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## **Beyond methods and models. Semiotics as a distinctive discipline and an intellectual tradition<sup>i</sup>**

### ***Abstract***

Such familiar characterisations of semiotics as being a method, a model, an interdisciplinary perspective, or a philosophical movement are inadequate, because semiotics itself comprehends many models, methods, and philosophical perspectives, and it is just one of the many enterprises which may be seen as occupying a space intermediate to the traditional sciences. Semiotics must be considered a science in its own right, defined by a particular point of view, rather than a domain of reality. As such it is in many ways comparable to cognitive science. A distinct advantage of cognitive science is being by definition a confluence of different research traditions, whereas semiotics has long been hampered by the autonomy postulate. On the other hand, cognitive science still seems to be stuck in an epistemological impasse, just as semiotics was at the time of structuralism. Cognitive semiotics could be a promising way out of both quandaries.

***Keywords:*** science, philosophy, epistemology, meaning, cognition,

### **Introduction**

Semiotics, often confused with structuralism and/or the philosophy of Charles Sanders Peirce, is customarily presented as a (series of) model(s) or methods – or a particular brand of philosophy. Elsewhere, I have argued that semiotics cannot be considered to be some kind of method, a “model”, a particular philosophical tradition, or even an “interdisciplinary perspective”, whatever that may mean; nor is it simply a critique of ideology or a “meta-analysis”; but it must be taken to be a science in its own right (cf. Sonesson 1992; 1993a, b; 1994a, b; 1996a). This seems to leave us with only one way of looking at the interplay between semiotics and other enterprises such as art history, literary history, general history, archaeology, psychology, sociology, and so on: that semiotics may function as an ancillary science to any of them, just as they may play the same part in relation to semiotics, when the latter is pursuing its

own aims. In the following, I will take a somewhat more sceptical stance concerning the possibilities of semiotics for becoming a science; but I will do so for historical and social, rather than systemic, reasons. And, in the end, I will offer the new paradigm of cognitive semiotics as a way forward – a way to arrive finally at that position which, according to Saussure, was prepared beforehand.

***Out of the semiotical soup shops: Semiotics and Philosophy***

From an epistemological point of view, it seems rather simple to ascertain that semiotics can in no way be a method or a model. Not to overburden our argument, let us define a *method* as *a series of operations which might be applied in ordered stages to an object of study, with the goal of yielding information of a particular kind about the object studied*; and let us similarly decide that a *model* is a *simplified, but still more or less iconic, representation of the object studied* which can be more easily manipulated than the real thing, and which (ideally) has the advantage of representing *classes of objects of a particular category*, rather than a single object, so that, when methodological operations are applied to it, it yields information about the category of objects concerned.

It should be obvious that semiotics cannot offer anything of the kind – or, rather, it offers too much of it. For semiotics, just as all other sciences, contains a wealth of models, as well as a panoply of methods. When one particular model and/or method is attributed to semiotics, it is obviously being confused with one of its manifestations having course during some particular period, most probably the movement known as French structuralism, which was popular in the 1960:s and 70:s, but which has since lost its relevance in most quarters. It may rightly be said about French structuralism that it tried (mostly in vain) to apply a linguistic model (itself abusively derived from the linguistic structuralism developed, notably, by Saussure and Hjelmslev), as well as to implement (but completely failing to do so) the method of the same linguistic school.

Semiotics as such is not restricted to any single method, but is known to have used several kinds, such as an exhaustive analysis of concrete texts, or *text analysis* (comparable to

distributional analysis in linguistics and “*explication de texte*” in literary studies), as well as classical *experimental technique* (well-known from psychology) and imaginary variation of properties, or *system analysis*, reminiscent of the kind of reasoning found in philosophy, most explicitly in phenomenology. In addition, semiotics has employed a hybrid form of text analysis and imaginary variation, which I have elsewhere called *text classification*, notably in semiotically inspired rhetoric (cf. Sonesson 1992a; 1996a).<sup>ii</sup> Nor is semiotics necessarily dependant on a model taken over from linguistics, as is often believed, although the *construction of models* remains one of its peculiar features, if it is compared to most of the human sciences. Indeed, semiotics differs from traditional approaches to *humanitas*, whose domain it may partly seem to occupy, in employing models that guide its practitioners in their effort to bring about adequate analyses, instead of simply relying on the power of the “innocent eye”. After having borrowed its models from linguistics, philosophy, medicine, and mathematics, semiotics is now well on its way to the elaboration of its proper models (cf. Sonesson 1992a, c; 1993a, 1994a, 1996a, 1998).

Nor should we adopt the popular preconception, according to which the semiotic field is inhabited simply by the followers of Peirce and Saussure. In the first place, there would be no reason (more than a superficial terminological coincidence) to amalgamate two such dissimilar doctrines as those represented by the elaborate but fragmentary philosophy of Peirce, and the marginal, if suggestive, annotations of Saussure. But, more importantly, in adopting this point of view, we would be unable to account, not only for the semiotical work accomplished well before the time of our two cultural heroes, be it that of the stoics, Augustin, the scholastics, Locke, Leibniz, or the ideologues, but also for much of contemporary semiotics, some parts of which are not particularly indebted to any of the forefathers.

In an article in which he says many sensible things in defence of semiotics, Umberto Eco (1988: 323ff) comes up with a very strange conception of what the latter is: on the one hand, he admits that there are certain specific semiotic sciences, such as those which study the interpretative habits of events in verbal language, gestures, traffic signs, pictures, and so on; on

the other hand, he claims that there is a general semiotics, which simply postulates the concept of sign, thus permitting us to speak about superficially dissimilar things within a unified framework. The latter, he maintains, is not a science, but a philosophical activity, and this is in his view demonstrated by the very proliferation of different conceptions of what semiotics is. Indeed, he goes on to say, it is a variety of the philosophy of language, which has the particularity of going beyond the study of statements, to the underlying activity, and which does not limit itself to a single semiotic system, verbal language.

It is interesting that Eco should admit that the studies concerned with *specific* semiotic phenomena are sciences; but that is no doubt because some of these sciences existed well before modern semiotics was in the works. The study of verbal language, for instance, has long been known as philology or linguistics. In some cases, however, this conception would require the establishment of new disciplines: there is, for instance no well-accepted branch of knowledge involved with the study of gesture, which is still treated within anthropology or psychology, or under the absurd and misleading heading of “non-verbal communication”. The semiotics of pictorial signs is even more in need of being established as an independent discipline, because art history has never been interested in pictures as such, but only in a series of pictures considered each in turn, and the findings of recent perceptual psychology have to be brought into contact with more systematic studies, similarly to the way in which post-Chomskyan linguistics has been related to psycholinguistics. The rudiments of a body of knowledge corresponding to a semiotics of pictures already exist; but it can hardly be considered a well-established discipline.

This part of Eco’s thesis was actually formulated well before him by Luis Prieto (1975a,b), who argued that disciplines such as anthropology, ethnology, sociology, psychology, literary history, art history, history of religion, archaeology, and so on, should more aptly be called the “semiotic sciences”, rather than being distributed among the social sciences and the humanities, because what they have in common is that they are involved with meaning. Eco (1988: 351) himself points out that while the natural sciences are interpretations of the first degree, the semiotic sciences are interpretations of interpretations. The latter, undoubtedly,  
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also applies to what archaeology does with artefacts left in some prehistoric burial; it may not apply to the radiocarbon dating of these artefacts, but it certainly applies to the interpretative frame in which the resulting dates are later inserted and given a meaning. More obviously, it applies to most things done in art history, though, once again, the study of artistic materials is only indirectly contained within this description, because of the chemical analyses being made on substances defined for an “artistic” purpose.

But Prieto allowed general semiotics to subsist and to remain a science, although at another level of generality. Although Prieto is not very clear about the nature of this general semiotic theory, his own work within the domain seems to imply the conviction that it should not only furnish the semiotic sciences with a coherent framework, before the specific disciplines can accomplish their task, but that it would also be called upon to compare the results of these disciplines, in order to determine how different resources for conveying signification may differ. Whether or not this common framework consists in the concept of sign, or if something different, or something additional, is needed, it seems strange to say that this framework is simply “postulated” by a philosophical movement, as Eco maintains. If so, all these disciplines would only be valid, given a particular philosophical framework, and for someone not sharing this framework, all these particular domains of study would have nothing to contribute. In the end, then, specific semiotics would also be given over to the whim of philosophy.

Curiously, Eco even claims that the fact of there being different semiotical points of view demonstrates that semiotics is a philosophical activity; but, at the very least, this would show that semiotics is a class of different philosophical and/or scientific activities. Actually, a much more natural conclusion would be that, just as sociology, psychology, archaeology, literary history, and so on, semiotics can be practised from the point of view of different philosophical conceptions. Thus, there may be a structuralist semiotics, a nominalist semiotics, a phenomenological semiotics, and so on – just as there may be, for instance, a processural and a post-processural archaeology, a positivist and a post-modernist art history, and so on.

The way to get out of the “philosophical soup shops”, to adopt Peirce’s phrase, is to bring

semiotics itself out of them. All sciences have once separated themselves from philosophy – a process that of course (as we shall see) always leaves a residue in the tureen.<sup>iii</sup>

Those who look upon semiotics as a method or a model undoubtedly themselves take up a position outside of semiotics. Eco's claims, however, are made from within semiotics itself. A more commonly voiced point of view among people closely involved with semiotics is that it is "an interdisciplinary perspective". I find it difficult to see the point of that description. Either it means that people representing a lot of other more well-established disciplines come together at semiotic congresses; but, if so, it does not describe any situation which is original to semiotics, and there is no reason for this state of facts having to determine the future of any discipline. Or it really means that semiotics itself is something "in-between" other disciplines. If so, that is not particularly new either: from social psychology to cognitive science, other disciplines have been born out of such an intermediate space. This also means that the phrase cannot describe the particularity of semiotics: there are a lot of other "interdisciplinary perspectives". So, at the very least, something needs to be added to this definition.

A more sophisticated version of this description is Paul Bouissac's (1998: 1999a, b) claim that semiotics is mainly involved with "meta-analysis", which "consists in reading through a large number of specialised scientific publications, selected among the published literature in one or several domains of inquiry, and of relating the partial results within a more encompassing model than the ones that are held by the various specialists concerned" (1999a: 4). This is indeed something which semioticians tend to do; but so do of course a lot of people working within cognitive science and a lot of other purportedly "interdisciplinary perspectives". We are still left with the question what the specificity of semiotics is. It cannot lie in that "more encompassing model", for we have seen that semiotics is more than a model, since it makes use of a lot of them. Of course, it may contain a class of more wide-ranging models. But in order to contain models, it must be something else: a science.

So what, then, is the central framework provided by a semiotic "meta-analysis"? Not simply the postulated concept of sign, as Eco suggests. I would be the first to agree with Bouissac (1998) that the notion of sign is insufficiently defined in semiotics. In fact, I have often  
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argued that both the central traditions, the Peircean as well as the Saussurean, simply presuppose the essential components of the sign (cf. Sonesson 1989a; 1992a,b; 1996a). Contrary to Bouissac, however, I think the concept of sign makes perfectly good sense, once it has been properly defined (cf. Sonesson 1989a; 1992a,b; in press). Itself a fruit of meta-analysis, my definition abundantly refers to ontogeny, as well as to phylogeny. However, this does not mean that the concept of sign is sufficient to define the domain of semiotics, which has to be much wider, at least because signs cannot be treated independently of a wider concept of meaning.

