible situation*. Their aim with this methodology – and here they come back to Hjelmslev – is to sort out from the primary ontological purport the semiotic substance that is relevant for accessing the form.

The paper ends with the specialisation of this approach in an operational manner, by briefly presenting Fontanille's proposal for a set of 'methodological regimes' of semiosis corresponding to different planes of immanence. Each plane is composed of a structured form and a substance of a 'residual' nature, assumed by another plane in which it is analysed as form; these planes are not independent but articulated. We observe in this approach a new connection to Hjelmslev, who wrote: '*La substance semble donc demander une base d'analyse différente de celle exigée par la forme sémiotique propre ... les diverses substances peuvent bien présenter des structures très différentes entre elles*' but '*il y a une certaine correspondance de structure interne dans les différents niveaux*', and this relationship between neighbouring levels should follow a principle '*qui reste encore à trouver*' (Hjelmslev 1971: 68), and also: "substance" ... can only designate a whole that is in itself functional and that is related to a given "form" in a certain way' (1961: 80). It is these levels and their articulation that Fontanille and Tsala-Effa attempt to define with the typology that follows, including the formalisation of the residues, according to the rationale that the *explanatory* foundation of signification follows from conditions preceding its manifestation (see also Ablali 2003: 116). In this manner, *sociosemiotics* ceases to be a simple extension of mainstream semiotics and is theoretically and methodologically integrated within it.

The authors identify a first typology of these levels as signs-figures, texts-enunciates, objects-supports, practices-strategies and forms of life-modes of existence. They then regroup these into the categories of *figures* (signs), *works* (texts and objects), *flux* (practices and forms of life), and *existences* (modes of existence, anthropological modes).¹⁵

The proposal by Fontanille and Tsala-Effa is partly a response to the problem introduced to the Greimasian canonical model, based on the principle of discontinuity, by the semiotics of passion, founded on the contrary on that of continuity. Fontanille and Tsala-Effa turn to the substance and propose to interconnect forms and substances. In so doing, and given their focus on meaning, the orientation towards phenomenology was almost inevitable; especially considering that the roots of Greimasian semiotics have contacts with phenomenology (see also Ablali 2003: 119-137). Simultaneously, they approach enunciation no longer just through its traces in a text, but as a matter worthy of analysis *per se*, inseparable from the analysis of a text and an explanatory factor of it.

The paper by Rea Walldén, who is associated with the School of Thessaloniki, is linked to Fabbri's paper in discussing the general history of the 20th-century avant-gardes, in her case the cinematic avant-garde, which also links up with Pärn's interest in cinematic language. We have already encountered the issue of the 'extra-sémiotique' (or exo-semiotic), which, as we saw, is not taken into account by the School of Paris. On the contrary, Walldén introduces the

possibility of its legitimate connection to semiotic theory. In epistemological terms, does the maintenance of the semiotic relevance answer all issues raised by semiotics, or are there certain *semiotic* questions that cannot be answered by it?

Walldén starts from Saussure's formal approach to *langue*, which she considers an epistemological rupture due to his conception of semiotic arbitrariness. She points out that this is the background for Hjelmslev's fourfold organisation of semiotic systems into four strata: form of the content, substance of the content, form of the expression and substance of the expression; she indicates that the relation between the two levels of form is what Hjelmslev means by sign-function. Walldén suggests using the term 'material' for the term that Hjelmslev's English translator gives as 'purport' and, following Umberto Eco, points out that not all materials can be used as vehicles for all forms.

Walldén's paper focuses on the modes of semiotisation of the extra-semiotic, and she thus attempts to define the boundary between semiotic and extra-semiotic. Based on a possible interpretation of Hjelmslev and her own approach to cinematic theory, she proposes a very interesting reinterpretation of the composition of the levels of substance, beyond that of social appreciation, in regard to both content and expression. More specifically, Walldén argues that the distinction between the socio-biological and physical levels of both the content-plane and the expression-plane of the substance is philosophically loosely structured, because it is difficult to maintain a differentiation between action/mechanism and objects – in fact, whatever happens in human interaction with objects is action in situation – whence she suggests a wider interpretation of Hjelmslev's position. She points out that the socio-biological and the physical levels of the substance of both planes are not exclusively semiotic, but also have an extra-semiotic dimension. She also notes that the presentation by Hjelmslev of the physical level of the content-substance as semiotic is not faithful to his model (cf. the materiality of the corresponding expression level) and should not be taken literally; this level should correspond to the referent.

On the articulation of the semiotic with the extra-semiotic, Walldén also has recourse to Lagopoulos's theory of the three articulations of the semiotic with the 'exo-semiotic'. He calls 'exo-semiotic I' the articulation of 'production/derivation', the articulation of the material socio-economic process of production with the semiotic system, generating the universe of non-formalised, non-codified ideology (in Hjelmslev's terms, the ontological purport, culturally formed, before it becomes the level of the substance of social appreciation of the content plane), leading in turn to the main structural axes of the semiotic system. The 'exo-semiotic II' is the articulation of 'manifestation', that is, the articulation of the semiotic system with its material vehicle (which includes at least Hjelmslev's level 3 of the substance of the expression). The 'exo-semiotic III' is the 'parallel' articulation, that of the reference of the semiotic system to the external world. The research object of Walldén is the articulation of 'manifestation' and the influence of the extra-semiotic on the semiotic in the context of manifestation.

Walldén envisages a redoubling of Hjelmslev's socio-biological and physical levels of the substance of the expression, due to the difference in the communication circuit between the production and the reception of a message. With reference to the socio-biological level, she differentiates between productive and receptive mechanisms and she rightly believes that, even on the physical level of the material trace, there may be a difference between the two extremities of the communication circuit.

This is the general theoretical context within which Walldén constructs her semiotic theory of cinema, with the aim to focus on avant-garde cinema. Cinema is a special case of *langue*, acquiring its identity in the plane of expression from the use of moving images (since the 1930s, in combination with sound) and activating a set of different orders of complexity, of 'heterogeneity'. She proposes the following cinematic interpretation of the levels of the cinematic substance of expression:

1. Level of social appreciation (semiotic). The socially constituted perceptive image of moving light/shadows and sounds.
2. Socio-biological level (semiotic and extra-semiotic). This includes the processes of production and reception in their respective situations. The process of production in the production situation refers to the 'pre-filmic realm', that is, the object the camera registers, and to three phases, one from *repérage* to the *mise-en-scène* on location; the second consisting mainly of the shooting process, ie. the recording of image and sound with its corollary of mechanical and/or electronic equipment; and the third coinciding with the post-recording manipulations of the recorded material, such as editing (as both signifying and mechanical process) and sound-mixing, still using technological equipment. The process of reception in the reception situation also refers to three phases, among which the first two (which we can consider as extra-semiotic), the processes of copying and diffusion of the copies of the film, and its screening, once more accompanied by technological equipment, are not part of reception in the strict sense, which is not the case with the third phase, the (semiotic) reception of the film by the perception apparatuses of the audience.
3. Physical level (extra-semiotic). Light/shadows and sound waves registered on celluloid, or more recently on a hard disc.

The issue of the materiality of cinema is a principal concern of Walldén's theoretical approach, but she also examines it from the viewpoint of its relation to the concept of 'reality'. She points out that we owe to Saussure the de-essentialisation of the sign, since signification, as the relation of the form of the content with the form of the expression, is detached from reference and the idea of representation. On this basis, she argues that the concept of realism in the arts and literature, as a metaphysical conception of un-mediated access to the referent, cannot be defended. Walldén discusses the development of the views connecting cinema to

reality, from pure realism and the idea of giving the impression of realism to the attempt to minimise mediation and, finally, the display of the mediated and constructed nature of cinematic reality by the avant-garde.

Walldén observes that, in spite of the variety of definitions of avant-garde art, there is a strong relationship between form-oriented and politically-oriented definitions, since this art combines formal experimentations with political radicalism. She also points out that the first avant-garde is strongly connected to structuralism and the second avant-garde to poststructuralism. She presents the core of avant-gardist theory as the 'other' in cinema: the turn to the plane of expression, followed by the position that a radical form constitutes a radical content. The corollary of this attitude – which, as we understand, is an ideological position – is for Walldén the absorption of the extra-semiotic into the semiotic, which is a strategy for destroying the illusion of reference. This turn to the plane of expression resulted from a political and ethical – and thus still ideological – demand concerning the social function of art, to tell the truth and free the people, a demand that became a leading aesthetic principle. The same turn to the plane of expression led to materiality and a materialist ideology, a questioning of the naturalness of the world, and the prospect, ultimately revolutionary, of change.

Given that there have been theoretical disagreements concerning the definition of avant-garde cinema, Walldén proposes five types of criteria to define it; she argues that the first type in combination with one or more of the other types is the necessary condition for characterising a film as avant-garde. Essentially, her criteria can be divided into two groups. One group, semiotic criteria, includes (a) filmic/textual: innovative experimentation on form; (b) Cinematic/situational: ideological radicalism and awareness of the political significance of form, self-awareness of the filmmakers, and views of specialists and the public. A second group covers extra-semiotic criteria, namely alternative methods of production and distribution.

Walldén completes the image of avant-garde cinema with the presentation of some of its main strategies for calling attention to the expression-plane of the film, such as a special use of thematisation revealing the constructed nature of a film, the more or less radical breaking of common filmic conventions, the exploration of the potentialities of cinema, and the focusing on the interface between semiotic and extra-semiotic. This last strategy brings to the foreground a major epistemological issue in the field of semiotics: the *necessity* for semiotics to go beyond its relevance in certain cases in order to complete the investigation of its object. Walldén gives a set of examples of this strategy: focus on the semiotic potential of the recording instruments, display in the film of extra-semiotic events, creation of traces on the physical film strip, such as display of structural (for example, the grain) or accidental elements (for example, dirt, nails), intervention on the film strip (for example, by painting it). She adds interventions in later processes, including the reception of the film (for example, changing the shape or material of the screen, interference with projection, participation of the actors of the film). She also points out that even what we would consider as the wider material situation of

the film, namely cinematic working relations and institutions surrounding its production and diffusion (for example, single-hand film-making, co-operatives of production and distribution), are given a semiotic aspect.

These cinematic actions reflect a major strategy we also find in postmodern theory and practice, that is, the insertion within a text of a *metalanguage* on it. This metalanguage has two main axes, of which the first is *the extra-semiotic intervention of the film-maker aiming at semiotic effects* and the second *the semiotisation of extra-semiotic elements and interventions*, which, as Walldén notes, may in certain extreme cases fail and miss semiotisation altogether.

Walldén is concerned with the articulation of semiotics with extra-semiotic materiality in respect to the expression plane, but, as we saw, exactly the same issue can be raised for the content plane. This issue was addressed, for example, by Lucien Goldmann. As a first step he relates the internal structure of a '*structure significative*' (or text) to the larger structure englobing it. He argues that the description of the internal structure leads to the *comprehension* of the text, while its relation to the englobing structure allows its *explanation*.¹⁶ For Goldmann (1971: 152), '*Comprendre un phénomène c'est décrire sa structure et dégager sa signification. Expliquer un phénomène, c'est expliquer sa genèse à partir d'une fonctionnalité*' which is its function in a wider social context. Goldmann gives as example Pascal's *Pensées*, which can be inscribed as a partial structure within the larger intellectual structure of the Jansenist movement (21). So far, this operation remains within the semiotic relevance and can be related to Fontanille's and Tsala-Effa's forms of life. But then Goldmann takes a second step. The insertion of a text within its larger semiotic structure does not exhaust the procedure of explanation, because:

...un dialecticien ne peut pas faire de l'histoire des idées en dehors de l'histoire de la société ... c'est la catégorie de la structure significative qu'on ne comprend que par l'insertion dans une structure plus vaste et dans l'ensemble de l'histoire (162).

Raymond Williams's cultural materialism adopts a very similar viewpoint, showing that the relationship between the literary text and material society is neither necessarily expected nor simple. Studying the representation of the opposition between the city and the countryside in literature and drama from antiquity through the Middle Ages to seventeenth-century London, he argues that the general pattern is that of a rhetorical contrast: the surface characteristics of the countryside are idealised in the pastoral mode or, on the contrary, mocked in an anti-pastoral mode, while the city is seen as a place of corruption or of polite society, according to the case. Williams concludes that all these representations obscure the actual social relations of rural exploitation, and are part of an effort to avoid the problem of changing them: finally 'the town and country fiction served ... to promote superficial comparisons and to prevent real ones' (Williams 1973: 46-54).

The issue is, then, how to bridge the gap between semiotic systems and the historical, material world of social life. In this context, the decision to remain within the semiotic relevance is entirely legitimate, as is the sociosemiotic approach of Fontanille and Tsala-Effa, since it protects the necessary epistemological delimitation of the field. However, it does so by leaving outside semiotics issues relevant to semiotics, as the views of Wallden, Goldmann and Williams remind us.

Semiotics eventually encounters the material world and its material social processes, and the problem of the articulation of semiotics with it. The articulation of substance with form is an *internal* articulation, the articulation of extra-semiotic processes with semiotics is an *external* articulation. This is envisaged by Hjelmslev when he defines the *metasemiotic of connotative semiotics* as covering the 'largest parts' of sociological linguistics and Saussurean external linguistics, but also as an approach to which 'belongs the task of analyzing various – geographical and historical, political and social, sacral, psychological – content-purports' and to which contribute '[m]any special sciences, in the first place, presumably, sociology, ethnology and psychology' (Hjelmslev 1961: 125). We note, however, that this metasemiotic is doubly heterogeneous. First, the content-purports are not only material, such as geographical, but also cultural, such as sacral, and in any case to the extent that they are studied by other sciences they are not objects of semiotic theory. On the other hand, sociological linguistics and Saussurean external linguistics, and in general the comparable areas of any semiotics, are oriented towards the articulation of the extra-semiotic with the semiotic and thus are of direct semiotic interest.

There are questions that arise during semiotic analysis that cannot be answered in a satisfactory manner by semiotics, questions that frequently amount to a quest for social production or, as in Wallden's paper, the interaction between semiotic and extra-semiotic processes. When this occurs, the limitations due to relevance lead to slippery extrapolations from the semiotic text to its surroundings which result in the best case in partialness and in the worst case in misleading conclusions. The answer to these questions pushes semiotics to the external articulation of semiotic processes with extra-semiotic processes. We feel that this articulation can be epistemologically defined in the context of a holistic social theory such as Marxism, interrelating material socio-economic and political components as well as semiotic-ideological-cultural components into a coherent whole.

It has been argued, as we saw, that this articulation does not concern semiotics but only the social sciences. Our objection to such a position is that an articulation is a junction between two domains; it represents their overlapping, and as such it can be approached from two different directions: from the general-and-wider to the particular-and-narrower, or in the opposite direction. The social sciences are in a position to offer their contribution to this articulation from *above*, but they do so according to *their own* point of view, contributing to the explanation of the major semiotic axes structuring the semiotic. Semiotics, on the other

hand, proceeds to much finer, more detailed analyses, which lead to questions that the social sciences pose themselves only marginally if at all, and thus, starting from its *own* point of view, from *below*, approaches social phenomena differently. The sociological problematics of the semiotician can only partially be identified with those of the sociologist.

Hence we conclude in favour of a threefold semiotic approach: immanent semiotic analysis, the sociosemiotic analysis englobing it and the social semiotic analysis articulating the latter, from a semiotic perspective, with the material social processes, or otherwise Hjelmslev's metasemiotic of connotative semiotics.

NOTES

1 The dichotomy between the nomothetic and the idiographic position can reach such an importance as to define the epistemological nature of a scientific field or sub-field. Thus, for example, in human geography, the 'new geography' of the fifties and sixties, based on logical positivism, adopted a nomothetic concept of geography, which led to the construction of 'universal' mathematical models common to both human and physical geography. The high point of new geography came with systems theory, which sought a systematic geographical theory through the formulation of formal theories for every geographical organisation (Johnston et al. 1981: Positivism, Quantitative revolution). On the other hand, human geography continued to follow the traditional idiographic view, using a simple comparative method for the understanding of *particular* areas, without any systematic theory or theories. It became clear that the positivist metaphorical transposition of physical laws and models to the societal dynamics of human geography led to a dead end. In this field, theoretical regeneration came mainly through the Marxian paradigm, which rejects both universal laws and the idiographic approach and considers geographical space as produced from the specific socio-economic regularities of historically distinct social formations.

2 We may distinguish two broad categories of epistemological positions, realist and anti-realist theories. According to realist theories, it is possible to know the essence of the world. Scientific theories are considered to be true, at least approximately, in the sense that they correspond to an external reality; they are theories-reflection and their truth is truth-correspondence. On the other hand, anti-realist theories exclude truth-correspondence; this is also Pärn's view, who indicates that 'All observations are always mediated by language and knowledge'. There are two main tendencies within this category. The first is represented by mild anti-realism, for which, while reality cannot be directly re-presented, it nevertheless exerts pressures on the content of theories and thus the latter cannot be arbitrary. The other tendency is radical conventionalism, an extreme relativism that holds that science is purely and solely a construction, totally disconnected from reality; thus, observations do not pose any constraints on the researcher and he/

she is completely free in theory-building (Soler 2000: 43, 109-118, 126). We recognise in this extreme tendency the position of poststructuralism and postmodernism.

3 The specific status of metaphor is a major epistemological problem. The preference of the sciences is for biunivocal relationships between signifiers and signifieds. Of the approaches that defend the foundational nature of metaphors, an intermediary position is formulated by George Lakoff and Mark Johnson, who consider that the human conceptual system is essentially metaphorical, but metaphorical concepts are based on non-metaphorical concepts, which are due directly to experience, derive their meaning directly from it and may be considered as universals due to their strong physical anchoring (Lakoff and Johnson 1980: 195, 197, 198, 201). The primacy of metaphor is advanced by two philosophers, Paul Ricoeur, to whom many references are made by Pärn, and Jacques Derrida. They both argue that metaphor is our fundamental way of understanding reality, a view expressed by Derrida, at the very abstract level of deconstruction, as: 'la valeur du sens propre paraît plus problématique que jamais' (Derrida 1972: 368).

We believe that we should distinguish between philosophical and scientific views. Philosophy is global, while science focuses each time on a specific object of investigation. Thus, philosophical views may be used as a paradigmatic background, but they cannot be transferred as such to the scientific domain. Irrespectively, then, of the validity of the above philosophies on metaphor, in the scientific domain it is useful to make the distinction Pärn makes between rhetorical and analytical metaphors, as well as between purely metaphorical and more or less literal theoretical modelling.

4 We should, however, make a distinction between the use of mathematics as such and the borrowing of *specific* mathematical models. The former is not metaphorical, since mathematics like logic is a *passé-partout* instrument of thought. On the other hand, the transposition of physical laws and models to society is undoubtedly metaphorical.

5 This definition of semiotics is radically different from the Saussurean view, which considers semiotics as a *cultural* enterprise.

6 As we shall see below, the 'law of relevance', which allowed the constitution of Saussurean linguistics, means that European semiotics remains within the domain of signification and thus excludes the referent.

7 After this classification of 1903, Peirce, who was not satisfied with it, passed in 1904 to another classificatory scheme, which is far more extensive and in theory results in the generation of sign classes up to the tenth power of ten, although in practice this number greatly decreases. Peirce never established a fixed sign classification and his later estimates range from 66 classes up to ten billion.

8 For Saussurean semiotics the index is not a sign, because it involves a referent (Eco 1976: 115-116).

9 We are reasoning here on the basis of the types as delivered by the tree-structure, marginalising 'noises' due to the overlapping of his types, which, as we saw, Peirce himself recognised.

10 Sebeok first introduced zoosemiotics in 1965. Later, (Sebeok 1997) he called ecumenical

semiotics 'global semiotics', and the semiotics of culture 'anthroposemiotics', considering the latter as just one part of semiotics, the other part being 'biosemiotics'. He later extended biosemiotics to include 'phytosemiotics' and 'mycetosemiotics' (though he excluded semiophysics, which would have incorporated inorganic matter).

11 Piaget (1968: 75-77, 89-100) disagrees with Noam Chomsky's view on the innate nature of his formal linguistic transformations and counter-proposes that they presuppose the formation of the sensory-motor intelligence. He also disagrees with Lévi-Strauss's invariant 'esprit humain', the 'unconscious activity of the spirit', on the grounds that the spirit is not a collection of permanent schemes, but the open product of a continuous auto-construction.

12 Greimas and Courtés's position leaves us with a contradiction, because, they state, on the one hand that in traditional societies the correlation of the semiotic with the social classes is possible, hence, of course, the need for an epistemology of the *articulation* between the semiotic and the extra-semiotic, but on the other that in modern societies the sociological phenomena of social stratification have shifted to signifying practices, maintaining in this second case the epistemological position of the semiotic relevance. Should we have two different epistemological semiotic approaches, one 'interdisciplinary' for traditional societies and one 'intertextual' for modern societies?

13 A few years later, Courtés expressed similar view concerning the relation between semiotics and the social sciences. He observes that there are two equally legitimate approaches having as object enunciation. The first emphasises the external – social, economic, religious, etc. – conditions of production of an enunciate and explains through them its composition and characteristics; this is, for Courtés, the 'secondary signification' of a text. He adopts the contrary view that enunciation is a purely semiotic instance, which is logically presupposed by and incorporated as traces within the enunciate. According to him, this maximum extension of the semiotic level delivers the 'primary signification' of the text. He observes that the production of a text is something that involves all the human sciences, but '*nous choisissons de ne point sortir du texte étudié, nous interdisant méthodologiquement de chercher ailleurs ... la source, l'origine*'. This view, he believes, is much more modest and limited than the aim of the human sciences to reach a 'deeper' level of analysis (Courtés 1991: 245-246).

14 In philosophy, ontology is a branch of metaphysics dealing with the nature of 'things' and for European semiotics the latter are only accessible through metalinguistic semiotic systems.

15 We believe that the last two are closely comparable to the semiotic processes of Pierre Bourdieu's *habitus* (see, for example, Bourdieu 1971).

16 These key terms are given a different meaning by Driss Ablali (2003: 119-137), when he compares Greimasian semiotics with Paul Ricoeur's hermeneutics. He considers the approach of Greimas as methodologically focused on explanation, though without excluding comprehension, and the approach of Ricoeur as reversing the relationship between the two terms. Goldmann combines Marxism with Piaget's genetic structuralism.

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Metaphorical modelling as research method in semiotics

Katre Pärn

Perhaps the most intriguing aspect of the problematics of methodology in semiotics concerns the more fundamental question of the disciplinary nature of semiotics – whether semiotics is, or should be, a theoretical discipline or an empirical discipline – or both – and the particular modes of inquiry deemed proper for each perspective. Although debating over the disciplinary nature, or, to put it more simply, over how to practice semiotics, in those terms might seem a thing of the past, the problematics reveals its acuteness each time the relationship between theories, methods and practices/applications, as well as their scope and meaning in semiotics is discussed. Yet what remains also latent in these discussions is a more fundamental question of the particular ‘brand’ of ‘science’ and ‘scientificity’ that semiotics is expected (or not) to align with. One of the results of leaving these issues implicit and unarticulated is the divide often seen between theory and method, or theoretical and empirical semiotics. This article attempts to demonstrate how modelling functions as a bridge between theory and method. Yet the value of this bridging depends exactly on acknowledging the more fundamental layers of semiotic inquiry. The main aim of the paper is to propose and develop the concept of metaphorical modelling as a particular methodological tool in semiotic inquiry as well as the humanities more broadly. The role of metaphors in science is a known issue, however, there are few approaches that deal with it explicitly in the humanities, and as a methodological issue. The use of theories and concepts viewed as method brings to the fore the role of language in methodology. Thereby an awareness of the metaphorical functioning and processing of language becomes necessary for understanding how theoretical language is used in research. The article attempts to show that the traditional distinction between theoretical concepts as precise, literal and analytical, and metaphor as imprecise figure of speech is not adequate for understanding how theoretical constructs are used in the humanities in general and semiotics in particular. From this perspective, one can notice that the metaphorical use of theories, constructs and models has been central in the humanities and semiotics for a while. Thus better understanding of metaphor and of the metaphorical

or otherwise – is our main research tool, understanding the cognitive, linguistic, discursive, etc. mechanisms of metaphor is crucial for understanding the implications of our language use. This affords more explicit awareness of how metaphorical modelling could be used more knowingly and systematically or without the hazards attributed to non-literal use of language.

This aim in mind, I will first introduce the background that frames the issue of methodology in the humanities and thereby in semiotics. Then I proceed with discussing the specificities of theory in the humanities, among them the use of theory as method. After that I will examine the issue of modelling that is seen as a central activity in science, but has been discussed far less in the context of the humanities. Yet, in the humanities, models and modelling have been extensively discussed on the level of object of study that helps to bridge the issue of modelling with that of metaphor. Also, I will introduce different views on ‘successful careers’ of metaphors in scientific discourse. This will provide a platform for analyzing the metaphorical use of theories, concepts and models in the humanities more broadly and in semiotics more specifically.

The paper aims to bring together various theories of metaphor and scientific modelling that implicitly or explicitly pave way for reconceptualizing a metaphorical use of theories, theoretical concepts and models as a specific mode of modelling that entails certain transformations and is accompanied by awareness of the ‘as if’ nature of the process. Far from claiming that all theories are metaphors, I rather want to demonstrate how this perspective helps to develop a more critical stance towards the different modes of using theories borrowed from other disciplines or domains in semiotic research.

On methodology

A discipline – a field of study – is an ordered body of knowledge defined through its subject matter. The disciplinary knowledge is usually organized into theories, that is, structures of ideas describing, interpreting and/or explaining the subject matter. Yet disciplines are not simply ordered bodies of knowledge but also ‘disciplined’ ways of acquiring knowledge; in other words, disciplines are also defined through their methodology – a body of tools and techniques used for creating new knowledge.

As creation of new knowledge always involves some kind of method, it should follow that the core issue of methodology concerns its capacities in knowledge acquisition. However, methodology does not obtain its central position in scholarly concerns only due to its role in the creation of knowledge, but also because method became a means for determining the discipline’s position – and thereby its value – in the system of knowledge in general and in the system of academic disciplines in particular. Instead of the classification of bodies of knowledge on the basis of their subject matter, the new classification assigned a more central role to the kinds of methods used in particular disciplines. Thus, specific methods are used as

a shorthand diagnostic for determining whether the discipline is to be considered scientific or non-scientific. As a consequence, in this new classificatory scheme, a discipline can change its position in the system of knowledge by changing its methodology.

This has considerable impact on the way the issues of methodology are perceived. Therefore it should come as no surprise that the question of methodology is surrounded by a certain degree of anxiety in the humanities and social sciences. Not only is there a methodological divide between the natural sciences and humanities as modes of inquiry; while the former are well aware of their common methodology, there is no similar consensus about the methodology of the humanities (Gadamer 2006: 7, Raymond 1982). The methodology-based system of classification and the well-defined scientific methodology make this lack of equal humanistic methodology a problem.

A contributing factor in this methodological anxiety is the narrow interpretation of science that not only conceives science as a method-driven enterprise but also delimits it with particular methods derived from natural sciences – the so-called scientific method. Hence it is only via this methodology that a discipline can produce scientific knowledge – be a scientific discipline with all the benefits of that status.¹ As a result, many academic fields of inquiry, particularly those that study humans, culture and society, are ‘demoted’ to the class of non-scientific disciplines.² A more acute factor in this anxiety is that exclusion from the narrowly defined sphere of science has been and still is perceived as ‘demotion’. The dominant model of the academic world is still hierarchical, science being considered if not the pre-eminent form of human intellectual activity, then at least the pre-eminent scholarly enterprise that, as such, should serve as the model for all other academic disciplines. Becoming ‘scientific’ tends to be perceived as desirable, a promotion, regardless of what the model actually entails in terms of knowledge about one’s object of study. As a result, the desire to be scientific tends to precede the desire to acquire a specific kind of knowledge about a specific domain. Thus instead of posing the problem of methodology from the perspective of desired or possible standards of reasoning or knowledge in a particular domain, this results in a habit of perceiving particular set of methods or modes of inquiry as being more proper and subsequently their specific epistemological affordances as the desired standards for academic knowledge. This forms a background for discussions on methodology in the humanities that is difficult to disregard.

This is not simply about scientism – the over-valorization, promotion or imitation of scientific modes of inquiry. What is of interest here is the question to what extent this situation hinders the epistemological and methodological emancipation of the ‘other’ disciplines, guides the understanding of epistemology and methodology, and does not allow recognition of the value of particular modes of knowledge creation used in the humanities. The distinction between natural sciences and humanities runs so deep that even the idea of emancipation, of autonomy of the humanities, tends to be conceived in terms of opposition to the natural sciences.

The narrow interpretation of science functions as a model for the humanities in many covert ways, regardless of whether a discipline is modelling itself after science or as its opposite. These dependences on the scientific model make them liable to hidden traps, as these dependences and resulting methodological tenets cannot be understood, questioned or challenged without acknowledging the particular 'brand' of science they were modelled after or against.

The perceived need to construct a common, unified methodology for the humanities and/or social sciences as distinct from natural sciences is but one example of this dependency. From that perspective, both qualitative methodology and the post-positivist approach are modelled after science. For example, St. Pierre argues that qualitative inquiry offered as an alternative to positivist methodology in the social sciences still relies on the markers of positivism, such as systematicity, linear processes, technique, transparency of language, accurate observation, representation, etc., thereby idealizing and normalizing the particular form of science that *equates knowledge with science* (St. Pierre 2013: 654 – emphasis in original). Even the view that the natural sciences use a nomothetic approach and focus on the general and systematic while the humanities use an idiographic approach and focus on the unique and individual was presented by Wilhelm Windelband at the turn of the 20th century as a reaction against positivist tendencies in the humanities and in line with Wilhelm Dilthey's rejection of the search for laws and regularities as the aim of the humanities; yet it downplays a long history of a nomothetic tradition in the humanities that precedes the birth of the natural sciences (Bod 2013: 257). Thus the humanities actively co-construct themselves as cultural other for science, whereby anything that is perceived as derivative of natural science ought to be avoided in humanistic research regardless of its history or actual practices.³ Disciplines, methodologies and modes of inquiry are co-dependent cultural systems that model and construct themselves not only according to their own historical trajectories or immanent logics, but also in dialogue with whatever they perceive as their cultural other.

This is to arrive at Feyerabend's (2010) anti-methodology perspective, that is, to a view that the broader methodological frameworks impose a false order and limitations on the lively, diverse modes of scholarly practice that use and should use whatever methods necessary for creating desired knowledge. Methods are for solving problems, not for defining disciplines. Scholarly inquiry should be, above all, methodical, not follow blindly a particular methodology. Especially as the methodological anxiety that directs the perception and construction of methodologies is caused by mechanisms external to actual research practices.

Further, the prevailing tendency to construct the debate or divide between science and the humanities on the level of methodology, rather than that of epistemology or ontology, is also a latent impact of the method-driven model of science. It has been pointed out that often the disagreements about results or research practices are misdiagnosed as disagreements about methodology while actually they are disagreements about epistemology or ontology.

But the latter remain unarticulated aspects of our research, as they are taken for granted as appendages of methodology. As Yanov and Schwartz-Shea (2006: xviii) put it, methodology can be seen as 'applied ontology and epistemology'. Yet the method-driven conception of science tends to obscure disciplinary epistemological or ontological assumptions and avoid questioning the possibility, function and relevance of particular kinds of knowledge in particular contexts.

In other words, there is an undercurrent that assigns value to certain methodologies independent of local research aims. This undercurrent also forces us to construct overarching methodologies and latent epistemologies modelled partly after the 'other' and therefore to some extent disconnected from local disciplinary aims. And it tends to see research as a technical process, not as a form of intellectual and creative inquiry that is necessarily methodologically and epistemologically plural.

On theory

The conception of theory in relation to method is another context where the covert influence of the narrow interpretation of science is at play. Science, conceived as a method-driven enterprise, assigns a specific position and role to theories. In turn, there is a common view that the humanities tend to be a more theoretical enterprise, and its theories are markedly different from scientific theories. In part, this view has its historical roots in the modern divide between science and other modes of inquiry, as introduced by Auguste Comte, who distinguished sciences as empirical disciplines from 'speculations' (Raymond 1982: 779, St. Pierre 2012). This introduced the most pronounced divide between knowledge afforded by method-driven research and that afforded by theory (as speculation) – a divide that made it necessary to introduce 'scientific theory' as a special type of knowledge structure, always differentiated from 'other' kinds of theories.

However, the often-criticized theoretical nature of the humanities is not about lack of grand methodology or of empirical humanistic research, but derives from the specific relationship between theory and method in sciences that places higher value on methods and empirical evidence. Thus in the face of new evidence gathered via method-driven empirical research, theory, understood as description or explanation of an empirical domain, should be rejected or changed, if necessary. Theory should ultimately mirror reality, even if its adequacy as true representation is uncertain. In the humanities, theories are not as dependent on empirical evidence, or rather, the dependence is of a different kind.

This difference does not stem from research practices or even from the interpretive mode of theorization, but ultimately from the nature of the object of study which is constituted by knowledge and thus mutable by it. As semiotic phenomenon, it is at the same time mind-de-

pendent and mind-independent (cf. Deely 2009). Moreover, the humanities study culture and are themselves part of culture. Therefore theorization, in one way or another, changes the object – our understanding, mode of experiencing it and thereafter interacting with or performing it – perhaps as much as theory is or should be constituted by the object. But this allows a theory, however removed from empirical reality, to be nevertheless practical, a ‘productive fiction’, to use Ricoeur’s (1979) concept.

This specificity of the object domain has immense impact on the usefulness or even tenability of theory as mirror-type representation, explanation of the empirical world and basis for predictions. Sometimes it has driven the need to justify the value of the humanities through posing alternative functions for theorizing, such as bringing about change, overturning the exposed structures, as legitimate alternatives to prediction (e.g. St. Pierre 2012: 495). Yet from a more profound perspective, recalled by Ricoeur (1974), the humanities, because of the unique relations they have with their object domain, can be nothing but mirror-type representations. But the direction of the reflection is different. To paraphrase Ricoeur’s discussion of the poetic text, theories, too, speak of possible worlds and of possible ways of orienting oneself in those worlds; they open up and discover, for the subject, the possible ways of being-in-the-world (1974: 106). Thus, in addition to whichever mode of reference they have to the world, theories are also for the subject capable of self-reflection. And cultural systems are also ‘subjects capable of self-reflection’, and they become self-reflective partly because of this theorizing.

Therefore theories in the humanities, however divorced from the immediate empirical world, are nevertheless means for self-reflection for subjects. This capacity remains even when the theories construct novel, (im)possible or alien worlds (or interpretations), as they always expand our ‘self-understanding in front of those novel worlds’ (Ricoeur 1974: 101). This aspect is crucial for understanding the particular forms of theory and theorization in the humanities. But before elaborating this ‘productive’ aspect of theorization further, a few remarks should be made about the instrumental value of theories in research.

