On the face of it, the premises of cultural semiotics appear to be fundamentally opposed to those of another recent specialisation within the study of meaning: biosemiotics. Explicitly, cultural semiotics considers nature from the point of view of culture, whereas, in biosemiotics, culture has all the appearance of being a simple outgrowth of nature. In this paper, I will not only argue that this apparent contradiction is misleading, I will also suggest that the classical parallel between the biological individual and society can be given new substance when cultural semiotics is confronted with biosemiotic models, notably that of Uexküll and that proposed by Maturana and Varela.

The key to the solution is really, as we will see, in the very formula which suggests the problem in the first place: although it is constituted by the dichotomy opposing Culture to Nature, cultural semiotics conceives Nature from the standpoint of Culture, rather than the other way round. The subject matter of cultural semiotics is, as I will suggest, not Culture as such, but the models we build in order to understand Culture. Every existing culture construct such a model (or several ones) about itself; and, in so doing, it necessarily includes in this model a vision of Nature. No matter what form it takes, such as conception of Nature is always construed from the point of view of Culture. It is in effect, at least in part, a residue concept.

The competing view, that which, to underline the parallel, we may describe as natural semiotics, is in a way equally one-sided. Culture itself tends to appear as a natural phenomenon, less, perhaps, as the non-man’s land as which Nature presents itself in cultural semiotics, than as being simply indistinct from Nature, devoid any real boundary to it. Smith (forthcoming; & Varzi 1999) invokes ecological terminology, when he describes the Lifeworld, in the sense of Husserlean phenomenology, as being the niche in which human beings stake out their life. It is found on a mesoscopic level, in between the microscopic and the macroscopic levels described by physics, but it is real in the same sense as the latter two — not more so, as he takes Husserl to claim.

There is a sense in which these two conceptions are not simply inversions of each other. As suggest above, cultural semiotics is a second-order view: It is a science building models about the models people make of culture. Natural semiotics, in the sense I have taken the term above, however, is a first-order conception: it conceptualises nature itself. In order to accomplish this, natural
semiotics must, as Husserl pointed out, itself take its stand within the Lifeworld, that is, within culture, in general and in particular. This is why we may conclude that, from an extensional point of view, Culture is part of Nature — but, from an intensional point of view, Nature remains part of Culture.

Modelling cultural models
In my work on cultural semiotics, I have retained two lessons from the Tartu school, on which its followers have certainly insisted less: that it is not about Culture per se, but about the model members of a Culture make of their Culture; and that this model itself is more involved with relationships between cultures (as well as subcultures, cultural spheres, and so on) than with a Culture in its singularity. This is not to deny that a model of Culture easily becomes a factor in Culture; thus, for instance, those who insist that contemporary Culture is an information society and/or a global village certainly contribute to transforming it into just that. As to the second limitation, relations between cultures may be seen as partly defining what cultures are, if it is not all too unfashionable to retain some aspects of the structuralist lesson.

What I will henceforth call the canonical model (Figure 1) is constructed around an opposition between Nature and Culture by means of which both terms are constituted, in the classical sense of linguistic structuralism, i.e. by mutually defining each other. Yet, as we have seen, a fundamental asymmetry is built into the model: Nature is defined from the point of view of Culture, not the opposite. According to the canonical model, every Culture conceives of itself as Order, opposed to something on the outside, which is seen as Chaos, Disorder, and Barbarism, in other words, as Culture opposed to Nature. In this sense, Nature will include other cultures, not recognised as such by the Cultural model. In earlier discussions of cultural semiotics, I have given many examples of the way this model is expressed in a lot of traditional (or ‘primitive’) world-views, beginning with the Ancient Greek’s use of the term “Barbarism” itself, which is mirrored in the verbally codified attitudes taken by the Aztecs and Mayans to neighbouring peoples, and even, within Europe, in the way Slaves talk about the Germans. Just in the case of the Barbarians playing the part of Other to the Greeks and Romans, these peoples are often described as being unable to speak (properly), which may be generalised to mean that they are deprived of all semiotic capacities.
It would be an error to think that, in the canonical model, Nature is simply a shorthand for other cultures. On the contrary, Nature not only include nature in the everyday sense of the term: the latter must be thought of as the best, or prototypical, instance. Indeed, it is hard to find a better exponent for this model than Colombo, who, when exposed to the unknown cultures of the ‘New World’, simply treats them on a par with natural phenomena. When he talks about people, it is only as part of the landscape: in long lists of things observed, he will often mention the Indians in-between birds and trees. The first time Colombo meets the Indians, he describe them as being ‘naked’; and he turns out to have the same view on them also in several metaphorical senses. He sees no interest in mentioning the artefacts the Indians use: he believe they lack everything, including language, culture, religion, customs. Therefore, he also fails to discover any differences between the tribes he encounters: they are all alike, as are their languages.