According to Saussure, semiotics (or semiology as he called it) was to study “the life of signs in society”; and our second mythical founding-father, Peirce, as well as his forerunner John Locke, conceived of semiotics as being the “doctrine of signs”. Later in life, however, Peirce came to prefer the wider term “mediation” as a description of the subject matter of semiotics (cf. Parmentier 1985). And Saussure actually argued that in the semiotic sciences, there was no object to be studied except for the point of view that we adopt on other objects (see Sonesson 1989a,I.1.4.). More recently, Greimas has rejected the notion of sign, and his followers Floch (1986) and Thürlemann (1982; 1990) have argued the case in the domain of pictorial semiotics. In a similar fashion, Eco (1976) himself, at the end of his tortuous critique of iconicity, substituted the notion of sign process for the traditional sign concept.

So there seems to be wide agreement within semiotics, although with somewhat different slants, that the sign (also termed the semiotic function) is not comprehensive enough to delimit the field of semiotics: rather, the domain of semiotics is meaning (or “mediation”), in some wider, yet to be specified sense. However, since everything, or almost everything, may be endowed with meaning, any object whatsoever (or almost) may enter into the domain of semiotics, but only in so far as it is studied from the point of view of its capacity for conveying meaning. Semiotics, I will contend, is not about what something means; it is about *how* it means.

***Two ways of defining sciences: Semiotics vs. the History of Religion***

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So far, I have tried to characterise complex notions such as method, model, movements, and so on, in very simple terms, sufficient to rule out the possibility of semiotics being one of those things. Now we face the even more daunting task of trying to determine what a science is. As a first approximation, one may want to say that a science is *a particularly orderly and systematic fashion for describing and analysing or, more generally, interpreting a certain part of reality, using different methods and models*. At this point we may want to introduce a division between natural sciences, on the one hand, and social and human (or, better, semiotic) sciences, on the other, which, following a traditional hermeneutical conception echoed by Eco (1988: 351), separates the interpretation of facts from the interpretation of interpretations. Normally, it is added that the first kind of knowledge involves phenomena for which laws may be formulated, while the second kind only refer to unique occurrences; and that while the second type may be understood, the first can only be explained. As we will see, this is largely a pre-semiotic conception.

But there is something seriously wrong with this analysis, even at its earliest stage. Not all sciences appear to have their own reserved piece of reality to study. It seems to me that sciences may be defined either as being preoccupied with *a particular domain of reality*, or as applying *a particular point of view* to the whole of reality (which is really one and the same). Thus, French studies are involved with French language and literature, linguistics with all languages (or what is common to all languages); similarly, the history of religions describes a very particular domain of reality, religion, as it evolves through history (and pre-history). Even within the natural sciences, there are some sciences that have their particular domains, such as geography, astronomy, and meteorology. This seems to be even more obviously true of such applied sciences as medicine and dentistry.

But there is no semiotic domain, just as there is no psychological or sociological one: rather, everything may be studied from the point of view of its semiotic, as well as its psychological, or sociological properties. We find the same thing in the natural sciences: chemistry and physics often appear to be different points of view taken on the very same matter.<sup>iv</sup> This is not the whole truth: in fact semiotics, psychology and sociology only apply their



points of view to the human world, or at least to the world of living beings (in most cases, to animals, not to plants). So the point-of-view approach is supplemented by a domain-approach. The domain of chemistry and physics is much wider: its goes well beyond the human world. But both apply the same point of view to the human world and what lies behind it, which is impossible for semiotics, as well as for psychology and sociology. Contrary to chemistry and physics, biology is not just another point of view, but it is also domain-specific: it only involves living creatures. This may explain that there is now such a speciality as biosemiotics but not (at least I hope so) chemical semiotics.

In the following, then, semiotics will be taken to be a science, the point of view of which may be applied to any phenomenon produced by the human race or, more widely, by living beings.<sup>v</sup> This point of view consists, in Saussurean terms, in an investigation of the point of view itself, which is equivalent, in Peircean terms, to the study of mediation. In other words, semiotics is concerned with the different forms and conformations given to the means through which humankind believe itself to have access to “the world”. This is at least the way I have formulated the task of semiotics in my earlier work. For many reasons (which have been clear with the emergence of cognitive science and biosemiotics), it now seems impossible to limit semiotics only to the way the human world is endowed with meaning. Even when discussing pictures, which are peculiar to human beings, we can only understand their specificity in contrast to meanings handled by other animals. It will therefore be better to avoid any kind of belief-predicates in the characterization of semiotics. Thus, semiotics should here be said to be concerned with the different forms and conformations given to the means through which living beings are observed, through their interactions with it, to have access to “the world”.

The very term “point of view” is of course a visual metaphor. Yet the point, which is a standpoint, matters more than the sense modality. For, in studying these phenomena, semiotics should occupy the standpoint of humankind itself (and of its different fractions). Indeed, as Saussure argues, semiotic objects exist merely as those points of view that are adopted on other, “material” objects, which is why these points of view cannot be altered without the result

being the disappearance of the semiotic objects as such. Analogously, it has been argued that we should have to adapt the point of view of the bat, let alone the tick, but it is not clear that this can be done in the same sense.

Taking the point of view of the users, and trying to explain their particular use, we cannot, like the philosopher Nelson Goodman (1968), reject the folk notion of picture because of its incoherence, but must discover its peculiar systematicity. But it does not follow, as Prieto (1975a) would claim, that we must restrict our study to the knowledge shared by all users of the system, for it is necessary to descend at least one level of analysis below the ultimate level of which the user is aware, in order to take account of the presuppositions underlying the use of the system. Semiotics must go beyond the standpoint of the user, to explain the workings of such operative, albeit tacit, knowledge that underlies the behavior constitutive of any system of signification (cf. Sonesson 1989a, I.1.4).

Moreover, semiotics is devoted to these phenomena considered in their *qualitative* aspects rather than the *quantitative* ones, and it is geared to *rules and regularities*, instead of unique objects. This is to say that, pictorial semiotics, like all semiotic sciences, including linguistics, is a *nomothetic* science, a science which is concerned with generalities, not an *idiographic* science, comparable to art history and most other traditional human sciences, which take as their object an array of singular phenomena, the common nature and connectedness of which they take for granted. I would like to insist on this combination here, since it overrides the traditional divide between the humanities and other sciences, postulated by the hermeneutical tradition from Dilthey and Weber to Habermas and Apel: even a well-established semiotic discipline such as linguistics, including the study of any particular language, involves the establishment of laws and regularities, not individual facts. Just like linguistics, but contrary to the natural sciences and to some varieties of the social sciences, all semiotic sciences are concerned with qualities, rather than quantities – that is, they are concerned with categories more than numbers. Thus, semiotics shares with the social and natural sciences the character of being a law-seeking, or nomothetic, rather than an idiographic, science, while retaining the emphasis on categories, to the detriment of amounts, which is peculiar to the human sciences.

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Being nomothetic and qualitative, pictorial semiotics has as its principal theme a category that may be termed pictorality, or picturehood – which is a peculiar version of iconicity.<sup>vi</sup>

In the small article on which rests Ernst Cassirer's (1972:91) principal claim to being a pioneer of semiotics, he declares that “linguistics is part of semiotics, not of physics”. This, however, is all he has to say about semiotics. The bulk of the text is taken up by a much more classical discussion: whether linguistics is to be considered part of the *Geisteswissenschaften* or the *Naturwissenschaften*. Cassirer has learnt the lesson of the Prague school well: he quotes Trubetzkoy's opposition between phonetics which is concerned with material facts, such as sound vibrations, or the movement of the speech organs, and phonology which is concerned with “incorporeal things”, that is, as Cassirer (1972: 90) points out, with units determined by meaning. Not only the segmentation of the world, but also that of the outer form of language, depends on a “world-view”: it is the effect of the double Saussurean cut through two amorphous masses, those of thought and sound. Phonology, then, and the whole of linguistics, is a *Geisteswissenschaft*. More importantly, however, Cassirer observes that, in this whole methodological struggle (for instance in the work of Dilthey and Rickert), “the fact that there is such a thing as human speech and that there is such a thing as linguistics was never mentioned” (1972:89). He does not hesitate to qualify this as “a very regrettable fact, a sin of omission that could not fail to have its consequences”. Nowadays, it may be added that, as linguistics has now been generalized to a series of particular semiotical sciences, such as pictorial semiotics, gesture studies, cultural semiotics, and so on, the result of neglecting these domains of study in the theory of knowledge are even more dire.

Strange to say, linguistics and other semiotical domains, as particular kinds of epistemological practices, were still ignored in the middle of the 20<sup>th</sup> century, during the new *Methodenstreit*, in the works of Gadamer, Habermas, Luhmann and others. In fact, many of these thinkers (as is also true of Dilthey) attribute much importance to language in other respects (as does, for instance Habermas, with his ideal speech situation), and yet they do not take the peculiarities of the semiotic sciences into account. They fail to realize that linguistics,

and other semiotical sciences conducted on this model, do not really correspond to either the description of the natural or the cultural sciences.

Unfortunately, Cassirer himself does not seem to take this peculiarity into account. In another publication, which is specifically dedicated to the study of the nature of the cultural sciences, Cassirer (1942: 63ff) takes exception to the simplistic opposition usually proposed between the natural and cultural sciences, claiming that general concepts are needed also in the latter. He starts out exemplifying this with linguistics which, in Humboldt's terms, studies the differences between the varying inner language forms, such as languages, like many Indo-European ones, which distinguish masculine, feminine and neutral gender in the nouns, and those which separate noun classes according to other criteria. He then goes on to discuss art history, exemplifying its general terms with Wölfflin's opposition between the picturesque and the linear style. However, if we consider linguistic research as it is really conducted, it is very different from art history, even supposing that thinkers like Wölfflin and Riegl had had more success in introducing their general concepts to the discipline as it is really practiced. Whether linguistics is concerned with universals of language (mentioned by Cassirer 1972:83, with reference to Jakobson), or it simply has the aim of formulating the phonological, grammatical and semantical rules of a given language, it is involved with something general, not with individual facts. Even as analysis of conversation (the Saussurean "linguistique de la parole"), linguistics is interested in formulating general rules. Historical linguistics, which may still have appeared as a more important part of linguistics in Cassirer's time, is certainly involved in a sense with singular facts, such as the dates at which certain language changes occur. But even in the pioneering days of Grimm and Paul, historical linguistics was very much dedicated to formulating rules of language change. Art history, even in the radical version of Wölfflin, only uses general facts as regulatory concepts for the studies of individual items. That is why art history is not pictorial semiotics.