What interests me here are the specific modes of inquiry in the humanities that bridge theory and method by turning theories into methods, taking them as ‘thinking tools’, means for analysis. Theories, after all, are not simply systems of knowledge, but systems of concepts, providing conceptual grids, a language for describing, analysing, conceptualising, and modelling one’s object of study. All observations are always mediated by language and knowledge, and therefore they are never uninterpreted perceptions but always ‘seeing as’ and ‘seeing that’ (Hanson 1958: 19-21). But in the humanities, language also functions explicitly as tool for analysis, that is, as method. Thus there have been many approaches that dissipate the stereotypical relations between theory and ‘world’, theory and method, as well as theory and research. This type of theory-driven (empirical) research has been suggested, for example, by Mieke Bal who called for seeking a heuristic and methodological basis for the humanities in concepts instead of methods (Bal 2002: 5).⁴

This conception was already present in theory-driven criticism – an application of theory in interpretation of particular works, in literary studies, film studies, art studies, etc. Importantly, the theory-driven mode of inquiry entered into literary studies not simply as a methodological shift but more fundamentally as an epistemological break from the framework that sought a unitary, ‘correct’ or intended interpretation, offering instead a sort of epistemology of ‘as if’. And it received resistance precisely on epistemological grounds.⁵

Noteworthy about the concept-based methodology for cultural analysis proposed by Bal is the shift of emphasis from interpretation to analysis, to use of a particular language of description for modelling the object of study in a particular way. But before turning to the question to what extent this conceptual language is used metaphorically, a few remarks on models and modelling in the sciences and the humanities.

On modelling

The view is by now quite common that science is about modelling and theories are (sets of) models, albeit but one type of models. Suppe (2000: S109-S110) considers models, not (empirical) theories, to be central to science. ‘Doing science’ is above all modelling. On this ground, William Silvert has even asked whether modelling should not be treated as a separate discipline (Silvert 2001). More importantly, this perspective allows positing the question of the relations between theories and world as that of relations between models and world. This has perhaps more semiotic than philosophical value, as models are by definition semiotic structures.⁶ A model as such is a ‘representation [...] in the very general sense of ‘standing in’ or ‘standing for’ the phenomena themselves or the logic of their functioning’ (Duranti 2005: 419).

Considering the centrality of models in science, it might be somewhat surprising that the topic has not had as explicit and extensive presence in discussions on knowledge structures and practices in the humanities. One reason for this might be due to the fact that models are seen as representational structures, yet theories in the humanities are seen rather as interpretive.⁷ Therefore the issue of models is discussed in the humanities more frequently on the level of object of study: the humanities study, search for and interpret models that exist in their object domain. Yet whether theories are ‘representational’ or ‘interpretive’, on a more fundamental level, theorizing is always modelling. Nevertheless, there is an important difference between ‘representational’ (or mirror-type) modelling and ‘creative’ modelling, and interpretive theories are often of the latter kind. The latter are modes where theories and concepts become not only ‘reproductive’, but also ‘productive’ *sensu* Ricoeur (1979).

On a more particular level, a lot has been written about the forms and functioning of models and theories *qua* models in science. Drawing on Max Black (1962), I will highlight aspects relevant to the current discussion. Firstly, there are different types of models, but all of them

represent a structure, abstract or material, of the object, real or imaginary. Models are realized in a different medium (or modelling system) than their objects, therefore the relationship between them must be mediated by some rules for translating or conventions of interpretation (Black 1962: 220-23). Theoretical constructs as models⁸ are usually representations of an abstract structure, although their degree of abstraction may vary. The models that aim to represent abstract structures of the original are isomorphic, that is, they share with their object the same structure or pattern of relations (222). As the same abstract structure can be embodied by a variety of phenomena, abstract models and modelling systems have more domains of application, yet due to their high level of abstraction, they lead, at best, to a 'plausible topology' (Kenneth Boulding, quoted in Black 1962: 224).

Another crucial aspect, next to the degree of abstractness, is the direction of modelling. Models are not only built from observations or data, that is, they are not necessarily object-specific (however general the object may be), but often pre-existing models are used to describe or represent new objects or domains, that is, models are applied in new situations. Both of these aspects, as I will discuss below, connect models to metaphors.

For example, a well-known presentation of these two directions of modelling is Clifford Geertz's distinction between two types of models: 'models of' and 'models for' (Geertz 1973: 93-94). Alessandro Duranti, in turn, uses this distinction on the level of scholarly practice for evaluating models created and used by scholars. For example, Chomsky's theory of syntax is a 'model of', whereas organisms used by biologists to make predictions about humans are 'models for'. Also, he notes, metaphors used in research are instances of 'models for', as when musicologists use the metaphor of 'conversation' to understand what jazz musicians do when they play together. Moreover, he observes that 'models of' have a tendency to be more constraining and closed areas of inquiry, while 'models for' have a tendency to be more open-ended frames of inquiry (Duranti 2005: 421).⁹

This can be compared to Ricoeur's (1979) distinction between two forms of reference: the 'reproductive' reference of the image and the 'productive' reference of fiction,¹⁰ mentioned above. Different from the reproductive mode, the productive way of reference does not copy a pre-given reality but has the ability to shape, transform, and thereby to develop and increase reality. Not surprisingly, Ricoeur also brings metaphor as an example of this kind of productive process, a form of 'seeing-as' created by language, distinct from 'seeing this or that'. And it is this 'seeing-as' that is capable of redescribing reality in new terms. Lotman (2011) has described a similar mode of modelling as characteristic of artistic modelling – artistic models are at the same time means for storing information and developing new meanings, thus have the capacity to increase the information stored in them. As such, they are, in his view, a symbiosis of scientific and play-type modelling.

Thus there is a close connection between artistic modelling and the specific mode of modelling I aim at with the notion of creative modelling – or perhaps one should use the Ricoeur-

ian notion of 'productive modelling' instead –, and as the above sources make obvious, metaphor plays an important role in that activity.

The connection between models and metaphors was made already by Black when he talked about the specific use of models in science as more than expository or heuristic devices. In these cases a description or a model of an entity belonging to an unproblematic, more familiar or better organized domain is translated into a problematic, less familiar domain. When the problematic domain is not simply modelled 'as if', but 'as' something else belonging to an otherwise disparate body of knowledge, the use of these kinds of models resembles that of metaphors (Black 1962: 228-38). But to develop this perspective further, I will first give an overview of the functioning of metaphors and views on their role in scientific discourse.

On metaphors in scientific discourse

One way or another, language is the main instrument of research in the humanities. Therefore awareness of the various modes of functioning of linguistic signs is essential. Among them is the subtle dynamics between literal and non-literal, metaphorical use of language. A lot has been written about metaphors and their role in the process of knowledge acquisition. I will only briefly summarize the aspects most relevant for current discussion.

Firstly, metaphors are not simply ornamental or rhetorical devices, but cognitive tools (e.g. Eco 1983). They are means for establishing correspondences between previously remote semantic fields (Ricoeur 1979: 130) or concepts from disparate domains of knowledge (Bowdle and Gentner 2005: 193) and as such, are sites and media for knowledge transfer (Maasen and Weingart 2010: 34). They can be seen as a mode of analogy or comparison, yet of a specific kind, since taken literally, metaphorical comparison is false. Metaphorical counterparts have identity only through metamorphosis (Aldrich 1968: 74), which enables them to establish correspondences between otherwise non-identical, domain-specific properties (Bowdle and Gentner 2005: 194). More specifically, the metamorphosis, or 'intellectual operation' (Black 1954/55: 293) is not about seeing that 'A is like B', but seeing 'A as B', as something other than what it literally is – and this, in turn, causes shifts in meaning of the source domain¹¹ as well. This constitutes the specific metaphorical mode of 'seeing-as' – the mode of thinking about something in terms of something else that, outside of a 'certain conformity or analogy' (Fontanier, quoted in Ricoeur 1979: 133), has no obvious relation to it.¹² It follows that metaphors cannot be reduced to simple comparison between the two domains without the loss of relevant insights (Black 1954/55: 293) or of a capacity to produce 'emergent meaning' (Beardsley, quoted in Ricoeur 1974: 99).

But the correspondences they posit are not between things, but between 'the way language defines things', the 'subtle network of propositions between cultural units' or 'cultural

information' (Eco 1983: 235-36), or, in the context of research, between disciplinary conceptions and domain-specific knowledge. More specifically, metaphorical comparison is described as an asymmetrical, non-reversible (Ortony 1993, Glucksberg and Keysar 1993)¹³ process of feature matching or structure mapping that presumes an isomorphic system of relations between source and target (e.g. Bowdle and Gentner 2005) – or establishes it. Metaphor, as Black (1955/56: 291-92) suggests, selects, emphasizes, suppresses, and organizes features of the target domain, and thereby interactively filters and transforms the way the target is seen and brings about shifts in attitude (Black 1954/55: 289). This also underlies metaphor's power to change discourses and thereby reorganize reality (Maasen and Weingart 2010: 21). Most importantly, the results of this process are open-ended and unpredictable.¹⁴

This readily shows that metaphorical comparison can be viewed as a type of *modelling*, but a specific type that involves interaction, transformation and awareness. Metaphorical modelling is an analytical, methodological activity, not rhetorical, although it inevitably has rhetorical effects. But before discussing this particular mode of modelling further, I will examine views on the use of metaphors in scientific discourse.

Although language as such is often viewed as a fundamentally metaphorical sign system, a distinction is made between literal and metaphorical use of language. In the context of science, the attitude towards the use of metaphorical language has been ambivalent, ranging from denying it a place in scientific discourse to making full use of its particularity. In Andrew Ortony's words:

Science is supposed to be characterized by precision and the absence of ambiguity, and the language of science is assumed to be correspondingly precise and unambiguous – in short, literal. For this reason, literal language has often been thought the most appropriate tool for the objective characterization of reality. [...] Other uses of language were meaningless for they violated this empiricist criterion of meaning. [...] A different approach is possible, however, an approach in which any truly veridical epistemological access to reality is denied. The central idea of this approach is that cognition is the result of mental construction. Knowledge of reality, whether occasioned by perception, language, or memory, necessitates going beyond the information given. [...] In this kind of view – which provides no basis for a rigid differentiation between scientific language and other kinds – language, perception, and knowledge are inextricably intertwined. (Ortony 1993: 1-2)

Thus the attitude towards metaphors in academic discourse reflects more fundamental epistemological views on language.¹⁵ Accordingly, two alternative forms of a 'successful career' have been proposed for scientific metaphors.

One of them, the 'metaphor career hypothesis' proposed by Brian F. Bowdle, Dedre

Gentner and others (Gentner, Bowdle, Wolff and Boronat 2001; Bowdle and Gentner 2005) sees it as a process resulting in conventionalization of the metaphor through extraction and retention of the structural abstraction, a domain-general metaphorical category which may become lexicalized as the secondary sense of a base concept. As a result of this process, interpretation of conventional metaphors does not require recourse to the source domain and can ultimately lead to a dead metaphor that has lost all semantic connections with the original source domain by acquiring new, target-domain-specific meaning (for example, 'blockbuster' in cinema). As a result of this process, the metaphoricity of the concept disappears but polysemy remains.¹⁶

As literal, unambiguous or even formalized language is seen as standard for scientific discourse, this career model seems to fit the desired trajectory for 'scientific metaphors'. There is common agreement that metaphors play a role in the discovery process, and that some degree of tolerance for loose analogy is important for creativity (Gentner and Jeziorski 1993: 476). Yet although analogies and metaphors are seen as useful tools, they are, nevertheless, deemed functional only in the beginning of research, during the phase of discovery, as sources for new insights and hypothesis, providing initial description for unknown phenomena, or as a surrogate descriptive language where there is no domain-specific language of description. Probably for this reason most of the discussions on scientific metaphors have concerned their heuristic role and innovative, generative aspects, not 'the subsequent hard and dirty work of testing, elaborating, confirming, discharging, adjusting, combining, formulating, arguing, communicating and establishing specific scientific metaphors' (Knudsen 2005: 374). During their further 'career', scientific metaphors should be clarified, verified and adjusted by empirical evidence and developed into more precise concepts, or disregarded and replaced with more exact terminology. Thus conventionalization does not only proceed by development of a domain-general abstract structure, but also by furnishing the metaphorical concept with domain-specific data-driven knowledge that will, ultimately, become the basis for formulating its new domain-specific meaning.

Metaphors can also be expanded conceptually and bring about broader matching between domains, opening the source domain for further transfers of related metaphors (Bowdle and Gentner 2005: 212, Knudsen 2005: 374). But these 'scaffolding metaphors' (Knudsen 2005) typically follow the same 'career-path'. During the 'career', as Knudsen observes, the innovative explicit metaphors turn invisible as metaphors. They become used for communicating established ideas and for promoting communal interpretation of the metaphors. Yet, she observes, they do not necessarily die, as their metaphoricity can be re-opened for pedagogical purposes or re-interpreted in the light of new knowledge (Knudsen 2005: 387-89).

This model of 'career' is not used¹⁷ only in the natural sciences but in the humanities as well. For example, Doris Bachmann-Medick (2016: 17) describes the characteristic dynamics of cultural turns in similar terms – from analytical concept to metaphorization of the concept

to becoming again a specific, non-metaphorical analytical concept that can be used in examining and analyzing various phenomena in the target domain.

An alternative model of a successful 'career' for a scientific metaphor has been put forward by Sabine Maasen and Peter Weingart (2010). In this view, a metaphor that has entered into scientific discourse is not doomed to die, but has value as a living metaphor that remains capable of continually enriching the target domain with new developments in the source domain. They view metaphors as 'nomadic' entities that travel from one discourse to another, and interact with these discourses in unpredictable, location-specific ways. But thereby metaphors also produce linkages between discourses, and as such, have a decisive role in the diffusion and (re)organization of knowledge. Travelling from one discourse to another, they can create networks of discourses, both scientific and non-scientific, and they 'help to understand how, gradually, discourses are transformed, scientific paradigms shift, world views are overturned' (Maasen and Weingart 2010: 38).¹⁸ As argued already by Arbib and Hesse (1986: 156) scientific revolutions are, in fact, metaphoric revolutions, and theoretical explanation should be seen as metaphoric redescription of the domain of phenomena.

In other words, metaphors are mechanisms of knowledge dynamics and central characteristics of their 'career' are transferability, connectivity, discourse-specific processing and transformation of meanings previously produced and established in other discourses (Maasen and Weingart 2010: 22, 39). Instead of remaining in use due to conventionalization, the success of a metaphor can be measured by the multiplicity, diversity and richness of the discursive interactions it has, as well as the scope of the discursive network it forms. Metaphors, after all, can ultimately reorganize reality or, instead, disappear from use.

As an example, Kay's (2000) study revealed how the metaphorical landscape of the genetic code is not only an indication of the discursive/paradigm shift in biology, but exemplifies a broader emergence of information thinking brought about by the rise of the communication technosciences – a shift that pervaded many disciplines and entailed complex interaction between cybernetic, information theoretical, linguistic, and in biology even biblical discourses. The metaphor of information, serving as conceptual link between the disciplines, produces apparent, albeit superficial conceptual unity that, in turn, reinforces the spreading of the paradigm. And due to the discursive and disciplinary linkages and associated social valence it provides, the vocabulary persists despite the reformulation of its 'contents'. 'Successful' metaphors, as Maasen and Weingart (2010: 21) suggest, are characterized by possessing the prestige of a dominant discourse.

The main difference between these two models of successful careers of scientific metaphors resides in their scope. Gentner, Bowdle *et al.* concentrate on the use of metaphors in particular disciplinary contexts, their model describes the career-path of a metaphor within a particular discipline or theory. Maasen and Weingart concentrate instead on particular metaphorical constructs and study their use across discourses and disciplines. Thus their model

does not deny the possibility that these constructs become locally conventionalized, but neither does it presume it.

Moreover, even if active metaphors can be quite easily detected on the surface level, there are more covert undercurrents created by the metaphorical nature of language as such. As a mode of comparison or (re)cognition of similarity, metaphor is about the establishment of generic relationships (Ricoeur 1979: 131) – metaphors involve categorization. Glucksberg and Keysar argue that as any other process of abstraction, metaphorical comparison leads to a new (metaphorical) category that includes both source and target domain, with the source domain being the prototypical exemplar of the attributive category.¹⁹ This also explains, in their view, the non-reversibility of metaphorical comparison (Glucksberg and Keysar 1993). However, due to their polysemous nature, these categories produce chains of ‘family resemblances’ (Arbib and Hesse 1986: 152) rather than clear-cut taxonomical categories. Therefore the metaphorical use of language is accompanied by constant categorical restructuring of semantic fields. More importantly, although as metaphorical categories these are ‘unnatural’ and unliteral, through frequent use and conventionalization of the metaphors involved, they become habitual, ‘natural’ ways of seeing the world. Thus, for example, there is nothing strange about seeing physical, biological and cognitive processes as informational, sub-classes of a more general and abstract conception of information. Yet there remains the question of the metaphorical nature of this underlying abstract category. Thus it is also through the establishment of these new categories that metaphors shift the meaning of the source as well as target domain, and ultimately change reality.

On metaphorical modelling

As already argued above, the approaches to metaphor as a means for establishing isomorphic relations or other type of mappings between the source and target domains show that metaphorical description is a form of modelling and metaphors are models. More precisely, metaphors function as ‘models for’, they are media for transferring knowledge from one domain to another in non-literal terms. More specifically, metaphorical modelling is a mode of ‘modelling as’ – modelling the target domain ‘as’ something else, yet not taken literally as such. On this basis they differ from other modes of analogical modelling. But it is also important to emphasize that in the context of theoretical modelling, ‘non-literal’ does not mean ‘not-to-be-taken-seriously’, but refers to a quite different attitude of taking the modelling as legitimate despite its ‘as if’ nature.²⁰

However, although, the notion of metaphorical modelling can pertain to any systematic instantiation of metaphorical correspondence, what I am interested in here is more specifically the metaphorical use of theoretical knowledge structures. As Maasen and Weingart (2010: 21)

argue, any idea, concept, model or theory that travels from one discipline to another can be seen as metaphor.

To return to Black's observation that certain uses of models in science resemble metaphors, the reason for this resemblance is precisely their nomadic and creative nature (Black 1962: 237). Moreover, he argues that this kind of use is not unique to the sciences but used in other disciplines as well, therefore this understanding helps to reduce the gap between sciences and humanities (242-43). Nevertheless, Black ultimately still draws a sharp distinction between metaphor as transfer of a system of commonplaces and these metaphor-like models – theoretical constructs, systems of concepts and ideas that can be deployed systematically. Therefore he introduces the concept of 'conceptual archetype' for the latter instances (241). I see no reason for this distinction, as ultimately it is not what is transferred – commonplace or disciplinary knowledge, imagery or concepts – but the particular, non-literal and transformative mode of this process that the concept of metaphor captures.

There is, by now, a rather general awareness of the ubiquity of these kinds of borrowings and boundary-crossings in the humanities, fuelled by and fuelling interdisciplinarity. Theories, concepts and models as abstractions and generalizations 'travel' well – across spatial/geographical, temporal, political, social and cultural frontiers, as well as institutionally, discursively, from one field or domain to another (Said 1983, Perry 1995, Bal 2002, Neumann and Nünning 2012).

Yet these approaches to travelling theories, while acknowledging the metaphorical nature of some of the concepts that travel, do not necessarily conceive the travelling concepts as such to be fundamentally metaphorical. Although these studies frequently outline the same processes of knowledge dynamics as Maasen and Weingart, they do not connect the broader implications of the travelling concepts to their functioning as metaphors.²¹ Yet the value of recognizing the metaphorical nature of these concepts resides in the capacity of the notion of metaphor to explicate these processes and mechanisms of dynamics and innovation, as well as the conventionalisation and naturalisation of these borrowed constructs in new contexts. In other words, it allows us to take into account various 'career-paths' metaphors can have in different contexts.

The main reason why these approaches refrain from viewing travelling concepts as metaphors seems to be the quite narrow conception of metaphors they employ. For example, Neumann and Tygstrup (2009), drawing on Kirstin Wechsel, elaborate quite extensively the role of metaphors in knowledge dynamics and innovation, and also note that travelling concepts often work as operative metaphors. However they ultimately see metaphors as being constrictive and lacking analytical precision. Therefore in their view, once metaphors have done their creative work, they have to be integrated into disciplinary theories and translated into a method in order to function as interpretive techniques (Neumann and Tygstrup 2009: 10). Thus scholars of travelling concepts routinely posit a principal distinction between theoretical/analytical concepts and metaphors,²² and therefore fail to acknowledge the metaphorical functioning of theories and concepts transposed into new and disparate domains.

In many ways, this view can be seen as yet another remnant of the narrow interpretation of science that opposes metaphorical language to scientific language and prescribes to the latter literality and lack of ambivalence. In this view, theoretical concepts cannot be at the same time metaphorical. It is this opposition that I would like to overthrow, not only because it is inadequate from the perspective of actual use of theoretical language in the humanities, but moreover, it obscures the implications, useful or otherwise, of the metaphorical functioning of these concepts and theories.

Another reason for this disregard results from the workings of these metaphors themselves. The abstract metaphorical categories created in the process of metaphorical redescription of an object domain become natural and habitual ways of classifying objects, in other words, they reconfigure and restructure our perception of the world. Certain domains or phenomena come to be seen as close, related or of the same kind on some more fundamental level. As a result, the application of the concepts does not seem metaphorical anymore. If nothing else, this naturalizing effect of metaphorical redescription calls for more acute awareness of the metaphorical nature of these kind of processes.

What I would like to bring forth through the notion of *metaphorical modelling*, therefore, is an understanding that (1) any instantiation of metaphor is a process of modelling of a specific kind; (2) the precision or vagueness of a metaphorical modelling depends on the precision and/or systematicity of the source model and its application; (3) theories, concepts and models become metaphorical as soon as they travel to a new and sufficiently disparate domain; and (4) the underlying category they establish is metaphorical in spite of its abstractness or conventionalization. This understanding affords fuller, more critical awareness and appreciation of the impact this process has on these knowledge structures, domains and, ultimately, on our sense of reality, if not on the reality itself. That is, the notion of metaphorical modelling aims to draw attention to the three equally important aspects of the use of theories *qua* metaphors; skill of modelling, awareness of its 'as if' nature, and recognition of the productive, creative potential resulting from its transformative character.

In other words, metaphors are not necessarily vague and theories, concepts and models are not necessarily literal. Metaphor can be as complex, elaborate, precise as its vehicle, that is, the theory, concept or model that is carried to a new domain. The pre-defined distinction between metaphors and theoretical/analytical concepts is neither useful nor adequate and creates an illusion that theoretical constructs are domain-independent abstract tools that escape the problems of metaphorical processing simply due to being abstract and elaborate, or vice versa – certain words or concepts are unprecise or vague simply because they are used metaphorically. Metaphors are not a lesser form of knowledge structures, but rather, as cognitive tools and intellectual operations, they involve greater complexity associated with play-type modelling (cf. Lotman 2011).

The most important characteristic of metaphorical modelling stems from the 'seeing-as'

quality of metaphors. Metaphorical modelling is ‘modelling as’. While scientific models are above all simplifications, metaphorical models are transformative. If ‘literal’ modelling of a domain can be an accurate description or interpretation of the domain, metaphorical modelling – literally speaking – never is. To model something or use a model metaphorically is to transform them into something that they are not. Yet this inaccurate description might nevertheless be useful. Making sense of the ubiquity of this kind of modelling in the humanities is about making sense of the use and usefulness of these metaphorical transformations. But it also affords more critical awareness when the transformation becomes useless distortion.

Over time, the humanities have been fundamentally transformed by metaphorical modelling, as mind-dependent sociocultural phenomena are the ideal object for this kind of approach. In many ways it has proven itself to be a fruitful method of research, yet unrecognized as such due to stereotypical ways of conceiving ‘proper’ modes of inquiry. Acknowledging this mode of research as one among other ‘legitimate’ methods is not only an emancipatory move, but is necessary for developing it further and taking fuller advantage of the technique as well as avoiding its hazards. We know a lot about metaphors, but very little about the ways metaphorical thinking and modelling is practiced in the humanities.

On metaphorical modelling in semiotics

The issue of metaphorical modelling is particularly interesting in the context of semiotics for several reasons. Firstly, because contemporary semiotics developed and flourished to a great extent through borrowing theories, concepts and models from other fields, as well as through further travels of these semiotically transformed constructs to other disciplines. In many ways, semiotics gave rise to the interdisciplinary landscape of the humanities through these borrowings and could perhaps be seen as one of the prototypical examples of the use of metaphorical modelling. Secondly, the models have not travelled only between disciplines, but also within semiotics, as it broadened its scope of studies from cultural to social to biological, from human to non-human domains. Semiotics studies phenomena that belong to domains that have been traditionally seen as if not fundamentally different, at least significantly disparate, and theoretical instruments have travelled between them quite freely. Thirdly, there is a strong ‘scientific’ and/or formal theoretical tradition in semiotics that brought about a specific awareness and attitude towards theorizing and modelling.²³ Central semiotic theoretical constructs are often highly abstract, general and quite formal. And, as has been noted, abstract theories and models travel well. In combination with the above-mentioned factors – use of borrowed models, cross-domain object of study and abstract mode of theorizing – modelling in semiotics has very often taken the form of a rather precise and systematic metaphorical modelling, although it has not necessarily been seen as such.²⁴

Therefore semiotics provides a fruitful field for studying the forms and workings of metaphorical modelling, and this perspective on theoretical constructs in semiotics can bring about new and interesting questions about these semiotic constructs and practices, as well as shed light on how and why these constructs have developed and travelled the way they have. Although detailed study of these issues goes beyond the scope of the current paper, I will try to illustrate some of the issues at stake through a few examples.

Central in these cases is the abstract and often formal mode of theorizing characteristic of (general) semiotics. This level of abstraction has itself been to some extent achieved and sustained through a metaphorical process. We recall Vyacheslav Ivanov's dictum that 'the fundamental role of semiotic methods for all the related humanities may with confidence be compared with the significance of mathematics for the natural sciences,' although, as he adds, descriptions made in terms appropriate to the humanities are far from the precision of mathematical terms (Ivanov 1978: 202-03). The relationship between mathematics and semiotics is a playground of diverse forms of borrowings. Semiotics was modelled as mathematics for the humanities, mathematical ideals of formalization and abstraction, as well as models were transposed into semiotics and transformed its practices of theorization. Yet the transfer was never straightforward, but accompanied by awareness of the fundamental difference between semiotics and mathematics. Theorizing with the aid of these mathematical ideas in semiotics was performed metaphorically, in a non-literal way.²⁵ But to be sure, mathematics was only one inspiration behind the abstract mode of modelling in semiotics.

This leads to an interesting question about the relations between abstraction, generalization and metaphoricity. There is certainly interdependence between those aspects, as the cross-disciplinary and cross-domain use of these notions necessarily abstracts them from local contexts and thereby also fuels their further travels. Yet it also brings about a question: do these domain-general models, originally borrowed from other fields permit us to avoid metaphoricity through abstraction, as it is habitually assumed, or is the underlying general category nevertheless metaphorical?

For example, the cross-domain use of the model of semiosis has resulted in debate about the 'general and fundamental sign processes', more specifically the question to what extent the model of the sign 'derived' from linguistics or other human sign processes results in a false conception of the human symbol as the archetypal form of sign relations (Favareau 2007: 11). However, since metaphorical modelling leads to categorization that posits the source domain as prototypical instance of the class, this archetype can be seen as problematic only if one disregards the metaphorical nature of this 'derivation' and assumes a different ontological commitment. Therefore the search for a model of semiosis that is abstract enough to be suitable for a description of 'more general and fundamental' sign processes, in the light of which human symbol use is a 'more specific and derivative' instance (Favareau 2007: 11), provokes questions about the nature of the relations between phenomena brought together by the model.

If the concept taken from the human domain (that ‘semiosis’ inevitably is) is developed into an abstract model that could be applied in disparate domains, then to what extent is the unity of these domains nevertheless based on an abstract metaphorical category resulting from the application of the model? What is the ontological status of this more fundamental similarity? Is human symbol use derivative in terms of modelling or derivative as a phenomenon? Are certain biological sign processes more fundamental semiotic processes or are biological and cultural sign processes nevertheless fundamentally different, and the need to conceive their relations in fundamental-derivative terms is prompted by metaphorical modelling of the disparate domains? This is not to claim anything for or against either of the possibilities, but to point out that the relationship between metaphorically general and fundamentally general needs examining, and more explicit understanding of metaphorical modelling is necessary to be precise about the nature and value of the knowledge acquired, as well as for using this mode of knowledge acquisition when deemed useful.

The use of the model of language illustrates another aspect of the knowledge dynamics afforded by metaphorical modelling. Saussure’s claim that due to the arbitrary nature of linguistic signs, language realizes better than other systems the ideal of semiological process and linguistics, therefore, can become a master-pattern (*patron général*) for all branches of semiology (Saussure 1959: 68) was almost an invitation for extensive metaphorical conversion between linguistics and semiotics. He might have meant that linguistics as a more advanced science will lead the way for the other branches (Krampen 1987: 64), but translator Wade Baskin’s interpretation came to be historically more accurate.

The year before this translation appeared, Claude Lévi-Strauss published his *Structural Anthropology* that made this new mode of linguistic borrowing infamous. To be sure, linguistic analogies and metaphors had been used before, but the structuralist approach entailed an important shift towards metaphorical modelling as a method of analysis. Moreover, this new methodology of ‘deriving from language a logical model which, being more accurate and better known, may aid us in understanding the structure of other forms of communication’ (Lévi-Strauss 1963: 83) involved twofold metaphorical modelling – positing language as model for other cultural systems, yet language was not understood in purely linguistic terms, but mediated by mathematical thinking.²⁶ This mediation, as Lévi-Strauss indicates, was crucial for shifting the study of language from the human scale to the microscopic and macroscopic scales, that is, to model non-observable phenomena. Lévi-Strauss called it ‘statistical modelling’ of (socio-cultural) phenomena (e.g. Lévi-Strauss 1963: 283-84) and this ‘statistical modelling’ is a metaphorical, not a literal application of mathematics. Similar logic governs his application – or transposition – of the ‘phonemic method’ to anthropology, into *another order of reality*, accompanied by the warning that linguistic methods should not be applied literally (1963: 34-36 – emphasis in the original). He labels this approach analogical, but it entails much more than that.

This ‘mathematical mediation’ was crucial in facilitating the useful exchange between language and other semiotic systems, as it helped to construct a model abstracted from natural language, not only substantially but also in scale. What is at stake in this linguistico-mathematical matrix is the difference between studying various cultural phenomena as relational structures and studying them *as language as relational structure*, since it was the recourse to language (which from the perspective of aiming for pure abstraction could have been avoided) that made all the difference from the point of view of methodology as well as remodelling the object of study. The former would have led (and to some extent, did lead) to the application of various ‘mathematical’ approaches for modelling the target domain, the latter brought about an extensive transfer of various linguistic theories, resulting in plural methodologies as well as broadening the ‘domain of language’. But it also gave birth to a branch of semiotics that was radically different from the tradition that grew out of philosophy and logics. Not to mention the impact semiotics had on linguistics in turn, or how the changes in intensity of borrowing have over time caused changes in how related the disciplines consider themselves to be to one another. More broadly, once the language-like nature of other semiotic phenomena was posited through this kind of metaphorical modelling, it opened a road for importing theories from other domains of language use – rhetoric, literary studies, narratology, etc. – into other cultural domains, resulting in the ever-expanding field of travelling theories and concepts we have today.

However not all instances of applications of linguistic theories and concepts were mediated by ‘mathematical’ thinking. The prevalent aim, especially during the structuralist phase, was to reconceptualize these borrowed concepts as more general semiotic concepts, following the traditional logic of development of scientific terminology. Yet the metaphors did not necessarily settle into a conventional model, but remained dynamic points of exchange between the domains. Characteristically, post-structuralist and many more contemporary approaches were/are already more interested in the dynamics, not conventionalization of knowledge.

For example, in the semiotics of cinema Christian Metz started by applying certain linguistic concepts that describe the pertinent traits of language in analysis of cinema, to determine the adequacy and more precise sense of the notion of a ‘language of cinema’ (cf. Metz 1964, 1971). In terms of the particular concepts involved, this was done rather systematically and often this metaphorical modelling led to locally precise concepts, yet the concept of a language of cinema itself never settled, nor acquired a new precise conventional meaning. Instead, as linguistics as source domain itself changed, new models became available for the semiotics of cinema as well as for film studies more broadly. After ‘structuralist’ linguistics, John M. Carroll proposed a research program based on Chomsky’s transformational-generative linguistics, thereafter Halliday’s systemic-functional linguistics was adopted by contemporary scholars of multimodal semiotics, etc. As such, the semiotics of cinema and various sub-branches of cultural semiotics more generally became an example of the potential of metaphor to constantly enrich the target domain with new developments in the source domain.

The most crucial aspect of these semiotic approaches was the shift in the mode of using the borrowed models. This becomes apparent when one compares them to other modes of applications of linguistic concepts in film theory. On the one hand, there were more literal 'linguistic readings' of cinema, where, for example, objects in the frame were taken as nouns, actions as verbs, shots were read as sentences etc. Thus cinematic literacy was conceived as being founded on ordinary language processing in the most basic sense. But also, numerous film grammars were written, where 'language', 'grammar', etc. were taken as 'mere metaphors' to frame aspects of cinema in terms of these notions. Thus in the semiotics of cinema, there was a shift away from both a literal application of linguistics and from simple figurative use, towards more precise, analytical abstraction and transformation of linguistic models for modelling cinema as language.

As the concept of language of cinema never settled down and conventionalized into an exact definition, as was expected from metaphors in scientific discourse, many film scholars saw the entire approach as flawed. If it cannot explain what this thing called film language is, one should conclude that it does not actually exist, therefore the use of linguistic models is inappropriate. Yet, as many film semioticians were 'forced' to reflect, the entire approach was different and the existence of film language was not conceived ultimately in ontological terms. Through the constant borrowing of new models from linguistics, the semiotics of cinema had shifted its own approach from an ontological one, testing the validity of the metaphor, to a methodological approach providing new ways of understanding and analyzing cinema with the aid of linguistic models.²⁷ Moreover, through the application of various borrowed models, the semiotics of cinema brought about a fundamental methodological shift in film studies, more precisely, a shift from film theory to film studies as an analytical enterprise.

More generally, this kind of metaphorical modelling also facilitated the integration of the research domain of semiotics. After that, new theoretical or methodological frameworks could be imposed upon the newly unified domain. Of course, the difference between the 'linguistic approaches' and more mature semiotic approaches must be recognized, if not for any other reasons than to understand how semiotics became and remained a separate discipline, and was not simply another episode in the sequence of interdisciplinary cultural turns. Yet there is a certain similarity between the methodology of semiotics during this period and the one used by the interdisciplinary network that produces continuously shifting 'cultural turns' today. And this similarity concerns precisely metaphorical modelling.