Yet the model should not simply be taken is this ethnocentric and highly value-laden sense. It could also be seen as a very generalised model, where all (human) cultures, or, more broadly, all living species, are on one side of the
divide, with only nature in the strict sense remaining on the outside. In this very
general sense, Culture is identical to the Lifeworld, the human niche, or even
more generally, to all niches or all *Umwelten*. As Husserl insisted, the natural
scientist (like any other scientist) must himself be in the Lifeworld: he must live
in the world of ‘ecological physics’, to use James Gibson’s equivalent phrase. In
other worlds, in terms of the canonical model, he is situated within the confines
of Culture. The question then becomes whether he chooses to place not only
stars and atoms, but also robots and perhaps animals, in the domain of Nature.

**From the Canonical Model to its Inversion**

This scheme is of course too simple even to do justice to some of the examples
given in the writings of the Tartu semioticians. In some cases, a Culture may
construe itself as being on the outside, representing Nature and Chaos, while
another society plays the role of Culture. To pick the example developed in
most of the Tartu articles, Peter the Great and other Russians trying to
modernise Russia held this latter view, while the slavophiles, more classically,
conceived of Russia as Culture and the Occidental countries as being the
Barbaric outsiders. It is easy to find contemporary examples, such as third
world countries trying to become industrialised, or states of the former Soviet
Block wanting to become integrated into Western Europe, whose inhabitants
may easily come to look upon the Occident as their cultural model. More
generally, for the last few decades young people all over the world have
construed the United States, in this peculiar sense, as being the *Culture*.

If the cultural model is intrinsically egocentric, then Culture will always
be where the Ego, the subject having the model, is, just as in proxemics; but
we can imagine that this same Ego is projected to another sphere, so that there
is an imaginary Culture which is built up around the projected Ego. In all those
cases in which there is non-coincidence between the real and imaginary
cultures (and the corresponding egos), we will talk about the *inverted canonical
model* (Figure 2). In fact, there are reasons to believe that it is not only spatially
(in terms of causal history, i.e. the trajectory from birth, in the sense of time
geography) that the subject having the model cannot really move from inside
his original Culture. As I have demonstrated elsewhere (Sonesson 1998), a
close reading of the Tartu school texts shows there to be several conflicting
criteria for defining what a text is, and hence what Culture is (since Textuality
is that which is inside Culture), and these do not always go together. The non-text is that which is not possible to understand. But, at least, it is also that which we do not care to understand because it is not familiar and/or because we do not ascribe any value to it. Culture may well have been outside Russia for Peter the Great, in terms of attributed value, but in the sense of ease of understanding, it is a good guess that Russia remained more cultural.

This suggests another way in which the canonical model is too simple: the limits between texts and non-texts (extra-texts, centro-texts, etc.) will often be different according as different criteria are used, which means that the limits between Culture and Non-culture (Extra-culture, Centre, etc) will also be different: the canonical model is simply the case in which all these different oppositions will map out the same border (cf. Sonesson 1998). In a terminology made familiar by Smith (1994, 1995a, b; forthcoming), the boundaries involved are of the fiat, not of the bona fide, kind: they are more like the fluctuating borders between nations than the limits between land and sea, inscribed in the hard facts of geography. In fact, the divide between Nature and Culture in the canonical model, in which all criteria give the same result, is comparable to the limits between dialects, which results from a statistical cumulation of the distribution patterns for different linguistic forms.

Even in this sense, the inverted canonical level, as we have described it above, also remains rather simply, because it only supposes the dissociation of two criteria: that of maximum familiarity (the classical criterion of the Lifeworld) and that of highest value. In some cases (the most simple ones, of course), the attitude of the natural scientist seems to be of this kind: he may well ascribe a higher value to nature (making it into his Culture), but he cannot help being more familiar with the specific human culture in which he lives, and he is forced to express his knowledge of the natural world in terms of the Lifeworld (thus, for instance, the particles and wave forms, familiar objects of the Lifeworld, as which light is often described).