Cassirer (1942:65) may however be right in claiming that the general concepts involved in the cultural sciences are neither nomothetic nor ideographic, in the sense often given to these terms. They are not nomothetic, he says, because in the cultural sciences, individual

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phenomena cannot be deduced from general laws. And they are not ideographic, because they cannot be reduced to history. This is of course the distinction I have tried to account for in distinguishing the nomothetic and qualitative sciences of semiosis from the nomothetic and quantitative sciences of nature.

***The social institution of science: Semiotics vs. Archaeology***

This is as far as I have taken the argument in earlier articles. But there is certainly something wrong with this reasoning. When he suggested the creation of “semiology”, Saussure claimed that its place among the sciences was prepared beforehand. Ironically, a century later, semiotics still does not exist as an independent discipline, apart from a few universities such as Lund, Tartu and Bologna. It certainly has more of an existence as collaborative networks between institutes and countries in different parts of the world, as partial definitions of research positions, and of course in the form of numerous associations, congresses, reviews, and books. But, clearly, something tells us that the place of semiotics was not as well-prepared as Saussure imagined.

In contrast, archaeology is today a well-established science, represented, as a matter of course, at most universities, and occupying a pride of place among those endeavors founded by state, regional, and even international, institutions.<sup>vii</sup> That is no doubt as it should be, for archaeology, in its different avatars, has contributed a great amount of knowledge about human culture and behavior through the ages. And yet, at least with the aid of the simple epistemological model we have used so far, it is difficult to say what archaeology is all about. If there is some particular archaeological domain of study, it is hard to discern it; and if there is a peculiar archaeological point of view, it is not easy to define.

This is hardly surprising: after all, archaeology emerged rather recently, not, as most disciplines, out of philosophy, but from what, on first sight, may seem an unholy alliance of travelers and adventurers (often with diplomatic passports), on one hand, and of museologists

and other specialists in classification, on the other (cf. Bahn ed. 1996; Trigger 1989). According to a common suggestion, archaeology is about “prehistory”, which is then characterized as the period before the advent of writing (cf. Fagan 1998:4f). If so, is this a domain of study, or a particular point of view? It would be the former, if it meant that archaeology was dedicated to the description of a world in which writing did not exist; it would be the second, if it meant that archaeology involves the description of the world as it appears when we only have recourse to knowledge not transmitted through writing. The latter description undoubtedly seems most promising from a semiotic point of view: it would imply that archaeology only describes the world as it can be recovered by means of information conveyed by a particular kind of semiotic vehicle.

Fagan implicitly appears to opt for the latter alternative: he says archaeology is concerned with periods in which most people are not literate, so that much new knowledge may be gained from excavation. Moreover, he proceeds to oppose “text-aided archaeology” to “prehistoric archaeology”.<sup>viii</sup> However, it seems that a lot of archaeology would then turn out to be of the hybrid kind: in fact, “text-aided archaeology” would not only include the study of, for instance, the castles erected during the Middle Ages, but also, within the domain of “industrial archaeology”, of near-contemporary buildings (cf. Renfrew & Bahn 1991).<sup>ix</sup> In the second place, the very effect of archaeological work may then be to make some phenomenon cease being an object of study for archaeology and being transformed into a subject matter of some other branch of learning, such as history. Thus, Mayan studies would suddenly stop being archaeological, once it was discovered that the Ancient Maya had true writing. Perhaps we could live with this later consequence. But there is a third objection, which may turn out to be more serious: it is not obvious that there is such a clear-cut difference between true writing systems and different kind of “pre-writing” that allows for the distribution of the past into two or more domains of study (cf. Bouissac 1997; Rudgley 1998).

Fagan (1998: 4f) also offers a second criterion: archaeology, as opposed to history, “is, most of the time, entirely anonymous”. Perhaps it is some similar idea that explains that Renfrew & Bahn (2000: 11) describe archaeology as “the past tense of cultural anthropology”

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(their quotation marks), not, for instance, of history. If, so, like Fagan, they are referring to a rather antiquated (but still dominant) conception of history, pre-dating the preoccupation, initiated by the *Annales* school, with enduring structures and long-time developments. Once again, this conception seems to have the effect of allowing archaeology itself to transform something into the subject matter of another science. To pick the same example, as long as everybody accepted the opinion of Sir Eric Thompson, according to which Mayan writing was only concerned with astronomical events, Mayan studies were part of archaeology, but now that we know that the inscriptions on many stelae concern highly individual “lords” of different Mayan cities, as well as the wars they waged on each others, the subject would cease being archaeological. Quite apart from this embarrassing situation, not only do recent, “post-processural” thinkers such as Hodder (1991) argue that archaeology should be more concerned with individuals, but Renfrew & Bahn (2000:9f) claim to discover some convergence with classical “processural” archaeology on this point.

Let us suppose, just for a moment, that what Fagan really wants to say, is that archaeology is some particular method, which can be used when the more direct method of simply “reading the text” is not available: that is, a way of recovering old artefacts, usually by means of excavation. As a complete characterization of archaeology this will of course not do. Digging is simply the first (or perhaps some middle part) of the endeavor called archaeology. It involves a lot of other methods, for reconstruction as well as analysis, from carbon dating to experimental archaeology. Yet it seems to me that it is the only operation that really singles out archaeology. Without excavation archaeology is not archaeology. As an enterprise, archaeology is not defined by any particular domain, or any point of view. It is defined by a method, which is not even a method of analyzing, but of acquiring, the artefacts that it turns into its object of study.

For the moment, it does not matter whether I might convince any archaeologist about the correctness of my observations. But the preceding discussion clearly shows that something being a science is much more a social than an epistemological fact. Saussure’ idea of there being some kind of system of the sciences within which the position of semiotics is already prepared

now seems rather ingenuous, and so does my own classification of the sciences into those based on divisions into domains and those adopting a particular point of view.

I still think it would be useful for semiotics to be recognized as a science. It would then gain some of the coherence and the focus it still seems to be lacking. In some respects, however, I might have been much more on the right track in an earlier publication (Sonesson 1989a, I.1.), where I suggested that semiotics could perhaps best be viewed as a series of entangled strains of problem areas making up a continuous discussion extending through the centuries, and that it was only by taking a retrospective view of (some restricted part of) this mesh, that semiotics could be defined *a posteriori*, for instance as I did in earlier paragraphs. From an epistemological point of view, nothing would change. This research tradition would still be characterized by its peculiar point of view. And it would not be equivalent to a “doctrine of signs”. It would be much more like a discussion: a network of problems branching out ever further through the centuries. In the following, when I talk about semiotics as a science, it should be understood in this sense. Indeed, I would like to claim that a science is simply a research tradition, in the above-defined sense, which has been institutionalized within society.

### ***Meta-analyses in our time: Semiotics and Cognitive Science***

To say that something becomes a science because of social reasons is not to suggest that those reasons are necessarily superficial, the result of power games and nepotism. In the case of semiotics, it may simply be the case that semiotics has so far failed to demonstrate its usefulness to wider groups within society. However, society as such is certainly also at stake: for some reason, the fortune of semiotics has been very different in Latin, and in particular Latin American, countries, than in the Anglo-Saxon, and more generally Germanic, world. People in the latter part of the world would no doubt tend to think that this is so because Latin culture is more susceptible to intellectual fads. There may be some truth in this, if semiotics is identified with intellectual fashion statements such as structuralism, post-structuralism, and post-modernism. But this is a very limited, and uninteresting, way of looking at semiotics.

It might be useful here to contrast semiotics with another brand of “meta-analysis” which



has met with more luck in the contemporary world, at least in the sphere under Anglo-Saxon influence: cognitive science. Like semiotics, cognitive science is often conceived as an interdisciplinary perspective that sometimes (no doubt more often than semiotics) has gained the position of an independent discipline. Curiously, it might be argued that cognitive science and semiotics cover more or less the same domain of knowledge – or rather, to apply the observations made above, take a very similar point of view on the world. This in itself is controversial, since semiotics and cognitive science offer very different characterizations of their domain (or, strictly speaking, the point of view taken on the domain). In some sense, however, both are concerned with the way in which the world described by the natural sciences appears to human beings and perhaps also to other animals and some robots. Cognitive science puts the emphasis on the place of the appearance of this world, the mental domain (although some of its exponents would not even recognize the mind as such, but would rather talk about the brain and/or the computer), and on its characteristic operation, cognition; and semiotics insists on the transformations that the physical world suffers by being endowed with meaning. Indeed, in an earlier phase, cognitive science seemed more susceptible of being described by a simple model: the mind as computer. At present, however, even cognitive science has several models, one of which could be described as involving the mind as brain.

The disciplinary history of these two approaches has been very different. Cognitive science is often described as the result of joining together the knowledge base of rather disparate empirical disciplines such as linguistics, cognitive psychology, philosophy, biology, and computer science. Thus, instead of one research tradition connected through the ages, cognitive science represents a very recent intermingling of several research-traditions having developed separately until a few decades ago. Semiotics has, in a more classical way, developed out of the amorphous mass of philosophy, and still has some problems encountering its empirical basis. It might be suggested that the basic concept of semiotics is the sign, whereas that of cognitive science is representation – even though there is a long tradition in semiotics for rejecting the sign concept, and recent cognitive science has marked its distances to the notion of

representation.<sup>x</sup> From the point of view of methods, semiotics is generally speaking stuck between the analysis of single "texts " and theory construction, whereas cognitive science is closer to relying on experimental methods (including, of course, computer simulation). These differences partly may explain why semiotics and cognitive science rarely are on speaking terms.

It does not make sense nowadays to invoke "cognitive science" as a whole. Cognitive science can be practiced, and indeed has historically been practiced, from very different points of views. There is some paradox to the very name "cognitive science", because its initial aim was to do away with cognition, and indeed consciousness, as we know it. Indeed, the fact that mental life could be simulated on a computer was supposed to show that mental notions could be dispensed with altogether. Consciousness was, in this view, not in any way more difficult to explain than the possibility of having snippets of code making the same kind of calculations as the human brain. Jerry Fodor's (1987) argument for the "language of thought" is the most explicit version of this point of view. And this conception is still very influential within cognitive science in the form of Daniel Dennett's (1987) idea about the "intentional stance": that human beings simply work like computers, with the added twist that they, for no useful reason at all, happen to think they are conscious.