From that perspective, it is easy to understand why semiotics is sometimes still seen as a phase in the ongoing interdisciplinary project, a phase whose vocabulary became if not outdated, then less relevant as new vocabularies emerged. And this view of semiotics is quite different from the one that conceives semiotics as mathematics for the humanities, a base discipline whose models should be fundamental and thus timeless, not one interpretive vocabulary among others. In other words, the landscape of the humanities itself has changed and the

toolbox-based or 'turn'-based interdisciplinary thinking has inevitably impacted on the role semiotics has or could have in the humanities.

Thus better understanding of metaphorical modelling helps to understand how semiotics as a discipline and its 'proper' models were and are established, but also the disagreements or misunderstandings about the nature and meaning of the 'proper' models. At the same time, it helps to understand the contemporary cultural theoretical landscape and the position of semiotics, its theories and models within it. This concerns both the general attitude towards theoretical constructs, related ontological commitments, aims and modes of application, as well as the role of metaphorical modelling in knowledge creation and dissemination. Most importantly, it should be recognized as a useful method for knowledge production, always accompanied by critical evaluation of its usefulness.

Conclusions

This is far from saying that all instances of modelling are inescapably metaphorical and there are no 'literal' theoretical concepts or models, only to draw attention to the often subtle difference between them. As Eco points out, if language is by nature metaphorical, then what defines humans as symbolic animals is the capacity to discipline and reduce the metaphorizing potential (Eco 1983: 218). The ways in which metaphorical modelling can and should be disciplined remain a subject for further studies. Instead, what I wanted to point out here is that the traditional distinction between theoretical/analytical concepts and metaphorical language is not adequate for understanding how theoretical language works, especially in this new landscape where boundaries between domains and disciplines have been shifted by travelling theories and concepts. Abstract, precise, systematic, theoretical, etc. are not opposites of metaphorical language or modelling. And the use of inadequate categorization is not a means for disciplining or reducing metaphorizing potential but creates a blindspot that does not allow full awareness of the mechanisms whereby theories, concepts and models turn into metaphors, nor appreciation of when or why these theoretical metaphors are actually useful and valuable. Moreover, many aspects of knowledge dynamics, of the development and use of theoretical constructs, both in local contexts and more globally, can be understood when they are seen from the perspective of metaphorical processing.

Metaphorical modelling, in one way or another, is already a valuable research method in semiotics and the humanities. One of the specificities of the humanities is their greater license to invent worlds as well as the practical value of, and need for, creating – indeed, inventing – them. That makes it possible to use metaphorical instruments to a far greater extent than in the sciences. Therefore it is useful to consider the use of metaphors, more precisely, the metaphorical use of theories, not as deviant but as a valid methodological possibility. But as

methodology it nevertheless requires discipline and refinement, if not for other reason than to make sure that we do not create novel worlds while we attempt to study the one we have.

NOTES

1 The adequacy of this model of science as a reflection of actual research practices in particular disciplines is not relevant here. All models are simplifications and this contributes to their power, rhetorical and other.

2 Note that I will use 'humanities' as shorthand to designate the 'non-scientific' research fields. This is a purely practical designation and I do not mean to imply that semiotics is limited to humanistic study.

3 Bod admits that the discovery of the long law- and pattern-seeking tradition in the humanities was unexpected, as Dilthey's and Windelbands distinctions gave the humanities a clear identity that became and still is the dominant thinking about the relationship between the humanities and the natural sciences, despite the fact that the new identity of the humanities as pattern-rejecting disciplines does not correspond to actual practice in the humanities, where nomothetic and idiographic approaches have existed side-by-side (Bod 2013: 257).

4 In the context of social research, a similar perspective is discussed in Murphy and Costa (2015) and (2016).

5 See Knapp and Michaels' attack on the possibility of different interpretations in their 1982 article; the 'as if' approach was raised in this context by Rosmarin (1983).

6 I have discussed elsewhere (Pärn 2016) the important difference between concepts of 'form', 'system', 'structure', 'pattern' and 'model' that have been used in semiotics as well as in other disciplines somewhat interchangeably, yet only the latter of which is semiotic by definition; as different from 'model', neither 'form', 'system', 'pattern' nor 'structure' are necessarily 'semiotic constructs', that is, stand-ins for *something else*, whereas 'model' is by definition that of something else, whether of an existent or non-existent thing is irrelevant. Or rather, their capacity to make present something absent, unobservable and possibly inexistent is part of their semiotic functioning. Thus at least to some extent semiotics is a (separate) discipline for studying models. See also Tondl (2000), Lotman (2011).

7 Another obvious reason is that the issue of modelling in science has been discussed mostly in the philosophy of science that has its basis in the narrow interpretation of science. There is no equal philosophy of the humanities. Therefore most of the discussions have taken place in the context of the natural sciences, incorporating, at best, social sciences and psychology. Thus the philosophy of science has become one of the main institutional vehicles for reinforcing the traditional division between the sciences and 'the others'.

8 By 'theoretical constructs' I mean theories and theoretical concepts, not the specific type

of models Black calls 'theoretical models' (c.f. Black 1962: 226) – the latter is more similar to metaphorical models.

9 Keller (2000) used the distinction, without connection to Geertz, in discussing a specific use of models as tools for 'understanding' in molecular biology. Interestingly, she also points to the metaphorical nature of the 'genetic computer' model she studied, or, rather, its obscure status as not just a metaphor nor just a model in the two respective domains of designing new kinds of computers and designing new kinds of organisms brought together by the metaphor. This is a very interesting instance of the productive capacity of metaphorical models.

10 Ricoeur talks about aesthetic fictions, but points out their relation to scientific models. Likewise, there is a long, albeit until recently somewhat forgotten tradition of studying scientific, theoretical entities as fictions, a tradition that in a more explicit form starts with Hans Vaihinger's philosophy of 'as if' (Vaihinger 1935 [1911]); for a more recent discussion on relations between models and fiction, see Suarez (2009) and Toon (2012). More recent approaches have drawn parallels between scientific models and literary fictions, but I would argue, drawing on Ricoeur, that metaphor provides a more condensed and perhaps more fundamental model for understanding some of these mechanisms.

11 Different concepts have been proposed for 'A' and 'B'. I will use the concepts of 'source domain' and 'target domain', with no particular reference to the theoretical framework these concepts 'belong' to.

12 Knudsen (2005: 73) defines the difference between analogies and metaphors: 'Whether the process is regarded as analogical or metaphorical depends on exactly how unrelated the two compared phenomena are considered to be.'

13 For example, with the metaphor 'cinematographic language', it would make sense to look for language-like aspects of cinema, not cinema-like aspects of language.

14 On this basis, analogy is differentiated from metaphor as one-to-one mapping from one-to-many mapping (Gentner and Jeziorski 1993: 476).

15 On this issue, see also Arbib and Hesse (1986, ch. 8) and Gadamer (2006: 427ff).

16 As Black puts it: 'Perhaps every science must start with metaphor and end with algebra; and perhaps without the metaphor there would never have been any algebra' (Black 1962: 242).

17 This is precisely a matter of 'use', as these are knowledge processes governed by human understanding of how things are supposed to work, thus the 'career' of metaphors depends on the views of the community of scholars using it.

18 They base their approach on James J. Bono's elaboration of the idea of ecology of discourses.

19 For example, cinematic language refers to a more general category of language derived from the source domain (natural language) and the latter becomes the prototypical example of 'language' in this new, more general sense.

20 In the context of the arts this cognitive duality has been discussed as the relationship be-

tween this kind of modelling and play by Gadamer (2006) and Lotman (2011). Characteristic of play-type modelling is the capacity to take it seriously while being aware of its 'as if' nature.

21 For instance, they often discuss the heuristic, generative, productive and creative aspects of travelling concepts, yet do not specify the mechanism of this potentiality to innovate, or explain it by some other mechanism, ie. 'translation' (see Bachmann-Medick 2012).

22 For example, Bachmann-Medick (2012: 27) states that as an analytical concept, translation no longer remains on the 'merely metaphorical level'.

23 This has been seen as scientism, yet I would argue that this view disregards the complexity of the situation that becomes more obvious when the metaphorical nature of the procedures is recognized.

24 These models have often been seen as analogical, especially if the theoretical discourse aims to be scientific in the traditional sense. Analogical comparison is deemed more proper for scientific discourse than metaphorical, open-ended mapping (e.g. Gentner and Jeziorski 1993, who also identify the shift from metaphorical to analogical comparison as one aspect of the general change that led to the birth of modern scientific reasoning). Yet the main difference between them is that outside of certain language games, metaphorical comparison is false when taken literally.

25 In my opinion, unawareness of this kind of practice of metaphorical modelling as a specific mode of research was the source of the confusion of Sokal and Brichmont (1997) as they accused postmodernist intellectuals of 'abusing science' – they read literally what was meant metaphorically and, quite obviously, it made no sense, since, taken literally, metaphorical constructs are false.

26 I take information theory and cybernetics, both of which played an important role in this mediation, especially through the works of Roman Jakobson, as its parts.

27 See Pärn (2012), where the study of methods of film semiotics led me to initial questions about the role of metaphor in these approaches.

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Hypothesizing the phrase: The syntax of a meal of the word-in-liberty¹

Paolo Fabbri

The Futurist movement had the project of a 'reconstruction of the universe' (as Giacomo Balla and Fortunato Depero state in their manifesto of 1915), that is, of all the semiotic dimensions of culture. This included linguistic syntax (Marinetti, Parole in libertà, 1913) and cookbooks (see Marinetti and Fillia, La cucina futurista, 1932). Starting from a meal of the word-in-liberty, we demonstrate the homology between literary and gastronomic texts.

KEYWORDS Futurism, literature, cooking, recipe

Moving. Lightness. Chewing the infinitive.
Marinetti and Fillia, *The Futurist Aeropoetic Meal*

Semio-liberated Futurism

Well-known specialists of Futurism maintain that, from a theoretical point of view, we know everything there is to know about this 100-year-old avant-garde. All we can do is add bits of factual information, insignificant variations on accumulated knowledge and ratified values (Belli 2007). To a semiologist, such a claim is a *bottom line*, a term that denotes a presentation of results, but also a failure of sorts. It is an uncomfortable bliss: the Futurist avant-garde is a classic that is not done telling its story, and we are constantly in danger of losing the bookmarks.

There is always time to relinquish exploring the different facets of a research topic. Our conference will take this time to present, highlight and problematize the radical Futurist innovations in the substruction and reconstruction of our vital and cultural universes. Using an aeronautical term that would have pleased Marinetti (FTM) and Azari, we could call these innovations 'clear-air turbulences', due to their impact and to the difficulty of retracing them.

Semiotics has no inclination to pass ideological, political or conceptual judgments or to impose literal or figurative limitations: here it merely aims to contribute to the 'sustainable development' of a general reflection on Futurism. In the first place, it will do so by defending its positions *in* the text and not *from* the text. In contrast to angry criticism, hasty judgments and summary trials, the semiotic method relies on microscopic analysis rather than on telescopic synthesis. And it takes the opportunity to examine on the way its own role in the contemporary development of linguistics and philosophy.

Its long silence is due (in addition to political rejection) to a conundrum internal to its own paradigm. Roman Jakobson, one of the greatest linguists of the century of Saussure and FTM, had an intense experience of Italian Futurism and a rather drastic opinion of its founder (Jakobson 1997). According to the young Jakobson, the theoretical principles announced by FTM did not enable the writing of poetry, but only of journalism. This preconception can be attributed to Jakobson's preference for Russian Futurism as well as to his poor knowledge of Marinetti's literary activity and of the verbal and visual experiments of the *Tavole Parolibere*. Jakobson's hasty verdict contributed to the disrepute of Futurism in Europe and discouraged further linguistic and semiotic investigations. This is rather paradoxical, considering that the Futurists' emphasis on the grammar and semiotics of poetry is also one Jakobson's outstanding contributions to the Structuralist school.

We would like to demonstrate that the questions raised and the answers offered by FTM and the Italian Futurist movement bring a qualitative contribution to the fields of semantics, grammar and textuality and to semiotic systems characterised by various forms and substances of expression (see De Maria 2001, Fabbri 1998a, 1998b, 2009a, 2009b). The contribution does not take the form of scientific propositions but of formal presentiments (or 'ungraspable intuitions' in the words of FTM) about parts of speech such as nouns, verbs, adjectives and adverbs. It presents a connotative linguistics that must be made explicit. The poetic principles underlying FTM's *Parolibberismo* (words-in-liberty) were meant to be applied also to the other expressive languages of Futurism such as art, fashion, music, design, dance and film. This kind of semio-liberism would have met with the approval of Roman Jakobson, who claimed, for example, that 'the juxtaposition of contrasting grammatical concepts may be compared with the so-called "dynamic cutting" in film montage'.²

Indeed, for the Futurists, natural languages and the natural world are the places where 'food sculptures', ie. consolidated and expressive paradigms, become manifest. The task of the avant-gardes is to reconfigure the abstract compounds that lie under the sensitive 'skin' of things and, by re-combining perceptual schemes, to compose 'simultaneous harmonies' between elements. These unusual effects will eventually usher in a futuristically reconstructed universe. Their semiotic contribution is implied rather than applied in the poetic experimentation of Futurist cuisine, where the analogy between language and the sensory dimension calls for a deformation of the passéist phrasing of taste, for an 'anti-pleasant' aesthetics

and for the anticipation of a new harmony of sense and the senses (see also Salaris 2000).

The meal formula

The text *Pranzo parolibero primaverile* (PPP) ('Springtime Meal of the Word-in-Liberty', see Appendix for translation), part of Marinetti and Fillia's writings from 1932, demonstrates these properties (Fig. 1). This 'formula', as FTM calls it, is an 'instructional' narrative (or pastiche) about the preparation, serving and tasting of a springtime meal experienced by a group of young Futurists in the throes of 'literary and erotic anxiety'. This 'synoptic-syngustatory' sequence includes peppers dipped in cod liver oil, garlic wrapped in rose petals, tortellini soup and strawberries in wine. All followed by bicarbonate of soda. The preparation and tasting initially establishes 'imaginative relationships' among 'equidistant' ingredients: 'peppers, garlic, rose petals, bicarbonate of soda, peeled bananas and cod liver oil'. Then each of the participants enjoys a personalised serving of strawberries in Grignolino wine. The first part of the meal is meant to appease anxiety; the second, tedium and monotony.

pranzo parolibero primaverile

La traversata di un giardino primaverile fra i dolci fuochi di un'aurora piena di timidezze infantili, ha dato a tre giovani, vestiti di lana bianca e senza giacca, un'ansietà tra letteraria ed erotica che non può appagarsi di una colazione normale.

Si mettano quindi a tavola all'aperto sotto un pergolato che lascia passare le dita calde del sole.

Non caldo, ma tiepido sia servito subito un piatto sinottico-singustativo di peperoni, aglio, petali di rose, bicarbonato di soda, banane sbucciate e olio di fegato di merluzzo, equidistanti.

Mangeranno tutto? Ne assaggeranno delle parti? Ne intuiranno i rapporti fantastici senza assaggiare neanche? A volontà!

Doverosamente mangeranno, dopo, una scodella di tradizionali tortellini in brodo. Ciò farà sì che il loro palato spicchi subito il volo cercando nel piatto sinottico-singustativo un'indispensabile nuova armonia.

Formeranno subito un rapporto metaforico inusitato tra i peperoni (simbolo di forza campestre) e l'olio di fegato di merluzzo (simbolo di mari nordici feroci e necessità curative di polmoni malati). Provino allora a intingere il pe-

perone nell'olio di fegato di merluzzo. Ogni spicchio di aglio sarà intanto accuratamente avvolto nei petali di rosa dalle dita stesse dei tre convitati che si distrarranno così ad accoppiare poesia e prosa. Il bicarbonato di soda a disposizione costituirà il verbo all'infinito di tutti i problemi alimentari e digestivi.

Ma il tedio e la monotonia potrebbero nascere dopo che i palati avessero gustato l'aglio alla rosa. Entri allora la contadinotta ventenne e grassa, recando fra le braccia una grande bacinella piena di fragole nuotanti nel Grignolino ben zuccherato. I giovani l'inviteranno, con alte parole in libertà fuori di ogni logica e direttamente espresse dai nervi, perché scodelli al più presto. Direttamente sulle teste la contadinotta scodellerà. S'ingegnino loro finalmente a mangiare, leccare, bere, smacchiarsi, rissando sulla tavola con aggettivi illuminanti, verbi chiusi fra due punti, rumorismi astratti, urli animaleschi che sedurranno tutte le bestie della primavera, ruminanti, russanti, borbottanti, fischianti, raglianti e cinguettanti in giro.

Formula dell'aeropoeta futurista
MARINETTI

Fig. 1. *Pranzo parolibero primaverile*, in Marinetti and Fillia, *La cucina futurista* (1932).

The attention of the semiologist is initially drawn to a rhetorical device. The paradigm of ingredients (Greimas 1985) is expressed through a parallel between two metaphors, an original analogy between two terms and their symbolic connotations: 'an unusual metaphorical connection between the peppers (symbol of rustic strength) and the cod liver oil (symbol of ferocious northern seas and the need to cure sick lungs)'. Then between the garlic, symbol of prose, and the rose, symbol of poetry.

Instantly they make an unusual metaphorical connection between the peppers (symbol of rustic strength) and the cod liver oil (symbol of ferocious northern seas and the need to cure sick lungs), so they try dipping the peppers in the oil. Then each clove of garlic is carefully wrapped in rose petals by the same hands of the three guests, who thus entertain themselves with the coupling of poetry and prose. The bicarbonate of soda is available for use as the verb in the infinitive of all food and digestive problems.

The second textual attractor is found in the last sentence of the first part, and involves a grammatical diversion: 'The bicarbonate of soda is available for use as the verb in the infinitive of all food and digestive problems'. As for the last paragraph, it ends with the collective recitation of 'high-flown words-in-liberty devoid of all logic and directly expressing [the young men's] nervous condition', followed by abstract noises and animal cries mixed with 'illuminating adjectives' and 'verbs shut between full stops'.

So then a buxom country girl in her twenties enters, holding in her arms a huge bowl of strawberries floating in well-sweetened Grignolino wine. The young men invite her, with high-flown words-in-liberty devoid of all logic and directly expressing their nervous condition, to serve them as quickly as possible. She serves them by tipping it over their heads. They end up eating, licking, drinking, mopping themselves up, fighting each other across the table with illuminating adjectives, verbs shut between full stops, abstract noises and animal cries which seduce all the beasts in the springtime, as they ruminate, snore, grumble, whistle, bray and chirrup in turn.

Futurist grammars

The reflection on adjectives and verbs, especially verbs in the infinitive, is part of FTM's poetic project for the destruction and reconstruction of grammar. It is the same attitude whereby Nietzsche demanded that thought be freed from the superstitions of syntax. In his *Literary Manifestos* from 1912 to 1914 (Caruso 1980, Stefanelli 2001, Rainey et al. 2009), FTM planned

an escape from conventional sentence structure, as the latter, despite its prudent head, was wingless and flatfooted, ie. unable to run and, above all, to fly.

As is well known, Futurist theory and practice proposed linguistic and literary recipes for a radical transformation of poetic writing, well beyond free verse. Futurists wanted to abolish the old-fashioned narrative structure by blowing it out of proportion: their radical program of distortion involved discourse down to its smallest parts, including punctuation. The Futurist poetic project is verbivore: it intends to strip the Italian language of the classical mask of syntax. This thuggish gesture liberates the sentence from the elegant and symmetrical harmony of balanced parts of speech; the step-by-step motion, draperies, festoons of an out-of-tune instrument. The Futurists, anti-purists as they are, aim to change the montage (in the cinematographic sense of the word) by modifying the temporal arrangement of forms through an unprecedented configuration of forces. The new rules for the circulation of words will change the order, interdependence and rhythm of ideas and events, as opposed to the monotonous back-and-forth of conventional phrasing. The ensuing new harmony is absolutely necessary to both metropolitan modernism and to the rural world. The experience of natural language and of the natural world must be re-explained.³

The poetry of grammar

FTM develops an ethics of the sign and, above all, a *pathos* of syntax made of attraction and aversion. In Italian, this uncomfortable feeling may be defined as *fastidio*, in its etymological sense of pride (*fastus*) and boredom (*taedium*):

... the feeling of horror that I experience when faced with a noun that strides forward yet is followed by its adjective, as if by some rag or puppy. Yes, sometimes the dog is held back on the leash of an elegant adverb. Sometimes the noun has an adjective in front and an adverb in back, like the two signboards of a sandwich man.

The principle is to disregard grammatical forms such as the adjective and the adverb, while privileging parts of speech such as the noun and the verb. Often neglected in the studies of Futurist poetics (focused as they are on neologistic innovations), verbal morphologies experiment with words and phrases, as for example in cooking-related terms: the *maître d'hôtel* becomes a *guidapalato* ('palateguide'); the barman, a *mescitore* ('pour-outer'); the cocktail is a *polibibita* ('poly-drink') that can be ordered at the *quisibeve* ('one-drinks-here') instead of at the bar; a dessert is a *peralzarsi* ('to-get-up'); a picnic, a *pranzoalsole* ('lunchinthesun'); the *sandwich*, a *traidue* ('betweentwo'), etc. Futurists famously replaced international terminology with newly minted words and linguistic forms, in the typical military style of the avant-garde: by creating a wedge.

However, the Futurists were also acutely aware that the syntax is what gives rhythm to the

lexicon: they therefore emphasised the syntactic dimension, what Jakobson calls the 'poetry of grammar'. In his theoretical and poetic practice, FTM works above all on the primary modelling system of the Italian language, using its properties and focusing on its grammatical and semantic possibilities. He takes a drastic position on the elements that compose the utterance, ie. the parts of speech, and on their delimitation and integration. And he does so by strengthening the use of nouns (the 'existing'); by generalising the infinitive of verbs (the 'occurring'); and by eliminating or transforming the adjective and repealing the adverb, ('existing/occurring'). His radical intervention on the very structure of language affects its formal constitutive meanings, the morphologies whereby it organises reality. His is a grammatical iconoclasm, a logo-clasm if you will.

Nouns, adverbs, adjectives

The noun, for the Futurists, is not a cognitive object that can be predicated, as in traditional grammars. Naked and elementary, isolated or doubled (synthesis-movement or node of nouns), the noun must recover its essential value, 'total and typical'. And carry a clearly defined sense, an 'essential colour', like a train carriage or a conveyor belt that is moved, as we shall see, by the verb in the infinitive.

In their violent attacks against grammatical hypotaxis⁴ (ie. against the interdependence between parts), the Futurists primarily targeted the adverb: 'explanatory, decorative and musical' (like the adjective), the adverb blurs the semantic clarity of the noun that it guards. It introduces a meditative break in the manner in which the noun moves across the sentence, and decreases its dynamism; the adverb is the cane or crutch that stops it from running and flying. FTM seems to somehow appreciate the generative flexibility of adverbs, their imperviousness to declension and their intransitivity. However, he deeply dislikes the formal dependence whereby adverbial suffixes are added to words, verbs, adjectives, conjunctions, clauses, and even to other adverbs. And what is unforgivable, in his view, is the manner in which the adverb acts as a 'buckle' holding the sentence together, a linking and closing clasp that secures its 'tedious unity of tone' ('a musical ligament that unites the different sounds of a sentence'). Above all, the adverb releases the tension and slows down the Futurist simultaneity ensured by the verb. After all, adverbs are the adjectives of verbs: they determine and modify the latter's meaning and stand in the same relation to the verb as the adjective to the noun.

The adjective, too, was initially ostracised from the radical syntax of Futurism. Epithets and attributes are (etymologically) something that is added on. They are optional and, due to their qualifying nature, carriers of relations and determinations. Moreover, their varying lengths and order of appearance introduce a delay and a rhythmic disturbance among the more important elements, ie. the noun and the verb, and undermine their qualitative value. According to avant-garde poetics, the adjective provides an 'overly minute' definition of the noun, or, as

we would say today, a predication limited only to the sign to which it is directly attached. The noun must therefore be made to dis-agree with the adjective.

It is remarkable that Roland Barthes, distant as he was from Futurism, also took a critical (while nuanced) stance against the adjective. To both Barthes and FTM, the adjective is the tombstone of meaning. '*Affirmer est enfermer*' (Barthes 2002). Because of the aggressiveness and arrogance with which it delivers its valuable merchandise, the adjective, be it positive or negative, ends up anaesthetizing it. Only borderline languages such as science or avant-garde art, 'superhuman' in their passion for objectivity and in the force of their perspective, attempt to question and extenuate predication. However, while Barthes turned towards the impossibility of predication that characterises the neutral sign or degree zero⁵ of metaphor or catachresis, the visual writing of the Futurists accepted the adjective if placed between parentheses, so as to avoid direct predication and blurring the tonality and atmosphere of the text.

FTM's initial refusal of the adjective has an interesting textual undertone. Because this refusal is not made in the name of anonymous objectivity or of naked truth, the adjective becomes acceptable when isolated as an 'absolute noun' (FTM) between parentheses. The adjectives become 'illuminating' (as in our PPP) through this typographical filter that dilutes the immediate intensity of their contact with the noun and diffuses it throughout the text. Instead of stopping the analogical momentum of nouns, the adjective, like a lighthouse, diffuses a rotating and semaphoric light through the glass cage of the parentheses. A light that 'crumbles, spreads abroad, illuminating, impregnating, and enveloping a whole zone of words-in-liberty'. The multiplication and sequential arrangement of atmospheric or tonal adjectives, not replaceable by nouns, and isolated by parentheses, ensure the atmospheric multiplication of the poetic sentence.

In short, the Futurist poet gives up on direct predication in order to create a tonal harmony, asymmetrical and *ad sensum*, on the level of discourse.

The infinitive mode

The linguistics of FTM and of the great specialists of his time, such as Meillet and Vendryès, reduces the parts of speech to their two most fundamental categories: the noun, as we have seen, and above all the verb in the infinitive.⁶ This is FTM's most original contribution to today's semio-linguistic discussions on the personal and temporal dimensions of the verb. It is also an unexpected point of encounter with Deleuze's philosophical reflections on signs, language, time and subjectivity.

Ever since his manifestos of 1912-1914, FTM regarded the infinitive mode as 'the very motion of the new lyricism'. Later, in the early 1930s, in his preface to Pino Masnata's (1940) *Tavole Parolibere* ('words-in-liberty tableaux'), FTM re-examined its meaning and clarified its use. In contrast to the other modes, the 'concept' of infinitive expresses syntactic elasticity (in

its adaptation to the noun), and the continuity, duration and fluidity of the life and intuition that captures it. It is the very sign of stylistic velocity. Neutral in its aspect, which it may or may not adopt, the Futurist infinitive is round (like a helix or a wheel) and adaptable to all the vehicles of analogy, while the other tenses and modes are triangular, ovoid, square and as a result a hindrance to momentum. The infinitive is the privileged formant of the verbs of motion, both transitive and intransitive. 'Infinitive verb = the divinity of action' (FTM). Unsurprisingly, Musso-olini's slogans made extensive use of verbs in the infinitive: '*Credere, Obbedire, Combattere*' (to believe, to obey, to struggle).

The infinitive is the home base to which every verb returns after being conjugated. And that makes it a flexible discursive tool. In Italian, the function of the infinitive can be narrative ('*e giù a dire che*', 'and then [they] went on to say that'); deliberative ('*ecco che si può dire che*', 'it might be said that'); exclamatory ('*e dire che!*', 'just to think that!'); or imperative ('*circolare, circolare!*' 'Move along, move along!'). It can be used in infinitive phrases, which are almost always supported by a verb of perception (for example, '*sentir dire*', 'to hear say').

There are other reasons why the Futurists were attracted to nouns and verbs: in the first place, the infinitive verb is a 'verboid' that can function as a noun: it can take articles, adjectives and determinants, and it can act as a subject or as an object of any kind. While participles and gerunds act as adverbs, the infinitive behaves as a morphologically invariable noun which compensates for the shortcomings of derivation, mostly through action nouns.⁷ And, as a noun, it can connect with others according to a double regime, simultaneously alternating (as observed by P. Masnata) between its nominative and accusative roles.

In the second place, the infinitive is not subordinated to the I. The degree zero of conjugation leads to the syntactic destruction of 'the literary 'I', in order to scatter it into the universal vibration'. The infinitive *correre* (to run), according to FTM, is a verb whose subject is 'everybody and everything: here is a universal irradiation of flowing life, a movement of which we are a conscious particle'. Thus, the infinitive verb does not express a saturated or absent subjectivity, but an impersonal passion: the optimism and absolute generosity of surrendering oneself to the becoming of everything, 'the heroic and disinterested continuum of effort and joy in "to act"'. It does not concern the state of mind of a subject, but the passion of the molecular processes of matter. And as the grammatical system includes affective language, whereas the classical syntactic period always conjugates a specific emotion, the infinitive function preserves a multi-faceted emotional perspective.⁸ Here Marinetti takes to its extreme consequences the depersonalisation that characterised the culture of the entire 20th century. And he does so down to the pronouns, which Carlo Emilio Gadda described as the lice of thought, and to Italo Calvino's image of grimacing in front of the mirror to prevent subjectivity. But the I is not simply a fabric of ghosts: by preserving its elasticity, Futurism wants to preserve the positive, indeterminate, fluctuating, fluid and interconnected character of identity.

The chronotype of life

To substantivise the sentence. To de-conjugate the phrase. The 'ungraspable' semantic and axiological intuitions that attracted FTM to the infinitive were made explicit in the linguistic and philosophical studies that followed. A case in point is the psycho-semiotic research of Gustave Guillaume, a post-Saussurean linguist who inscribed the morphology of the infinitive in the architectural representation and generation of verbal tenses. One of the syntactic dimensions of his 'chronogenesis' is prospection: the temporal modes are arranged according to a modal course from the virtual to the actual and from 'incidence' to 'decadence'. The perfect participle is decadent, 'the dead form of the verb', its complete achievement to the point of extinction (although it can be reactivated through the auxiliary!). On the contrary, the present participle and the infinitive are its live, incident form. While the present participle is transitional and can be actualised without being completely achieved, the infinitive is the only radically virtual and non-prospective form. 'What is completed', Guillaume argues, 'is null, nonexistent, rejected'. In almost Futurist terms, the chronotype of the infinitive is the signifier of the most virtual tense. It is completely open to what will come to pass without passing away and in blatant opposition to the '*passéist*' completed action (ie. the participle). Time eludes the verb through the zero-sign of the infinitive. The avant-gardes are not reaching out for the future, but for virtuality and simultaneity.

Becoming and the event

'The verb is the univocity of language, in the form of an undetermined infinitive, without person, without present, without any diversity of voice. It is poetry itself' (quotations are from Deleuze 1997a and 1997b). Without Deleuze's explicit reference to Guillaume,⁹ we would be surprised that he should discuss the infinitive (as well as indefinite pronouns and proper nouns) in the framework of his reflections on becoming, virtuality and the event and as part of his philosophical project for a 'pure semiotics' of language in its relationship to reality.

Deleuze, too, wants to retrace the path of chronogenesis: from *chronos*, the time of conjugated measurement, to *aion*, the indefinite time of singular events. This concept builds upon Bergson's reflection on Becoming, which (in spite of FTM's open praise for the genius of Dante and Edgar Allan Poe as opposed to Bergson's) is a staple of Futurist poetics, along with multiplicity and simultaneity.¹⁰ To Deleuze, the infinitive is the signifier of a becoming, a passage of intensity, an experience of the universe in its molecular dimension, through an affective and intensive body. Because Deleuze does not wish to contemplate ideas through concepts, but matter through perception, becoming is the true perception of the vibrating matter of the world in its own intensive nature. It is not a metamorphosis, which presupposes something

that has already happened (the decadent and dead form of the past participle) but an incident process, presided over by the general instance which inhabits the infinitive and which Deleuze occasionally calls the fourth person singular. Hence the Futurist tone of Deleuze and Guattari's (2006) description of intense, imperceptible and molecular becoming, but also of becoming infant, animal or machine: in their 'le devenir-cheval du petit Hans' ('the becoming-horse of little Hans'), 'guêpe rencontrer orchidée' ('wasp to meet orchid'), 'regarder il' ('to look at he') and 'on mourir' ('one to die') the infinitive signifies the singularity of an impersonal and virtual event. Whereas the noun, according to Deleuze, is ambiguous and always subject to interpretation, the infinitive is unequivocal because it linguistically expresses all events in one: 'The infinitive verb expresses the event of language – language being a unique event which merges now with that which renders it possible'. And because the event is introduced into language through the infinitive, the infinitive is that which brings the interiority of language in touch with the exteriority of being, and the actions and passions of the body with the incorporeal actions of language.

Thus, it is not surprising that Deleuze uses 'to eat' to demonstrate how 'the verb [...] causes the event, as that which can be expressed by language, to happen to consumable things'. According to Deleuze, thinking (where the instance of language comes into contact with the existence of being) also means to eat-to speak. A borderline between things that are eaten and sentences that are spoken, between speaking of food and eating words. Starting from Artaud, Deleuze demonstrates how the word can regress into the body, be eaten again by the mouth, and converge into inarticulate spasms, screams, and sighs. Just like the three young Futurists of PPP.

Savouring the infinitive

After this long detour (which is not a digression), it is time to return to the text. For the Futurists, cooking ranks first among the arts, and demands creative originality. PPP therefore presents the formula for constructing an imaginary event, with its protasis, apodosis and clauses, of which FTM wants to change the phrasing, prosody and rhythm. During the narrative, which has a collective protagonist, the hungry young men alternate existing recipes (tortellini soup and sweetened strawberries in wine) with recipes of their own invention (peppers in cod-liver oil and garlic with roses). The latter are original recipes prepared directly by physically manipulating matter: the acts of dipping and wrapping create a sequence of 'equidistant' elements (peppers, garlic, rose petals, bicarbonate of soda, peeled bananas and cod-liver oil). In order to prepare these recipes, the Futurists must first guess the possible 'imaginative relationships' between these elements. These relationships are metasemiotic because the recipe consists in creating metaphorical proportions between two symbols with contrasting meanings. The /pepper/ is to /rustic strength/

as /cod-liver oil/ is to /ferocious northern seas and the need to cure sick lungs/. While the /garlic clove/ is to /prose/ as the /rose petal/ is to /poetry/.

Waiting for the day when nourishing waves could be broadcast by radio, the avant-garde saw eating as a lyrical sport, based on metaphor and analogy. The simultaneous and word-in-liberty meals were spaces where they could invent 'flavourful colourful perfumed and *tactile* food sculptures', whose fundamental harmony of form and colour were meant to nourish the eyes and stimulate the imagination before tempting the lips. Their semio-liberated cuisine was explicitly poetic: 'In Futurist cooking these canapés have by analogy the same amplifying function that images have in literature'.¹¹ And in gastronomy as in poetry, the superficial plan is where the values articulated in an axiologically and ideologically 'other' discourse become manifest.