The Extended Model and the Subject/Society Parallel
There is, however, another way in which the canonical model may seem insufficient to describe our relationship to other cultures. It certainly seems to be possible for a subject in one Culture to conceive of some other society, cultural sphere or whatever as being a Culture, without being part of his or her
Culture (the Textual) vs Nature (the Non-textual)

Extra-culture (the Extra-textual) vs Intra-culture (the Intra-textual)

Projected Alter vs Projected Ego vs Person (Auto-ontive) vs Non-person (An-ontive)

Second person (Anti-ontive) vs Person (Auto-ontive)

Mechanism of text-generation

Accumulation of information

Translation mechanism

Exchange of information

Mechanism of inclusion

Chaos - text

Cosmos - text

Text ↔ Non-Text

Real Ego

Extra-Text ↔ Intra-Text

Real Alter

Ego-text

Alter-text

Fig. 2. Inverted and Extended Canonical Models
Culture. We may therefore imagine a model in which Culture is opposed not only to Non-Culture (or Nature), but also to Extra-Culture (Cf. Fig. 2.).

This extension of the model is systematically built into the version of cultural semiotics elaborated by Posner (1989). In his view, the distinction between Non-Culture and Extra-Culture is accounted for by a scale of semiotisation, which runs from a zero degree in Non-Culture, then increases in Extra-Culture and even more in Culture, within which it attains its maximum degree at the Centre (as opposed to the Periphery). This solutions seems unsatisfactory to me for several reasons. First, it is not clear what semiotisation is.

In the second place, it is unclear how a scale, which is continuous, should be able to account for a segmentation into different domains, the limits of which change the meaning of the artefact crossing them: in fact, if there is an Extra-culture and a centre, as well as a Non-culture and a Culture, there should also be extra-texts and centro-texts, in addition to texts and non-texts. In Francis Edeline’s apt phrase, ‘to semiotize is (first) to segmentize’. Rather than a continuous scale (or several scales), what we need are criteria for segmenting the domain of culture and non-culture, in such a way that Culture and Extra-culture remain more intimately connected to each other than either of them is to Non-culture. This can be done by attending to the parallel between persons and cultures, suggested, independently, by Peirce and Bakhtin.

Already when claiming that the cultural model is egocentric (rather than, more trivially, ethnocentric), I posited a parallel between persons and cultures: the cultural model is an origo, a portable centre, by means of which members of a culture ‘take possession of’ the semiosphere (to generalise what Benveniste said about language). Indeed, parallels between persons and cultures have often been made, not least in semiotics. Peirce talked about cultures as ‘compact persons’ (cf. Singer 1984; Colapietro 1989). Moreover, Lotman argued that a Semiotics of Culture was possible because cultures could be seen as (collections of) signs, and Colapietro (1989 58, 78ff) quotes Peirce’s comparable identification of minds with symbols when trying to show the viability of a Semiotics of the self.

In his early work, Bakhtin (1990; 1993) is very much preoccupied by the differences between the self and the other, often masquerading under the terms Author and Hero. He points out that it is only the other which may be (and must
be) seen from the outside, and thus is perceived as a complete and finished whole; the self, on the other hand, is an unlimited process which can never be grasped in its entirety, indeed it is some kind of stream of consciousness, which only comes to a stand-still at death. This is so because ‘my emotional and volitional reactions attach to objects and do not contract into an outwardly finished image of myself’ (1990:35; cf. 1993). Only the other’s body can be seen completely: there is an ‘excess of seeing’ (1990:22ff). In the case of ourselves, some part of the body is always lacking, even as reflected in a mirror. This difference translates to the mind. In this sense, the other, contrary to the self, has the property of outsideness, or transgredience (1990:27ff).

Bakhtin (1990: 25ff, 61ff) uses these observations to criticise the theory of empathy popular at the time: understanding cannot be an identification with the other, for, to begin with, this would be pointless, since it would only give us the same thing over again, and in the second place, it is impossible, because the other, by definition, can only be seen from the outside. Yet Bakhtin (1990: 15ff, 17, 25f) admits that we may imaginatively take the position of the other on ourselves, though what is gained from this outside position can only be appreciated once it is reintegrated into the stream of consciousness, as a phase of the ongoing process which is the self. In a very late text, however, Bakhtin (1986) suggests a parallel can be made between the meeting of self and other and the interpretation of other cultures: in both cases, understanding is not possible by a total identification with the other culture, but only by entering the other culture and then return to a position external to it. In our terms, Non-culture can only be transformed into Extra-Culture by taking once own ultimate stand in Culture.