At some point, some researchers within the cognitive science tradition realized, not only that human beings could not really function outside the context of a human life world, and without taking their bearings on their outside bodily form, but that this was true also of computers able to simulate or accomplish some of the operations typical of human beings. This brings us to the notions of "situatedness", which has henceforth played an important role in cognitive science, and also to the complementary notion of "embodiment". Too much should not be made of these notions, however, because, as mentioned above, they apply to computers as well as to human beings. It is no doubt true that they served to bring inspirations from phenomenology and other traditions involved with consciousness into the fold of cognitive science, which is in itself a remarkable feat, if we remember that, before that, many phenomenologists, such as most famously Hubert Dreyfus, and a notable representative of the British style of the philosophy of mind such as John Searle, were violently opposed to cognitive

science. However, both situatedness and embodiment can be given – and have been given – other, more mechanistic, interpretations. The preoccupations with notions such as agency, intentions, consciousness, empathy, intersubjectivity, etc., are typical of “consciousness studies”, such as practiced, for instance, by Evan Thompson (2007), Shaun Gallagher (2005), Dan Zahavi and a few others, but not of cognitive science as a whole. In fact, these notions are anathema to much of cognitive science, both in its classical version and, in a more implicit and confused way, in what nowadays may be described as mainstream cognitive science, associated with the work of Lakoff and Johnson, Dennett, Fodor, etc.<sup>xi</sup>

To Lucy Suchman (1987) and her followers, the term “situated” expressed a need to take the context into account. So does of course the term “embodiment”, since our own body is the primary context of all our actions. “Embodiment” is no doubt a more precise term than “context”, and perhaps “situatedness” can be made to be that too, but then it has to be specifically defined. In any case, even if “situated” and “embodied cognition” are fashionable terms at present, mainstream cognitive science still does not seem to take them in the direction of consciousness studies. The body which forms the context is not the body as lived, that is, as a meaning, but the body as studied in the neurosciences. Lakoff, Johnson, Rohrer, and their likes today form the core of what is meant by mainstream cognitive science. Although their work is extremely confused and contradictory (as shown most clearly by Haser 2005), and even though it contains superficial references to part of the phenomenological tradition, a close reading of, in particular, their most recent publications, shows that in actual fact, they are back at a conception identical in practice to that of classical cognitive science, with the brain being substituted for the computer. As soon as they get down to business, the body they are talking about is reduced to the neurons and synapses of the brain. Thus, embodiment, in this tradition is certainly not part of context. This is also true if their work is interpreted in terms of the kind of influence they have had.

Another related problem derives from the term “cognitive” as such, as is appears in the name of the enterprise. In the traditional discipline of cognitive psychology, and in the

psychology of development, as, for instance, in the Piaget tradition, the term "cognitive" has a rather clear, well circumscribed meaning, being opposed, notably, to perception, unconscious processes, and probably empathy in most senses of the term. At least prototypically, or as a goal state, it involves rational operations, such as those that are characteristic of argumentation or problem solving. Although I am not aware of any explicit definition of the term within cognitive science, it is clear that the term "cognitive" here has taken on a much vaster, or much more unclear, meaning: originally, it corresponded to everything which could be simulated by a "cognitive device" such as a computer, and nowadays, it appears to stand for anything which can be localized in the brain. According to the "language of thought" hypothesis (first formulated by Fodor), even categorical perception and other elementary perceptual operations are based on cognition. Contemporary representatives of cognitive sciences such as Lakoff and Johnson would seem to claim that also thinking in a more traditional science might be reduced to very simple operations, in which case "cognitive science" becomes a misnomer.

In the end, then, what we do need, is some kind of meta-analysis: as Bouissac (1999a: 4) put it so well, we need a procedure which "consists in reading through a large number of specialized scientific publications, selected among the published literature in one or several domains of inquiry, and of relating the partial results within a more encompassing model than the ones that are held by the various specialists concerned". No doubt cognitive science, by definition, has been better at this than semiotics, because it is characterized by the confluence of various earlier research traditions, whereas semiotics has too long been hampered by the autonomy postulate, taken over from Saussurean and Chomskyan linguistics. For my part, I have always sided with cognitive science in this respect, even before it was invented. What cognitive science needs, however, is to take into account even more research traditions, one of which is no doubt semiotics. However, meta-analysis taking a semiotic as well as a cognitive point of view might perhaps better be called semiotics. In the end, there may be no meaning without cognition, and no cognition without meaning, at least given the wide definition of cognition characteristic of cognitive science. It might perhaps be said that semiotics differs from cognitive science simply by putting the emphasis on meaning rather than cognition.

***Cognitive semiotics as a new paradigm***

Cognitive semiotics – or, perhaps better, semiotic cognitive science, as Terrence Deacon has suggested (only orally, I believe) –, which aims to bring together the knowledge base and models of cognitive science and semiotics, seems to have been invented several times over, probably because it is needed. What seems to be lacking, most of the time, in semiotics, is real empirical research. What is severely missing in cognitive science is a conception of meaning.

The kind of cognitive science with which I here would like to organize an encounter is the brand whose real epistemological horizon is phenomenology, in its classical Husserlean form as well as in its recent versions within consciousness studies – and Searle, whose version of the philosophy of mind is to a large extent either crypto-phenomenological or a parallel development arriving at the same general conclusions. But it is also the kind of cognitive science which continues the tradition of cognitive psychology from Bartlett to Neisser. It is the kind of cognitive science which also relies on experiment.

Semiotics would have nothing to offer cognitive science, if it were only a model or a method, or a philosophical standpoint. Above, I have argued that semiotics cannot be considered to be some kind of method, a model, a particular philosophical tradition, or even an “interdisciplinary perspective”, whatever that may mean; nor is it simply a critique of ideology or, in Paul Bouissac’s (1999) term, a “meta-analysis”; but it must be taken to be a science in its own right (cf. Sonesson 1992a; 1996; 2004-06). The most obvious reason for this is, as we saw, that semiotics, if it is not erroneously identified with French structuralism, can be seen to have been using many different models and methods, as well as being practiced from different philosophical points of view. And it is not simply a “meta-analysis” or some other kind of “interdisciplinary perspective”, because that does not tell us anything about its originality. It is interdisciplinary and meta-analytical with a twist, because it takes meaning as its perspective on the world.

On the other hand, there have recently been some encouraging developments within cognitive science which, no doubt with some exaggeration, may be qualified as a “semiotic

turn”: an interest in meaning as such, in particular as it has developed, ontogenetically and, in particular, phylogenetically, in the human species and, to some extent, in other animals and animal-like machines. Terrence Deacon (1997) is a researcher in neuroscience whose work has been particularly acclaimed within cognitive science. Yet he has chosen to express some of his main arguments in a terminology taken over from Peirce, who is perhaps the principal cultural hero of semiotics.<sup>xii</sup> Not only Deacon, both other scholars interested in the specificity of human nature now put their emphasis on the concept of sign (which they normally term “symbol”, using this word in a sense in which we will not employ it here). This is true, in a very general sense, of Donald’s (1991) stages of episodic, mimetic, mythic and theoretical culture. It seems to apply even more to Tomasello (1999), less, in the end, because of his epigraphs taken from classical semioticians such as Peirce and Mead as well as Bakhtin and Vygotsky, than because of the general thrust of his analysis, which consists in separating true instances of interpreting actions as intentional from those which may merely appear to be such. Building on the aforementioned works, Jordan Zlatev (2002, 2003) is explicitly concerned with the conditions for the emergence of higher levels of meaning involving “mimesis” and language, from more basic ones, characteristic of all biological systems (life forms), such as “cues” and “associations.

Interestingly, there has also been an attempt at a true “cognitive science turn” in semiotics, most clearly represented by Thomas Daddesio (1995), who has however not created any true following. Daddesio does try to absorb the empirical knowledge base of cognitive science into semiotics, and he does seem to side with the consciousness studies strand in cognitive science, at least in some passages, though he mistakes Lakoff & Johnson for its representatives. His main argument for having recourse to cognitive science, however, seems somewhat confused to me: when he criticizes semiotics for leaving out mental concepts, he puts on the same level the physicalist reductionism of behaviorism and the recognition, on the part of the tradition of Saussure, Cassirer, Husserl, the Prague school, and others, that there is also a third level of meaning, the social one – which does not exclude the mental world as its mode of access.<sup>xiii</sup> The latter, contrary to the former, makes of semiosis in the most central sense of the term: the intersubjective structures which make meaning possible (Cf. below on

semiotics in relation to rhetoric and hermeneutics). In many other ways, however, Daddesio's contribution has been undeservedly neglected. In fact, he is of course quite right in emphasizing the correlation of intersubjective structures (language as Saussurean *langue*) and subjective access (language as "competence", less in the sense of Chomsky than that of psycholinguistics).

Daddesio would thus seem to associate semiotics with a particular philosophical standpoint. But this is a point of view which cannot be sustained. As I argued above against Eco (1988: 323ff) the fact of there being different semiotic points of view can hardly be taken to demonstrate that semiotics is a particular branch of philosophy; for, at the very least, this would show that semiotics is a class of different philosophical and/or scientific activities. However, as we saw above, it would be even more natural to conclude that, just as sociology, psychology, archaeology, literary history, and so on, semiotics can be practiced from the point of view of different philosophical conceptions. Thus, there may be a structuralist semiotics, a nominalist semiotics, a phenomenological semiotics, and so on – just as there may be, for instance, a processural and a post-processural archaeology, a positivist and a post-modernist art history, and so on. The kind of semiotics which I propose, which would permit us to organize an encounter with cognitive science of the consciousness studies brand, in particular, is a decidedly phenomenological and empirical semiotics.

This is why, in the end, what we need is some kind of meta-analysis, i.e. a procedure which "consists in reading through a large number of specialised scientific publications, selected among the published literature in one or several domains of inquiry, and of relating the partial results within a more encompassing model than the ones that are held by the various specialists concerned" (Bouissac 1999: 4). We know that cognitive science, because of being a confluence of various earlier research traditions, has been better at realizing this task, whereas semiotics has too long been hampered by the autonomy postulate, initiated by Saussurean and Chomskyan linguistics. Unlike most of the venerable semiotic tradition, I have always argued against the autonomy postulate, basing my own work to a large measure on an interpretation of experimental results (most notably in Sonesson 1989). In that sense, without using the term, I

consider myself to be one of the inventors of cognitive semiotics. However, in some respects, scholars such as René Lindekens and Martin Krampen, who already in the heyday of structuralism set up their own experimental studies, basing themselves on semiotic models, may have even more claim to that title.

A case in point could be Sven Arvidson's (2006) attempt to show the relevance to experimental studies of attention of the phenomenologically derived categories of theme, thematic field (which Arvidson calls contexts), and margin, which according to Gurwitsch divides any possible field of consciousness, perhaps more adequately characterized by Arvidson as the sphere of attention. Interestingly, he does so in order to show the importance of phenomenology to cognitive science (and thus, even more, I would argue, to cognitive semiotics). The thematic field, according to Gurwitsch, is that part of what is present to consciousness which is connected to the theme of attention in an intrinsic way (itself, as becomes clear in Arvidson's book, a notion which needs elucidation), while the margin is all that is simply co-present (notably the stream of consciousness as a whole in time, the body of the subject, and the world of perception) without being connected to the theme. Arvidson is quite right in claiming that this is an important dimension of consciousness which is neglected in empirical studies, but when he claims that this division is either implicitly present in experimental studies, or would explain their findings better, he is much less convincing. In fact, the experimental studies that he quotes seem to be concerned with other aspects of consciousness, which are at least not sufficiently explained by Gurwitsch's division. Indeed, he often seems to take for granted that "context" (which is Arvidson's terms for Gurwitsch's thematic field) is used in the same sense in the experiments by psychologists ignorant of Gurwitsch's work. This goes a long way to show that, if you want experiments to tell us anything about phenomenological (and/or semiotical) notions, you have to design your own experiments.