FTM's aero-poetic formula is not a web of patterns, ie. of already existing recipes. Nor is it a cookbook, a programme for the construction of edible objects. It is a *Bildungsroman* about the construction of subjects who must appease their 'literary and erotic anxiety' and the 'tedium and monotony' provoked by the coupling of poetry and prose. On this sensory and passionate plan we find the bicarbonate of soda, which symbolizes the verb in the infinitive, the becoming of intensity. Abrasive and anti-acid, it breaks up skin fat and digestive obstructions: it is a refreshing and purifying product for cleaning, beauty and health purposes. Thus, bicarbonate is used to experiment with affective and intensive bodies that are lightly dressed (no jackets), touched by the 'warm fingers of the sun', and in direct contact (without the mediation of cutlery) with the food.

After the old-fashioned and pedestrian tortellini, the Futurist palate can take flight in search of a 'new harmony' in the discordant play of the organs, and elicit the emergence of a new sensitivity which is not a quality but a sign, not an *aistheton* but an *aistheteon* (Deleuze). 'Calmly take up the material again. Crucify it with sharp nails of will. Nerves. Passion. Lip-felt joy. All of heaven in the nostrils. A smack of the tongue. Hold the breath so as not to blunt a chiselled flavour' (FTM).

The springtime meal, which favours raw food, is more attentive to touch than to flavour, more tactile than gustative. It maintains the traditional order of flavours (from savoury to sweet, from the tortellini to the sugared wine), but reverses the sensory experience. While the tortellini soup must be dutifully eaten, the basin of strawberries in wine will be freely tipped over the young men's heads and white clothes, eliciting (in Italian) a vivid and incident spurt of verbs in the infinitive: '*mangiare, leccare, bere, smacchiarsi*'. A unique event of words-in-liberty 'directly expressing their nervous condition': 'illuminating adjectives, verbs shut between full stops'. A speaking-eating, an open, impersonal and simultaneous block of sensation, in which the verbs, like sandwich men between signboards, are stuck in an ambivalence between nominative and accusative. The adjectives, for their part, function as lighthouses, as an atmospheric multiplicity that illuminates the whole meal consumed under the shade of an arbour.

Speaking-eating: the meal, or rather the process of eating, triggers a sound poem in the

style of Khlebnikov (Jakobson notwithstanding) or Depero; a rudimentary language of natural forces and brutal humour that includes abstract noises and animal cries. Futurist words-in-liberty, which communicated without speaking, did actually include animal and mechanical noises, together with old distorted words and dialectal expressions: a throng of noises and a scuffle of voices. In PPP, the metropolitan Futurists, enemies of D'Annunzio's cities of silence, duel with the silent countryside of the Impressionists and the static landscapes of the Cubists, in order to seduce, rather than the engines of the metropolis, the 'beasts in the springtime', which all exist in the present participle, a verbal form that is still alive: '*ruminanti, russanti, borbottanti, fischianti, raglianti e cinguettanti*'. They participate in the universal vibration that must be futuristically expressed in the infinitive. Madness of Becoming.

Envoy

This, and this alone, can the semiologists see at the bottom of the multi-coloured well of their microscope.

NOTES

1 Translated by Odysseas Vangelas, Panagiotis Xouplidis and Karin Boklund-Lagopoulou.

2 On the cinematic montage of sentences, see Jakobson 1985.

3 Compare Marinetti's *métaphore filée* of the sentence as a wave to Valéry's description of the writing of Bossuet:

Marinetti: 'It is precisely through the deliberate use of the adjective and the adverb that writers give that melodious and monotonous rocking effect to the sentence, its moving and interrogative rise and its calming and gradual fall, like a wave on the beach. With an emotion that is always identical, the reader's spirit must momentarily hold its breath and tremble, beg to be calmed, until at last it can breathe freely again when the wave of words falls back, with a final punctuation of gravel and a last little echo' (FTM, A Response to Objections (11 August 1912), in Rainey, Poggi and Wittman 2009: 126-27).

Valéry: 'He starts off powerfully from silence, warms up by degrees, expands, lifts, organizes his sentence, which at times builds up like an arch, supported by lateral propositions marvelously distributed round the central moment, rises, casting off its incidentals, surmounting them to come at last to its keystone and move downward again, performing prodigies of subordination and balance, until it arrives at its appointed term and the complete resolution of its forces' (*Collected Works of Paul Valéry*, trans. Martin Turnell. Princeton, NJ: Princeton University Press, 1968, p. 108).

4 Parataxis is hypotaxis without markers.

5 It is worth mentioning that Barthes's 'degree zero' comes from Brøndal's glossematics.

6 At the beginning of the century, linguists agreed that the most urgent grammatical problem was that of the parts of speech. Meillet and Vendryès recognized only the verb and the noun among the ten parts of speech usually mentioned in grammar books.

7 Maybe it does not belong to the paradigm of inflection, but to that of derivation; a 'quasi-derivative' in which the relation between root and affix is one of solidarity and not of conjugation (Togeby).

8 'In fact, the grammatical system includes affective language and stylistics may be considered as part of the theory of grammar or at least of syntax' (Hjelmslev).

9 Starting from Guillaume, Deleuze revisits the stoic concept of *aion*, then the definition of *haecceitas*: 'The infinitive and the aion'.

10 See H. Bergson, *Time and Free Will. An Essay on the Immediate Data of Consciousness* (1889), and *Matter and Memory* (1896).

11 See the recipe *Parole in libertà* (Words-in-liberty) by the aero-painter Escodamè; *Il Bombardamento di Adrianopoli* (The Bombing of Adrianopolis) by Pascà d'Angelo; or the *Tavola parola libera marina* (Seascape with Words-in-liberty) by the aero-painter Marinetti. Suitcase-food is served and aeroplatic statues are eaten.

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APPENDIX

Springtime Meal of the Word-in-Liberty

Walking across a spring garden through the gentle flames of a dawn full of childish timidity has plunged three young men dressed in white wool, without jackets, into a state of literary and erotic anxiety that cannot be appeased by a normal meal.

They sit down at a table out of doors under an arbour that allows the warm fingers of the sun to pass through.

They are immediately served with a synoptic-syngustatory plate, not hot, but gently warmed, of peppers, garlic, rose petals, bicarbonate of soda, peeled bananas and cod liver oil equidistant from each other.

Will they eat it at all? Will they taste just parts of it? Will they grasp the imaginative relationships without tasting anything? It's up to them.

Next they dutifully eat a bowl of traditional clear soup with tortellini. This has the effect of making their palates take flight quickly to search in the synoptic syngustatory plate for an indispensable new harmony.

Instantly they make an unusual metaphorical connection between the peppers (symbol of rustic strength) and the cod liver oil (symbol of ferocious northern seas and the need to cure sick lungs), so they try dipping the peppers in the oil. Then each clove of garlic is carefully wrapped in rose petals by the same hands of the three guests, who thus entertain themselves with the coupling of poetry and prose. The bicarbonate of soda is available for use as the verb in the infinitive of all food and digestive problems.

But tedium and monotony can arise after the tastebuds have savoured the garlic and roses. So then a buxom country girl in her twenties enters, holding in her arms a huge bowl of strawberries floating in well-sweetened Grignolino wine. The young men invite her, with high-flown words-in-liberty devoid of all logic and directly expressing their nervous condition, to serve them as quickly as possible. She serves them by tipping it over their heads. They end up eating, licking, drinking, mopping themselves up, fighting each other across the table with illuminating adjectives, verbs shut between full stops, abstract noises and animal cries which seduce all the beasts in the springtime, ruminating, snoring, grumbling, whistling, braying and chirruping in turn.

Formula by the Futurist Aeropoet Marinetti

Visual semiotics applied to the evolution process of cross-media adaptations

Raúl Gisbert Cantó

The concept of visual semiotics seems to have been framed in the field of static images, such as publicity or photography; however, this branch of semiotics offers an undeniable range of approaches to be applied to other media, such as the comic book or the cinema. Both products share a number of factors proper to their own features and origins, of which we highlight the adaptation processes they both present; in this sense, the concept of cross-media adaptation seeks to reflect how some features from one specific medium are adapted to another, even if they are alike in form and/or content. The process of adapting both images and text from a comic book to a film could involve the use of semiotics to explain how these processes take place. Thus, by the application of Peircean theories on semiotics to these two cross-media adaptations, we will try to analyse, in the present article, to what extent these theories provide the appropriate tools to carry out an extensive analysis of both comic book and film adaptations. To do so, a number of comic books and their adaptations to the cinema will be the corpus of the analysis. Finally, as a result, we will arrive at conclusions showing how the theories on visual semiotics could be applied to the audiovisual media and what repercussions this process of adaptation has had throughout the history of both the comic book and the cinema.

KEYWORDS visual semiotics, comic book, cinema, adaptation,
cross-media productions

Introduction

The concept of visual semiotics seems to have been applied to a wide range of both visual and audiovisual media, such as photography, comics, cinema and publicity; in a way, this branch of semiotic studies has always been present in the analysis of these kinds of me-

dia. However, there seem to be few studies of how this approach could become a useful tool for the analysis of an audiovisual corpus, especially regarding the process of adaptation from the comic book to the cinema; in this sense, the concept of *cross-media adaptation* seeks to reflect how some features from one specific medium are adapted to another, even if they are alike in form and/or content.

As Linda Hutcheon points out, 'when we call a work an adaptation, we openly announce its overt relationship to another work or works' (2006: 6). According to her research on adaptations, there are many ways of analysing adaptations, however, the opposition between fidelity and creativity seems to have been the 'criterion of judgment' to analyse an adapted work. One of the main points of this scholar is the development of the sense of recognition of an adaptation, that is, the feeling triggered in the audience when they realize the work they are consuming is an adaptation, which could entail changes and evident differences from the original source: 'recognition and remembrance are part of the pleasure (and risk) of experiencing an adaptation; so too is change' (Hutcheon 2006: 4).

This sense of recognition is also visible when adapting comic books to the cinema. One of the first adaptation studies that took into account the comic book as a source was carried out by Thomas Leitch, who analysed not only the style of the adaptation, but also the content and the medium of the adaptations: 'Comic book adaptations' performative styles depend less on any medium-specific comic-book look than on the individual style of their particular source and the relation they seek to establish to that source' (2007: 199). In his research on adaptations, Leitch bases his theories on the connection between intertextuality and hypertextuality, and how the 'hypertextual relations [...] shade off to the intertextual' (2007: 94). According to this view, the basic conception of adaptation should not be based on the degree of fidelity, but on the textual relations triggered by the process of the adaptation itself, that is, the links created within the work and how it is connected to other works, whether they are original sources or adaptations as well.

A range of theories have appeared mainly based on the adaptations from literature to film; on the other hand, very few of them focus on comic books as the main source for adaptations: 'the most commonly considered adaptations are those that move from the telling to the showing mode' (Hutcheon 2006: 38). In this paper, we are going to select one of the theories based on the adaptation of literature to the cinema and try to apply it to the area of the comic book, basing our research on the process of adaptation regarding the degree of fidelity and/or creativity and following the criteria presented by the previous scholars: Linda Hutcheon and Thomas Leitch.

In addition, since the comic book is a visual medium, it seems necessary to find an additional point of view when analysing adaptation from the comic book to the cinema. In this paper, we will demonstrate that visual semiotics based on Peircean theories, with the sign as the core element, would serve as a useful tool to carry out an extensive analysis of the adaptations of visual

and audiovisual media, the comic book and the cinema. To do so, a number of comic books and their adaptations to the cinema will be the corpus of the analysis, mainly focusing on the characters created by DC and Marvel, currently the two major publishers of comic books in the world.

Following the Marvel box office success of *The Avengers* (Whedon) in 2012, and *Avengers: Age of Ultron* (Whedon) in 2015, DC in 2017 launched *Justice League* (Snyder) in an attempt to reorganize its superhero universe, which Marvel had previously done with its own universe. Regarding these Marvel films, the main heroes presented in the plot are Ironman, Spider-Man, Hulk, Captain America, Thor, Hawkeye and Black Widow. Meanwhile, the main characters forming the Justice League are Superman, Batman, Wonder Woman, Aquaman, Flash and Ciborg. As they form a large group of characters to be analysed, we have taken into account two major selection criteria: box office success and the number of most recent adaptations produced from the comic book to the cinema. Considering these two aspects, we have chosen Ironman and Spider-Man as the main representatives of Marvel; due to the three recent adaptations to the cinema of the character of Ironman and the main role he has in the films where The Avengers are assembled, playing an important part in all of them, this character involves new changing elements to be analysed from a semiotic point of view. On the other hand, we have chosen the case of Spider-Man due to the large amount of films focused on this character in the last fifteen years (six in total) but performed by different actors: the Spider-Man in *Spider-Man* (Raimi 2002) is different from the *The Amazing Spider-Man* (Webb 2012) and from *Spider-Man: Homecoming* (Watts 2017). Regarding the DC characters, Superman and Batman have been chosen due to the release of the film *Batman V Superman: Dawn of Justice* (Snyder 2016) and their appearance in the film *Justice League* (Snyder 2017). Moreover, they are the DC characters that have been most often adapted to the cinema, so this entails a highlighted aspect to be taken into account for our analysis.

Finally, as a result of our analysis, we will arrive at conclusions showing how the theories on visual semiotics presented by Peirce could entail analytical tools to study the process of audiovisual adaptations and the final products deriving from it.

Peirce's semiotic theories

Peirce reworded his studies on logic and adapted them in order to create his semiotic theories, so we can deduce that this author falls within the field of the pragmatic semiotic tradition. His core idea is based on the universality of thinking, that is, the idea that states that human thinking should be unified and supported by a scientific approach. In turn, the semiotic theories developed by Peirce were created under the concept of *semiosis*. This concept involves a process that takes place in the mind of the interpreter of a sign, which likewise makes the sign to be formed as a sign. Thereafter, the sign fulfils its function of triggering an effect in

the person interpreting it. However, Peirce also developed the concept of *unlimited semiosis* (Karam 2014: 3), which states that the effect a sign has, and its subsequent interpretation, will lead to the manifestation of other processes in which another sign will have to fulfil its function of triggering an effect and of being interpreted. Thus, his doctrines of signs are closely related with visual semiotics and the representation of images.

The semiotic model of Peirce is based on triadic divisions and subdivisions, mainly due to their former background in logic. As a first approximation to the categorization of the sign, and on the basis of the remarks presented by Karam in his article *Introducción a la semiótica de la imagen* (2014), Peirce develops a triadic division about the process by which the construction of the representation of a sign in relation with the interpretant is formed in terms of *firstness*, *secondness* and *thirdness*. Within this division, we find another three subdivisions according to the analytical approach involved in the process of interpretation; thus, if the sign is considered as a bearer of simple qualities or general laws, Peirce divides the sign into *qualisign*, *sinsign* and *legisign*. The second subdivision is based in the relation that a sign maintains with the object it represents or with the interpretant of this sign and the terms proposed by the author are *icon*, *index* and *symbol*. Finally, signs can be divided according to the representation that an interpretant makes of the sign and the terms presented by Peirce are *rheme*, *dicent* and *argument*.¹ Hereafter, we are going to take into account the subdivision based on the relation between a sign and the object it represents and also how the sign is defined and structured in direct relation with cross-adaptation between the media of comic books and films.

The sign and its application to the audiovisual media

Peirce applies his research in mathematical logic to the conception of the sign and from this process, therefore, a number of categorizations and divisions are derived. Initially, his semiotics defined the sign as an element 'that is in place of another one under any aspect or capacity' (Zecchetto 1999: 52). However, in later years he reformulated this definition to understand the sign as 'an object which is in relation to its object, on the one hand, and to an interpretant, on the other, in such a way as to bring the interpretant into a relation to the object, corresponding to its own relation to the object' (Zecchetto 1999: 34). According to this last definition, any sign would be composed by a *representamen*, understood as the idea of the object being represented or the sign itself; by the *object*, the concept referred to by the sign, and, finally, by the *interpretant*, that is, the information interpreted by any person according to the intentionality of the sign. Nevertheless, these three elements constitute a complex relationship when they are applied to the field of the media, as we will see below.

If we analyse this triadic relation, we could observe that the elements composing it share a number of functions to categorize reality. Thus, Peirce states that signs create other signs,

called *interpretants*, as they are formed after the process of interpretation of a sign, in this case, a *representamen*. Due to this fact, an interpretant 'can be constituted by the development of one or more signs' (Zecchetto 1999: 52).

All these mental processes bear the interpretation of an idea, allowing us to communicate with the reality surrounding us, as Peirce considers the perception of signs as a way of directly relating to the world around us. For this reason, this factor of perceiving and interpreting a sign denotes a complex process because each entity could create a completely different interpretation of the same sign. As Zecchetto points out, 'the function of the interpretant in a determinate sign can change value and become a representamen of another sign' (1999: 54); that is, the interpretation made of a sign could constitute the representation of another sign, which would be different from the previous one. As an example, we can take the function of the 'Bat-Signal' in the Batman comic books, which appears in the night sky when Commissioner Gordon asks for help. The superhero interprets this sign as a warning, letting him know that someone is in trouble and needs his help; however, to any inhabitant in Gotham, it may simply represent a meeting between Batman and the Commissioner or just the fact that the vigilante is around in the city at night.

This new approach, based on the linking of signs with the perception of reality and the triadic divisions of the sign, was adopted by different semioticians to become the foundation of their studies referring to the analysis of the image from a semiotic point of view. These triadic divisions will develop the possibility of considering the sign not only as a linguistic or visual element in isolation, but of considering a sign as a linguistic-visual element in conjunction; that is, a sign that adopts both areas and coalesces into studies in which the word and the images are linked homogeneously. This new conception of sign, defended and backed by semioticians such as Metz (1974) and Eco (1977), will lay the foundations for the studies of two major audiovisual media: the comic book and the cinema.

In addition, Peircean triadic divisions provide a useful tool to analyse visual elements, as they entail an approach to analyse how information, such as characters, situations, settings, colors, etc., is adapted from the comic book to the film. As stated above, this paper will consider only the relation matching the sign with the object it represents, as images are clear examples of visual elements that refer to a certain entity. In this sense, the icon, the index and the symbol will represent something to be interpreted by a receiver, something bearing meaning.

Icon: the sign is linked with the object due to their similarities and common attributes. Peirce defines the icon as a *mental image* (Zecchetto 1999: 57), as the interpretant of the sign creates an image in his/her mind that is related with the sign perceived. Thus, it is perceived as a relation of resemblance between the sign and the object it represents. A clear example of an icon would be a photograph or a piece of art in a museum, as both of them represent a sign reflecting a reality based on similarity. In this sense, any element, either real or fictional, could be considered as an icon. In this particular case, relating this theoretical point with audiovisual

media, a clear example of an icon would be a frame in a film that adapts a vignette from a comic book, as they both create a relationship of visual similarity.

Index: this sign represents directly the object, so it is considered the neutral representation of any sign. The index is, thus, an indicator of the represented object because it links a physical object with another one, showing a clear connection. One of the most common examples used to explain an index is smoke, as it is an index that indicates the presence of fire. So, in a way, the index denotes a factual connection to its object. Relating this aspect to the area of comics and films, the Bat-Signal would be an example of an index, as it means that someone is in danger in Gotham city and needs the help of Batman.

Symbol: it is a sign that bears an arbitrary meaning, either because of a law or a previously established convention. In this sense, Peirce called symbolic signs the signs that consist in a rule, norm or habit. A symbol denotes by virtue of its interpretant. Examples of symbols would be the emblems of Superman (an S in capital letter) and Batman (a bat), as any interpretant of these signs would recognize that they are referring to the two superheroes.

A categorization based on the fidelity of adaptations

Nowadays, there are a number of categorizations of literary adaptations to the cinema; however, there are very few categorizations that are based on adaptation from the comic book to the screen. Taking into account this factor, we have opted to present one of the categorizations dealing with literature and we have adapted it to fit, as much as possible, the function of serving as a structural model to analyse the comic book adaptation to the cinema. Thus, in the following lines, the typology of adaptations of literature created by José Luís Sánchez Noriega in his work *De la literatura al cine* (2000) will be presented and we will analyse it as a conventional representation suitable for the media of the sequential arts, which involve both the comic book and the film.

According to the opposition fidelity–creativity, Sánchez (2000: 63-66) highlights four different kinds of adaptations. In the following categorization, based on the proposal offered by Sánchez, we assess the degree of difference and similarity between the original work (in our specific case, the comic book) and its adaptation to film. The categories given by Sánchez provide a gradation, so that we can find in one end the faithful adaptation from the comic book to the cinema and, in the other, an adaptation completely different from the original piece. Between these degrees of fidelity, we find two other categories that depend on the kind of adaptation according to the nuances emphasized. Thus, the categorization we propose is the following one:

Adaptation as illustration: this is a kind of adaptation that retells the story, characters and situations almost exactly as they appear in the comic book. In this sense, ‘the commentary

aspects are given, the dialogues are completely transcribed and figurative and visual elements are used' (Sánchez 2000: 64). We can find a clear example of this kind of adaptation in the graphic novel *Watchmen* (1986), created by Alan Moore and its later homonymous adaptation to the screen in 2009, directed by Zack Snyder. If we analyse both works, we would find some vignettes that seem to have been captured in the frames presented in the film. Something similar appears when the settings are taken into account, as they are recreated the same way they appear in the comic book; as a result, this novel seems to have been created in order to be adapted to the cinema. In the words of Liam Burke, this kind of adaptation as illustration can be defined as an 'intersection' which happens 'when the uniqueness of the original text is preserved to such an extent that it is intentionally left unassimilated in adaptation' (2015: 14).

Adaptation as transposition: in this case, both the form and the content of the story from a comic book are translated into film, highlighting the cinematographic strategies of this medium, so that there is a transposition from the world appearing in the vignettes to filmic language and cinematographic aesthetics. In a way, it is based on the equivalence between the content in the comic book and in the film. A vast number of the films adapted from comics would belong to this category, especially the superhero genre, as all the action, sequences and scenarios of these kinds of stories cannot easily be transferred to the screen; even though the use of special effects has allowed directors and producers to try to get close to comic books, there is a specific need for the vignettes' sequentiality to achieve the same effect that they produce in the reader of a comic. The comic books that narrate the origins of the superheroes are often excellent examples belonging to this category, as filmmakers, once they adapt the story and the content to the screen, try to keep as much of it as possible in order to maintain the continuity in both media. Some adaptations that will be analysed in the present article belong to this category, such as the adaptations of the comic books of Batman, Superman, Ironman or Spider-Man.

Adaptation as interpretation: this kind of adaptation is based on the change in the point of view of directors and producers of a film based on the story narrated in the comic book, so the audience will find the foundations of the comic along with a large number of nuances that will transform it into another story, different from the ones to be found in the published comic books. In this case, it could be said that these adaptations consist of an interpretation of what the comic book presents to its readers, as the emphasis in this category 'is based on highlighting the ideas, topics and feelings that determine the inner life of the work' (García 1990: 182). In the same way as the process of adaptation as transposition, a vast number of comic book adaptations would fit this category, especially the superhero, action and adventure genres; just the idea of having a main character in a comic book story is enough to produce some other stories where this character could maintain the status of the main character in the story shown in the film. As an example, we could point to the recent film *Suicide Squad* (2016) directed by David Ayer, as in this case, the aesthetic and background elements of the characters have been

kept but the story in the film is completely different from the rest of the stories published in the comic books.

Free adaptation: in this kind of adaptation, the cinematographic story is completely different from the original stories in the comic books, so the comic book only serves as an inspiration to create another story that would include, in all likelihood, a new setting, new situations and new characters, both main and minor ones. It is mainly about an influence that the comic book has on the film, but, when the final product is created, neither the content nor the interpretation have any relation with the original ones in the graphic novels. As Sánchez points out, this category 'does not work ordinarily on the text itself [...] but it responds to other interests and acts on different stages' (2000: 65), such as the structure of the action, the themes the characters deal with or the time and setting where the action takes place. The example we provide is the comic book series that served George Lucas to create the successful saga *Star Wars*, *Valérian and Laureline*, called initially *Valérian: Spatio-Temporal Agent* (Christin and Mezière 1967) created by Pierre Christin.² This sequential story narrates the adventures of two agents whose mission is to surf the universe keeping peace through time and space; this same idea was taken by George Lucas to create his adventures in outer space and it evolved until the appearance of the first film of the saga called *Star Wars: a New Hope* (Lucas 1977).

Application of Peircean concepts to the analysis of comic-book film adaptations

In this section of the article, we are going to put into practice the concepts presented in the theoretical section, using examples from the superhero comic books and their adaptations, with the aim of proving that the Peircean concepts described above would constitute useful tools for analysing the process of adaptation from the comic book to the film. At the same time, we will also prove that the categorization we have adapted proposed by Sánchez based on literature can work as a structural model for comic book adaptations, and that the categorization based on fidelity and the use of Peircean concepts as tools provide an approach to analyse cross-adaptation between comic book and film.

As mentioned above, Marvel and DC are the major publishers of comic books in the world; however, their approaches to the superheroes and their backgrounds are completely different. In the present paper, we will analyse comic books and films based on superheroes belonging to these two publishers as a way of framing and delimiting the scope of our research. We also must take into account that comic book films are products that absorb a wide range of influences, such as 'vigilante archetypes, urban crime, action sequences and heightened reality, coming together and evolving into a genre with conventions all of its own' (Burke 2015: 98). In this sense, different variations in the way of narrating comic book stories are expected, taking

into account several aspects such as the audience to which a story is addressed, the year and place of publication and also the kind of drawing that the comic book and the film presents. In a way, 'adaptations sought to emulate, even replicate, panel borders, transitions and layouts; they attempt to freeze motion pictures, visualize sound, and interpolate a host of codes that had previously been considered unique to comics. Furthermore, some filmmakers have used the malleability of digital tools to bring a measure of comic book "graphiation" to cinema' (Burke 2015: 221). The corpus of our research is based on three elements to be analysed and which will allow us to draw conclusions on whether or not the application of Peircean theories to the audiovisual media are likely to be successful. The first one relates to the setting of the action and the architecture, in regard to buildings and urban spaces. The second element is based on the emblems worn by the superheroes and what aspects we could infer from them. Finally, the last element to be analysed involves the costume of the superhero and how it triggers some effects on the reader and/or the audience.

The setting and the architecture

The first aspect that we will analyse is based on the setting, the specific location where the story in both the superhero comic books and the films takes place. It is necessary at this point to highlight the different concepts of setting that Marvel and DC have, as the first one commonly uses real cities, such as New York, Washington or Tokyo, and DC mixes both real and imaginary cities, having as a result places such as Gotham or Metropolis (the cities where Batman and Superman live respectively). One of the main reasons for this 'may account for more recent DC comics adaptations returning to traditional large-scale action sequences' (Burke 2015: 43), which means that the current trend when creating superhero stories is that the stories are commonly based on settings that originated in the first comic books. In this sense, directors and producers of the film adaptations take into account where the action takes place in the comic book and how to translate it into the filmic language: 'In adaptations such as *Batman* (Burton 1989) [...] architecture and performers reinforce the depth of field by providing lines of perspective typically found in comics' (Burke 2015: 258). In order to analyse both the setting and the buildings in the adaptations from the comic book to the film as Peircean signs, we have chosen the stories of Batman and Ironman, as the narratives where these two superheroes appear are completely different in their specific settings, cities and also buildings.

The city of Gotham, where Batman acts as the night vigilante, is an amalgamation of Pittsburg (Pennsylvania) and New York, mainly due to its high skyscrapers and the dangerous neighborhoods to be avoided at night. The Gothic atmosphere gives the name to the city, so the *interpretant* of this element, which also is a sign, could probably deduce what this city would look like. Both in comics and films, Gotham is depicted as a dark place, with a high crime rate, where corruption and violence seem to have taken over the whole city. This gloomy envi-

ronment surrounding the city works as a sign, specifically as a symbol in Peircean terms, as the image that Gotham offers is not only descriptive, but also a reflection of what the black and grey tonalities in the image mean. In the same way, architecture in Gotham also has a meaning, as the skyscrapers, churches, manors and the Gothic style in the adaptations are icons of what the readers can find in the comic books; these icons provide a direct relation of resemblance between these elements in the two media, so we can note that the process of adapting the architecture in stories about Batman, apart from being adaptations as illustration in terms proposed by Sánchez, convey meaningful signs, which in this case are icons due to their representative nature. However, due to the fact that most of the buildings are not real and specific in these plots, we could also note that several key buildings are free adaptations, as in the case of Wayne Manor, which is sometimes depicted as a medieval castle and sometimes as a contemporary luxury construction. It all depends on what it is being narrated in the plot.

In the same way, the city depicted in the stories of Ironman is New York, however, the meaning of this city and its appearance in the comic books and films of Ironman is completely different to the Batman ones. Most of the action takes place during the day, when the sun shines over the high skyscrapers. What this fact implies is that there is no room for crime and violence, that it is a safe place to live and that the problems will be solved outside the city. This is also a symbol, as the meaning of the light, the bright colours and the blue sky represent not only a sense of peace and tranquility, but also the physical environment of a safe city, and that is what the creators of the Ironman stories want to convey when depicting the city of New York.

As we can observe in the above analysis, the setting and the architecture are signs easily adaptable as illustration or transposition, as the characteristics of a city could be easily adapted to different media. They can also be icons or symbols, depending on the process of adaptation and on the inner features and possibilities of each medium: if the city is shown as it is, this sign will be an icon reflecting the similarities between them; on the contrary, if the city is depicted as a way of conveying a different meaning apart from its physical appearance, it will be considered a symbol. Nevertheless, adaptation as interpretation also fits in this category, as the directors and producers of the film could take any specific building from the comic books and adapt them to the screen in several ways, enlarging them or making them look brighter or darker depending on the scene. We note that adaptation as interpretation is also a key concept in superhero films, where there is enough room for producers to 'interpret' the information exposed in the original source, that is, the comic book.

The emblems

Another important aspect to be highlighted and which is closely related with the theoretical part of this article is the use of 'superhero emblems'. If we think about any famous superhero, recognizable imagery comes to mind: for example, the yellow capital letter S for

Superman, the black bat over a yellow oval background for Batman, or a black spider over a red background for Spider-Man. Consequently, we can see these emblems in a vast number of merchandising products, such as t-shirts, school bags, pencil cases, mugs, etc. The key point here is that these emblems are forged long ago, as the origins of these signs are to be found at the same time as the superheroes they represent were born. 'Even before these characters are adapted to cinema, they have already achieved the iconic status central to merchandising' (Burke 2015: 68). Therefore, not only has the representation of the superheroes changed, but so have the emblems they are linked to. For example, the bat in the emblem of Batman has changed since its creation, showing a bat in different forms and with a different background: sometimes it changes from yellow to white.

All these superhero emblems, in the same way as the comic books as a whole, provide visual content along with the written text, developing a concise medium of communication. This aspect of offering the readers clear and concise messages has been analysed by Burke, who states that comics, and emblems as an extension, 'rely on readily identifiable signs that leave little room for ambiguity. Thus, in the same way a clock must look like a clock, character types in comics tend to be explicit' (2015: 248). As a result, emblems embody a distinguishable element of specific visual signification for the readers, understood with no need of further clarification. In this sense, emblems are usually cases of adaptation as illustration or transposition, maintaining their design, colours and general meaning. We also find some cases of emblem adaptation as interpretation, as they can also appear not in their original form in the costume of the superhero, but painted on the wall of a building with different colours or with their shape modified to fulfil a cinematic purpose. However, it is difficult to adapt emblems through free adaptation, as the adapters need to stick to the emblems that have been used since their creation. Changing them will entail changing their whole meaning and what they represent.

Moreover, some emblems could trigger different reactions in the audience, as some of them contain more than a single meaning. As an example, below we will analyse the emblems representing Superman and Batman.

The emblem for Superman has always been characterized by a capital S in red over a yellow background; we can mainly see it in the costume of the superhero, but this element, as a sign, conveys different meanings. For example, the emblem of the S would be an icon if the model of the emblem that appears in the comic book is the same as that in the adaptation for the cinema, showing the same size, colour and even design. On the other hand, this emblem will be considered as a symbol because it represents Superman himself; that is, any comic book reader will easily relate this emblem with Superman, as a strong link has been created between these two elements since their first appearance, so, most certainly, Superman will also be represented by this emblem for the years to come.

The black bat presented in the emblem of Batman over a yellow background also leads to the analysis of this element as a triadic Peircean sign, as we have pointed out in the previous

paragraph about the emblem of Superman. In the same manner as the red S in Superman has been kept in the adaptation from the comic book to the film, the emblem of Batman still preserves the same colours and design, so we can state that this emblem in the films is also an icon of the emblem in the comic books; the key point in these signs is the fact that the representation of emblems in films adapted from comics commonly entails the idea of an icon. However, the emblem is a symbol since the figure of the bat over the yellow background is directly related with Batman and all the ideas and conceptions surrounding it, both in comic books and films. We could also say that, if Superman will always be represented with the capital red S, Batman will always be represented by a bat with its wings uplifted.

Additionally, if we analyse the evolution of the emblems within the adaptation from the comic book to the cinema, we can point out the fact that these emblems are tightly linked with the evolution of the costumes the superheroes wear, as most costumes show an emblem. In the next section we will focus on the costumes as a semiotic element and their analysis from a Peircean semiotic perspective and Sánchez's theory on adaptation fidelity.

The costumes

Costumes are an unavoidable and important element to be discussed in this article, as they bring colour, personality and a mark of distinction to the superheroes wearing them. The costumes worn can be analysed from two points of view: the first by analysing the colour and its effect on the reader, the second relating to the superhero and his interaction with the costume.

On the one hand, the colours in the superhero costumes are not a matter of coincidence or something happening by chance. Creators, writers and comic book artists choose the colours of the suits for a specific reason. In order to offer some examples, in this section we are going to analyse the costumes worn by superheroes such as Superman, Batman, and Spider-Man, using the Peircean terminology detailed above.