In his early work, Peirce had recourse to the metaphor of the three common types of personal pronouns to describe analogies between persons and cultures. He even puts them in place of what was later to become the three fundamental categories of Firstness, Secondness, and Thirdness. But Peirce did not identify the second person, as one may at first naively expect, with Secondness, but with Thirdness. In his view, the second person was the most important, not the first: ‘all thought is addressed to a second person, or to one’s future self as a second person’ (quoted from Singer, 1984: 83f). In terms which Peirce took over from Schiller, the first person stood for the infinite impulse (Firstness), the third
person for the sensuous (Secondness), and the second persons for the harmonising principles (Thirdness). Peirce called his own doctrine ‘Tuism’ (from ‘Tu’, as opposed to ‘Ego’ and ‘It’), and he prophesised about an ‘tuistic age’, in which peace and harmony would prevail. So the Peircean other is a friend and collaborator; he is not the spirit which always says no, the devil in a Biblical sense.

Both Bakhtin and Peirce see the self as something which is not and cannot be concluded, something which exists only as developing in time. But while to Bakhtin the other is something static, essentially closed off, he is for Peirce of the same kind as the self, that is a stream of consciousness which cannot be halted — before the moment of death. So from this point of view, the other is just another self to Peirce. On the other hand, Peirce claims there is no direct access to knowledge about the self, just as there is none about the other: both are only indirectly known through signs. As far as access to knowledge is concerned, then, the self is merely another other to Peirce. The outsideness, or transgression, which Bakhtin attributes to the other is also a property of the Peircean self.

I would not presume to decide who is right, of Peirce and Bakhtin, about the self and the other; perhaps we should consider their descriptions to be alternate, but equally possible, models. In any case, it seems clear that, given its egocentric point of departure, cultural semiotics must side with Bakhtin. Ego and Alter are two of a kind to Peirce, but in the model of cultural semiotics that we have presented Ego and Alter are essentially opposed as to their nature, as in Bakhtin’s work. Since Alter is petrified and closed-off by the look of the Ego, he should of course be the square inserted into the openness of the Ego, not the opposite as the model (cf. Figure 1) suggests; but this is another aspect, not taken into account by the model in its visual manifestation. After all, what is inside, according to one criterion, may well by outside according to another.

Semiosis as Conversation and Reference
In a famous analysis, Benveniste (1966) has suggested that what is ordinarily termed the pronouns of the first, second, and third persons, should really be considered the result of combining two different dimensions, the correlation of personality, which opposes the person to the non-person, and, within the former pole, the correlation of subjectivity, which opposes the subject to the
The traditional third person, in this sense, is no person at all, and it is opposed to two kinds of persons, the one identified with the speaker, and the one identified with the listener. Tesnière (1969) later proposed to use the somewhat more enlightening, but more cumbersome, terms autoontive, antiontive, and anontive, respectively: i.e. the one who exists in itself, the one who exists against (the first one), and the one who, properly speaking, does not exist at all. It could be said, then, that Culture is the domain of the subject, or autoontive, while Extra-culture is the domain of the non-subject, or antiontive; Non-culture, finally, is the residence of the Non-person, or anontive. It seems particular proper to describe Non-culture as that which does not properly exist.

The terminology suggested certainly does not involve the imposition of a linguistic model on culture; rather, it is Benveniste’s merit to have discovered a cultural layering within language, which may well exist also in other semiotic systems. However, I do think the terminology is in some ways influenced by the semantics of Romance languages. It is natural for a Frenchman, a Spanish speaking person, and so on, to think of the third person as a non-person because the pronouns in question are equally employed about things and living beings; in Swedish, German, English, and so on, however, we use two of the varieties of the third person pronoun, ‘he’ and ‘she’, almost exclusively about persons. It therefore seems more correct to talk about the axis of conversation or dialogue, joining Ego and Alter, as opposed to the axis of reference or nomination, which connects the former to the thing meant, or Aliquid. Extra-culture is the one with whom Culture is ‘on speaking terms’; Non-culture is the one Culture may at the most be speaking about. In this sense, cultural semiotics becomes, in Milton Singer’s (1984) phrase, a real ‘conversation of cultures’; but, at the same time, it is a conversation conducted out of reach of other cultures.