What cognitive science needs, on the other hand, is to take into account even more research traditions, one of which is no doubt semiotics. However, meta-analysis taking a semiotic as well as a cognitive point of view might perhaps better be called cognitive semiotics. In the end, there may be no meaning without cognition, and no cognition without meaning, at



least given the wide definition of cognition characteristic of cognitive science.<sup>xiv</sup> Where semiotics puts the emphasis on meaning, cognitive science, as we have seen, centres its attention on cognition (however widely redefined). However, by using such a term as cognitive semiotics, I am clearly implying that semiotics it not just any tradition worthy of taking into account in a reformed cognitive science. Such a term clearly involves taking for granted that meaning is the primary issue of human beings and, beyond that, of all life-forms. From the point of view of semiotics, cognitive semiotics is rather a perspective from which semiotics may be elaborated. Without semiotics, cognitive science is not complete.

But even though general semiotics must feature meta-analysis in an essential way, it should not be viewed as simply a tradition within philosophy. As Peirce said, we have to get out of the philosophical soup shops. Let us now turn to consider some of philosophical residue left in the tureen.

### ***From Phenomenology to Ecological semiotics***

Just like (French) structuralism was semiotics with a particular epistemological slant, cognitive science so far often has been a study of cognition equipped with a particular epistemology. Basically, French structuralism was characterized by a positivistic conception of the world and of scientific method, taken over less from Saussure than coming out the subsequent development of linguistics prior to the advent of Chomsky and forming the background of distributionalism and behaviorism. As all French intellectual fads at the time, Structuralism (in this sense) obviously also had to take Freud and Marx into account, which could only be done by tempering the positivist conception, or rather, concomitantly rendering it rigid and inoperant. Something which is less well-known, however, is that Structuralism, appearing on the French intellectual scene, also had to define itself in relation to (Husserlean) phenomenology, at least in its French, subjectivist, variety, known as Existentialism. At least the early work of such well-known French structuralists as Greimas, Barthes, and Foucault contains explicit phenomenological references. None of them really reflected on the epistemological incompatibility of phenomenology and positivism (though at least Foucault clearly marked his distances to phenomenology later).

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Some later semioticians, such as Jacques Fontanille and Jean Petitot, have later returned to the phenomenological tradition (though using it, it seems to me, in a merely *decorative* way). At the same time, however, semiotics generally has largely grown out of the structuralist strait-jacket (although I feel rather lonely having tried to take into account the rich intellectual yield of structuralism, as well as showing what was wrong with this epistemological stance).

From this point of view, cognitive science still seems to remain at the stage of structuralist semiotics. It is a meta-analysis determined by the computer-metaphor, both as a way of constructing models, and (probably less) as a method of analysis known as simulation. No doubt, while early cognitive science was entirely dependent on the idea of the mind as a computer, functioning on the model of extant computer programs, recent decades has seen the advent of computer programs, called “neural networks”, constructed so as to function as models of the mind, identified with the brain, or at least as models of some aspects of brain functioning. This is perhaps the sense in which Pinker (1997; 2002) suggests that the idea of the mind as computation is wider than the “computer metaphor”. At least for some thinkers within this tradition, this has prompted the question of how the mind relates to the brain, or, in other terms, the problem of explaining the “personal level” from the “subpersonal level”. Some neurologists within the cognitive science framework have seen the necessity of accounting for “qualia”, i.e. the mind as experienced by a subject (Edelman & Tonini 2000), and philosophers operating within the same frames have tried to map commonsense psychology to brain functioning, often in terms of computer models (Bermúdez 2005). This should really bring cognitive science closer to phenomenology, even though such as rapprochement has only been suggested in rare instances so far (Gallagher 2005; Thompson 2007, Zahavi 2005). The lack of input from phenomenology and other philosophical traditions current during the turn of the 19<sup>th</sup> century is clearly apparent in the discussion between “simulation theory” and “theory theory” concerning the relation between Ego and Alter (strange to say, even in Gallagher 2005).<sup>xv</sup>

The task of phenomenology, as Husserl saw it, was to explain the possibility of human beings having knowledge of the world; as a philosophical endeavor, phenomenology is about  
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the way the world of our experience is “constituted”. As a contrast, psychology is not about the world, but about the subject experiencing the world. However, every finding in phenomenological philosophy, Husserl claims has a parallel in phenomenological psychology, which thus could be considered a tradition within psychological science (cf. Husserl 1962; Gurwitsch 1974). If consciousness is a relation connecting the subject and the world, then phenomenology is concerned with the objective pole and psychology is about the subjective one. It is often forgotten that Husserl not only inspired but also himself was inspired by the Gestalt psychologists. Close followers of Husserl such as, most notably, Gurwitsch (1957, 1966), were as much involved with phenomenological psychology as with philosophy and discussed the findings not only of the psychology of perception but of contemporary contributors to neurobiology such as Gelb and Goldstein. Also the early Merleau-Ponty was, in this respect, an exponent of phenomenological psychology.

Being a neurologist, Edelman (1992) clearly does not discover the body from the horizon of consciousness, like a phenomenologist, but quite the opposite, he implies that the mind cannot be divorced from the body. In a sense, this is hardly controversial: unlike those hypothetical angels postulated by Max Scheler, human beings can only boast a mind as long as they have a body. But, if this is true in the order of existence, it is not necessarily so from the point of view of investigation. After all, Brentano (1885) did not use a scalpel, much less fMRI, to discover the property of intentionality (in the sense of directedness), which Edelman recognizes as an irreducible characteristic of consciousness; nor did James (1890) find any of those “Jamesian properties” of consciousness repeatedly mentioned by Edelman in such a way. Indeed, far from being “a deliberately non-scientific set of reflections on consciousness and existence” (Edelman 1992: 159), phenomenology started out from the fact of intentionality and attempted to probe ever deeper into its ramifications, in order to rediscover and amplify those very Jamesian properties of consciousness mentioned by Edelman. Husserl and Gurwitsch may have been wrong to think of phenomenology as a discipline completely separate from biology and psychology, but the relative disconnection of phenomenological reflections, like those of

Brentano and James, from biological knowledge has no doubt borne rich intellectual fruit. If “a biologically based theory of mind” can in some respects “invigorate” phenomenology, the opposite is certainly just as true.

It is, no doubt, phenomenology in the sense of phenomenological psychology which is of relevance here: it is in this sense that I think that, together with semiotics, phenomenology should participate in the confluence of research traditions making up cognitive science.<sup>xvi</sup> Personally, I also have some sympathy for phenomenology as a philosophical stance (though not in the sense of transcendental idealism), but this is less essential in the present context.

Phenomenology, like semiotics, takes as its point of departure the way things make sense to us, that is, how they mean. In this, very broad sense, phenomenology accomplishes a semiotical reduction: things are considered only from the point of view of their having meaning to us (which might be people of a particular culture or subgroup, or humankind in general). From a phenomenological point of view, there is, in a sense, no way of overcoming the divide between the mind and the world formulated by Descartes, for Descartes did not invent it: it is intrinsic to that phenomenon which, in Descartes’ own words, is the most widely distributed in the world: common sense.

Common sense is not notorious for being right: but if we ask ourselves how the body (and the rest of the world) makes sense to us, then common sense is our very subject matter. Even so, common sense gives rise to an apparent contradiction: my body is necessarily experienced through my consciousness, but in my consciousness it is experienced as being outside of it.<sup>xvii</sup> All post-Cartesian mediations, from those of Husserl to those of Merleau-Ponty, have been concerned to account for this paradox. To do so, it is necessary to accomplish a painstaking analysis (of which there can be no better example than the posthumous papers of Husserl himself, together with the – also largely posthumous – works of Peirce) of all those structures of the mind that are normally at the margin of consciousness. Since this is a question of discovering the way in which that which has a meaning means, there is no other way of achieving it, even if it is an extremely fallible enterprise.

In this sense, as I have argued above, as well as elsewhere (Sonesson 1989: 27ff), all human and social sciences which aspire to discover regularities, such as linguistics and other semiotic sciences, necessarily start out from phenomenology – and we should be happy if those phenomenological investigations sometime manage to be as meticulous as those of Husserl and Gurwitsch.

This common sense world from which all analysis of meaning must start out was characterized by Husserl as the Lifeworld, paraphrased by the later phenomenologist Alfred Schütz as the world taken for granted. The Lifeworld, in this sense, must comprise both what, in recent cognitive science, is known as “naive physics” (what we, as members of the human race, not as students of the natural sciences, believe about the physical world) and “common sense psychology” (what we believe about ourselves other persons). The psychologist James Gibson, who sometimes repeated Husserl’s very words in describing what he called “ecological psychology” (what we must take for granted about the environment in order to be able to perceive the world as we do), is more obviously concerned with the naive physics parts. Taking my clue from Gibson, I have called this kind of study, prefigured by both Husserl and Gibson, *ecological semiotics* (cf. Sonesson 1993a, 1994a, 1996a, 1997a, 1999a). However, as semioticians we still feel that something is lacking here: the world of signs itself. In the terms of Karl Popper (prefigured by many other authors), our experience is not only made up of subjects with consciousness (World 2) and the world of physics (World 1), but also of organism-independent structures such as languages and other semiotic resources (World 3). All access to these worlds is of course only possible from within World 2. And yet World 3 has its own existence, just as well as World 1.<sup>xviii</sup>

***The three sciences of communication: rhetoric, hermeneutics, semiotics***

Like semiotics, rhetoric and hermeneutics may be viewed as age-old research traditions in search of scientific status. The case of rhetoric is certainly somewhat different from the others: it was a kind of *epistémé* (that is a science, not simply an art, a *techné*), already in Antiquity, and it remained so through the Middle Ages, when it was part of the Trivium, and beyond that at

least until the Enlightenment, when Vico, for instance, was a professor of rhetoric. More recently, it has again become a discipline occupying a position at the university, though, like in the Middle Ages, it tends to be reduced to a *techné*, in the Aristotelian sense, that is, merely a set of practical precepts which are taught to the students and not questioned, rather than a science transforming this “art” into explicit knowledge, as suggested by Aristotle. Only in the work of the two Belgian schools of new rhetoric, that of Perelman, and that of Groupe  $\mu$ , which is semiotically informed, has rhetoric taken on some of the trappings of a science.<sup>xix</sup>

As for hermeneutics, when it first emerged in Late Antiquity, and then again during the Middle Ages, it was certainly an art in the Aristotelian sense, featuring a series of guidelines for the interpretation of religious texts, to which later the canon of Antiquity was added. Hermeneutics in the Renaissance sense, on the other hand, remained a *techné*, but one which was alimented by historical and critical research, permitting the restitution of the true text. At least since Schleiermacher and Dilthey, however, hermeneutics rather seems to have been transformed into a philosophical tradition, particularly tainted by the Heideggerean conception of thinking, although it also has been given its own status within the social sciences, mainly thanks to the contribution of Habermas. Interestingly, within the recent hermeneutic tradition, hermeneutics and rhetoric have appeared as some kind of sister sciences (most explicitly perhaps in the work of Gadamer), though very little is generally said about the latter.<sup>xx</sup>

I want to suggest that this sisterhood could more conveniently be expanded so as to comprehend also a third member, which is of course semiotics. The resulting trinity is not the one proposed by Popper (and even less that of Peirce): both hermeneutics and rhetoric are concerned with the Popperean World 2, that of the subjects, but semiotics is of course mainly concerned with World 3, that of organism-independent artefacts. Instead, rhetoric, hermeneutics, and semiotics occupy different positions in relation to the process of communication. They may be said to be different sciences of communication taking different points of view on the communication process. But in order to see this, we have to go beyond the model of communication propounded by the mathematical theory of information, which is too often taken for granted outside and inside of semiotics.