To begin with, the costumes of Superman and Spider-Man present the same colours (red and blue) but combined in a different way: in Spider-Man's costume, the colour blue is found around his legs and tights and the colour red covers the rest of the suit; Superman, in turn, originally wears a light blue costume and the colour red is found in his accessories: boots, trunks and cape. The colour red, among some other interpretations, is mostly used in clothes to disguise blood, which is in fact suitable for superheroes, who are used to fighting and being injured in daily quarrels. Blue offers contrast with red, which seems to match chromatically. The use of these two bright colours, especially in Superman, serves as an indicator that the superhero is close to the people, means that he will be visible for the citizens whenever needed. It is a way of showing transparency and a clean attitude towards the people who may need to be saved. In opposition to these bright colours, Batman's costume offers a dark version of the suit, using mainly grey and black. The reason for the use of these colours seems obvious, as this superhero is considered the

dark knight, the night vigilante of Gotham. The tonalities of grey and black allow him to hide in the shadows and also give him a terrifying and imposing appearance towards the villains in the city. So, in theoretical terms, the use of superhero costumes and their colours to create meaningful content would be related with the Peircean concept of symbol, as they are an indicator of the concepts represented. In the same way as the Bat-Signal has a meaning, both in the diegetic and extra-diegetic space, the red cape over a blue spandex costume triggers in the minds of the audience the image of Superman, and this fact is mainly due to the features and characteristics of the costume referring to the superhero; namely, the costume is a sign that represents the superhero. If the colours of the costumes entail symbols, their adaptation from the comics to the cinema will also entail, in most cases, adaptation as illustration, since the colours of the superhero and their meaning would be kept. However, when considering the process of adaptation, there will be some cases when the colours are altered in the costumes for cinematic purposes; thus, adaptation as interpretation and free adaptation are likely to appear. We find one major example of these changes in the adaptation of the colour of costumes when the superhero appears in films where special effects are a key aspect. The use of special effects is increasingly gaining ground in the cinematic business, especially in the superhero genre, so these two kinds of adaptation are becoming more popular in relation to the use of colours in films.

On the other hand, the costume in comic books not only acts as a symbol for the reader, but also as a defining element of the superhero wearing it. Changes in the adaptation of costumes could thus also bring new points of view on the character and could possibly affect the story and the situations narrated in the comic book. Such adaptations could entail a minimal change, which would be considered an adaptation as transposition, or, if the change is major and makes a notable difference, it could lead to a free adaptation. These changes may be analysed by using the concepts presented by Peirce in his theories on visual semiotics. If we compare Batman's costume in the comics and in the films, we can find a good example of this. Batman's costume is one of the suits in the history of comics that changes the most, from the fabric costume worn in the first film in 1966, to the armoured suit appearing in the film *Batman v Superman: Dawn of Justice* (Snyder 2016): 'it should be noted that *Batman Begins* displays the fidelity flux of other adaptations of episodic texts, with the film inspiring an armour-like redesign of Batman's costume in the comics. [...] *Batman Begins* is more greatly inflected by its comic book source(s) than previous adaptations of the character' (Burke 2015: 166). In using different kinds of costumes, the directors and producers of films can choose between changing their fabric, design or even colours, or try to adapt them as illustration, which is, according to the categorization given above, the intention of adapting them in the same way as they appear in the comic book. Due to this kind of adaptation, we could see different on-screen versions of Batman's costumes. The important change to be highlighted is the one accounting for the use of armour-like costumes instead of the traditional fabric suits. And the reason seems quite obvious: this kind of costume offers the superhero better protection and, at the

same time, gives him/her the body shape expected of a hero. As an example, 'Michael Keaton, Val Kilmer, and George Clooney may have lacked the muscularity of action stars, but their moulded rubber suits ensured Batman still had "musclebound anatomy' (Burke 2015: 253).

As we pointed out above, a costume entails a specific relation with the superhero wearing it, but costumes also highlight one aspect to be discussed: the face. The three characters we have chosen convey three different attitudes towards wearing a mask to be in disguise. The first one is Superman, who does not wear any mask, as he prefers to show his face to the world. We can find a sense of transparency in this action, as people regard Superman as a superhero that has nothing to hide, a crystal clear person. Also, the fact of showing his face could be considered as a sign, due to the interpretation we could derive from it: this superhero has nothing to hide, so people can trust him. The next superhero would be Batman, who is in the middle between Superman and Spider-Man, as he only covers half of his face. This trend of having the face half-covered plays a role as a complement of the costume: 'This feature is regularly emphasized by the hero's costume, with the lower part of their face often the only feature visible' (Burke 2015: 254). This highlights a semiotic element in comic books: the square jaw. This element could entail what, in Peircean terms, is called a symbol, as it reflects the idea of a strong and self-confident man. 'Not only do classic heroes such as Batman and Daredevil display a square jaw line beneath their masks, but characters such as the X-Men and Judge Dredd [...] also conform to this convention' (Burke 2015: 254). As we can observe, this trend has been kept throughout the years, as the validity of the symbol remains in the audience's mind. If the mask becomes an element to hide the identity of the superhero, the face being exposed, as we have seen with Superman, has a meaning: just as superheroes, defenders of good and enemies of evil, possess physiological elements such as the square jaw or the light face, villains, on the contrary, show their evil in their face. Features such as the diabolical smile, a furious stare or some scars also convey symbols, in Peircean terms, which represent the evil in the villains' faces and show a relation between the sign and its representation: 'Villains should be larger than life, and preferably grotesque. The Joker and Two-Face are perfect examples of Batman bad guys; they wear their villainy on their faces' (Burke 2015: 255).

Conclusions

Taking into account the previous study based on the application of Peircean concepts to the analysis of some comic books and film elements, such as the setting, the emblems and the costumes of the superheroes, we can draw two main conclusions in order to prove the validity of the Peircean theories on the sign as tools for the analysis of audiovisual material, having as a support the theories of Sánchez regarding the degree of fidelity of the adaptations from comics to film.

The first conclusion is related to the application of visual semiotics to the audiovisual media. It has been proved that the theories developed by Peirce could act as a tool in order to

analyse audiovisual elements, in this case, both comic books and films. The visual nature of these products leads to the perspective of considering them as signs; as a result, they can be observed and studied by applying a semiotic approach. We can conclude from this analysis that, taking into account the large number of differences of these media, both the comic book and its adaptation to the screen can be studied with the proposed semiotic tools. Moreover, the fact that both media convey different kinds of signs has to be highlighted, as in some cases, for example, one sign will be considered as an icon in one medium and as an index in respect to the other medium. As a consequence, we can state that each medium works with a range of signs, which, on some occasions, can share a number of similarities in both media.

The second conclusion is based on the relationship between the Peircean sign and the theory of adaptation proposed by Sánchez. Fidelity in the process of adapting from comic book to film plays an important role when analysing these products, as the readers and the general audience seek faithful representations of the superheroes from the comics in the film. The issue of fidelity in adaptation, as tested above, can also be analysed from a visual semiotic perspective using Pierce's theories as a basis. Thus, the degree of fidelity will also be reflected in terms of icons, indices and symbols, which have proved to serve as a useful tool for this kind of analysis.

NOTES

1 This division is related to the speech acts proposed by Searle (1976), who divides these acts into three elements: locutionary, illocutionary and perlocutionary.

2 This information has been found on the following web page: <https://es.gizmodo.com/el-mar-avilloso-comic-frances-en-el-que-george-lucas-se-1748135394>

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Pour une sémiotique pilotée par la méthodologie

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L'une des difficultés persistantes de la sémiotique, comme le rappelle le texte d'orientation proposé par la revue Punctum, est l'écart qui s'est installé entre les spéculations théoriques et les réflexions épistémologiques, d'une part, et les méthodes et résultats de la description et de l'interprétation des données, d'autre part. Pour tenter de résoudre le problème constaté, nous proposons ici d'inverser l'ordre habituel des priorités, et de considérer que la sémiotique doit être pilotée par la méthodologie et non directement par l'épistémologie. A cette position de principe, nous ajoutons deux critères : (i) la capacité de la méthode à pouvoir rendre compte de la singularité des objets analysés, et (ii) l'articulation de cette méthode avec celle des disciplines voisines qui s'occupent des mêmes objets. Notre proposition s'articulera donc en deux moments : (1) un examen détaillé, dans la théorie du langage, des conditions sous lesquelles il est possible, en même temps que la structuration de la forme, de prendre en considération les variations substantielles, et (2) une réflexion, fondée sur les résultats du premier point, sur le traitement des singularités pratiques à l'interface entre la sémiotique et l'ethnologie-anthropologie. L'ensemble est une contribution en faveur d'une diversification contrôlée des régimes méthodologiques de la sémiotique.

MOTS-CLES : interdisciplinarité, structuration de la forme, variations substantielles,
 singularité, régimes sémiotiques, régimes méthodologiques

Introduction

L'une des difficultés persistantes de la sémiotique, comme le rappelle le texte d'orientation proposé par la revue *Punctum*, est l'écart, pour ne pas dire la béance, qui s'est installé entre les spéculations théoriques et les réflexions épistémologiques, d'une part, et les méthodes et résultats de la description et de l'interprétation des données, d'autre part. Il en résulte qu'il

est pratiquement impossible aujourd'hui d'apprécier clairement quels sont les résultats scientifiques acquis ou attendus de la recherche sémiotique, et que, à l'encontre des ambitions affichées au milieu du XX^{ème} siècle, les pratiques d'analyse qui se disent « sémiotiques » se dissolvent dans les usages académiques courants des disciplines, notamment celles qui étudient les médias contemporains.

On peut voir également comme autres effets dommageables de cette situation : (i) l'inconséquence générale des typologies sémiotiques théoriques, qui n'engendrent guère de différenciation méthodologique, et se satisfont de procédures d'analyse uniformes, voire indistinctes, (ii) la trop fréquente incapacité des analyses sémiotiques à rendre compte de la spécificité individuelle de chaque objet d'étude, et (iii) la tendance générale à effacer d'emblée, par une sorte de coup de force théorique et méthodologique, l'hétérogénéité et la diversité intrinsèque des données à prendre en compte pour l'analyse sémiotique.

Cette situation découle elle-même de l'incertitude qui pèse sur le statut épistémologique de la sémiotique, en raison du sous-bassement scientifique et disciplinaire disparate qui la caractérise. Pour affermir et expliciter les liens entre épistémologie, théorie, analyse et constitution des données, il faut en effet assumer pleinement le statut empirique et inter- (ou trans-) disciplinaire de cette pratique de construction du sens. Sous cette condition, la constitution des données devient inséparable de leur élaboration théorique, la méthodologie de l'analyse et les choix épistémologiques s'ajustent réciproquement, la diversité et l'hétérogénéité constitutive des objets étudiés est prise en compte dans les propositions théorico-méthodologiques, et surtout, tout cela a lieu au cours d'un dialogue entre la sémiotique et les autres « sciences du sens » qui occupent déjà le terrain.

Cette contribution reposera sur deux choix assumés, qui donneront lieu à deux développements consécutifs : (1) le premier porte sur l'horizon théorique de référence, qui est choisi pour sa capacité à entretenir le dialogue entre la sémiotique et la théorie du langage, et plus précisément la linguistique théorique ; (2) le second porte sur l'un des aspects de la méthodologie, à savoir la capacité de la sémiotique à rendre compte de la spécificité des objets qu'elle analyse, en interaction avec les sciences directement concernées par ces objets. D'un côté, il est question de l'une des interfaces entre la sémiotique et les sciences humaines et sociales : l'interface avec la linguistique. De l'autre côté, il est question de la nature de ce que l'on est en droit d'attendre d'une discipline de recherche (la sémiotique) qui s'intéresse aux œuvres et en général aux produits de la culture : en ce cas, la projection de modèles généraux ne suffit pas à satisfaire cette attente, puisque chaque œuvre, chaque objet, tout en participant de lois plus générales, ne vaut culturellement qu'en proportion de son irréductible singularité.

L'objectif de cette étude sera donc d'examiner, dans l'interface d'abord avec la linguistique, et ensuite avec l'ethnologie, comment la sémiotique peut produire des analyses individualis-

antes, sans pour autant rompre avec les principes et les méthodes inspirés par la théorie du langage, tout en s'adaptant à d'autres sciences humaines et sociales, selon la nature des objets analysés.

La variation substantielle dans la théorie du langage

La nécessité de questionner la dimension méthodologique de la sémiotique en tant que science de la signification n'est pas qu'une urgence qui se fait sentir subitement face à l'incertitude qui pèse aujourd'hui sur son statut institutionnel. Il s'agit d'une question de fond qui, au regard même de l'histoire de la sémiotique, a toujours présidé à sa définition en tant que projet de recherche inspiré par la théorie du langage. Louis Hjelmslev, dont le rôle est central à cet égard, engage le sujet dès son article « Sur les rapports entre la phonétique et la linguistique » publié en 1938 (avant *Prolegomènes à une théorie du langage*), puis le prolonge en 1954 dans « La stratification du langage », (après les *Prolegomènes*), lorsqu'il entreprend de poser et de préciser sa définition de la langue face à celle proposée par Ferdinand de Saussure.

Ce qui est en question, c'est le statut précis de la dichotomie « forme/substance » telle qu'il l'entend. Il s'agit de fonder une perspective analytique face à la perspective déployée dans *Le Cours de linguistique générale* (Saussure, 1995 [1916], « La valeur linguistique »), une perspective « étiologique », dans la mesure où ce qui anime Saussure consiste d'abord à définir les conditions de fonctionnement de la langue, et aussi à dégager les raisons immanentes pour lesquelles elle fonctionne ainsi. Chez Hjelmslev, deux moments retiennent l'attention comme ayant particulièrement contribué à cette élaboration, d'une part « l'introduction du concept de matière », d'autre part « l'élaboration d'une pensée de la forme comme notion d'épistémologie générale ».

Le concept de matière s'impose à Hjelmslev, lorsqu'il s'engage à clarifier son approche de la substance, face à celle de Saussure, décrite comme une masse amorphe, purement ontologique, à l'inverse de la langue qui, elle, serait une forme, c'est-à-dire le produit d'une articulation :

On pourrait appeler la langue le domaine des articulations [...] chaque terme linguistique est un petit membre, un articulus où une idée se fixe dans un son et où un son devient le signe d'une idée. La langue est encore comparable à une feuille de papier : la pensée est le recto et le son le verso : de même dans la langue, on ne saurait isoler ni le son de la pensée, ni la pensée du son ; on n'y arriverait que par une abstraction dont le résultat serait de faire de la psychologie pure ou de la phonologie pure.

La linguistique travaille donc sur un terrain limitrophe où les éléments de deux or-

dres se combinent : cette combinaison produit une forme, non une substance. (Saussure 1995 [1916] : 157)

Tel qu'il l'aborde, Hjelmslev considère la *matière* de deux manières différentes. Il la considère d'une part comme un donné physique, préexistant à la langue, ce qui serait l'équivalent de la substance ontologique de Saussure, c'est-à-dire qu'elle ne s'offre qu'à une possibilité d'abstraction ; d'autre part, comme une substance subordonnée à une forme.

La première approche est un dédoublement de la perspective étiologique de Saussure, mais avec une nuance de taille, soit le passage suivant retenu notamment par la linguiste Anne-Gaëlle Toutain (Toutain 2013) lorsqu'elle s'emploie à clarifier ce fait chez Hjelmslev :

Les sons en tant que données physiques sont la matière de l'expression qui est spécifiquement imprimée par la forme de l'expression linguistique et, du même coup, se présente comme une substance face à la forme. Aussi longtemps qu'on considère la matière en tant que telle, on est en présence de phénomènes physiques ; dès qu'on considère la matière en tant que substance subordonnée à la forme, on est en présence des sons du langage. [...] Dans le monde des idées aussi, la langue, en informant la matière, pose des frontières [...] Cette mise en forme du contenu transforme la matière du contenu en substance du contenu, et les idées deviennent des idées langagières, c'est-à-dire des concepts. (Hjelmslev 1973 : 182-222)

La nuance apportée est d'un intérêt notable, elle tranche définitivement entre la substance ontologique et celle décrite comme linguistique. La substance ontologique, envisagée comme « phénomènes physiques » est celle retenue par Saussure, et elle préexiste à la langue. Quant à la substance linguistique, dépendante de la langue comme forme, il est intéressant de voir que c'est elle qui préside à la reconnaissance des sons comme « matière de l'expression », c'est-à-dire comme spécifiquement imprimée par la forme de l'expression linguistique ; et que c'est aussi elle qui, par la mise en forme du contenu, transforme la matière du contenu en substance du contenu : « et les idées deviennent des idées langagières, c'est-à-dire des concepts. », dit très précisément Hjelmslev. Il en est ainsi de la référence convoquée par Hjelmslev pour soutenir ce fonctionnement particulier de la substance linguistique, le principe de la *per-tinence abstractive* de Karl Bühler : « la matière du langage est traitée comme substance pour une forme linguistique [...] l'opération intellectuelle d'abstraction par laquelle nous passons de la matière de l'expression à la forme d'expression est très exactement analogue à celle qui, dans le domaine du contenu, fait passer de la matière du contenu à la forme du contenu », souligne Hjelmslev (Hjelmslev 1973 : 152).

On pourrait alors reconnaître à la *substance* une position médiane de sélection de la pertinence : à l'interface entre la *matière* (ontologique) et la *forme* (linguistique), d'un côté la substance recueille ce qui, de la matière, est pertinent pour accéder à la forme, et de l'autre

côté, elle témoigne du fait que les abstractions formelles ne sont pas définitivement coupées des réalités existentielles. Ce type de médiation pourrait être rapproché de celui que Pierce accorde au *fondement* (« ground ») dans l'extraction d'un *objet immédiat* parmi toutes les facettes disponibles de l'*objet dynamique*. L'objet immédiat est directement impliqué dans la constitution de tel signe, alors que l'objet dynamique manifeste tout le potentiel signifiant non exploité dans le signe en question.

Le principe de la *pertinence abstractive*, élaboré à la lisière des développements de Troubetzkoy sur la phonétique et la phonologie et avec en arrière-plan ses travaux en psychologie, est ce qui permet à Karl Bühler d'établir l'intérêt de la langue (il parle plus précisément du langage) pour comprendre le type de relations qui unit un même signe à la multiplicité de ses variations. Son point de départ, élaboré dans son étude consacrée au « Développement mental de l'enfant », est un essai, en opposition au monisme des principes, pour aborder tout phénomène dans sa multiplicité. En passant par la parabole de l'enfant, Bühler introduit le concept de vision orthoscopique, à savoir la saisie d'un objet selon une vue de profil. Selon ce concept, explicitement exposé par Perrine Marthelot dans son ouvrage *Karl Bühler, du contexte à la situation : La signification*,

lorsqu'il reproduit un objet du monde, l'enfant positionne la plupart du temps sa représentation de l'objet selon le point de vue de l'angle unique qu'en donnerait un œil placé perpendiculairement à lui. Pour représenter une chaise, l'enfant trace trois traits d'un profil, selon la position d'un observateur placé perpendiculairement à l'objet. Il ne reproduit pas la complexité de l'objet, mais il sélectionne un aspect, celui de la forme orthoscopique qui prime sur les autres. (Marthelot 2012 : 72)

Partant de cette parabole, Bühler constate notamment que la forme orthoscopique est prépondérante dans nos représentations des choses en raison d'une tendance de localisation orthogonale, c'est-à-dire d'une tendance à localiser les impressions des figures perpendiculairement à la ligne de vue. De cette manière, l'aspect sélectionné de la vision orthoscopique se distingue ainsi de la perspective, pour ne donner accès, dans une vue perpendiculaire et sélective, qu'à une partie de l'objet, sans donner accès implicitement aux autres vues possibles et aux autres aspects de l'objet.

Or, selon Bühler, tout objet, tout signe est avant tout une unité complexe, susceptible d'être saisie sous plusieurs points de vue, et si on est obligé d'en choisir un seul à la fois, il faut que les autres soient implicitement présents, à titre potentiel, ce qui revient à rétablir une perspective. Dans ses propositions, Bühler y parvient en introduisant son modèle instrumental du langage ; soit ses trois fonctions du langage, définies comme les trois modes possibles de la variation du signe linguistique relativement aux trois pôles de la situation de communication:

Le langage est de part en part un système de signes, souligne Bühler. Par conséquent

un même signe peut être compris tantôt comme symptôme d'un état intérieur (dans la réalisation de la fonction de manifestation), tantôt comme un signal guidant le comportement doué de sens (dans la fonction d'appel), tantôt comme symbole dans la fonction de représentation, en vertu du principe de pertinence abstractive à l'événement concret de parole. C'est en raison de ce principe de sélection des aspects que Bühler est en mesure d'apporter une réponse à la question du type de relation qui unit un même signe à la multiplicité de ses variations. (Marthelot 2012 : 54)

Le principe de la *pertinence abstractive* se justifie ainsi chez Bühler dans la mesure où il permet de définir le rôle central du langage (la langue hjelmslevienne) dans la mise en forme du signe, c'est-à-dire comme un lieu de sélections. C'est en effet le parti pris affiché par Hjelmslev :

La reconnaissance du son du langage s'effectue donc au prix d'une abstraction, en écartant certains aspects de la matière phonétique donnée, qui paraissent sans pertinence pour la forme linguistique, et en considérant que d'autres aspects sont au contraire pertinents ; on les considère ainsi tantôt comme genre proche, tantôt comme différence spécifique par rapport aux paramètres définitoires du son du langage. On met en jeu, dans cette analyse, le "principe de la pertinence abstractive" selon l'expression de K. Bühler ; la matière du langage est traitée comme substance pour une forme linguistique. [...] l'opération intellectuelle d'abstraction par laquelle nous passons de la matière de l'expression à la forme de l'expression est très exactement analogue à celle qui, dans le domaine du contenu, fait passer de la matière du contenu à la forme du contenu. [...] Toute forme linguistique du contenu, tout concept linguistique doit être défini de telle sorte qu'on écarte certains éléments de signification comme variantes sémantiques, et au contraire qu'on intègre les autres, comme paramètres pertinents, à la définition. (Hjelmslev 1973 : 151-52)

L'on sort ainsi définitivement d'une ambiguïté révélée auparavant, dans le chapitre « Accent, intonation, quantité » et qui traduisait de ce point de vue les questions liées au passage de la substance à la forme. La question annoncée devient particulièrement celle du passage de la matière à la forme, où la substance joue un rôle de médiation, et surtout de *potentiel d'aspects* pour une mise en perspective du signe. C'est un des points d'intérêt, sinon le principal, lorsque dans « La stratification du langage », Hjelmslev choisit plus tard de poser la question des strata, c'est-à-dire des rapports entre la double distinction introduite par Saussure entre *forme* et *substance* et entre *contenu (signifié)* et *expression (signifiant)*.

Ayant abouti, comme on le sait, grâce à la doctrine glossématique, aux quatre grandeurs que sont la substance du contenu, la forme du contenu, la forme de l'expression, la substance de l'expression, il revient sur une conséquence essentielle de ce résultat, dont une des incidences, souvent passée inaperçue, est en lien avec la méthode d'analyse habituellement

retenue en sémiotique : il s'agit de la manière dont les relations entre ces grandeurs sont en général envisagées. En interrogeant les différences et les analogies entre les grandeurs ainsi élaborées, Hjelmslev parvient à une hiérarchie de trois classes de strata : 1° plan du contenu/plan de l'expression ; 2° forme du contenu/substance du contenu ; et 3° forme de l'expression/substance de l'expression. S'il est vrai que, de cette manière, ces classes se laissent concevoir ainsi tant du point de vue syntagmatique que du point de vue paradigmatique, « donc comme des chaînes ou comme des paradigmes, respectivement », Hjelmslev observe surtout une propension à la seule conception syntagmatique lorsque ces strata se présentent à l'analyse immédiate. Autrement dit, alors même qu'il est possible de concevoir ces strata comme membres d'un paradigme, ne sont pris en compte habituellement, pour les deux plans, que la seule relation sémiotique ou de solidarité ; et pour la forme et la substance, la seule relation de manifestation ou de sélection, « la substance sélectionnant la forme », à l'intérieur de chaque plan. Hjelmslev propose l'explication ci-après, somme toute logique et qui, *in fine*, justifie un peu plus a posteriori le mode de structuration de la fonction sémiotique :

Puisque la détermination (fonction unilatérale entre la substance comme variable et la forme comme constante) n'est valable que du seul point de vue syntagmatique (comme une sélection) tandis que du point de vue paradigmatique il y a réciprocity (plus particulièrement complémentarité) entre forme et substance, la substance ne peut jouer le rôle de variable que dans les cas nets où pour l'analyse immédiate le syntagmatique est seul en cause [...] Il paraît certain que l'interdépendance constituée par la fonction sémiotique est d'ordre nettement syntagmatique (donc, nous l'avons une solidarité) et que, en conséquence de ce fait, la relation sémiotique doit être considérée comme contractée par la forme du contenu et la forme de l'expression seules, sans le concours des substances. (Hjelmslev 1971 [1954] : 171)

La proposition de Hjelmslev devient heuristique quand, en lien avec cette explication, et en prolongement avec « Sur les rapports entre la phonétique et la linguistique », il argumente à nouveau en faveur de la substance comme matière. L'enjeu central est ici celui de la commutation, c'est-à-dire des jeux de corrélations entre variantes, en tant que ce qui organise « l'analyse immédiate » à n'importe quel stade de chaque plan.

À partir du moment où il est question d'envisager une identification des éléments qui contribuent à une exigence de commutation, la substance, selon Hjelmslev, devient nécessaire de fait, alors que pourtant elle ne participe pas à la fonction sémiotique, comme nous venons de le voir ; elle « s'impose » (Hjelmslev 1973 :72), dit-il précisément. Nous retrouvons encore une des différences essentielles qui distinguent Hjelmslev de Saussure. Le plan d'où procède la commutation, c'est-à-dire l'identification d'éléments qui en dérivent, « ne se réduit plus à une forme pure (Saussure), il devient un plan du contenu et un plan de l'expression respec-

tivement ». En d'autres termes, avec la commutation, l'on n'a pas d'autre choix que de se situer d'emblée dans la seule sphère sémiotique. C'est en effet le point d'orgue de « La stratification du langage ». Hjelmslev construit sa démonstration à travers ce qu'il présente comme un « fait bien connu » :

C'est un fait bien connu, par exemple, qu'une seule et même forme de l'expression peut être manifestée par des substances diverses : phonique, graphique, signaux par pavillons, etc. On hésite souvent devant ce fait ; on l'explique de façons diverses. On peut le discuter, mais on ne peut l'écartier. Le fait reste. (Hjelmslev 1971 [1954] : 173)

Il en déduit trois remarques essentielles. La première, sous la forme d'une précaution, concerne la nature des substances ainsi décrites. Dans la mesure où elles opèrent de cette manière, en tant que manifestantes, ces substances, dans la terminologie glossématique, ne peuvent se comprendre alors qu'en tant que déjà sémiotiquement formées. Or, ceci devrait paraître paradoxal, puisqu'il est aussi des cas où une même analyse différenciée d'un plan de l'expression peut fournir deux formes sémiotiques différentes. Par exemple indique Hjelmslev, « dans le cas normal d'une langue telle que le français ou l'anglais, l'analyse phonématique et l'analyse graphématique du plan de l'expression ne feraient que fournir deux formes sémiotiques différentes manifestées par des substances différentes, ce qui ajourne la contrainte d'une formation sémiotique préalable ». En d'autres termes, même si l'exemple pris n'est pas des plus efficaces dans une telle hypothèse, la perspective conduisant à envisager des substances non sémiotiquement formées va donc aussi de soi tout naturellement.

C'est ce constat qui conduit à l'apport heuristique que nous reconnaissons à « La stratification du langage ». Selon Hjelmslev, l'enjeu est moins celui de la multiplication des formes qui, chacune, sont à même d'en appeler à la ou aux substances qui les manifestent (sémiotiquement formée ou non) ; cet enjeu concerne l'ordre de la manifestation ainsi portées par les substances, lequel n'opère jamais que dans un sens allant de la (ou des) substance(s) vers la forme : « on voit du même coup qu'il est impossible de renverser les termes et de prétendre qu'une même substance puisse revêtir des formes sémiotiques différentes » (Hjelmslev 1971 [1954] : 174), puisque c'est la substance qui porte le potentiel de variations et d'aspects. Hjelmslev revient alors au terme de *matière* pour désigner ces différentes sortes de substances. De cette manière, il n'est plus nécessaire de distinguer entre les substances sémiotiquement formées et celles sémiotiquement non formées. Mais, poursuit-il, cela permet aussi de dire, sans qu'il y ait contradiction, qu'une même matière (par exemple la matière phonique, graphique, etc.) peut servir à manifester des formes sémiotiques différentes ; et cette matière, sous peine d'échapper à la connaissance « doit être scientifiquement formée, du moins à un degré qui permette de la distinguer d'autres matières ».

La deuxième remarque, indicative, une fois le terme de *matière* établi, concerne le cadre

d'effectuation de cette multiplicité des *substances*. Par rapport à la forme sémiotique, cette multiplicité des substances ne vaut que pour la forme de chaque plan pris à part : pour la forme du contenu et pour la forme de l'expression. Il y a donc maintien d'une relation arbitraire entre les deux plans. Du coup, il est intéressant de retenir qu'une même forme du contenu est à même d'être exprimée par plusieurs formes d'expression et inversement.

Enfin la troisième remarque, Hjelmslev l'expose comme une suite naturelle de l'évidence attestée de la multiplicité des substances. Elle concerne ce qu'il serait justifié de considérer comme la structure interne de la substance : « Enfin, dit-il très exactement, on ne saurait signaler le fait constitué par la multiplicité des substances sans insister tout d'une haleine, sur un autre fait qui vient le compliquer apparemment : nous voulons dire qu'une même substance comporte à son tour plusieurs aspects, ou, comme nous préférons dire, plusieurs niveaux ». (Hjelmslev 1973 : 175). Il en est ainsi de la substance de l'expression, par exemple la substance phonique :

On sait que la substance phonique prise dans son ensemble et dans le sens le plus large du terme demande tout au moins une description physiologique (dite articulo-latoire, myocinétique, etc.) et une description purement physique (ou acoustique, dans le sens propre de ce terme), et qu'il faut y ajouter sans doute une description auditive, selon l'aperception des sons du langage par les sujets parlants. En principe, les autres substances de l'expression ne se comportent pas autrement : il y aura pour elles, tout au moins une description physique et une description par apperception. (Hjelmslev 1971 [1954] : 175)

Il en est également ainsi de la substance du contenu :

De toute évidence, c'est la description par évaluation qui pour la substance du contenu s'impose immédiatement. Ce n'est pas par la description physique des choses signifiées que l'on arriverait à caractériser utilement l'usage sémantique adopté dans une communauté linguistique et appartenant à la langue qu'on veut décrire ; c'est tout au contraire par les évaluations adoptées par cette communauté, les appréciations collectives, l'opinion sociale. La description de la substance doit donc consister avant tout en un rapprochement de la langue aux autres institutions sociales, et constituer le point de contact entre la linguistique et les autres branches de l'anthropologie. C'est ainsi qu'une seule et même « chose » physique peut recevoir des descriptions sémantiques bien différentes selon la civilisation envisagée. (Hjelmslev 1971 [1954] : 175)

Nous en venons alors à l'apport effectif de « La stratification du langage » dans l'économie générale de la sémiotique. Justifiée par l'idée de matière, la possibilité d'une multiplicité des substances, par ces derniers découpages, semble autoriser ainsi, de fait, toute latitude pour

ancrer concrètement la *mise en perspective* (cf. supra) de l'analyse, c'est-à-dire la part méthodologique de la sémiotique.

Il s'agit d'une véritable découverte, mais dont on a rarement, sinon jamais, tiré toutes les conséquences dans la pratique habituelle de la sémiotique. Et peut-être, au moins pour partie, avec quelque raison. Nous parlons de substance, autrement dit cette grandeur du système sémiotique qui par définition opère hors ou tout au moins en deçà de la fonction sémiotique. Il semble donc difficile, voire anti-sémiotique, de souhaiter en rendre compte telle quelle dans une analyse sémiotique. En réalité, ce serait n'avoir pas questionné suffisamment le niveau précis d'où elle exercerait sa pertinence. Or Hjelmslev lui-même en souligne déjà la portée, dont il est clair que loin de compromettre la fonction sémiotique, la substance, à travers sa structure ainsi décrite, est très justement ce qui lui garantirait son sens ou sa teneur, c'est-à-dire, pour tout objet, cette visée, variable d'un contenu intentionnel à l'autre, qui en fonde l'individualité. Il suffit encore de lire Hjelmslev pour cela :

Non seulement 'cheval', 'chien', 'roi', 'montagne', 'sapin', etc. seront définis différemment dans une société qui les connaît (les reconnaît) comme indigènes et dans telle autre pour laquelle ils restent des phénomènes étrangers – ce qui d'ailleurs n'empêche pas, on le sait bien, que la langue dispose d'un nom pour les désigner, comme par ex. le mot russe pour l'éléphant, *slon*. Mais l'éléphant est quelque chose de bien différent pour un Hindou ou un Africain qui l'utilise et le cultive, qui le redoute ou qui l'aime, et d'autre part pour telle société européenne ou américaine pour laquelle l'éléphant n'existe que comme un objet de curiosité exposé dans un jardin d'acclimatation et dans les cirques ou les ménageries, et décrit dans les manuels de zoologie. (Hjelmslev 1971 [1954] : 176)

Il est donc possible de faire un pas de plus pour déterminer où se situe la question. Il est clair que les préalables de la fonction sémiotique ne sont en aucune manière reconsidérés. Celle-ci demeure centrale, même si elle est maintenant confrontée à *une dynamique de variations et d'aspects soumise à une perspective*. Ce qui reste et qui est révélé par ces descriptions de la substance est de savoir où cette fonction prend concrètement effet, autrement dit ce qui la fonde. En suggérant une série de premiers niveaux d'organisation (les niveaux physiologique, physique et par apperception pour la substance de l'expression et les évaluations adoptées par la communauté pour la substance du contenu – appréciations collectives, opinion sociale), on voit bien où Hjelmslev situe la tâche. Elle est très clairement méthodologique. Analyser, oui, mais analyser quoi ? Telle serait la question principale. L'on est alors invité à s'orienter vers une approche de l'analyse sémiotique plus attentive à la diversité, plus soucieuse des ancrages singuliers et individualisants de la sémiose ; assurément comme dans bien d'autres sciences humaines déjà éprouvées sur le sujet.

Anthropologie de la minimalité

Les conséquences de cette discussion sur le concept de substance, et sur ses rapports avec la matière et la forme, sont bien plus qu'épistémologiques et spéculatives : elles sont méthodologiques, puisque dans la procédure d'analyse elle-même, si l'on veut mettre en œuvre les principes d'exhaustivité et d'adéquation, la manière dont est prise en compte la diversité et la variabilité qui environne la structure centrale du système, construite en immanence, est décisive. La notion de *mise en perspective*, notamment, devient une obligation de méthode : on ne peut plus faire comme si le point de vue de la structure centrale du système n'était pas un point de vue, et comme si le seul fait de l'adopter dispensait de prendre en considération, ou au moins de préserver les éléments repoussés en marge ou en arrière-plan, ou renvoyés à un point de vue alternatif et complémentaire. Chez Saussure lui-même, la question du point de vue est déterminante pour la méthode, et on peut même considérer que la totalité des dualités qu'il manipule (ou qu'on lui fait manipuler) dans le *Cours* sont des *points de vue complémentaires*, c'est-à-dire que pour chaque paire conceptuelle (par exemple diachronie/synchronie, ou paradigmatique/syntagmatique), adopter un point de vue, c'est renoncer à l'autre, et réciproquement, tout en sachant que les deux sont indispensables à la connaissance du phénomène étudié, même si l'un des deux semble, provisoirement, plus marginal ou secondaire que l'autre.