In his fascinating study of the conquest of America, Todorov (1984) makes a lot of the differences in the attitude taken by the two cultural heroes of the enterprise, Colombo, on one hand, and Cortez, on the other: while both find themselves faced with a hermeneutical task, the former applies it to things, the latter to people and their society. As we have seen, the attitude of the former is of the kind epitomised by the canonical model. Yet, Todorov is wrong, I think, to say that Colombo takes a totally asemiotic attitude. Contrary to Todorov’s opinion, the reported facts cannot be taken to indicate a lack of interest in
As he is described by Todorov, Cortez takes a very different attitude from that witnessed in Colombo: first of all he wants to understand the other culture, although he is of course not interested in understanding for understandings’ sake. He interprets the world in order to change it. So his first priority when arriving to the New World is to find an interpreter. He is conscious of the symbolic importance of weapons, beyond their value as brute force. He even uses the knowledge about the other culture which he acquires for his own purposes. The most notable example of the latter is the way he takes advantage of the myth about the return of Quatzelcoatl. In order to realise purposes undoubtedly defined by his own culture, his allows his own behaviour to be rewritten as a text of the other Culture. There can be no doubt that to him, Aztec society is an Extra-culture. But this does not mean, as can be seen, that his behaviour is necessarily more ethical than that of Colombo. The ‘conversation of cultures’ is here not for mutual benefit, but serves to subtly overpower the other. Cortez makes used of the extended canonical model.

From Proxemics to the Functional Circle by way of Modes
There are two respects in which the Tartu school model of Culture is curiously reminiscent of the proxemic model which describes how distances become socially meaningful (Hall 1966): first, they are relative to a centre, an origo, which in one case in the own Culture, and in the other the own body, that is, like the Husserlean Lifeworld (and like Bakhtin’s world of everyday life), they are ‘subjective-relative’; and, in the second place, the categories defined by both models attribute meaning to objects to the extent that they transgress borders, in one case between our own Culture and other cultures, and in the another case between different spaces having the body as their centre. Only in this way can we understand that something, which is a ‘text’ on one side of the
cultural divide, becomes a ‘non-text’ on the other side of the border, and vice-versa. This latter feature is also found in the rhetorical model of meaning (cf. Sonesson 1995; 1997b).

Fig. 3. The body envelop and its surrounding proxemix spheres (inspired in Hall and Spiegel & Machotka). The arrows illustrate entries through designated openings and through the closed borders, respectively.
The question now, is whether this parallel may be taken further. It will be remembered that, to E.T. Hall, there is a number of ‘bubbles’ around the individual, determining the significance of various distances: the intimate level, on which you may fight or make love, the personal level, which is fit for encounters with close friends, the social level, adequate for more distant mingling, and the public level, characteristic of the conference situation. In an undeservedly forgotten book, Spiegel & Machotka (1974) add a final layer, that of the bodily envelop itself, corresponding to the skin. It could be said that, in a kind of individual adaptation of the canonical model, different criteria define the limits of Nature and Culture, Ego and Aliquid, at different points in space. The boundaries of the subject, too, are differently situated, and thus appear to be fiat borders, rather than bona fide ones. Indeed, it would appear that, from a proxemic point of view, the limits of the ego are differently situated, according as alternative criteria are applied, just as we have discovered the criteria of Culture to be.

Some people would no doubt want to introduce even further layers of the ego, coming after the skin, when starting from the outside. Maine de Biran qualified the body as an ‘résistant continue’; in a parallel fashion, Husserl claimed that it cannot be further divided, although the corpse can; thus, as I have concluded elsewhere (in Sonesson 1981), the former is not open to the primary semiotic operation of segmentation, which means, in our present terminology, that it is not part of the Ego, or Culture. In this sense, Non-cultural begins inside Culture. This is probably not entirely true, however; and one may imagine further divisions of the Ego which are not parallel to those of the organism.