Even today all semiotic theory relies, more or less explicitly, on the communication model derived from the mathematical theory of information, which was designed to describe a few, by now rather old-fashioned, technological means of communication, telegraphy and radio, and in particular to devise remedies to the loss of information often occurring during transportation. Largely because of the influence of Jakobson (1960) and Eco (1976; 1977), this model has been used inside semiotics as a model of all communication, all signification, and of all kinds of semiosis.

This practice has produced at least two symmetrical, equally negative, consequences: by reducing all kinds of semiosis to the mass media kind, in particular to that employed by radio and telegraphy, we become unable to understand the peculiarity of more direct forms of communication; and by treating all semiosis as being on a par, we deprive ourselves of the means to understand the intricacies added to direct communication by means of different varieties of technological mediation. Beyond this, we may even discover a third, even more serious consequence: by projecting the communication model onto each and every form for conveying meaning, we lose sight of that which is really common to all kinds of semiosis

I will here suggest a model of communication (Figure 1), which takes the basic operation of communicating to be, not transference in space, or translation into another code, but the act of interpretation, which supposes an active contribution on the part of the receiver, as well as on that of the sender, the receiver being sometimes more, and sometimes less involved than the sender. Indeed, the first result of a process of communication is to produce a task of perception for the receiver, who has to have the means of accomplishing this task.

We could start by separating the process of communication into three acts which do not have to take place at the same time and/or in the same space: the act of producing the artifact, the act of presenting it to the receiver, and the act of receiving it. The whole of this process supposes there to be some pool of knowledge held in common by the sender and the receiver, or rather, one pool of knowledge of the sender and one pool of knowledge of the receiver which, even in the most favorable case, can only partly overlap. If the message is sender-

adapted, it is the task of the receiver to recover the part of the message that is not given in his pool of knowledge. This is a typically hermeneutic task. On the other hand, if the message is receiver-adapted, it is the task of the sender to recover the part of the message possibly being understood by the receiver. This is an elementary rhetorical operation. Of course, rhetoric is also about recovering such elements of the message that may possibly be not only understood but also convincing to the receiver, but conviction is based on understanding (in some sense). There could also be a corresponding hermeneutical operation, if hermeneutics is taken to include the discovery of the most favorable interpretation.<sup>xxi</sup>



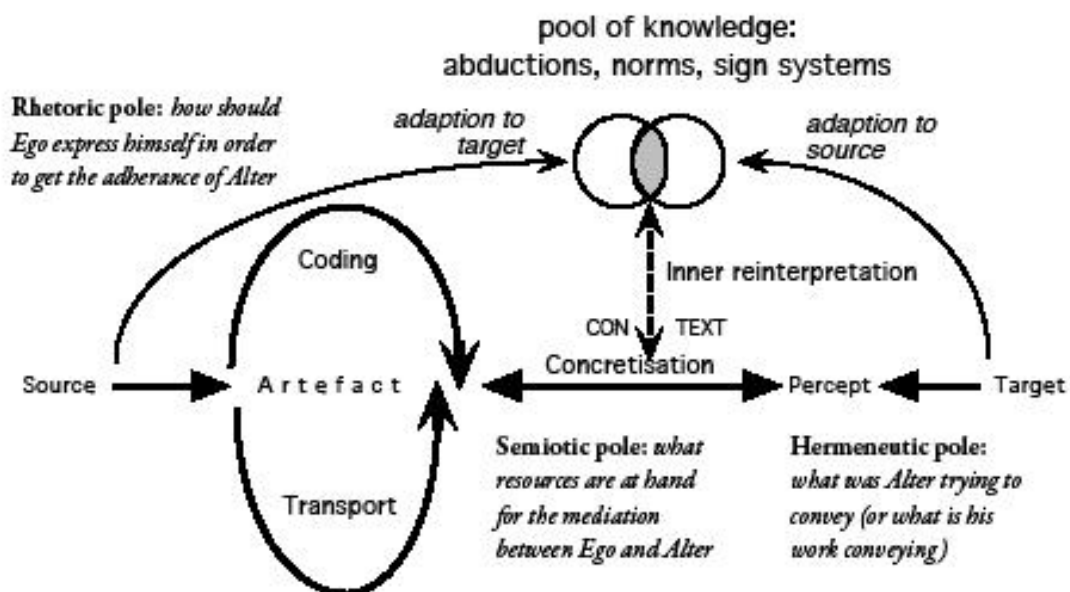


Figure 1. The communication model divided into three scientific perspectives

More simply, looked at from this angle, rhetoric is concerned with the way of creating the message, so as to win the adherence of the other, and hermeneutics is involved with the task of recovering what the other wanted to say (or what a particular work really may be taken to mean). In between the position of Ego and Alter, semiotics has to elucidate what resources are at the disposal of both participants in the process of communication. If rhetoric, semiotics and hermeneutic are sister sciences, it makes sense, however, to ask semiotics to take care of the other sisters. A semiotically informed rhetoric would ask what means are at our disposal for gaining the adherence of the other. Similarly, a semiotically informed hermeneutics would ask what resources there are for construing the meaning of a certain sender and/or a certain work. Could there then also be something like a hermeneutically and/or rhetorically informed semiotics? I think not. As research traditions, hermeneutics and rhetoric have a lot to teach semioticians. But they cannot redefine semiotics in an essential sense, in the way in which semiotics redefines hermeneutics and rhetoric. This is because, as against traditional hermeneutics (at least what is sometimes called the subjectist tradition), semiotics observes

that nobody can be understood but through the semiotic resources offered by a given society (including the very structures of sociality). In the same way, semiotics points out, against rhetoric as it is often practiced nowadays (though it would concord, in spirit at least, with the so much criticized rhetoric tradition of the 16<sup>th</sup> to the 19<sup>th</sup> century, which was restricted to the taxonomy of expressive devices, or *elocutio*) that nobody can express himself, except by means of the semiotic resources given in a particular society. This means that, not only is communication only possible as an interaction between sender and receiver, addresser and addressee, but that even this interaction cannot take place, but through the intermediary of signs and other meanings. But these meanings are really part of the world going beyond both addresser and addressee, the World 3 of Popperian ontology: that which is only given through consciousness, but has an existence independent of consciousness.

## Summary

In this article, I have been delving into some things which have been said, or presupposed, about semiotics: it being a particular model, method, a current of thinking, some kind of interdisciplinary approach (which in reality tends to amount to being a synonym for interdisciplinarity *tout court*), or even a particular kind of philosophy. I have rejected all these alternatives, at least in their exclusive sense, as constituting too little, or too much, to be able to correspond to what semiotics is and has been. First of all, semiotics is a constellation of more or less interrelated thoughts and ideas, and objections and rejections of them, as well as developments and syntheses of them, which have been handed down through the centuries.

This is the stuff sciences are made of, whether they are defined by a domain of study, such as geography or French studies, or by a particular perspective taken on everything, such as physics and chemistry, or sociology and psychology - or semiotics. To be a science, something must, in addition, be socially constituted as such. So far, it seems that semiotics has failed this trial, contrary to what Saussure predicted. Somewhat maliciously, I suggested that archeology, which seems to be an epistemological hodgepodge deprived of any coherence of perspective or

domain, is, on the contrary, a well-established science. Of course, cognitive science is another success story, although it started out from an absurd metaphor, and it was constituted out of the confluence of several pre-existing disciplines.

Although semiotics has often been defined by its own proponents in confused and confusing ways, it seems, on the contrary, to be a rather coherent enterprise, when we attend to what has actually been done. So why was no Saussurean place prepared for us beforehand? This could be taken to suggest that there is something wrong with society (as there most certainly is in many other respects), but perhaps we must also recognize some failings of semiotics as a (prospective) science. We have done very well to use some kind of first persons approach, starting out from, though not necessary arriving at, the person doing the research, as in phenomenology. The study of artifacts (such as texts, pictures, etc.) have also been a valuable foray into meaning characteristic of classical semiotics, although it has often concerned too few object to be able to carry generalizations very far. But this can never be enough. It is only when we can design our own experiments, starting out from the models derived from semiotic theory that we can hope to make up a thriving discipline. I don't know if Cognitive semiotics is a good name for such an enterprise. But it is certainly a useful name for it at present. The marriage of semiotics and cognitive science (presented by phenemenology) is made in epistemological heaven.

### References

- Andrén, Anders (1997). *Mellan ting och text*. Stockholm/Stehag: Brutus Östlings Bokförlag Symposion.
- Angenot, Marc (1985). *Critique de la raison sémiotique*. Montréal: Presses de l'Université de Montréal  
(English translation: *Critique of semiotic reason*. New York, Ottawa & Toronto: Legas. 1994)
- Arvidson, Sven P. (2006). *The sphere of attention*. London : Kluwer Academic.
- Bahn, Paul G. (1998). *The Cambridge Illustrated History of Prehistoric Art*. Cambridge: Cambridge University Press.
- Ed. (1996). *The Cambridge Illustrated History of Archaeology*. Cambridge: Cambridge University Press.
- Bates, Elisabeth (1979). *The emergence of symbols*. Academic Press. New York

- Bermúdez, José Luis (2005). *Philosophy of psychology*. New York & London: Routledge.
- Bouissac, Paul (1997). New epistemological perspectives for the archaeology of writing. In *Archaeology and Language I*, Blench, Roger, & Spriggs, Matthew, (eds.), 53-62. London & New York: Routledge.
- (1998). Converging Parallels. Semiotics and Psychology in evolutionary perspective. In *Theory & Psychology*, 8, 6, 731-753.
- (1999a). Semiotics and the science of memory. Paper presented at the conference on Semiotics and the European Heritage, Dresden, February 1999.
- (1999b). Le savoir sémiotique. In *Degrés*, Vingt-septième année, no 100, c1-c15.
- Brentano, Franz (1885). *Psychologie von empirischen Standpunkt*. Leipzig: Mener.
- Cassirer, Ernst (1923-25-29). *Philosophie der symbolischen Formen. T. 1, Die Sprache. T. 2, Das mythische Denken. T. 3, Phänomenologie der Erkenntnis*. Berlin : Bruno Cassirer.
- (1942). *Zur Logik der Kulturwissenschaften*. Göteborg: Elanders.
- (1972). Structuralism in Modern Linguistics. In *Readings in Modern Linguistics*. Malmberg, Bertil, 8ed), 78-98. Stockholm: Scandinavian University Books.
- Conley, Thomas (1990). *Rhetoric in the European tradition*. Chicago: University of Chicago Press.
- Daddesio, Thomas C. (1995). *Of minds and symbols*. Mouton de Gruyter: Berlin & New York
- Deacon, Terrence (1997). *The Symbolic Species: The Co Evolution of Language and the Brain*. NY: Norton.
- Deely, John (1982). *Introducing semiotic. Its history and doctrine*. Bloomington: Indiana University Press.
- (1994). *New beginnings. Early modern philosophy and postmodern thought*. Toronto: University of Toronto Press.
- (2001). *Four ages of understanding*. Toronto: University of Toronto Press.
- Dennett, Daniel C., (1987). *The intentional stance*. Cambridge, Mass. MIT Press.
- Donald, M. (1991). *Origins of the Modern Mind. Three Stages in the Evolution of Culture and Cognition*, Cambridge, Mass.: Harvard University Press.
- (2001). *A Mind So Rare*. New York: Norton.
- Edelmann, Gerald (1992). *Bright Air, Brilliant Fire. On the Matter of the Mind*. London: Penguin Books.
- & Guilio Tonini (2000). *A Universe of Consciousness*. New York: Basic Books.
- Eco, Umberto (1976). *A theory of semiotics*. Bloomington: Indiana University Press.
- (1977) The influence of Roman Jakobson on the development of semiotics, in D. Armstrong, and C. H. van Schooneveld (eds.), *Roman Jakobson: Echoes of his scholarship*, 39-58. Lisse. Peter de Ridder.