Le problème qui se pose maintenant est celui de l'éventuelle généralisation de ce principe de méthode, élaboré à l'interface avec la théorie du langage. Qu'en reste-t-il quand on affronte des objets d'une autre nature, et manipulés principalement par d'autres disciplines ? Quelles transformations doit-il subir ? Nous proposons pour répondre à ces questions d'examiner maintenant ce qu'il en est de l'approche sémiotique des *situations pratiques*, à l'interface notamment de la sémiotique avec l'éthologie-anthropologie.

Il nous vient à l'esprit un développement éclairant à cet égard, mené en anthropologie, par Albert Piette. Spécialiste des modes d'existence « minimalistes », Albert Piette, à l'inverse de tenants d'une approche systématique du fait culturel (par exemple Boltanski), invite à considérer dans les productions culturelles, non pas ce qui en structure et réduit la diversité, c'est-à-dire en tant que système central, mais ce qui en garantit la spécificité. Il s'agit en somme d'identifier cette part irréductible de la diversité, qui résiste à la structuration dominante, et qui manifeste ainsi le caractère singulier de la situation analysée. Ses argumentaires, conduits à partir d'observations ethnographiques, concernent tant les modes de présence des humains que les manières d'être des situations et des objets. C'est l'objet de son ouvrage *Anthropologie existentielle* (Piette 2009), dans lequel sont consignés divers principes théoriques et méthodologiques. Piette ouvre son livre sur le concept de *minimalité* qui, au-delà de sa portée heuristique, nous semble un paradigme à prendre en compte sérieusement pour questionner l'idée de structure en sciences humaines et sociales et principalement ce qui en est advenu. Dans un premier exemple, s'appuyant sur des détails de la vie quotidienne et en observant les modes

présence des humains et des singes, Piette montre par exemple que la seule manière véritable de caractériser les humains est de les rattacher à leur mode passif :

Quand nous regardons les hommes dans leurs instants successifs, il apparaît souvent des présences anodines qui, parfois sans que nous le sachions, deviendront créatrices de décisions, génératrices de conséquences diverses, parfois aussi resteront sans suites, mais qui souvent se laissent infiltrer par des moments vides, des gestes secondaires ou pensées vagabondes [...] Le mode mineur, tel que nous avons nommé cet ensemble de détails, n'est ni une action générale, ni un type particulier d'activités. Il constitue une modalité spécifique par laquelle un individu est nécessairement présent dans l'espace-temps où deux ou plusieurs personnes se trouvent en coprésence. (Piette 2009 : 11)

Piette fonde son argumentation en prenant appui comparativement sur le comportement des grands singes. « A lire quelques 'classiques' de primatologie, dit-il, nous découvrons que la vie des singes et des grands singes se caractérise par l'action et le signe » (Piette 2009 : 20). La démonstration qui s'ensuit est l'illustration heuristique de cette manière d'être. Piette insiste sur la part intentionnelle et prévisible des actions des singes, d'où il ressort que le singe est un grand détecteur de signes et surtout un être vigilant. Il cherche ainsi en permanence à repérer les signes et à les associer à des informations, même lors d'accomplissement des actes les plus banals comme manger ou se déplacer, mais *a fortiori* aussi pour des situations complexes comme lors d'interactions plus ou moins pacifiques ou conflictuelles.

Reprenons notamment ces descriptions de Frans De Waal (Waal 1992) et Hans Kummer (Kummer 1993) retenues par Piette et qui traduisent diverses routines des singes et grands singes :

Ainsi Gray [un macaque rhésus] s'assoit non loin de Tail, s'épouille et n'arrête pas de jeter des coups d'œil en direction de son adversaire [...] Il me sembla entendre quelqu'un siffler dans la colline la plus proche. Oncle Bert qui dormait si profondément que sa lèvre inférieure pendait sur sa poitrine, se dressa d'un bond et regarda dans la direction d'où était venu le bruit. Ses yeux, son nez, ses oreilles semblaient autant d'antennes. (Piette 2009 : 22)

Les chimpanzés donnent la même impression : « ils se déplacent en groupe vers la périphérie de leur territoire, progressant silencieusement en file indienne, attentifs au moindre bruit venant d'en face. Ils escaladeront un arbre pour faire le guet et écouter une heure durant voire plus » (Piette 2009 : 22).

Piette reconnaît aussi la capacité de certains grands singes à introduire des écarts vis à vis de ces comportements attendus, ce que les primatologues traduisent souvent comme des erreurs d'interprétation :

Chez ces primates à l'esprit de compétition très poussé, les taux de cortisol dépendent du succès avec lequel un individu gère ses tensions sociales. Comme chez les êtres humains, c'est en définitive une question de personnalité. Certains mâles dominants présentent des niveaux de stress élevés simplement parce qu'ils ne savent pas faire la différence entre un défi sérieux lancé par un autre mâle et un comportement neutre qui ne devrait pas les inquiéter. Ils se montrent nerveux et paranoïaques. (Piette 2009 : 26)

Cela se traduit parfois aussi comme une tactique pour réorienter différemment l'action de son vis-à-vis :

Les singes rhésus, au contraire, se regardent droit dans les yeux au cours d'un conflit ; les dominants intimident les subordonnés en les fixant du regard. Comme le contact visuel prolongé est menaçant dans leur communication, il est logique qu'ils « détournent prudemment le regard au cours d'approches amicales, y compris les réconciliations » [...] L'attitude indifférente n'est pas celle du détachement mais une action volontaire, non seulement pour marquer une réconciliation mais aussi pour simuler en vue d'une tromperie [...] C'est comme si l'animal ne sortait pas d'un régime d'attention même pour faire moins ou pas vraiment. (Piette 2009 : 26)

Tout en soulignant la minutie et la précision des observations des primatologues et surtout leur enthousiasme à traduire l'intelligence des singes et grands singes, l'idée d'Albert Piette consiste à dire que ce sont précisément ces modalités actives par lesquelles on les identifie qui les éloignent de tout effet avéré d'humanité.

En réalité, ce que les primatologues retiennent, c'est l'incapacité des singes et grands singes à se détacher de l'action présente, ce qui précisément n'est pas le cas des humains. Albert Piette pense évidemment qu'il est possible de procéder différemment, c'est-à-dire, moyennant une autre forme d'observation, d'accéder chez les animaux à divers gestes qui restent sans réponse. Ainsi, il serait possible de pointer des gestes périphériques pendant l'accomplissement d'une action ou aussi d'observer des comportements inaccomplis, par exemple dans des situations de jeu. Il n'en demeure pas moins qu'en réalité de telles observations n'ont jamais d'effet qu'à l'intérieur d'un jeu d'expression. Selon Albert Piette, cette conclusion constitue ce qui éloigne la vie sociale des hommes de celle des singes, tout à l'inverse de ce qu'en pensent les primatologues, victimes selon lui d'une « erreur anthropologique ». A quoi reviendrait alors le fait de se détacher de l'action, ce qui serait la spécificité des humains ? Voici ce qu'en dit Piette :

Quant à la spécificité de la vie des humains, elle serait d'avoir créé et introduit un ensemble d'appuis extérieurs et surtout d'avoir généré un mode de présence car-

actéristique. Il consiste dans la possibilité de se (re)poser pendant l'action, et donc de nuancer le mode majeur-actif par des formes diverses de passif-mineur. L'hominisation consiste ainsi dans une modalisation en mineur des actions, c'est-à-dire dans l'injection d'une strate amortissante simultanée à une séquence d'actions successives à celle de la tension chez les singes. (Piette 2009 : 36-37)

Piette décrit ainsi les bases de son hypothèse de la *minimalité*. Il s'agit d'un mode d'être et de présence spécifiques à l'homme et qui prend appui sur les « restes », sur les résidus singuliers de comportements qui ne sont pas intégrés à la structure de la tâche ou de l'interaction principales, c'est-à-dire la présence dans chaque situation immédiate d'éléments divers de situations extérieures (et peut-être aussi antérieures).

Telle est la force et l'originalité de l'être humain : une présence amortie dans une situation par la présence d'appuis matériels et d'éléments distrayants, et en même temps la possibilité de « décaler » l'épreuve qui surgirait à partir d'une perte d'appuis dans l'action en cours. (Piette 2009 : 38)

On notera en passant la nature du phénomène étudié : dans une perspective *existentielle*, il est de l'ordre de la *présence*, présence vive ou « présence amortie », et par conséquent, il s'agit bien, dans un mode d'existence et une situation sémiotique donnés, convertis en un champ phénoménologique et perceptif, de repérer les expressions de la variation de la présence des acteurs, en intensité et en étendue. En outre, si le mode *majeur* est « actif » et le mode *mineur*, « passif », cela implique une permutation des rôles actantiels et une commutation des modalisations (notamment entre *vouloir* et *pouvoir faire*). Piette développe sa conception grâce à une série d'exemples illustratifs. Parmi ces exemples, citons le suivant, souvent convoqué, et qu'il est possible à ce jour de considérer comme le plus heuristique :

Le mode mineur du comportement rituel, c'est aussi, d'une certaine manière, sa saveur. Peut-on imaginer une cérémonie religieuse rassemblant des fidèles complètement absorbés dans leurs prières, les mains jointes et écoutant les paroles du prêtre sans aucune latéralité dans le regard et l'attention, sans penser à autre chose, sans faire pénétrer dans leur rôle de fidèle des traits issus d'autres rôles ? Les choses se déroulent et il importe sans doute qu'elles se déroulent mais « seulement tout ceci se passe et nous affecte d'une manière sourde, latérale » (Sansot 1986 : 19). Comment donc l'approcher ? (Piette 2009 : 554-55)

Cet exemple mérite un examen attentif. Pour commencer, il s'agit d'une *situation* sémiotique, selon les termes de Landowski (Landowski 1989 : 194-99), à l'intérieur de laquelle se déroule une *pratique rituelle*, par conséquent fortement structurée et programmée dans le

détail, sachant que c'est justement ce type de structuration et de programmation qui lui confère son efficience rituelle. Dans cette pratique, les participants jouent le rôle de « fidèles », mais Piette fait observer qu'ils sont également animés par d'autres « rôles ». On doit alors supposer que ces autres rôles appartiennent à d'autres pratiques, et on est conduit en conséquence à prendre en considération, tout autour de la pratique principale, une conjoncture d'autres pratiques, concurrentes ou pas, adjacentes ou transverses, qui interfèrent avec la première. Chacune de ces pratiques, principale ou secondaire, est manifestée selon un régime de présence qui lui est propre, ce qui implique de considérer le mode d'existence global, caractéristique de la situation analysée, comme stratifié en plusieurs niveaux de présence, et notamment de présence « majeure » et de présence « mineure ».

Les manifestations des pratiques adjacentes ne sont dans la situation évoquée par Piette que des bribes de gestes ou de comportements, les interférences sont juste esquissées, les pratiques alternatives ou concomitantes sont à peine reconnaissables, voire non reconnaissables, principalement parce que la contrainte syntagmatique de la pratique principale est particulièrement forte et exclusive. Toutefois, on sait qu'au cours de l'histoire des pratiques religieuses, la force de cette contrainte a été très variable, et que par exemple au Moyen Âge, l'assistance populaire se livrait en continu et sans retenue à nombre d'activités dont le déroulement de l'office religieux n'était que l'occasion périodique. Quoiqu'il en soit du degré de manifestation de ces autres pratiques interférentes, il est exprimé en intensité (plus ou moins vive ou « amortie ») et en étendue (plus ou moins fragmentaire ou complète).

Ces observations impliquent alors une décision méthodologique : ou bien les manifestations de ces interférences doivent être considérées comme insignifiantes, et non pertinentes, et l'analyste doit procéder à la normalisation de son corpus, en les éliminant ; ou bien ces manifestations doivent être considérées comme participant à la signification spécifique de la situation, et l'analyste doit dans ce cas en préciser la place et la fonction dans son corpus. La première voie est déjà connue, au moins dans son principe : c'est précisément celle empruntée par Greimas, dans *Sémantique structurale* (Greimas 1986 [1966]), quand pour normaliser le corpus d'analyse et le transformer en texte, il décide d'éliminer toutes les marques de subjectivité et d'énonciation, c'est-à-dire tout ce qui ancre la structure textuelle dans une situation et des circonstances singulières et non reproductibles. La seconde voie a elle aussi déjà été empruntée, notamment par Jacques Geninasca (Geninasca 1997), quand il défend la singularité de chaque œuvre artistique, et exige de la sémiotique qu'elle soit en mesure d'en rendre compte. C'est aussi celle choisie par Jean-Marie Floch (Floch 1990), quand il scrute dans tous ses aspects, même mineurs, apparemment, d'un objet, d'un usage, ou d'une pratique.

La décision est d'ordre méthodologique. Dans le cas des pratiques, à partir de l'exemple évoqué par Piette, il faut alors poser comme principe qu'aucune pratique ne peut être isolée de toutes celles qui interfèrent avec elle, parce que, justement, ce sont ces interférences qui permettent d'apprécier la force d'engagement des pratiquants dans la pratique principale,

ainsi que l'efficience de son organisation syntagmatique et de ses enchaînements successifs. Le mode « mineur » (Piette 1992 : 551-61), en l'occurrence, et notamment le caractère plus ou moins reconnaissable des manifestations adjacentes et apparemment marginales, est ce qui singularise précisément l'équilibre ou le déséquilibre entre tous les rôles (toutes les facettes pratiques, tous les aspects mis en perspective) qui habitent et animent chacun des acteurs de la situation pratique.

Pour conclure : La diversification méthodologique

Dans le cas des pratiques et des formes de vie, on se heurte à une difficulté qui tient à l'hétérogénéité du corpus, et surtout au fait qu'il est impossible, voire illégitime, d'en circonscrire le périmètre avant d'avoir commencé l'analyse. C'est une difficulté que l'ethnométhodologie a déjà, et depuis longtemps, rencontrée et traitée à sa manière. L'un de ceux qui sont allés le plus loin à cet égard, et de la manière la plus rigoureuse, est Clifford Geertz, avec le concept de *description dense* (Geertz 1998). La « densité », en l'occurrence, est le résultat d'une procédure itérative et cumulative, où les éléments recueillis par l'analyste sont progressivement testés, intégrés au corpus, ajoutés et articulés aux précédents, et ainsi de suite.

Cette méthode permet ainsi, par extension à l'analyse sémiotique proprement dite : (1) de faire appel à des données de statut hétérogène, (2) d'associer des énonciations et des genres eux-mêmes hétérogènes, (3) de faire le tri parmi les données primaires (la « matière ») de celles qui se révèlent pertinentes pour accéder à une forme qui est en cours de construction (la « substance »). La méthode que la sémiotique adopte en l'occurrence se distingue de celle de l'ethnologue au moins sur deux points : (i) l'hétérogénéité des statuts, genres et énonciations qui caractérisent les données – l'ethnologue ne prend en considération, en principe, que ses propres observations –, et (ii) la visée téléologique d'une forme sémiotique (à sélectionner parmi les types de modèles disponibles ou à construire), qui prend en ce cas le statut d'une *hypothèse sur la structuration de la signification* – l'ethnologue n'est pas supposé faire de telles hypothèses, mais doit se laisser guider par la procédure d'observation –. La structuration de la signification vise à l'identification de la structure centrale, qui permet du même coup de relever au cours de la procédure tous les éléments qui semblent ne pas y participer, mais qui sont gardés en mémoire parce qu'ils interfèrent avec elle : ainsi se met en place le « tri » qui extrait de la matière primaire la substance pertinente. Globalement, la méthode, associant sélection des données pertinentes et processus d'analyse, procède par accumulation et saturation : quand l'ajout de nouvelles couches de données et de nouvelles analyses ne donnent plus rien de nouveau, le processus est parvenu à saturation, et la reprise des analyses en vue de leur schématisation et de la structuration de la forme sémiotique est alors possible.

Si on confronte cette méthode avec celle qui conduit à préserver et prendre en considéra-

tion les variantes et les aspects de l'expression et du contenu linguistiques, on constate immédiatement que, si les principes généraux sont les mêmes, les incidences méthodologiques sont fort différentes. Les données, Hjelmslev le dit lui-même dans les *Prolegomènes*, sont *du texte*, et par conséquent sont fortement homogénéisées au sein d'un système sémiotique unique. On a déjà rappelé pourtant qu'une même forme de l'expression pouvait renvoyer à plusieurs substances de l'expression (verbale, iconique, gestuelle, orale ou écrite, etc.), mais il ne s'agit pas dans ce cas d'un seul et même ensemble signifiant (comme pour les pratiques soumises à l'équivalent de la « description dense »), mais de plusieurs textes, plusieurs ensembles signifiants connectés, complémentaires ou alternatifs, dont les relations, après l'analyse séparée de chacun d'eux, pourront être prises en compte en tant que relations intersémiotiques (ou « intermodales »).

Il résulte de cette confrontation que, pour aller jusqu'au bout de son engagement dans la réflexion méthodologique, la sémiotique doit prendre en compte ces différences de méthodes, qui dépendent à la fois de la nature des « sémioses » prises en charge, et du type de discipline qui en a déjà la charge dans la répartition des tâches et des domaines du monde de la recherche. Dans les deux cas que nous avons examinés, le texte et la théorie du langage d'une part, et les pratiques et l'ethnologie d'autre part, on peut commencer soit par la distinction entre les types de sémioses (texte / pratique), soit par la différence entre les interfaces disciplinaires (linguistique / ethnologie), mais dans les deux cas, une distinction ramène immédiatement à l'autre, et on identifie alors des *régimes méthodologiques* distincts.

C'est la raison pour laquelle, depuis une dizaine d'années, nous défendons une approche sémiotique différenciée selon plusieurs « plans d'immanence » (Fontanille 2008), à savoir celui des *signes-figures*, celui des *textes-énoncés*, celui des *objets-supports*, celui des *pratiques-stratégies*, et celui des *formes de vie-modes d'existence*. Une version plus récente de cette typologie des plans d'immanence est proposée dans l'ouvrage *Terres de sens* (Fontanille et Cougnas 2018), où sont distingués quatre grands régimes de la sémiose : les *figures* (signes), les *œuvres* (textes et objets), les *flux* (pratiques, formes de vie) et les *existences* (modes d'existence, modes anthropologiques). Cette typologie des plans d'immanence, débouchant sur une typologie des *régimes sémiotiques*, repose dès ses premières formulations (Fontanille 2005) sur une distinction entre la substance et la forme, et surtout sur les « restes de substance » que laisse la structuration de la forme en chacun des plans d'immanence.

Par exemple, au plan d'immanence des *textes-énoncés*, une œuvre picturale peut être structurée en tant que texte, sans qu'on puisse prendre en compte, par exemple, les propriétés plastico-gestuelles de la touche et de la trace. Ces restes substantiels seront pris en charge lors de la structuration d'un autre plan d'immanence, celui des *pratiques-stratégies*. De même, dans la structuration de la forme d'une pratique socio-économique (au plan d'immanence des *pratiques*), la focalisation sur le système central de la pratique conduit à laisser en marge des éléments substantiels, qui seront pris en charge en revanche au plan d'immanence des *formes de vie*. Par exemple, dans l'analyse des pratiques socio-économiques de coopération

(dans des coopératives ouvrières), la structuration narrative et actantielle se focalisera sur les syncrétismes actantiels (le sujet opérateur est aussi le bénéficiaire de la valeur produite, le destinataire est un actant collectif qui regroupe tous les sujets opérateurs), sur la hiérarchie entre les modalités (le vouloir-adhérer domine, et fonde toutes les manifestations de l'égalité entre les membres de la coopérative). Cette focalisation méthodologique est principalement dictée par la confrontation politique, et la nécessaire comparaison avec le modèle capitaliste. Mais elle laisse dans l'ombre (c'est-à-dire dans les « restes substantiels ») un traitement original de l'altérité, de la différence et de l'épanouissement de « soi comme un autre », qui ne laisse pas d'étonner. Le traitement de l'altérité aura lieu lors de la structuration de la *forme de vie coopérative*, et débouchera alors sur une reprise formelle du principe de *réciprocité généralisée*, constitutif d'un actant collectif qui n'est composé que d'« autres », dont le processus coopératif renforce et renouvelle systématiquement l'altérité.

La diversification méthodologique de la sémiotique, fondée théoriquement sur une typologie des plans d'immanence et des régimes sémiotiques, exploite par conséquent systématiquement, non seulement les articulations de la substance et de la forme, mais surtout la distinction entre les modes « majeurs » (la structuration de la forme) et « mineurs » (les restes substantiels) en chaque plan d'immanence. Elle est donc elle-même structurée par la hiérarchie, les conversions et les articulations entre les plans d'immanence et entre les régimes méthodologiques associés à chacun des régimes sémiotiques.

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Beware! Construction! A semiotic methodology for approaching avant-garde cinema

Rea Walldén

This paper proposes a methodology for approaching avant-garde cinema based on Hjelmslev's theory of sign-function. Its starting point is the epistemological rupture constituted by Saussure's introduction of the concept of fundamental semiotic arbitrariness, which radically alters the relation of the semiotic realm to what lies outside it. The paper uses Hjelmslev's model of semiotic stratification, concentrating on the strata of substance, their inner structure and their articulation with the extra-semiotic realm. It proposes some interpretive hypotheses regarding the lower levels of the strata, notably the incorporation in the model of the situations of production and reception. It goes on to apply the modified model to cinema, a particularly apt choice for studying the theoretical aporias regarding the inner structure of the expression-substance because of the complexity and heterogeneity of its expression-plane, as well as the multiplicity and lack of spatio-temporal simultaneity of its production and reception processes. The paper shows how some traditional ontological and epistemological positions regarding reality and materiality, as well as their aesthetic and ethical implications, underlie the ways cinema has been theorised. These issues are reformulated and resituated with the help of the Hjelmslevian model. The above sets the ground for attempting an inclusive meta-definition of avant-garde art. I argue that avant-garde is an approach to the arts, not a style, and therefore a structural description is needed to comprehend it. The definition I propose relies on the intimate connection between innovative artistic practice and a focus on the expression-plane, modelled on the prototype of revolution, sustained by a materialist ideology and motivated by a political demand: tell the truth, be revolution. In other words, attention to the expression-plane is the result of a political demand for epistemic sincerity; materiality becomes the path to know and, potentially, change reality. In the case of avant-garde cinema, this choice often takes the form of a struggle against 'realist' and 'reductivist' misconceptions, ie. the beliefs that cinema can give immediate access to reality and that it can be reduced to words. It is expressed as a search for cinema's specificity

and the expansion of the limits of the cinematic medium, as well as the questioning and subversion of cinematic conventions, such as representational and narrative ones. The final part of the paper attempts to identify and interpret specific techniques used by avant-garde cinema and classify them under strategies aiming at the revelation of cinema's constructed nature through drawing attention to its expression-plane.

KEYWORDS avant-garde, cinema, Hjelmslev, expression-substance

Articulations of the semiotic with what lies outside it

The crux of Saussure's novelty in defining the sign can be summarised in its *fundamental semiotic arbitrariness*, which is the organising principle of a cluster of interrelated concepts. Crucially, it entails a completely different relation of the semiotic realm to what lies outside it.

Saussure's definition of the sign is logically the last step of his definition of *langue*, ie. of language as a system. The reason is that, in Saussure, the ontological status of the semiotic unit is secondary to semiotic structure. In other words, semiotic systems are not composed of signs; they are articulated into signs. In Saussure's *Cours de linguistique générale*, *langue* is a social construction. It is different from the sum of the natural abilities of its users – and consequently of the human species in general – though these abilities make it possible. What is natural to the human species is the semiotic ability, which is clearly distinct from its products, ie. the different *langues* (Saussure 1972 [1916]: 25-26). *Langues* are the products of social communities, and therefore dependent on socio-historical conditions. Furthermore, a *langue* is different from its individual use, ie. *parole*, which it makes possible (30-31).

In Saussure's *Cours*, the sign is defined as the *inseparable* co-existence of two aspects of a *non-material* nature, the signifier and the signified (98-99). Arbitrariness and differentiability are intrinsic to this definition. The term 'arbitrary' does not mean 'dependent on the free choice of the speaking subject' (101) but 'unmotivated', ie. conventionally, socially constituted. On a first level, arbitrariness concerns the link between the signifier and the signified. This means that there is no intrinsic reason why a particular signified is paired with a particular signifier, and consequently no intrinsic connection between a sign and its referent. However, when combined with differentiability, arbitrariness gains a much more radical meaning. Differentiability is summarised by the famous dictum: 'in *langue* there are only differences [...] without positive terms' (100) and expounded in connection with the concept of 'linguistic value' (155-169). What *langue* does is to articulate the unperceivable and amorphous continua of sound and thought into double-faced formal units. Therefore, it is semiotic communities that articulate/shape the way they perceive the world through the process of giving it meaning. It is not just the relation between words and things, but the very distinction of the world into 'things' which

is no longer natural. Following Oswald Ducrot, I call this kind of arbitrariness ‘fundamental’, ‘to distinguish [it] from the arbitrariness of each isolated sign’ (Ducrot and Todorov 1972: 30).

Fundamental semiotic arbitrariness is Saussure’s epistemological rupture. It means that signs gain their value from their position in the semiotic system and not because of some intrinsic similarity or analogy with the extra-semiotic world, or because of their reference to independently existing objects. Moreover, the completely formal definition of language as a semiotic system that this principle entails allows Saussure to disconnect it from the expression medium of sound and to envision ‘natural’, i.e. verbal, languages as one kind of semiotic system among others, and linguistics as a subset of a future science of semiotics (Saussure 1972: 33).

As the individual sign is no longer constitutive and semiotic systems are not necessarily limited to ‘natural languages’, Louis Hjelmslev introduces the concept of ‘sign-function’, i.e. the structure of the constitutive relations of the semiotic phenomenon. In his 1954 essay *La stratification du langage* (Hjelmslev 1971), he proposes a model of these relations which is consistent with Saussure.

Hjelmslev analyses semiotic systems around two distinctions: (a) Firstly, between content and expression, which results in two interdependent planes, the plane of content and the plane of expression; this distinction is specific to semiotic phenomena. And (b) secondly, between form and substance; terms that are defined as ‘relative’, their difference being one of degree of abstraction (Hjelmslev 1971: 56). From this double division result four *strata*: content-form, content-substance, expression-form, expression-substance. The sign-function proper is the relation between content-form and expression-form, which is a mutual dependence, a double implication: denotation. This is the equivalent of the Saussurean relation between the signified and the signifier. The relation between form and substance inside each plane is a one-way implication, where substance presupposes form but not the other way around: form is manifested by substance. The only two strata that have no immediate relation to each other are content-substance and expression-substance (Hjelmslev 1953: 68; 1971: 53-54).

Importantly, the substance-strata are ‘semiotically formed’ (1971: 57). To speak of the *manifestante* without implying that it is semiotically formed, Hjelmslev uses in French the term *matière*, in English *purport*, in Danish *mening*. Judging from the use of these terms, I think that a better rendering of the concept in English would be ‘material’. One should note that Hjelmslev’s materials (*matières/purports/meninger*) are also already in a certain sense formed, otherwise they would completely escape cognition (58). They are ‘scientifically’ formed and sciences are also semiotic systems. In Hjelmslev’s texts, there is confusion about whether the terms *purport* and *matière* should also be used for an even ‘rawer’ entity, that which escapes cognition altogether; this entity I refer to as *matter*.

Each substance-stratum consists of three levels: (1) the level of social, collective perceptions, which belongs to the stratification in the strict sense; and the (2) ‘socio-biological’ and (3) ‘physical’ levels, which do not. Level 3 depends on both levels 1 and 2, whereas level 2

depends on level 1. This does not mean that the existence of the physical entities as such depends on the semiotic substance. What depends on it is their formation, the process of being articulated by form, which constitutes them as relevant to the semiotic system. The process of articulation starts from the form stratum of each plane and is directed towards the levels of substance, which (the levels of substance) are chosen or shaped – but not created – out of the materials offered by the outside world. As Umberto Eco has observed, the continuum of the world, while amorphous, is not homogeneous; it has a ‘grain’ that limits what our forms can shape out of it (Eco 2000: 120-22). In other words, while a form may be manifested by substances taken from different materials, not all materials can be used for the manifestation of every form. For example, a national flag may be painted on wood or embroidered on silk, but it cannot be made out of sound.

Level 1 of substance, the level of social perceptions and ‘the only immediately pertinent from a semiotic point-of-view’ (Hjelmslev 1971: 61-62), is easily demarcated both in the content-plane and the expression-plane. However, the definition of levels 3 and 2 is problematic in both cases. I think that Hjelmslev’s distinction between these two levels is loosely structured on a distinction between object and mechanism, between thing and action, which is philosophically difficult to maintain. It seems that sometimes Hjelmslev is slowed down by the metaphysical burden that his own work tends to question and transcend. I think that one would be more faithful to the radicalism of his work if one tried to interpret it in a wider sense.

With regard to level 2 of substance, a possible interpretation is implied by the use of the term ‘conditions’ in the description of level 2 of the content-substance. Hjelmslev’s levels 2 and 3 of expression-substance already appear in Saussure’s *Cours*, although not so systematically classified, as they stem immediately from Saussure’s communication circuit (Saussure 1972: 20-30, 37, 66, 98, 157). Saussure distinguishes between the ‘material’ and ‘sensuous’ parts of the sound, which correspond to Hjelmslev’s level 3 and level 1 of expression-substance, as well as between speech as mechanism of articulation or hearing and as acoustic phenomenon, which in turn correspond partially to Hjelmslev’s levels 2 and 3 of expression-substance. With regard to the content-plane, level 2 of the content-substance is comprised of

the socio-biological conditions and psycho-physiological mechanisms [...] allowing to the speaking subjects [...] to create, reproduce, evoke and handle in different ways the elements of appreciation. (Hjelmslev 1971: 61-62)

In the process of mapping the articulations of the semiotic with what lies outside it, Alexandros Ph. Lagopoulos defines three ‘exo-semiotic’ (or, as he later called them, ‘extra-semiotic’) realms, ie. realms outside the semiotic: the ‘exo-semiotic I’, which is the material process of production; the ‘exo-semiotic II’, which is the material of expression; and the ‘exo-semiotic III’, which includes the referents (1986: 235-36). Crucial in his proposition is the definition of

the exo-semiotic I, in which we might include Hjelmslev's level 2 of content-substance, as the material process of production. I think that it should be understood as a condition of possibility and might be linked to a generalized concept of situation. Then, I think that level 2 of Hjelmslev's expression-substance could also belong to the exo-semiotic I, as the process of material production constitutes the condition of possibility of the expression-plane as well. The main divergence between Lagopoulos's exo-semiotic I and Hjelmslev's level 2 of substance lies in the direction of their causal connection to the semiotic, which may be resolved through the notion of condition of possibility, as opposed to a deductive causality.

Hjelmslev's level 3 of substance is quite clearly defined in the case of the expression-plane: it is the material of expression, Lagopoulos's exo-semiotic II. Level 3 of content-substance is more problematic, however. If one were to take Hjelmslev literally, level 3 of content-substance could correspond to the semantic units (1971: 59-60, 66), which is at odds with the principles of his model. In my opinion, a consistent application of the model would situate semantics at a different position, as it involves both a content and an expression plane, being semiotic *stricto sensu*. A more loose interpretation of the same passages in Hjelmslev could be to see level 3 of the content-substance as corresponding to the physical entities used as raw material for the community's apperceptions; these physical entities, however, are in a way already pre-semiotised. This interpretation would link content-substance level 3 to the referent, and I choose to follow it.

This investigation opens up the *aporia* of the degree of semiotisation of semiotic substance. We have seen that the division form-substance is a matter of degree and that the term 'substance' is used to denote the *manifestante* as semiotically formed. Nevertheless, while level 1 of substance, the level of social perceptions, is relevant to the semiotic function in the strict sense, the other levels are not. I think that this means that their semiotisation is not relevant to the sign-function under consideration. To the degree that their semiotisation is relevant to the specific sign-function, it has left a trace on its form and is therefore classified in level 1 of substance; the rest should be considered as exterior to it. Therefore, I think that as level 2 of substance of both planes we should classify the conditions of possibility of production, both semiotic and non-semiotic, both praxes and mechanisms. Level 3 of content-substance should be seen as corresponding to the referent, and yet cannot be identified with the realm of the independently and concretely existing world. Such a definition is in accord with Eco's approach, according to which the referent is abstract and conventional (Eco 1979: 66). Finally, level 3 of the expression-substance is composed of the materials from which level 1 of the expression-substance chooses to manifest expression-form. The recognition and distinction of these materials is the result of their semiotisation, which however is not relevant to the sign-function as such.

An intersection of the sign-function with the circuit of communication unavoidably takes place in levels 2 and 3 of the expression-substance, as they constitute the 'channel of communication'

in terms of communication theory (Eco 1979: 53). I think that the intersection of the sign-function with the communication circuit causes a certain redoubling of levels 2 and 3 of substance on both planes, because of the differentiation between the sides of *production* and *reception* of the message. Hjelmslev's level 2 of the expression-substance is clearly distinguished into the productive and the receptive mechanisms. Level 3 of the expression-substance is the material trace, the element transferred between the addressee and the receiver that makes communication possible; therefore, ideally unique. Nevertheless, practically it also often has aspects incorporating the difference between production and reception, including the dialectics of production and reproduction. Then, while the referent of a successful communication should ideally be common to addresser and addressee, in practice communication is always partial, and scientifically it is meaningful to study this potential divergence. Finally, level 2 of the content-substance, which in Hjelmslev seems to be comprised of the conditions forming the speaking subjects' appreciation, could easily be differentiated between those partaking of the addresser's appreciation formation and those partaking of the addressee's. Therefore, a more exact formulation of the sign-function would incorporate the sides of production and reception into substance.

In summary, the sign-function can be construed as a *form* bridging two *substances*. These are the two directions of the sign's articulation with the reality that is beyond it: through the content-plane and through the expression-plane. These two directions are doubled by the communication process into the sides of *production* and *reception* (Fig. 1).

The sign-function of cinema and its peculiar expression-plane

Cinema is a signification system, functioning at the epistemological level of *langue*, by which we mean that which underlies the way that every film produces meaning and which makes this production of meaning possible. We accept, following Eco, that 'semiotic systems do not necessarily have two articulations; [and that] the articulations are not necessarily fixed' (1979: 231).

Semiotic systems other than natural languages tend to be recognised by their expression-substance. Considering that the expression-substance is shaped by the expression-form – as seen in the previous section –, this means in reality that semiotic systems are (or should be) classified according to the kind of expression-form that they have, and not by their expression materials. The impossibility of defining semiosis by the expression materials becomes apparent if one remembers that the semiotic systems that make possible Dante's *Divine Comedy* and Bach's *Brandenburg Concertos* choose their expression-substances from the same expression material, the sound wave; yet natural languages and music are definitely different kinds of semioses.