- (1984). *Semiotics and the philosophy of language*. Bloomington: Indiana University Press.
- (1988). *De los espejos y otros ensayos*. Barcelona. Lumen. [Spanish translation of *Suglie specchi e altri saggi*. Milan: Fabri 1985].
- (1999). *Kant and the platypus*. New York: Harcourt Brance & Co..
- Fagan, Brian M. (1998). *Peoples of the Earth. An Introduction to world prehistory*. 9<sup>th</sup> edition. New York: Longman.
- Fagot Joel, (ed). (2000). *Picture perception in animals*, East Sussex, Psychology Press Ltd.
- Ferris, Maurizio (2002). *Historia de la hermenéutica*. Mexico: Sigle XXI editores (Italian original 1988).
- Floch, Jean-Marie (1986). /entries in/ *Sémiotique. Dictionnaire raisonné de la théorie du langage. Tome II*. A.J. Greimas, & J. Courtès, J., (eds.). Paris: Hachette.
- Fodor, Jerry (1987). *Psychosemantics*. Cambridge, Mass. The MIT Press.
- Foucault, Michel, (1966). *Les mots et les choses*. Paris: Gallimard.
- Gallagher, Shaun (2005). *How the body shapes the mind*. Oxford: Clarendon.
- Gibson, James (1966). *The senses considered as perceptual systems*. Bonston: Houghton Mifflin Co.
- (1971). The information available in pictures, *Leonardo*, 4:1, 27-35.
- (1978). The ecological approach to visual perception of pictures, *Leonardo*, 4:2: 227-235.
- (1980). A prefatory essay on the perception of surfaces versus the perception of markings on a surface. In *The perception of pictures, Volume I: Alberti's window.*, Margaret Hagen, (ed.), xi-xvii. New York: Academic Press.
- (1982). *Reasons for realism. Selected essays of James J. Gibson*, Edward Reed, & Rebecca Jones, (eds.). Hillsdale, New Jersey, & London: Lawrence Erlbaum Ass.
- Gombrich, E.H. (1960). *Art and Illusion*. London: Phaidon Press. Second edition 1962.
- Goodman, Nelson (1968). *Languages of art*. London: Oxford University Press.
- Greimas, A. J. (1970). *Du sens*. Paris: Seuil.
- Groupe μ (Dubois, J., Dubois, Ph., Edeline, Fr., Klinkenberg, J.M., Minguet, Ph, Pire, Fr., & Trinon, H.) (1970). *Rhétorique générale*. Paris: Larousse.
- (1992). *Traité du signe visuel, Pour une rhétorique de l'image*. Paris: Seuil
- Gurwitsch, Aron (1957). *Théorie du champ de la conscience*. Bruges: Desclée de Brouver.
- (1964). *The Field of Consciousness*. Pittsburgh: Duquesne University Press.
- (1966). *Studies in Phenomenology and Psychology*. Evanston: Northwestern University Press.

Signs vol. 2: pp. 277-319, 2008

ISSN: 1902-882

- (1974). *Phenomenology and the Theory of Science*. Evanston: Northwestern University Press.
  - (1977). *Human encounters in the social world*. Pittsburgh: Duquesne University Press.
  - (1985). *Marginal Consciousness*. Athens, Ohio: Ohio University Press.
- Hagen, Margaret (1979). A new theory of the psychology of representational art. In *Perception and pictorial representation*, C. Nodine, & D. Fisher, (eds.), 196-212. New York: Praeger Publishers.
- (1980). Generative theory: a perceptual theory of pictorial representation. In *The perception of pictures, Volume II: Dürer's devices*, Margaret Hagen, (ed.), 3-46. New York: Academic Press.
- Haser, Verena, (2005). *Metaphor, metonymy, and experientialist philosophy : challenging cognitive semantics*. Berlin ; New York : Mouton de Gruyter.
- Hjelmslev, Louis (1959). *Essais linguistiques*. Copenhagen. Second edition: Paris, Minuit 1971.
- Hochberg, Julian (1972). The representation of things and people. In *Art, perception, and reality*, E.H. Gombrich et al., (eds.), 47-94. Baltimore and London: John Hopkins University Press.
- (1978). *Perception*. Second, revised edition. Englewood Cliffs, Prentice Hall, Inc.
  - (1980). Pictorial functions and perceptual structures. In *The perception of pictures, Volume II: Dürer's devices*, Margaret Hagen, (ed.), 47-93. New York: Academic Press.
- Hooder, Ian (1992). *Reading the past*. Second edition. Cambridge: Cambridge University Press.
- ed. (1996). *On the surface. Çatalhöyük 1993-95*. London: British Institute of Archeology at Ankara.
- Husserl, Edmund, (1962). *Phänomenologische Psychologie*. Husserliana IX. The Hague: Nijhoff.
- (1939). *Erfahrung und Urteil*. Prag: Academia Verlagsbuchhandlung.
- Jakobson, Roman (1960). Linguistics and poetics, in: Sebeok, Thomas, (ed.), *Style in language*, 350-377. Cambridge, Mass.: MIT Press.
- Johnson, Mark, (1987). *The body in the mind*. Chicago & London: University of Chicago Press.
- & Tim Rohrer, (2007). We are life creatures: Embodiment, American Pragmatism, and the cognitive organism. In *Body, language, and mind*. Ziemke, T., Zlatev, J., & Frank, R., eds. 17-54. Berlin & New York: Mouton de Gruyter
- Lakoff, George & Turner, Mark (1989). *More than cool reason*. Chicago/London: Univ. of Chicago Press.
- & Mark Johnson (1999). *Philosophy in the flesh*. New York: Basic books.
- Lombardo, Thomas (1987). *The reciprocity of perceiver and environment*. Hilldale, New Jersey, & London: Lawrence Erlbaum Ass.
- Meyer, Michel (1999). *Histoire de la rhétorique des Grecs à nos jours*. Paris : Librairie générale française,

- Neisser, Ulric (1976). *Cognition and reality*. San Francisco, Freeman & Co.
- (1987). From direct perception to conceptual structure. In *Concepts and conceptual development: ecological and intellectual factors in categorization*, Ulric Neisser, (ed.), 11-24. Cambridge & London: Cambridge University Press.
- Parmentier, Richard J. (1985). Signs' place in Medias Res: Peirce's concept of semiotic mediation. In *Semiotic mediation. Sociocultural and psychological perspectives*, R. Mertz, & R. Parmentier, (eds.), 23-48. New York & London: Academic Press, Inc.
- Peirce, Charles S. (1931-58). *Collected Papers I-VIII*. Hartshorne, C, Weiss, P, & Burks, A, (eds.). Cambridge, Mass. Harvard University Press.
- (1998). *The Essential Peirce, volume I-II*. Ed. By the Peirce Edition Project. Bloomington and Indianapolis: Indiana University Press.
- Persson, Tomas (2008). *Pictorial primates*. Lund: Lund University.
- Piaget, Jean (1945). *La formation du symbole chez l'enfant*. Neuchatel: Delachaux & Niestlé. Third edition 1967.
- (1967). *La psychologie de l'intelligence*. Paris: Armand Colin.
- (1970). *Epistémologie des sciences de l'homme*. Paris: Gallimard.
- Pinter, Steven (1997). *How the mind works*. New York: Norton.
- (2002). *The blank slate*. London: Penguin.
- Prieto, Luis (1966). *Messages et signaux*. Paris: PUF.
- (1975a). *Pertinence et pratique. Essai de sémiologie*. Paris: Minuit.
- (1975b). *Essai de linguistique et sémiologie générale*. Genève: Droz.
- Reed, Edward S. (1988). *James J. Gibson and the psychology of perception*. New Haven & London, Yale University Press.
- Renfrew, Colin (1982). *Toward an archaeology of mind*. Cambridge: Cambridge University Press.
- Renfrew, Colin, & Bahn, Paul, (1991). *Archaeology. Theories, methods, and practice*. London: Thames and Hudson Ltd.
- (2000). *Archaeology. Theories, methods, and practice*. Third edition. London: Thames and Hudson Ltd.
- Ricoeur, Paul (1975). *La métaphore vive*. Paris: Seuil.
- Rudgley, Richard (1998). *Lost civilisations of the Stone age*. London. Century.
- Saussure, F. (1968/74). *Cours de linguistique générale*. Edition critique par Rudolf Engler. Tome 1-II.
- Signs vol. 2: pp. 277-319, 2008  
ISSN: 1902-882

Harrossowitz, Wiesbaden.

Sieveking, Ann (1979). *The cave artists*. London: Thames & Hudson Ltd.

Sonesson, Göran (1988). *Methods and models in pictorial semiotics*. Report 3 from the Semiotics project.

Lund: Institute of Art History (mimeographed).

– (1989a). *Pictorial concepts. Inquiries into the semiotic heritage and its relevance for the analysis of the visual world*. Lund: ARIS/Lund University Press.

– (1989b). *Semiotics of photography. On tracing the index*. Report 4 from the Semiotics project. Lund: Institute of Art History (mimeographed).

– (1992a). *Bildbetydelser. Inledning till bildsemiotiken som vetenskap*. Lund: Studentlitteratur.

– (1992b). The semiotic function and the genesis of pictorial meaning. In *Center/Periphery in representations and institutions. Proceedings from the Conference of The International Semiotics Institute, Imatra, Finland, July 16-21, 1990.*, Tarasti, Eero (ed.), 211-156. Imatra: Acta Semiotica Fennica.

– (1992c). Comment le sens vient aux images. Un autre discours de la méthode. In *De l'histoire de l'art à la sémiotique visuelle*. Carani, Marie(ed.), 29-84. Québec: Les éditions du Septentrion/CÉLAT.