The semiotic identity of cinema, as recognised by its expression-plane, can be situated

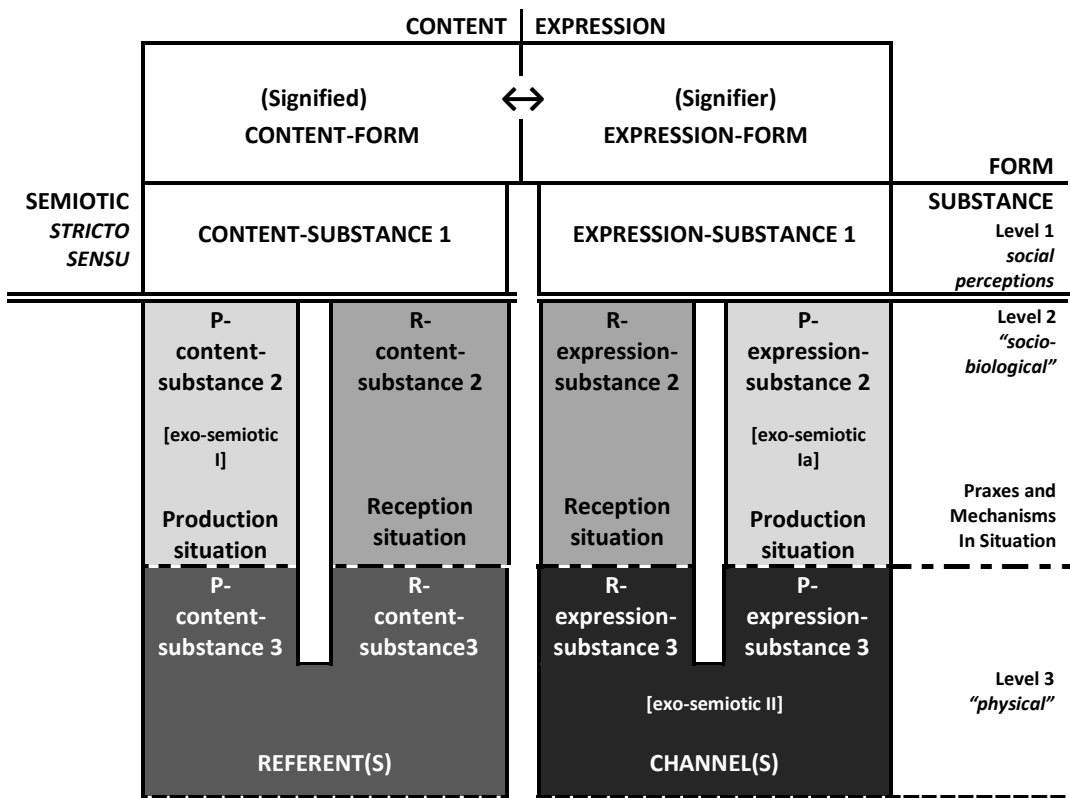


Figure 1. Modified model of the sign-function.

in four areas. Firstly, it includes images. It shares this characteristic with other semiotic systems, such as painting, all of which are addressed by visual semiotics. An image has an expression-form of two spatial dimensions. Secondly, cinema shares with photography the specificity of using photographic images. This characteristic was given exceptional importance, as it was argued that it radically affected their ontological status. In this, traditional celluloid films differ from animation, as well as from digitally produced films, however, the relevance of this distinction is questioned in the following section of the present essay. Thirdly, cinema uses a succession of static images in time, in order to create the impression of a moving image. The moving image is its *differentia specifica par excellence*. Cinema was born when technology made the moving image possible, and even in speaking films this remains its definitional characteristic. Christian Metz considers as specifically cinematic codes the ones pertaining to the moving image, while Eco identifies the cinematic code with the moving image alone. Moving image means a three-dimensional expression-form, of two spatial and one temporal dimensions. Fourthly, cinema since the 1930s includes auditory elements; it is a complex audio-visual system. As Metz has conceptualised it, cinema's composite expression-material is composed of five elements: moving photographic image, writing, speech, music, noises (1964: 71; 1971:

10, 17-8; 1977: 112-3). Eco disagrees that this complexity pertains to the level of cinema's *langue*, arguing that it takes place on the discursive level of film. This essay follows Metz's view. Moreover, Metz introduces the concept of *heterogeneity*, by which he refers to codes: cinema is heterogeneous because it uses different kinds of codes. I generalise the use of the term *heterogeneity* to describe all the different orders of complexity pertaining to cinema. Finally, a whole other group of questions arises from the fact of cinema's multiple, complex and non-fixed articulations, which are beyond the scope of the present essay.

Because of its peculiarities, cinema is a good case-study for someone wishing to investigate the complexities of the expression-plane in general. Firstly, the multidimensional and composite nature of its expression-form, and the different orders of heterogeneity of its expression-substance, make it a particularly good example for the study of the dialectics of manifestation between form and substance and between the different levels of substance, as well as for the ways in which the materials limit the range of these manifestations. Secondly, the obvious distance between the place and time of a film's production and the place and time of its reception makes apparent a distinction that exists in all kinds of semiosis, even if it tends to be disregarded in the case of (natural language) speech. Thirdly, cinema semiosis includes multiple processes, both in its production and its reception phases, and involves several manipulations of the material traces that support it. This opens up the *aporias* of the distinction between levels 2 and 3 of the expression-substance.

A provisional attempt to apply Hjelmslev's stratification to cinema could propose the following organisation: Cinema's form articulates in multiple ways with its semiotic substance, in a way combining Eco's (1976) triple articulation and the articulations of audial elements. Cinema's expression-form relies on two spatial and one temporal dimension. Its expression-substance 1 consists of the socially and collectively constituted perceptive image of moving light and shadows, as well as of sound. Its production-expression-substance 2 includes the processes and conditions of *mise-en-scène*, shooting, post-production etc. Its reception-expression-substance 2 includes the processes and conditions of reproduction, projection etc. Its expression-substance 3 includes everything from lightwaves and sound waves to the recording materials (Fig. 2).

Let us now try a closer examination of the expression-substance. The raw materials of cinema are moving light and shadows, as well as sound. These are registered on the celluloid visual and audio track, or more recently in digital form on a hard disc. These registrations are formed and processed in multiple ways, the final result being 'the film', both as text and as object. The film's (*stricto sensu* semiotic) expression-substance 1 consists of the socially constituted perceptive image of light and sound; therefore, its expression-substance 3, strictly speaking, can be no other than lightwaves and sound waves. This is its material support. This material support, however, exists only when projected; it does not persist in time. It needs to be registered into a different material support. This, in turn, is copied many times and transported to the reception situation, where it re-produces light and sound. This 'intermediate' material

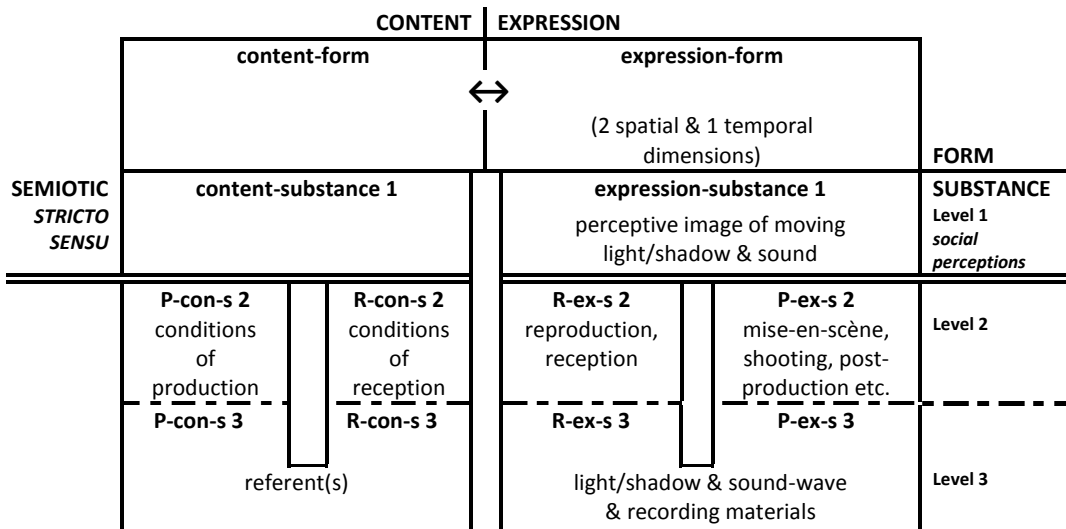


Figure 2. The modified model of the sign-function applied to cinema.

support, that travels in space and time, must necessarily be included in expression-substance 3; yet it has a different relation to the sign-function.

In expression-substance 2 belong the conditions of production and reception. The process of production can be conceptually divided into three phases, all of which usually take place in more than one space and time, and occasionally overlap. The first phase includes what happens before the recording processes, which range from *repérage* to the *in-situ mise-en-scène*; the second consists in the recording of image and sound, ie. mainly the shooting process; the third phase includes all the post-recording manipulations of the recorded material that result in the final product, such as editing and sound-mixing. All these processes may leave meaningful traces in the expression-form. On the side of reception one can also distinguish three phases, the first two of which do not belong to reception in the strict sense. The first includes the processes of copying and diffusion of the copies of the film and the second its re-production, ie. the screening. Finally, there is the film’s reception in the strict sense by the members of the audience.

One also needs to take into account the mechanical and/or electronic equipment allowing the registration and formation of the material, and the mechanical and/or electronic equipment allowing its copying and then its projection, as well as the audience’s apparatuses of perception. Following the analogy with the human perception apparatuses, we classify all the equipment in question in expression-substance 2, as part of the situations of production and reception. In the distinction between the material and the instrument that forms it, we choose to classify instruments as part of the processes.

An interesting question is where to classify the materials that take part in the processes,

but are not included in the material support of the sign-function. A particular example of this is the pre-filmic realm, ie. everything that stands in front of the camera. In our opinion, it is clear that the pre-filmic is part of the production situation, ie. expression-substance 2. However, as it is the material cause of the light and sound that constitutes the film's material support, it has a different relation to it than the recording process and equipment (Fig. 3).

EXPRESSION-SUBSTANCE 1: SOCIAL, COLLECTIVE PERCEPTIONS SEMIOTIC STRICTO SENSU		EXPRESSION-SUBSTANCE							
		<u>SOCIALLY PERCEIVED IMAGE OF MOVING LIGHT/SHADOW & SOUND</u>							
EXPRESSION-SUB. 3: MATERIAL SUPPORT	EXPRESSION-SUB. 2: CONDITIONS / SITUATIONS	Communication Circuit	PRODUCTION (3 PHASES)			RECEPTION			
		Economic Circuit	PRE-RECORDING	RECORDING	POST-RECORDING	DIFFUSION	REPRODUCTION	RECEPTION	
		PROCESSES	Pre-Production	Production	Post-Production	Distribution	Screening	Reception	
		EQUIPMENT	Pre-production equipment	Equipment for manipulating the pre-recording elements (e.g. lights)	Recording of Image & Sound (cinematography & sound-recording) THE CAMERA & other recording equipment (analogical or digital)	Manipulation of the recorded materials (editing, mixing, printing etc.) Printing, editing & other equipment and / or COMPUTER, PROGRAMS & other equipment	Copying & Distribution processes Copying & Distribution equipment	Projection of Image and Sound THE PROJECTOR, Screen, Room	Individual Reception through Vision and Hearing HUMAN SENSORIAL APPARATUS
		MATERIALS	Preparation processes (repérage etc.)	Manipulation of the elements in front of the camera (mise-en-scène) Virgin materials on which to record & Elements that produce the light and sound to be recorded (settings, actors etc.)	Light & Sound that is recorded on celluloid or as digital information & Light & Sound as Recorded	Printing & other materials and / or digital info	Light & Sound Wave as Re-Produced	Light & Sound as Received	
			Light & Sound Wave as Produced		Light & Sound Wave as Re-Produced				
			COPY ZERO		COPY N				
			THE FILM celluloid: image frames & audio-track and / or DIGITAL INFORMATION material trace of LIGHT-WAVE & SOUND-WAVE in TIME						

Figure 3. Detail: The expression-substance of cinema.

Reformulating traditional questions

Theories of language, signification and the arts always involve and presuppose premises with regard, on the one hand, to our relation to reality and, on the other, to the question of materiality, even if these remain unacknowledged. While obviously depending on what and how reality is, our relation to it is a question of epistemology. The accurate knowledge of reality as *adequatio*, ie. correspondence, constitutes one of the prevalent definitions of truth. The notion of truth, however, also carries moral implications, as it means not only gaining knowledge of reality but also accurately communicating it. In the history of thought, there is a constant slippage between these objective and subjective definitions – a moral demand on the subject to learn the truth and communicate it, with religious and/or political undertones. This mixture of epistemological and ethical implications is carried over to the concept of representation, which plays a central part in both the philosophy of language and the philosophy of art, even before these two meet in the linguistic turn of the 20th century. Definitions of the languages and the arts as representations have been the dominant, though by no means the only ones. In the philosophy of language, the relation to reality is re-formed as reference, and reference is conceived as representation. The debate over the naturalness or conventionality of this connection is at least as old as Plato's *Cratylus*. In theories of the arts, the concept of representation is often construed in terms of similarity and/or imitation, and is used both as definitional structure and as axiological criterion.

A second question regards materiality and the medium, which intimately concern both the definition of art and of the sign. On the one hand, the sign has been and is still commonly understood as the material means of expressing our thoughts. On the other, dealing with the materials has always been part of the definition of art. Moreover, the arts have been differentiated according to criteria of materiality: ie. the body-organs that produced them, or the human senses that perceived them, or the material means by which they were expressed. Whether viewed from an ontological or a phenomenal point of view, the materials of expression have often been conceived in hierarchical order according to different metaphysical criteria. Traditionally, language has been intimately connected to voice, sound, breath, and thus the medium of voice or sound has been given an exceptional position in the metaphysical hierarchy of the media (see, f. ex., Derrida 1967).

Furthermore, what is materiality and its value depends very much on the overall philosophical position. Plato, for example, considers materiality as accessible to our senses and not real; Aristotle considers it real but only accessible through the mediation of form; Kant, combining both, introduces the notion that our human constitution provides the forms by which we perceive the givens of intuition, yet we have no access to the things-in-themselves. Materiality, therefore, may be identical to reality or opposed to it, accessible or inaccessible to our senses, the criterion of truth or the cause of falsity.

Saussure's radically new and de-essentialised definition of the sign affected the traditional

definitions in many ways. For one, it no longer conceived signification as representation, emptying the metaphysical attributes of what was until then considered as the 'represented' and the 'representing'. Moreover, it undermined the metaphysical hierarchies between the different ways of communication and expression, including their study under the same discipline. Furthermore, semiotics affected the definition of art in two ways: directly, by the erasure of the demarcational line between art and non-art initiated by Roman Jakobson and the Prague Circle; and indirectly, by the de-essentialisation of the semiotic substance as formalised by Louis Hjelmslev and the Copenhagen Circle.

Let us situate reality and materiality in Hjelmslev's model, as presented in the previous section. The entire sign-function is real; semiotics is an ontologically monist theory. However, the semiotic strata, while real, are intelligible constructs. Literal materiality belongs to the realm beyond the semiotic. What traditional philosophy construed as relation to reality, in the new model is re-situated as a particular articulation of the content-substance. Discussions regarding the materiality of the arts prove to involve their entire expression-plane, including the non-material expression-form. Signification is re-defined as the insoluble relation between content-form and expression-form, and not by reference to the reality beyond the semiotic. The traditional questions regarding the relation between the signifier and the signified are analysed and re-situated into the conceptually distinct but interrelated issues of signification, reference and material support. Therefore, the question of the social constitution of a semiotic system can be reformulated as concerning, on the one hand, the relation between its content-plane and expression-plane and, on the other, the articulation of its content-substance; while the specificity of non-linguistic semiotic systems can be reformulated as concerning their expression-substance, and how this affects the previous question (Fig. 4).

The concept of 'realism' is a wild card in the debates over reality and materiality. Ontological realism is the belief in the existence of a subject-independent reality, while epistemological realism is the belief that humans have the ability to access (know) it. Epistemological anti-realism or moderated realism – ie. the beliefs that humans have either no access to reality at all or a limited and mediated access to it – can very well co-exist with ontological realism, but they make its proof problematic. The concept of realism enters the arts and literature in the 19th century, and although it presupposes ontological and epistemological commitments, it does not immediately concern them. Realism in this context is a canonical and axiological discourse regarding stylistic and compositional principles of the art-works, on the one hand, and their social and aesthetic value, on the other. Opposing Romanticism and idealisation, and stressing the social function of art, it views the artist as an objective observer of reality. Philosophically, aesthetic realism is an expression of the traditional metaphysical desire of form-independent content and un-mediated access to the referent. Practically, it has meant the adoption of particular styles of expression and, contradictory as it may be, of particular subject matters (see Beardsley 1975: 290-98). In the 20th century, the advent of modernism and the avant-gardes

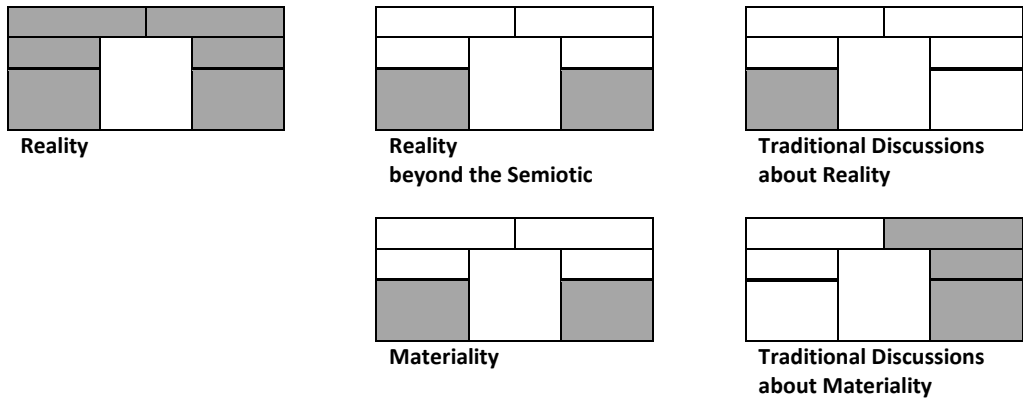


Figure 4. Reformulating traditional questions regarding reality and materiality.

strongly questioned both its theoretical premises and its aesthetic conventions, leading to either its complete abandonment or its total re-formulation. It is worth noting that its premises are incompatible with structural semiotics.

Since its beginnings, cinema was considered to have a particular relation to reality. Until World War II, the assumed closeness of this relation had impeded cinema's inclusion in the arts; from that point on it became an argument in its favour (Casetti 2000: 26). This assumed privileged relation to reality has had different foundations. First is the notion of cinema as an unmediated opening to reality. This position is easily refuted by a listing of the technical mediations and creative choices that lead to the construction of a film: from the choice of what to shoot and the manipulation of the pre-filmic elements to the frame and shooting choices, from *découpage* and editing to sound-design and mixing. A certain improvement on the previous notion conceives cinema as a neutral recording of an already-coded reality. This formulation still greatly underestimates the number of choices and the degree of manipulation this 'recording' allows, or rather necessitates. A third and fourth lines of argument are based on the bond of similarity of the iconic signs and the concept of indexicality, both of which have been convincingly refuted by Eco (1979: vii, 62, 66, 115-19, 161-65, 178, 186, 190-217, 219-24, 231-34). One needs to deal separately with the literal indexicality of the photographic technologies, what André Bazin (1958) has called the 'ontology of the photographic image' and compared, as proof of existence, to the Sacred Shroud of Turin. Nevertheless, this link does not connect the signified to its referent, but the material trace to its conditions of production. Therefore, it does not constitute proof of existence of its referent and does not affect the conventionality of cinematic semiosis. A final line of argument is based on the richness of the sense stimuli that cinema provides. The greater the range of sense stimuli an art involves, the closer it comes to our experience of reality, the argument goes. What this underestimates is the fact that the cinematic experience is still very much 'poorer' than our everyday experience.

Moreover, it founds cinema's assumed closeness to reality on a persuasive virtuality.

This line of argument displaces the discussion from the belief that cinema has a privileged relation to reality to the observation that it *gives the impression of* having such a relation, and to the subsequent question of why it is so. This is cinema's notorious concept of *impression, illusion or effect of reality*, which practically means the forgetfulness of a film's conventional and constructed nature. There are three groups of reasons given for this impression. The first group involves the constitution of the human perceptual apparatus, starting with the *phi*-phenomenon that allows us to see as continuous movement the rapid succession of static images. The second draws on psychoanalytical concepts and research, and explains the function of identification mechanisms. The third group of reasons relies on internal coherence and previously constituted conventions of representation.

These issues have in the history of cinema theory been entangled with the different aesthetic ideologies regarding realism. In this context, the questions of what cinema is and how it functions have been subordinated to questions about what is a good film and what kind of films should be made. Realism has had a particularly strong hold on cinema theory and criticism throughout the 20th century, a fact which sets cinema apart from the other arts. Determining factors in the conceptualisation of realism in cinema have been, on the one hand, the canon developed by the American studio film industry, and on the other, the negotiation of Marxist demands. A turning-point in the debate has been the theorisation of the Italian Neo-Realist movement. Finally, in the context of the French Nouvelle Vague, the journals *Cinématique* and *Cahiers du Cinéma* distanced themselves from realism, judging it to be an idealist theory; they were probably right (Casetti 2000: 25-47).

The structural revolution of the avant-garde and the demand for epistemic sincerity

Avant-garde art, along with Saussurean semiotics, Marxian politics and Freudian psychoanalysis, is part of the epistemological shift which defined the 20th century. It has radically changed the definition of art founded by the Renaissance and the Enlightenment. If one wishes to understand the 20th century, one could not find a better starting point. Avant-garde expresses the violently optimistic spirit of the previous century, youthful and terrifying and fragile at the same time. Many of its novelties have been incorporated unacknowledged into popular culture, commercialized by advertisement, diffused by the new technologies and, unknowingly, have changed the way we see the world.

As a term, 'avant-garde' originates in military jargon. It is the French term for the 'vanguard' or 'advance guard', which designates the small group of soldiers that precedes the advance of the main force of an army. It combines the senses of 'small', 'leading' and 'in increased

danger', carrying a connotation of courage or even heroism. In the realm of ideas, it was first used in the late 18th century in the context of the French Revolution. It was attributed to the philosophers and intellectuals of the Enlightenment who were considered to open the path for political and social changes. The concept was introduced into the field of the arts in the early 19th century by the Saint-Simonians and interacted with the figure of the Romantic artist as prophet and visionary. By the beginning of the 20th century, the function of avant-garde was claimed by both revolutionary parties and artistic movements. In the context of art, it has since become a historical determination. There were two peak periods of the avant-garde art movements: (a) the 'historical' avant-gardes of the early 20th century up to the 1930s; and (b) the 'neo-avant-gardes', mainly during the 1960s and 1970s (see e.g. Bürger 1984).

'Avant-garde' is an approach to art and not a style. This explains why it denotes a wide range of extremely dissimilar art movements and art works. Moreover, it explains why its agents perform a constant conceptual slippage between the definition of art as avant-garde and avant-garde as a kind of art; from an avant-garde artist's point of view, there is no other kind. To this difficulty must be added the general questioning of the existence of the category of art as such. Furthermore, to the degree that avant-garde artists define avant-garde art, they do so modelling it on their own practices, and thus excluding others. It is the retrospective meta-definitions of art theory that allow one to see avant-garde art as a phenomenon.

Yet, there are certain unresolved disagreements between these definitions. One debate concerns whether avant-garde art should be defined in terms of form experimentation or with regard to its social function (Poggioli 1981; Bürger 1984). Another concerns the primacy of form or political radicalism in its definition. Moreover, the dialectical relation and relative positioning of the avant-gardes with regard to artistic modernism is also debated: to put it simply, the question is whether the avant-gardes were oppositional to the modernist project or belonged to it. Per Bäckström argues that the key for untangling this complexity may be found in the divergence in theory of national traditions, which he classifies into Germanic, Romance and Anglo-American (Bäckström 2007). Following a structuralist and post-structuralist interpretation (Derrida 1967, Kristeva 1974), this essay argues that the form-oriented and the social-function-oriented definitions of avant-garde are indissolubly connected. They describe the same structural move. Furthermore, this essay does not consider the avant-gardes as oppositional to modernism *per se*, but rather as its most radical expression; however, the national and institutionalised high modernisms were opposed to several principles of the avant-gardes, and therefore cannot be classified as such.

Avant-garde art combines formal experimentation with ideological radicalism, and all its defining characteristics result from a constitutive questioning of established categories. Its definition includes an element of structural innovation at the level of the signifier and the destabilisation of the institution of art, a high degree of awareness of the theoretical implications of any practice, the link between art and life, and the interdependence of form and content.

From this follows that radical content cannot exist without radical form; it may also be implied that a radical form in itself constitutes a radical content.

Structuralist semiotics is connected both conceptually and historically to the historical avant-gardes, while its poststructuralist mutation is closely interlinked to the neo-avant-gardes. Semiotics has totally transformed the traditional definitional connection of art to materiality. What used to be the essential link to materiality as definitional of the independent realm of art was changed into a functional prioritisation of the signifier as definitional of the poetic function of messages in general (Jakobson 1987: 69-70). Jakobson's poetic function, along with the Russian Formalists' concepts of defamiliarisation, has been the basis for a new, semiotic definition of art, which was formed around two axes: the focus on the expression-plane and innovating research, as well as their intimate connection (Kristeva 1974; Eco 1979: 261-76). This was formulated through a constant two-directional interaction between semiotic theory and the avant-gardes, and acted both as a descriptive definition for the semiotic study of art and as a prescriptive definition for avant-garde art practice.

It is meaningless to speak of avant-garde art without an awareness of its revolutionary subtext. The link was conscious and obvious to those who theorised the avant-gardes from a close vantage point. The Formalist Viktor Shklovsky, writing his essay *Art as Technique in Russia* in 1917, obviously modelled art's definitional device of 'defamiliarisation' on a revolutionary reference; while poststructuralist Julia Kristeva is even more outspoken about what, in her 1974 homonymous text, she terms '*la révolution du langage poétique*'. In other words, 'revolution', 'art' and 'avant-garde art' seem to share the same conceptual structure. Each of them is defined as an act of rupture with an existing structure and, possibly, founding a new one. Through a game between isomorphism and synecdoche, they become almost synonymous.

In this context, it is important to observe how the intensified interest in the expression-plane is situated with regard to the relation of art to life. Traditionally, such an attention would be conceived as a turn of art to itself and away from the world, the clearest formulation of which would be the 'art for art's sake' dictum. However, the avant-gardes' focus on the expression-plane is no longer conceived as a distantiating with regard to non-semiotic reality but as a way back to it. Hjelmslev's model of the sign-function, combined with a discourse of sincerity, can begin to suggest the reasons. Focusing on the expression-plane, which includes a way toward the non-semiotic realm as much as the content-plane does, becomes a strategy to counteract the illusion of the independence of the content-plane and of the 'naturalness' of reference.

There is a series of conceptual steps and double interpretations, that allow for stronger and weaker claims, which connect the focus on the expression-plane with change and ultimately with revolution; ideologically, this preference is not unrelated to materialism. For example, the interest in materiality is the result of an interest in the real structure of reality; the remembrance of the existence of the expression-plane reveals the constructed and ideological nature of our

perceptions and conceptions; the functional primacy of the expression-plane, that characterises art in general, becomes a strategy for drawing attention to it, which is a conscious choice; drawing attention to something implies making people see what they had not previously seen; to see what was there but one couldn't see is the process of becoming conscious; by becoming conscious of a structure, one questions the 'naturalness' of its existence and, therefore, opens up the possibility of changing it; 'making strange' something, so as to draw attention to it, already changes it to a certain degree; this change is already creating something new; a new way of expression, a new art, a new language is already a new reality; which, moreover, changes the way we see and think about (non-semiotic) reality; which may even lead to our changing (non-semiotic) reality. To sum up, for avant-garde art, the prototype structure is revolution, the underlying ontology is materialism, and the main aesthetic principle is defined by a political-ethical demand with regard to its social function: tell the truth, free the people, be (and cause) revolution. Materiality becomes the path to knowing (and changing) reality.

The dialectics of reality and materiality in defining avant-garde cinema

The relation of cinema to both modernism and the avant-gardes is peculiar, for reasons related to its short history, technological basis and wide popularity. Firstly, when cinema appeared at the end of the 19th century, it was considered modern as such: as a technology and as a social phenomenon, it inspired poets and writers who were uninterested in its potentialities as a means of expression. Secondly, forefathers and classics of this new art were the representatives of the historical avant-garde movements; there was not much tradition to revolt against. Thirdly, its newness and desire for acceptance with the status of art led cinema to an extensive use of concepts and techniques borrowed from the other arts, among which were representational elements abandoned by the visual arts and 19th-century narrative conventions challenged by literature. Fourthly, the cost of its production and the wide diffusion of its products very soon turned it into an industry, which promoted a conservative aesthetic in order to appeal to investors and attract a wide public. By the mid-1940s, Hollywood's cultural imperialism had made a small group of expressive choices the norm and everything else the exception. In this context, anything diverging from the Hollywood norm was perceived as daring, even avant-garde, and to a certain degree, correctly so. Possibly for this reason, 'avant-garde', despite its many definitional *aporias*, is a more widely used category in cinema than 'modernism'. Whom should one consider as paradigmatically modernist in cinema, Welles or Rossellini? (Aumont 2007) And is the French Nouvelle Vague modernist in general or avant-garde in particular?

'Avant-garde' is the 'other' cinema. There have been multiple terms to describe it – such as

'non-narrative', 'poetic', 'experimental' – none of which is exactly co-extensive with any other, each of which enters an equally controversial and complicated definitional dialectics. There are many and conflicting definitions of avant-garde cinema (see Albera 2005, Brenez 2006, Le Grice 2001, Noguez 2010, Adams Sitney 1987, Voguel 1974). The most significant theoretical disagreement lies in the primacy of radicalism of form or content, despite the consensus regarding their close interconnection. In other words, on the one hand, the question is at which degree of unconventionality and novelty of form a film deserves to be called avant-garde; and on the other, whether unconventional form is enough to constitute a subversive message. A related debate concerns the use of the term 'experimental' as identical or distinguishable from the term 'avant-garde' (see e.g. Albera 2005, Noguez 2010). Another debate concerns avant-garde cinema's dialogue with the other visual arts and new audio-visual technologies (see e.g. Le Grice 2001).

In constructing a working definition that is as inclusive as possible without losing its heuristic utility, I propose five groups of criteria for recognising a film as avant-garde. Firstly, (a) there is form experimentation. One should repeat that form experimentation is a structural demand and does not imply particular stylistic choices, visual or other. Secondly, (b) avant-garde cinema combines form experimentation with a certain ideological radicalism – though not necessarily overtly political – as well as with the consciousness of the political significance and potential of form. These characteristics are complemented by extra-semiotic characteristics, such as (c) alternative methods of production and distribution; (d) the self-awareness of the filmmakers; and (e) the classification by theorists, critics and the wider public. I think that having some characteristic from the first group (a) is a necessary condition for classifying a film as avant-garde, and it must be accompanied by at least one characteristic from some other group. Moreover, group (a) in a sense already includes group (b), because of the interdependency of expression-form and content-form.

As was the case with the avant-gardes in general, the cinema avant-gardes also focused on materiality as the path to know reality. The struggles against the 'realist' and 'reductivist' misconceptions in cinema, ie. against the beliefs that cinema can give immediate access to reality and that it can be reduced to words, were interconnected and of central importance to them.

Filmmakers of the historical avant-gardes have stressed in their texts the importance of cinema's visuality and temporality, in terms such as Richter's 'visual rhythm', Epstein's 'photogenie', Dulac's 'visual film', 'optical harmonies' and 'music of silence', and Eisenstein's 'hieroglyphics' (in Adams Sitney 1987). They argued that cinema's potentialities lie in the use of its specific materials, and not in the imitation of novelistic or theatrical techniques. In this context, the introduction of sound caused a major theoretical debate, particularly with regard to its 'talking' aspect. This was eventually resolved by the acceptance of sound into cinema's specificity, no longer as an impoverishing and 'naturalising' element, but as increasing and enriching its complexity. Importance was given to the non-synchronous use and displacement between the elements of cinema's multileveled heterogeneity. Gradually, the interest in the expression-plane

shifted from the semiotic expression-form to the semiotic expression-substance, and further on to the extra-semiotic materials and processes. By the early 1960s, the research on cinema's specificity had evolved into research on its conceptual and expressive borderlines, and then on the expansion of its apparatus and its opening to other fields.

As we have explained previously, cinema since its beginnings has been haunted by its relation to reality. One can distinguish three approaches to reality: the first has formed the so-called classic narrative cinema as exemplified by classical Hollywood films. This approach is based on a slippage in the significance of the concept of 'similarity'. 'To look like the real' because of being faithful to the real, becomes 'to look like the real' in the sense of giving the impression of being real. So truthfulness regresses in favour of verisimilitude. A number of techniques concerning visual representation and narration have led to highly codified conventions, with the expressed purpose of minimising the audience's awareness of the constructed nature of film. These conventions are socio-historically conditioned, which becomes quite obvious if we consider the speed by which they lose their effectiveness as illusions of reality.

A second approach to realism aspires to the minimisation of mediation. It includes diverse cinema movements – from Neo-Realism to Free Cinema and *cinéma-verité* – and occasionally crosses paths with the avant-gardes. In this case, the purpose of showing things 'as they are' concentrates on the lessening of their distortion by the process of mediation. Techniques of this approach include shooting outside studios, without sets and artificial lighting, using non-professional actors, using wider shots of longer duration in order not to manipulate the audience's reception too closely, using more loosely connected and open-ended narrative structures etc. However, these techniques do not cease to constitute stylistic choices rather than an un-mediated approach to reality. One may argue that they are less manipulative and repressive, but they are no closer to the referent.

A third approach to truthfulness in cinema concentrates on sincerity, on making the audience aware of the fact of the mediated nature of cinema's relation to reality. This has been one of the constant underlying ideological positions of avant-garde film-making. From this point of view, the first kind of realism is considered not only ontologically mistaken but morally fraudulent, politically repressive and artistically non-cinematic. The second kind of realism would simply be a self-deception. Avant-garde film-makers' version of truthfulness as sincerity fits well with their exploration of cinema's characteristics and expansion of its limits. Their questioning goes further back from the realistic conventions of representation to the conventionality of representation as such, both on the levels of visual representation and of narration.

To start with, one can argue that not to comply with a convention is by itself an emancipatory move, particularly if one reveals the convention's conventional nature in the process. Nevertheless, there are more specific implications with regard to some avant-garde film choices. Firstly, to question representation is to question how reality is turned into concepts. This means to question, on the one hand, specific representations and, on the other, the very pos-

sibility of representation. To reveal aesthetic realism as conventional and ideological, as well as to reveal the constructed nature of film, is to struggle against an illusion, with ethical and political implications. Secondly, to deny classical narration means both to deny the dominant narrative and to oppose the narrative mechanisms of audience manipulation. It has been convincingly argued that the classical, so-called Aristotelian structure of narration is indissolubly linked to the Oedipal itinerary, as well as to capitalist and patriarchal ideology. Moreover, it functions manipulatively, contributing to the spectators' identification with the film and, therefore, diminishing their critical position with regard to what they see. Thirdly, the focus on medium is related to the notion of materialism. The importance of the signifier, and then of the semiotic and extra-semiotic substance, is meant as a truthful relation to the Real, as opposed to aesthetic realism which can be construed as nothing more than a kind of philosophical idealism. Finally, to alter what people thought of as eternal and as going without saying changes the way that they see the world. Questioning the given and proposing new forms may open up the possibility for the new and the unforeseen.

Strategies and techniques of avant-garde cinema

Avant-garde films apply certain interrelated strategies to draw attention to their expression-plane and, therefore, to their conventional and constructed nature. I have distinguished these strategies for analytical reasons, although practically they often overlap and a specific technique may be the result of the combination of several strategies. The listing that follows is not meant to be exhaustive.

A first strategy is self-reference through thematisation. This is not necessarily an avant-garde choice. It is perfectly possible to make a conventional film on the subject of filmmaking. When combined with other strategies, though, thematisation can act as a narrative excuse to reveal construction or as a way to draw additional attention to it. This is what happens in Dziga Vertov's famous 1929 film *The Man with a Movie Camera*, whose plot intertwines a day in the Soviet Union with the processes of making and receiving a film (Fig. 5).

A second strategy is not to use some cinematic conventions, which in practice means consciously breaking them, and thus reminding the audience that they are conventional, ie. constructed. This can be done in different degrees, ranging from small interferences with the conventions to radical alterations. The 'broken' conventions may concern visual representation, such as the 180-degree rule and establishing shots, or narration, such as linear time and the Aristotelian structure. 'Jumping the line', for example, which often happens in *Nouvelle Vague* films, causes a momentary spatial confusion for the audience that throws them out of the illusion of reality and obliges them to think of the existence of the camera.

A third strategy is to draw attention to a potentiality by actually using it. Of course, usually



Figure 5. *The Man with a Movie Camera* (Dziga Vertov, 1929).

the fact that a potentiality is used is not enough to draw attention to it, unless it has rarely been used before. It is the way that it is used that becomes important. A revealing way may be unusual (see previous strategy), or particularly consistent, or very extreme. For example, a very rich exploration of the complexities of cinematic heterogeneity is performed in the 1977 Greek film *Idées Fixes/Dies Irae* by Antoinetta Angelidi, where the elements of heterogeneity are used both in displacement and in *contrapuncto*. By rearranging already codified messages and juxtaposing materials, the film comments both on the messages themselves and on the functioning of cinematic semiosis (Fig. 6).

A fourth strategy pertains to the focusing on the borderline between the semiotic and



Figure 6. *Idées Fixes/Dies Irae* (Antoinetta Angelidi, 1977).

its outside. This can be done in several ways, including the semiotisation of extra-semiotic elements. Let us look at some techniques to draw attention to the articulation with the extra-semiotic elements of the expression-plane (the examples are taken from Adams Sitney 1987; Le Grice 2001; Brenez 2006). One should note that the described techniques usually also simultaneously exemplify some of the strategies mentioned above.

The notion of the cinema's recording instruments as generating their own subject-matter appears already with the historical avant-gardes, with Dziga Vertov's 'mechanical eye' and Germaine Dulac's 'visual films'. Particularly interesting in this respect is the work of Michael Snow, who explores the potentialities of camera movement. For example, the 1967 film *Wave-length* develops in a continuous 45-minute zoom, while in the 1971 film *La région centrale* the camera moves around in 360 degrees in every direction and on every plane of a sphere. Another group of strategies aims at rendering the audience aware of the event of shooting. An example of this is Andy Warhol's work between 1963 and 1965, with the deliberate use of continuous takes, the inclusion of white flare at the end of the reels, and the background noise and director's instructions in the soundtrack.

Another area of investigation is the film strip itself, as a material and as an object. Drawing attention to the physical nature of the film starts with using the sub-semiotic elements of the cinematic image. These can be the grain of the photographic image, the sprockets and frame lines, and accidental elements such as scratches and dirt; and later on, the pixels and electronic noise. An example of this is George Landow's 1965 *Film in Which There Appear Sprocket Holes, Edge Lettering, Dust Particles etc.* A different strategy is to completely subtract the camera as a recording apparatus. Many techniques have been employed to leave a trace on the film, such as painting on it or scratching it. One of the first attempts was Man Ray's 'rayogram' technique, which consisted in laying small objects like dust, nails, pins and springs directly onto the film before exposure. Other strategies focus on printing, processing, re-filming, re-copying. Furthermore, drawing attention to the film strip as an object may even change its function, turning it into a surface for added layers of materials or into an independent exhibit – in which cases it is no longer part of a cinema sign-function.

Editing as both signifying and mechanical process has been given attention since the 1920s Soviet theories of editing. In the 1960s, metric film-makers, particularly Peter Kubelka, transfer editing from the level of the shot to the level of the frame. Kubelka stressed the fact that motion in cinema is an illusion and introduced the technique of single-frame editing. In his completely abstract 1960 film *Arnulf Rainer*, he uses only empty and black film frames, and empty and white sound, in specific relations, in order to create with these absolutely first materials a film repeatable by anyone. The exploration and expansion of the audience's perceptive apparatus has, of course, as initial historical reference Marcel Duchamp's 1926 *Anémic Cinéma* and includes Kubelka's, Conrad's and Sharits' 'flicker-films'.

Experimenting on the projector's flicker as a form in its own right is one of the techniques

focusing on the projecting apparatus. Another strategy changes the conventional use of the projector; for example by the technique of film-slip, ie. the continuous motion of the film through the gate rather than the intermittent phasing of shutter and claw. Another group of strategies draws attention to the screen – changing its shape, its material, replacing it with different objects or multiplying it in number. Another strategy completely subtracts the film from the process of projection. This was first thought of by the Lettrists, who asked “Can we do films without film?” The work of Malcom Le Grice explores this possibility. For example, in his 1971 *Horror Film 1*, he interrupts the beam of pure colour projections, creating shadow on the screen. Anthony McCall went further with his solid-light installations, starting with the 1973 *Line Describing a Cone* and going further by subtracting even the projector in his *Long Film for Ambient Light*. The expansion of the event of the reception has its origin in the 1951 *Le film est déjà commencé?* by Maurice Lemaître, where actors *in vivo* participated in the performance. In Isidore Isou’s 1960 *Le film sup ou la salle des idiots*, the spectators were given materials to make their own films. Audience participation has since been invited in many different ways, recently also through interactive computer programs.

What is conventionally considered as completely extra-semiotic are the material conditions, economic and working relations, and institutions that surround the processes of production and diffusion of the films. These too become significant for avant-garde film-making, which not only uses alternative methods such as single-hand film-making or co-operatives of production and distribution, but also incorporates them into the film itself. Most interesting in this respect are the cases of Peter Watkins and Armand Gatti, where the process of genesis of the films is equally as important as the result.

Closing, one could make a few observations. Firstly, the strategy of semiotising extra-semiotic elements of the expression-substance is particularly intriguing, precisely because the moment they are semiotised, they cease being extra-semiotic, moving on the borderline against a further extra-semiotic. Secondly, a constant risk faced by some of the proposed techniques is to fall back outside semiosis, or even outside perception. Kubelka’s single-frame editing, for example, is completely unperceivable and therefore unable to produce signification. It functions only in combination with its creator’s verbal explications and the viewing of its celluloid material as a spatial exhibit, which allows one to perceive it as co-existing series of frames. This is not necessarily a problem but it means that such a work includes on equal footing the two different uses of the same material (ie. its formation by different forms, which belong to different sign-functions, one cinematic, the other not) and the verbal explanation. Thirdly, these techniques play and often cross the borderlines of cinema semiosis toward other kinds of semiosis, precisely because the kinds of semiosis are not defined by material, while materials are not demarcated in a metaphysically stable way. This means that often these works cease to be cinema. This move, however, is meaningful for understanding cinema. Therefore, fourthly, the great gift avant-garde offers us is finding, revealing and opening up potentialities;

potentialities with regard both to filmmaking practice and to understanding films, cinema and signification in general.

Saussurean semiotics and avant-garde art belong to the same epistemological shift that defined the 20th century. Among their shared characteristics are the belief in the constructed nature of the semiotic realm and the demand for a de-naturalisation of ideology. As Louis Althusser puts it: 'One of the effects of ideology is the practical denegation of the ideological character of ideology by ideology' (1970: 151). Uncovering and dismantling ideology is indeed a liberating act.

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Book Reviews

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Cobley, Paul 2016. *Cultural Implications of Biosemiotics*. Dordrecht: Springer, 139 pp. ISBN 978-94-024-0857-7, ISBN (eBook) 978-94-024-0858-4.

Paul Cobley's book is designed as a layperson's introduction to biosemiotics. It combines a roughly historical overview of the development of the field with a series of chapters on what the author argues are the main implications of biosemiotics for the study of culture.

The central argument of the book, the continuity (or synechism, as Cobley calls it) between nature and culture, is in itself scarcely new, 160 years after Darwin published *The Origin of Species*. The difference is that biosemiotics makes the argument in terms of the processes of semiosis, which it sees as continuous, though increasingly complex, from the simplest living organisms up to humans, their societies and cultures.

It is clear why biosemiotics finds its preferred semiotic theory in Peirce. Much of the argument hinges on the nature of the sign, how it is constituted and how it functions. However, the crucial moment in the development of the field seems to have been the discovery, by Thomas Sebeok, of the work of the early 20th-century Estonian-German biologist Jakob von Uexküll.

Uexküll was interested in how living beings perceive their environment. He argued that an organism experiences living in terms of a species-specific spatiotemporal reference frame that he called *Umwelt*. The *Umwelt* is not simply what a human observer would perceive as that organism's external surroundings, but is composed of its self-oriented *Innenwelt* (inner world) and the information on the external world conveyed by its senses (its sensorium). This is where semiotics comes into the picture, because the organism 'interprets' this sensory input, distinguishing what is positive (+) – ie., food, warmth – from what is negative (-) – ie., danger – and ignores what is simply irrelevant to its interests (0).

Human beings also live in their own *Umwelt*. But since humans are a very small part of all the living organisms on the planet, and the specifically human semiotic activities known as culture are a small part even of the semiosis that humans are engaged in, the peculiar forms of semiotic activity typical of culture (notably the production and consumption of texts of all kinds) are of very limited interest to biosemioticians. Like many biosemioticians before

him, Copley has a tendency to point this out in unnecessarily aggressive tones, which mars the style of the book.

The pivot of the book is chapter 3, 'Difference in kind or difference of degree?', which takes up the issue of human exceptionalism. The introduction of the concept of *Umwelt* allows biosemiotics to speak of the organism's cognitive capacity to differentiate objects within its *Umwelt* as a rudimentary form of modelling. Somewhere in the course of prehistory, the human species begins to co-evolve with language. For biosemiotics, verbal speech is only a late development of the capacity for non-verbal communication, or 'language'. Copley, citing other researchers, dates the appearance of this capacity to perhaps as far as 2 million years ago, whereas verbal speech only came into use some 300,000 years ago. Primary modelling involves the ability to differentiate. Verbal language is a secondary modelling system, able to cognize and express relations between things (Peirce's 'Secondness'). Tertiary modelling is what develops out of this: 'the extension, through inevitable mutation in social exchange, of primary and secondary modelling to produce cultural forms' which 'partake of the lower strata of modelling but also feed back to them' (p. 35). The development of verbal language thus involves a drastic step in the complexity of the human *Umwelt*. 'This is where language defines what it is to be human; and this is where sociality – the interconnectedness of signs that humans are able to apprehend – is crucial to the process' (p. 36). Language is thus, for humans, a difference of degree in their ability to carry out semiosis – and that difference of degree becomes a difference in kind, as culture, language and brain co-evolve.

Significant in this development is the concept of 'nesting'. Copley argues that more complex forms of semiosis grow out of, and incorporate, more rudimentary forms, but the rudimentary forms do not disappear in the process; instead, earlier and simpler forms of semiosis can be found 'nested' inside even the most complex kinds of sign processes in human culture. This seems to be crucial to the difference in perspective between Darwinian evolution and biosemiotics: 'Biosemiotics, particularly on the question of language, sees the genetic inheritance not as a matter of periodic mutations but as a development involving nesting and embedding' (p. 43). Evolution thus conceived becomes less a process of accidental genetic jumps and more an ongoing process of adaptation (or, as Copley prefers to call it, exaptation).

After this, Copley's argument becomes more philosophical. The book gradually focuses more on the issue of realism (on which he often cites the work of John Deely) and how the concept of *Umwelt* allows for a qualified kind of realism which Copley contrasts with the post-modern insistence on our entrapment in discourse. Chapter 4 is concerned with the development of subjectivity, which he approaches in a rather interesting way through the concept of *Umwelt*. The *Umwelt* is not objective reality (the 'real world'). It is our perception and construction (our model) of reality as we perceive it through our sensorium and our experience (including all the social and cultural information carried by language). Like any organism, we sort our experience into positive, negative and indifferent, and that which we categorize as

indifferent we essentially do not perceive at all. Our *Umwelt* is, in other words, a kind of collective bubble. But if that collective bubble is too far from the objective world that we live in, it won't work, and we as individuals and as a species will not survive. The resistance of what is 'out there' is what we experience as 'otherness', and the sense of self is developed out of the encounter with the 'other'.

Chapter 5 deals with ethics. This part of the argument, in my opinion, does not work. Much of the chapter is a presentation of the work of Susan Petrilli and Augusto Ponzio. The argument seems to be that, as the only self-aware semiotic animal, humans have a responsibility to protect and preserve the global web of natural/cultural semiosis that we are a part of. But since most of this global web of semiosis would go on quite happily without us, can that argument really be used to support action in any specific way? Dead bodies are just as much a scene of trillions of bacteria engaged in semiosis as are living ones. Unless we succeed in eliminating absolutely all traces of life on earth down to the bacterial level, through nuclear catastrophe or disastrous climate change, the global semiotic web seems pretty indifferent to what humans do.

Higher mammals perhaps provide a better analogy for a biosemiotic ethics. But even this will need some work. Animals parent their offspring, as Copley points out, but they frequently kill the offspring of other members of their own species to increase the chances of perpetuating their own genes. Groups of wild chimpanzees go to war against other chimpanzee groups over territory and resources. A natural ethics could probably be made to cover behaviour conducive to the survival of the group rather than the individual (ie. the concept of self-sacrifice). Perhaps we could stretch it to the survival of the species, or even of the planet, if we can be persuaded to accept a wide enough meaning of 'group'. But that is really only an ethics of enlightened self-interest (which, to the extent that self-preservation is part of our biosemiotic nature, I suppose would be a bio-ethics). It would work as an argument against environmental destruction, but it won't help much against murder, war or genocide.

Chapters 6 and 7 have to do with determinism and freedom, though I found them less clear than the preceding chapters. The discussion of codes in chapter 6 seems driven mainly by the need to distinguish between strong codes (such as the genetic code) and weak codes (which involve interpretation, agency and choice – ie. 'meaning'). The point seems to be that semiosis is not just a matter of mechanical coding. Chapter 7 starts with an argument for taking a 'wider' biosemiotic approach to cultural issues, using the semiotics of vision as an example (and including an ungenerous and misunderstood account of Michel Foucault, Fredric Jameson, ocularcentrism and the 'masochism of French theory', p. 95). It then moves on to a discussion of 'constraints' that is closely related to long-standing Marxist debates on determinism, and indeed, here and in previous chapters, Copley refers to a number of Marxist theoreticians, notably Althusser.

The argument comes to a head in chapter 8, 'Humanities are natural', a defence of the humanities from an anti-humanist, non-individualistic perspective. This is where the book has

been going. The tone also becomes much more conciliatory, actually recognizing the trans-disciplinary contribution of Saussurean semiotics (and the concept of *text* introduced independently by Roland Barthes and Yuri Lotman), as this ‘shifting the focus from the “good” to the “analytic” is the defining feature of contemporary humanities’ (p. 113). The chapter of course argues for mind-matter continuity, for culture as part of nature, for agency as inhabiting *Umwelt*, and there is nothing wrong with that, though it is unlikely to help save the humanities from the onslaught of late-capitalist instrumentalism.

However, the most interesting part of the chapter is the argument, based on suggestions in the late work of Sebeok, that animal semiosis might develop into ‘aesthetic behaviour’.

Cobley argues that ‘[a]esthetic behaviour, as formulated here, heightens cognitive differentiation. It is a form of modelling with its own specific procedures, practices and rewards’ (p. 121). In an *Umwelt* that includes (and is partly constructed by) human language, this modelling is ‘the anticipation and creation of possible worlds’ (p. 121) in art, fiction, philosophy or science. Independently of whether aesthetic behaviour exists among animals, such an approach to the humanities raises some interesting possibilities. It suggests that there is an unexpected use value to what we loosely define as the ‘arts’. The use value of the arts would be as a kind of cognitive gymnastics or fitness exercises. Cognitive ability is obviously good for survival. Aesthetic behaviour keeps it on its toes. It provides a form of play-as-cognitive-practice.

This, then, goes on to a defence of the need for humanities as the disciplines that analyze and cultivate such cognitive skills. It is formulated as a defence of art and philosophy, but it could easily be extended to all the human sciences, including history, sociology, psychology and anthropology. There is an interesting echo, once again, of the arguments made by Marxist theoreticians of culture, such as Georg Lukács in his defence of the novel as a manifestation of collective consciousness, or Raymond Williams arguing for a view of cultural texts as ways of imagining ourselves, our world and our possibilities for action in it.

Cobley’s book has not really answered the original question it posed of ‘How could natural history become cultural history?’ (p. 2), and it would clearly be unfair to expect it to do so in 140 pages. We can assert that there is a continuum of nature and culture (something which we really should have digested by now), and we can suggest that a semiotically informed understanding of cognition provides a possible bridge for linking up the pieces of this continuum, but beyond that, we simply do not know enough – about either nature or culture – to be able to say anything very specific. And at this point, this ignorance is an invitation for speculation that can get pretty wild.

Thus, I am not really convinced that biosemiotics as it currently stands has many implications for culture. I am pretty certain that it will not help me to understand medieval literature or to analyze the narrative structure of television serials. But it is a *bona fide* development of Peirce’s theory of semiosis and provides interesting feedback to that theory from empirical

research. Cobby's book brings to the forefront a number of interesting connections on a philosophical and theoretical level, and gives the reader a good introduction to what biosemiotics is all about.

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Multimodality in focus – a new paradigm for semiotics?

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It is certainly true that multimodality is in fashion – or rather anything multi-, like multi-sensoriality, the multiple (Deleuze), etc. The word first evokes just different sense organs – seeing, hearing, tasting, touching, smelling – but most of the adherents of the new school say it is much more: it is social semiotics. Yet, when you say semiotics, thousand of lamps start to click: there are hundreds of versions, traditions, concepts, approaches within semiotics. So one should first say what is then meant by semiotics. If we very broadly accept what Umberto Eco said, namely that semiotics=signification+communication, it is evident that in multimodality we underline primarily the latter.

The anthology edited and directed by Lyndon C. S. Way and Simon McKerrell entitled *Music as Multimodal Discourse: Semiotics, Power and Protest* (London: Bloomsbury, 2017) is a very thought-provoking collection of essays on this new phenomenon. It is also very 'British' in the sense that the empirical material it deals with to support its theories mostly stems from the media of the Anglo-Saxon world, with some exceptions from Spain and Guatemala. But it is British also in the sense that it is a continuation of so-called British Cultural Theory, which indeed has expanded all over the world in the academia of sociology, linguistics, discourse analysis, anthropology, history, arts studies, ie. broadly, in the humanities. However, since semiotics is mentioned in the very title of the book, it legitimates us to scrutinize this new approach from the viewpoint of this 2000-year-old discipline called semiotics and sometimes semiology.

One typical feature in all the writers of the anthology is that they all use semiotics but they do not want to be called semioticians. They share the view that semiotics is identical

to the linguistic ‘imperialism’ once launched by the structuralists in the wake of Saussure’s ideas, a phase already long left behind in the light of poststructuralism and postmodernism. Something essential is then forgotten, namely that semiotics in the meantime has developed radically and explosively in different schools and empirical fields, not only in the analysis of verbal sign systems but also, powerfully, in non-verbal issues. So the idea of studying all these aspects of messages surrounding us is nothing new, it has been going on for a long time (see Eco, Lotman, the Paris School, all the special branches of semiotics in theater, cinema, music, architecture, dance, etc). Very often it is then called ‘intertextuality’. Yet multimodality tries to grasp states before meanings are manifested and crystallized into texts or into discourse. By discourse, we of course no longer mean only linguistic texts but something we could call ‘symbolic power’ after Michel Foucault, though the term was also used as early as by the Frankfurt school.

The nature of the book is revealed from the very beginning by its dedication: ‘This book is dedicated to all those everyday composers, musicians, lyricists, fans and listeners who instinctively know how powerful music can be in communicating social change’. Social change? What is that? What change? It is pleasant to have analyses representing ‘participant observation’, i.e. leading to some concrete program and action. But what has to be changed? The authors are certainly thinking of socially unjustified conditions. Is it that the position of marginalized people has to be improved? But who are marginalized? Those who represent popular culture, those who enjoy messages at the level of TV advertising and jingle tunes. I would like to propose a modest correction here: what is marginalized in the contemporary world is *not* popular culture, which in our commercialized and mediated world has constituted a new civilization; it has penetrated to every corner of the world. Instead, what is marginal in Western culture is the classical humanistic tradition, or what we could call ‘cultivation’ (German *Bildung*), which is in danger of vanishing or being banalized altogether. This kind of voice is not heard or accepted at all by the representatives of British cultural studies. If you like classical music you are elitist, ultraconservative, regressive, intolerant, even fascist, at least crypto-fascist, in your value profile. I would like to recommend to the inhabitants of the Brexit island to read one classic from continental Europe, namely Pierre Bourdieu’s *Distinction*. Though his theory is undeniably very Parisian when he supposes that the whole world follows the class distinctions of Parisian *arrondissements*, his conclusion is that tastes in music, food, dressing, lifestyle are not compact blocks of attitudes but positions to be shared very diversely. Thus you can be a left-wing radical and like Beethoven symphonies or Wagner. You may go to rock concerts and be ultraconservative. So it is saddening if the ideology of a new scholarly approach limits itself to stereotypical schemes of class boundaries. There are many semiotic schools with an inclination to political activity and consequences which basically accept the principle that research is value-based and never neutral; they might willingly join this front unless they were rejected by many voices from this choir of multi-issues.

At least they should concretely demonstrate their new CDA, ie. critical discourse analysis, and social semiotics in their full analysis of the phenomena under study. I am afraid that by limiting ourselves only to communication without reference to the results already reached decades ago in the field of signification we cannot get far. However, if we want to enact our ideological choices (certainly as such justified) and if the object is to ponder 'how musical meaning is a part of broader socio-cultural and political discourse exposing how it has real power and agency in the social world' (Way and McKerrell 2017: xiv) and 'that music can articulate discourses not only of power, exploitation, abuse and hate, but also resistance, subversion, belonging, community and hope' (xv), then we need concepts and metalanguage whereby we can analytically scrutinize these issues, This view was already presented by Tia DeNora in her study *Music in Everyday Life* in the section Conceptualizing Music as a Force: 'Music is not merely a "meaningful" or "communicative" medium. It does much more than convey signification through non-verbal means. At the level of daily life, music has power' (DeNora 2000: 16-17). Yet it is hard to imagine how anything could have power before it *signifies* something. Why are we social beings, why do we follow social orders and laws? Because they are *internalized* in our minds, they live within us as one part of our human mind. This was said as early as by Herbert Marcuse in the notion of internalized dominance. In my own modest effort to study the postcolonial situation I have proposed such concepts (Tarasti 2000), and as to more radical social involvement, in my theory of resistance (in Tarasti 2012, 2013, 2015). But this is not the issue here. Let us see what could be developed from the tools offered by the rich anthology in front of us.

It is probably true what Umberto Eco said once about popular culture: namely that when you open a coke bottle, the act itself is not terribly interesting for a semiotic analysis, but all the connotations in the mind of the consumer and his social practices, values, etc. are more challenging. In order to study them you need to be rather a sophisticated philosopher. What in fact happened with both popular cultural and so-called 'elitist' high culture of classical art in the 1960s in the vein of structuralism was the following. By showing that classical works of art, from Michelangelo, Dante, Racine, Pascal, Corneille to Goethe, Flaubert, Proust, Tolstoi, Belyi and Mallarmé, followed the same textual rules as revealed by structural linguistics and other semiotic schools, structuralism pulled them down to the same level as all texts in a culture. Yet, analyzing popular culture with the same tools, structuralism elevated it to the much higher status of an object worthy of academic discussion, which it had not been earlier. The reception of authors like Roland Barthes and others in the UK followed just these lines. And he is still almost the only one of the French structuralists mentioned by name in popular culture studies (thanks to his inspirational essay 'The Grain of the Voice'; when I, as a young student, interviewed Barthes in Paris in 1973, he considered that psychoanalysis, Marxism and linguistics were the three great forces in semiotics. Yet, he had elegant hands, capable of playing Schumann whom he also studied).

The problem with the new multimodal approach is that all the empirical examples it uses concern only rather stereotypical, not to say trivial cases of media culture. I have not seen it analyzing more complex meanings and textual configurations, as for example in 'higher' level art works. Apparently the multimodal approach does not do this since they for ideological reasons exclude that world. I remember the situation in Swedish musicology in the 1980s and even earlier. There were 'serious' scholars (Alf Gabrielson and generative grammarians such as Johan Sundberg) in Uppsala and Stockholm at the Royal Swedish Academy of Music studying classical music, Swedish music history but also cognitive psychology. Professor Ingmar Bengtsson's *Musikvetenskap*, Introduction to musicology (Bengtsson 1973), with its deep interest in musical semiotics (which was unfortunately never published in English but used as the authoritative textbook in all Nordic, Swedish-speaking countries, Finland included) was nevertheless not 'serious' enough for the Helsinki professor Erik Tawaststjerna who said that at that age one could not adopt a new approach, he should rather have studied Liszt's B minor sonata. Yet, at same time there was the socially radical school in Göteborg around Professor Jan Ling (later also Rector of the whole University), who studied only 'progressive' issues of the musical *folkhemmet* ('home of the people'), but it is hard to say with what results. They would certainly have shared the same ideology as the multimodal approach.

Sometimes the scholars of the anthology refer to 'classical' musicology but then usually to its radical American wing of the so-called new musicology. This happens in connection to gender studies, which were taken to be so promising some time ago. The great guru is Susan McClary, with her *Feminine Endings: Music Gender and Sexuality* (2002), mentioned in particular in the essay by Aileen Dillane, Martin J. Power and Eoin Devereux. McClary tried to show that gender is musically constructed, that music had gendered aspects, and that gender and sexuality functioned in narratives making music a gendered discourse. That is all of course very exciting. But unfortunately we still do not have a theory of how gender is reflected in its own signs. The relation is certainly not a simple causality, even if we were to reject Freud's dictum about anatomy being destiny. It would be challenging and renewing indeed to study this mysterious connection between gender and art – particularly in such complex cases as Tchaikovsky, Proust and many others. But we are not sufficiently advanced in theory to do it successfully. We are given to understand, by the above-mentioned authors in their essay 'Shame Makes the World Go Around: Performed and Embodied (Gendered) Class Disgust in Morrissey's *The Slum Mums*' (Dillane, Power and Devereux 2017: 48-70), that this movement 'challenged structural and empirical research in musicology at a time when scholarship declared "signification" to be off-limits, yet where "structures" as graphed by theorists and "beauty" (see Hanslick, 1995, for example) as celebrated by aestheticians evidenced violence, misogyny and racism'. They argue that new musicology was a justified reaction on the American scene against extremely formalized Schenkerianism and set theory, or archival and sketch studies, but at the same time they focus all their own study on 'signification' as ideologically motivated issues in the Pandora's

box of violence and racism. That is strange – and sad at the same time – and totally ignores what kind of research has grown in Europe from even the Hanslickian source they mention, though we would not accept it as the only standpoint of ‘absolute music’. There has been an international project on musical signification since 1984, when it was established in Paris at the French Broadcasting Company.

Susann McClary once in a lecture at a congress in the US said dramatically that Beethoven exhibits himself as a rapist in the violent transition to the *Freude* theme in his Ninth Symphony. Edward Laufer, a distinguished Canadian Schenker scholar, burst into laughter. ‘No, I was quite serious’, said McClary. The error in reasoning is here to think that if a man or woman has a bad ideology, the art they produce will also be bad and be doomed. There are cases like Richard Wagner, whose personal moral standards were certainly very low, but in spite of it he created enchanting music. On the other hand, we have a lot of morally and ethically extremely good people but their art is zero, boring. All the efforts to create morally purified and positive art, say in the Soviet Union or in Nazi Germany, is like that. One can well accept in principle the aesthetics of the USSR as such, but their consequences and applications are terrifying. Fortunately European scholars have always been more reasonable and the new musicology has never achieved the foothold in the Old world that it has in the New. Its results, in studies on Schubert (Solomon), Tchaikovsky and Sibelius (Tim Jackson), speak for themselves as historically exaggerated, arbitrary interpretations. In any case we have to remember that the journey from person to art is long and complicated. To follow the idea of the French linguist André Martinet, a ‘rearticulation’ occurs when we shift from one level to another. In his existential philosophy Sören Kierkegaard spoke about ‘leaps’ in the development of our identities. Hence what happens in art can be already far afield from the real personality.

Let me return to multimodal studies and see if they propose something new and promising for musical studies in some sense. Indeed, there is a lot of writing which may probably evoke new and productive openings. Specifically, with the fear of touching the area of signification which they deem regressive, they may perhaps have something new on the level of communication.

Lyndon C. S. Way and Simon McKerrell admit that music has been made of semiotic connections between music and language, but fundamentally their position is that music is not a language. That has been said many times. They obviously think that this is a progressive standpoint but they totally ignore the studies of music as a non-verbal sign system. Music is not always an aural phenomenon (Way and McKerrell 2017: 13). True, starting with Ernst Kurth in his music psychology a long time ago, many have said that music is not in tones, it only manifests in tones. Music has semiotic ambiguity. Also true, but we still try to understand that ambiguity and complexity and to form a metalanguage with which we could speak about it. Musical meaning is corporeal and our bodies are cultured. All this has been said by many in musical semiotics, from tango scholar Ramon Pelinsky to Gino Stefani and recently, in general,

the Venezuelan anthropologist José Enrique Finol in his work *Corposfera*. They accept Philipp Tagg's idea of music as something 'alogogenic' (Tagg 1979: 14). This certainly repeats what Curt Sachs once said about music as either logogenic or pathogenic. Göran Eriksson and David Machin deal with music in Sweden. They study a Swedish reality TV series and its musical messages. Unfortunately the cases of how music carries the plot and its emotional contents remain rather scanty because the analytic vocabulary of their gurus, namely Bell and van Leeuwen, is so simple – or even false, like McClary's thesis that in opera masculine character have harsher staccato notes quoted from military music – we can list hundreds of contrary examples. The essay on Morrissey's *The Slum Mums* melody has been already discussed. Popular culture is automatically justified because it is the voice of the suppressed underclass. The melody itself is analyzed harmonically but certainly this is not the relevant level of analysis for this type of music where the musical signifier is in a musical respect very scanty, but its meanings lie elsewhere.

One of the most fascinating chapters is the one dealing with recontextualization and fascist music by John E. Richardson. There are cases of fascist musical practices in many countries which consist of adopting or stealing some melody from its authentic innocent context and providing it with a fascist meaning in a new context. This is very much the same as the musical quotations once studied by Zofia Lissa, ie. a melody is transferred or transplanted to a new 'isotopy', so to say. 'When a textual element is taken from a specific context we argue it is decontextualized, when this same element is inserted into a new context, we argue it is recontextualised' (Richardson in Way and McKerrell 2017: 77). That is certainly a productive methodological discovery which can be applied to any musical culture, so it is not something just typical of fascism but quite general. If Turkish music appears in Beethoven's Ninth Symphony finale we can say that it is recontextualised. So any ideology could adopt this technique, which has its own varieties. Way brings these ideas further to the Turkish mediascape and its protest music. He distinguishes between voice melodies and instrumental melodies. Theo van Leeuwen studies a phenomenon which everyone has experienced, namely the jingle melodies of TV advertisement. Even in old age one can remember by heart tens of jingle melodies once heard on TV; they are rooted deeply in our subconscious psyche and so this phenomenon is certainly culturally significant. They often act as leitmotifs by their use and appearance. They are like heralds, they are made to be remembered. They are musical signs and the only way to get into their essence is musico-semiotic analysis by all the sign categories from Peirce (icon, index, symbol) to Greimas (seme, isotopy, modality) or existential semiotics (zemic, presign, actsign, postsign, geno/phenosign etc.). In themselves, these logos are trivial.

Johnny Wingstedt also examines jingles as musical designs. Again Halliday's textual metafunctions are mentioned, as a semantic gesture I would say. But the study of the jingle of Mr Clean does not tempt us to hear it. Laura Filardo-Llamas justly grasps the problem of home violence in Spain and its representation in multimodal discourses. Rusty Barrett adds to the whole the voice of Latin America by studying indigenous hip-hop as anti-colonial discourse in

Guatemala, very fascinating. He speaks for the Maya movement defending their native values in this country. Matthew Ord examines British folk rock recording as countercultural discourse. For him, musical meaning is metaphorical, and one may here remember what Roland Barthes once said about musical meaning: '*Seule la métaphore est exacte*'.

Finally, I want to mention that the journal *Semiotica* just dedicated a special issue to multimodality in argumentation (Rocci and Pollarolli 2018). A quite essential note there is by Paul van den Hoven (2018: 330), who sees multimodal argumentative discourse as a shift towards the audience. Like once the notion of genre, it is nowadays rather determined by the receiver, the consumer of the message (Cobley 1996 and 2002). The discourse world is a rhetorically organized world. But this is also the danger of the whole multimodal approach, namely, if it studies only extremely regulated media messages, the whole context of multimodality gets distorted by one type of messages of our electronic 'bubble' world. Reality, ie. all communication, is of course multi-modal but in a much deeper, more problematic and complex sense than anything the mass media offer us. The idea to study argumentation level by level starting from the basic phenomenal point of view is certainly the right one. By that we gradually get to the meaning processes which even the most banal popular culture messages can offer us. It will be interesting to observe in which directions multimodal studies develop in the future.

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