– (1993a). Pictorial semiotics, Gestalt psychology, and the ecology of perception. Review of Saint-Martin, Fernande, *La théorie de la Gestalt et l'art visuel*. In *Semiotica* 99: 3/4, 319-399.

– (1993b). Die Semiotik des Bildes, *Zeitschrift für Semiotik* 15: 1-2, 131-164.

– (1994a). Prolegomena to the semiotic analysis of prehistoric visual displays. In *Semiotica*, 100: 3/, 267-332. 47-64. -

– (1994b). Sémiotique visuelle et écologie sémiotique, in *RSSI*, 14, 1-2, printemps 1994, pp. 31-48. 47-64.

– (1995a). On pictorality. The impact of the perceptual model in the development of visual semiotics, in *The semiotic web 1992/93: Advances in visual semiotics*, Sebeok, Th., & Umiker-Sebeok, J., eds., 67-108. Mouton de Gruyter, Berlin & New York.

– (1995b). Livsvärldens mediering. Kommunikation i en kultursemiotisk ram. In *Mediatexter och mediatolkningar*. Holmberg, Claes-Göran, & Svensson, Jan, (eds), 33-78. Nora: Nya Doxa.

– (1996a). An essay concerning images. From rhetoric to semiotics by way of ecological physics. Review of Groupe  $\mu$ , *Traité du signe visuel*. *Semiotica*, 109-1/2, 41-140.

– (1996b). Le silence parlant des images, *Protée* 24:1, 37-46.

– (1996c). De la retórica de la percepción a la retórica de la cultura/Från varseblivningens till kulturens

Signs vol. 2: pp. 277-319, 2008

ISSN: 1902-8822



- retorik, in *Heterogénesis* 15, 1-12.
- (1996d). Iconicité de l'image – Imaginaire de l'iconicité. De la ressemblance à la vraisemblance. Actes du Premier Congrès de l'Association internationale de sémiologie de l'image, Blois, novembre de 1990. In *Visio*, 1, 1, pp. 23-34.
  - (1997a). Approaches to the Lifeworld core of visual rhetoric. *Visio* 1, 3, 49-76.
  - (1997b). The ecological foundations of iconicity, in *Semiotics Around the World: Synthesis in Diversity. Proceedings of the Fifth International Congress of the IASS, Berkeley, June 12-18, 1994*. Rauch, Irmgard, & Carr, Gerald F., eds., 739-742. Berlin & New York: Mouton de Gruyter.
  - (1998a). Metonymy, in *Encyclopaedia of Semiotics*. Bouissac, Paul, ed., New York & London: Oxford University Press.
  - (1998b). That there are many kinds of pictorial signs, *Visio*, 3, 1, 33-54.
  - (1998c). The concept of text in cultural semiotics. *Sign System Studies*, 26, 83-114.
  - (1999a). Post-photography and beyond. From mechanical reproduction to digital production. In *Visio* 4, 1, 11-36.
  - (1999b). The life of signs in society – and out of it. *Sign System Studies*, 27, 88-127.
  - (2000a). Iconicity in the ecology of semiosis, In *Iconicity - A Fundamental Problem in Semiotics*. Troels Degn Johansson, Martin Skov & Berit Brogaard (eds.), 59-80. Aarhus: NSU Press.
  - (2001a). De l'iconicité de l'image à l'iconicité des gestes, *Actes du congrès ORAGE 2001 ORALité et Gestualité, Aix-en-Provence, Juin 18-22, 2001*. Cave, Ch., Guaitella, I, & Santi, S. (eds), 47-55. Paris : L'Harmattan.
  - (2001b). La retorica del mondo della vita. In *Modo dell'immagine*, Pierluigi Basso (ed), 93-112. Bologna: Esculapio.
  - (2001). From Semiosis to Ecology. In *VISIO*, 6: 2-3: 85-110: Cultural cognition and space Cognition/Cognition culturelle et cognition spatiale. Quinn, A., ed.,
  - (2004-06). *Current issues in pictorial semiotics. Lecture one: The quadrature of the hermeneutic circle*. First conference of a series published online at the Cyber-semiotics Institute (Now the Semiotics Institute Online). January 2004. Revised August 2006
  - (2006). The meaning of meaning in biology and cognitive science. A semiotic reconstruction. *Semiotiké. Trudy po znakovym sistemam/Sign system studies* 34:1, Torop, P., Lotman, M., Kull, K., eds., 135-213. Tartu, Tartu University Press.

- (2007). From the meaning of embodiment to the embodiment of meaning. In *Body, language, and mind*. Ziemke, T., Zlatev, J., & Frank, R., eds. 85-28. Berlin & New York: Mouton de Gruyter.
  - (2008). In press, Semiosis and the Elusive Final Interpretant of Understanding. In *Semiotica*, 169.
  - Forthcoming a, From Iconicity to Pictoriality. To appear in *VISIO: Iconicity revisited/Iconicité revisitée*, Sonesson, Göran ed.
- Suchman, Lucy A. (1987). *Plans and situated actions : the problem of human-machine communication*. Cambridge: Cambridge University Press.
- Thompson, Evan (2007). *Mind in Life*. Canbrdridge. Mass.: The Belnap Press
- Thürlemann, Félix (1982). *Paul Klee. Analyse sémiotique de trois peintures*. Lausanne: L'Age d'Hommes.
- (1990). *Vom Bild zum Raum. Beiträge zu einer semiotischen Kunstwissenschaft*. Köln. DuMont.
- Tomasello, M. (1999). *The Cultural Origins of Human Cognition*, Cambridge, MA: Harvard University Press.
- Trigger, Bruce G. (1989). *A history of archaeological thought*. Cambridge: Cambridge University Press.
- Von Uexküll, Jacob (1956). *Streifzüge durch die Umwelten von Tieren und Menschen – Bedeutungslehre*. Hamburg: Rowohlt.
- Zahavi, Dan (2005). *Subjectivity and selfhood*. Cambridge, Mass.: The MIT Press.
- Zlatev, Jordan (2002). Mimesis: The ‘missing link’ between signals and symbols in phylogeny and ontogeny: In *Mimesis, sign, and the evolution of language*. Pajunen, Anneli (ed.), 93-122. Turku: University of Turku.
- (2003). Meaning = Life (+ Culture). An outline of a unified biocultural theory of meaning. *Evolution of Communication*, 4/2: 253-296.

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<sup>i</sup> Pre-publication of a text meant to form the introduction of a book in progress. The argument has profited from discussion at the Semiotics Seminar at Lund University.

<sup>ii</sup> Bouissac (1999a, b) also talks about four “ways of acquiring knowledge” within semiotics and elsewhere, which partly correspond to my division: “experiment” and “reasoning” has obvious parallels, “serendipity” would for me be something occurring at certain moments within the other strategies, and “meta-analysis” is an aspect which I have not mentioned, but to which I will turn below.

<sup>iii</sup> Another variety of this thesis could be to present semiotics as a “critique of ideology”, which is a conception probably first formulated by Voločinov, and more famously repeated by Kristeva, but it is still found in Angenot 1985. This self-contradictory conception will not be further discussed here.

<sup>iv</sup> There may of course also be many points of view within a science: Newtonian physics, relativity theory, and quark theory appear to be different points of view in contemporary physics.

<sup>v</sup> It is impossible to establish a consensus among all semioticians on what semiotics is all about; and many semioticians will not even care to define their discipline. However, if we attend less to definitions than to real research practice, and if we leave out those would-be semioticians who simply do not seem to be doing anything very new (those who merely go on doing art history, literary history, philosophy, logic, or whatever), it seems possible to isolate the smallest common denominators of the discipline.

<sup>vi</sup> This is not to say that semiotic results must be formulated in terms of Hempel's covering law (as has been claimed by some exponents of "New Archaeology"): we are referring to the distinction between nomothetic and idiographic descriptions in the more general sense of Rickert and Windelbrand.

<sup>vii</sup> As will be obvious here, if not before, the present discussion relies heavily on a contrast between archaeology and semiotics, which I developed in a lecture, which has not been published, that formed part of a colloquium on semiotics and archaeology, organised at the Swedish Institute in Istanbul in December 2 to 10, 2000. The reflections of archaeology here simply serve as an example, but they will be more directly relevant to our discussion in lecture two.

<sup>viii</sup> From our point of view, this prompts the question: should we also add a "picture-aided archaeology"? And perhaps even further hybrids such as a "trace-aided archaeology"?

<sup>ix</sup> It has been argued that, although introductory text books give a different impression, most archaeology is really involved with historical times, that is, it is "historical archaeology" (Andr n 1997: 12f).

<sup>x</sup> If this seems a paradoxical statement, I must refer the reader to Sonesson, in press, for its elucidation.

<sup>xi</sup> My first tradition seems to correspond to what Thompson (2007:4ff) calls cognitivism, but the other two only overlap somewhat with Thomson's "connectionism" and "embodied dynamicism".

<sup>xii</sup> Without trying in any way to diminish Deacon's contribution – in fact, I find him very convincing whenever he is not having recourse to semiotic terminology –, I have earlier expressed serious misgivings about his way of using Peircean terms, because this serves to obscure both the central issues of semiotics, and those introduced by Deacon (Cf. Sonesson 2006).

<sup>xiii</sup> I am of course simplifying the issue: thus, there is a notable ambiguity in the work of Saussure between a social and an outright formalist interpretation.

<sup>xiv</sup> According to the "language of thought" hypothesis (first formulated by Fodor) even categorical perception and other elementary perceptual operations are based on cognition. Contemporary representatives of cognitive sciences such as Lakoff and Johnson (on which more will be said in later lectures) would seem to think that also thinking in a more traditional science may be reduced to very simple operations, in which case "cognitive science" becomes a misnomer. "Cognition" appears to have changed meaning, standing simply for that which may be simulated on a computer.

<sup>xv</sup> For a discussion of this tradition, which is useful even for those who are not able to agree with the Heideggerian conclusions (curious in this author), see Gurwitsch 1979 (written in 1931).

<sup>xvi</sup> Cf. the remarks on Arvidson 2006 above!

<sup>xvii</sup> Strictly speaking, this is not the problem of our own body, nor of the other, but the more general one of the external world, as pointed out by Gurwitsch (1979: 26f): but it is quite sufficient for us to note that it *also* applies to the body

<sup>xviii</sup> The nature and origin of organism-independent artifacts (which are of course independent of both matter and mind, both only in a limited sense) will be further discussed below, but for more a more complete discussion, see Sonesson 2007.

<sup>xix</sup> For the history of rhetoric, see, for instance, Conley 1990 and Meyer 1999. More will be said about the two Belgian schools on new rhetoric in later lectures. An important theoretical contribution to rhetoric is of course also Ric ur (1975), although the author is more well-known from his

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phenomenological and hermeneutical inspirations.

<sup>xx</sup> An extensive overview of the hermeneutical tradition is found in Ferraris 2002.

<sup>xxi</sup> The conception of communication presented here is very much indebted to the theories of the Prague and Tartu schools of semiotics, in particular as discussed in Sonesson 1999b. More will be said about this in later lectures.