From a proxemic point of view, the subject is a topological construction: a series of concentric circles demarcating the public, social, personal and intimate, spaces (in relation to another subject), within which is found the bodily envelope, all of which are defined by the fact that they may be penetrated and then produce an effect of meaning (Fig. 3). This is to say that these ‘protective shells’, as Hall puts it, are more or less permeable. In topological terms, they possess the property of being open or closed. More exactly, in merotopological terms, some parts of them have the property of being open and others that of being closed. The case of the bodily envelop is
most easily illustrated: it possesses are series of openings (mouth, nostrils, etc.), but it may also be penetrated elsewhere, with more serious consequences, such as scars. It is the merit of Spiegel & Machotka to have pointed out this distinction. To some extent it can be generalised to the proxemic spheres: the intimate sphere, for instance, may be more open in the forward direction. Actually, as I have suggested elsewhere (Sonesson 1993b), between the bodily envelope and the proxemic distances other layers may be introduced, those or clothing, which themselves are multiply structured, from hairdo and tattoo, at one extreme, to outdoor clothing, at the other. Like the body, pieces of clothing have their preferred routes of penetration.

<table>
<thead>
<tr>
<th>position</th>
<th>permeability/direction</th>
<th>ego inside</th>
<th>alter inside</th>
</tr>
</thead>
<tbody>
<tr>
<td>adjacent to</td>
<td>adessive</td>
<td>somewhere else</td>
<td>somewhere else</td>
</tr>
<tr>
<td></td>
<td>adessive</td>
<td>ablative</td>
<td>ablative</td>
</tr>
<tr>
<td>inside</td>
<td>inessive</td>
<td>inside &gt; outward</td>
<td>ego opposed</td>
</tr>
<tr>
<td></td>
<td>inessive</td>
<td>elative</td>
<td>inhibition</td>
</tr>
<tr>
<td>outside &gt;</td>
<td>inward</td>
<td>ego opposed</td>
<td>alter opposed</td>
</tr>
<tr>
<td></td>
<td>illative</td>
<td>alterresistance</td>
<td>egoresistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ego in favour</td>
<td>intrusion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>expulsion</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 4. A fragment of the sublogic of space (inspired in Hjelmslev’s case grammar and the notion of modes and vectors in the work of Gardner 1970: Cf. Sonesson 1989, I.4.5.)
The possibilities may be illustrated by a scheme reminiscent of case grammar (Fig. 4.). In fact, this model was first developed as a way of expressing in topological terms, with an added dynamical element, the so-called modal-vectorial properties suggested by Gardner (1970) when elaborating on an idea from the psychoanalyst Erik Eriksson (cf. Sonesson 1989,I.4.5.). The psychoanalytical derivation of these categories is here irrelevant; what is important, however, is that these categories form a spatial model which is intimately wedded to bodily experience. In fact, Gardner associates each of the modes with a different bodily opening: incorporation with the mouth, retention and expulsion with the anus, and intrusion and inception with the male and female sexual organs, respectively. All the modes may be seen as movements out or in of the body, with the ego playing an active or passive part in what happens. From this point of view, what is lacking here is the case in which the subject actively resists the movement inwards; and, of course, the case in which similar movements come to a halt before crossing the borderline.

Interestingly, many of the categories turn out to correspond to the so-called ‘local cases’ found in Finnish grammar (and less completely in other grammars, often expressed as prepositions rather than cases; cf. Hjelmslev 1937). It also accounts for the twin aspects of indexicality, as found in visual rhetoric, contiguity and factorality (or mereology). Where it goes beyond grammar, however, is in the active stance taken by the ego and/or the alter. Resistance as reality proof is of course an old ingredient of philosophical theories, from Maine de Biran to Sartre. Here, however, it serves to account for the bodily-centeredness of the spatial model. Of course, local cases also account for the limitrophic cases: those movement which come at a stand-still close to the border.

Permeability, however, is relative to the different senses, as well as to movement. As I have pointed out elsewhere, there is some confusion when Simmel opposes the window, which may be penetrated from the inside out, to the door and the bridge, which may be penetrated in both directions. The problem is not so much that there are windows, such as shop windows, which are more customarily permeable from the outside in, and that even apartment windows may be permeable from the outside. The basis issue is rather that,
while windows are permeable to sight, doors and windows are permeable to movement (Cf. Sonesson 1981; 1995b; cf. Hammad 1989). The same observation applies to the human body: the eyes, for instance, are permeable, without resistance, to light, but only by using force do they become permeable to other potential penetrators, including movement.

The parallel with the canonical model should be clear: not only are some non-texts impeded from entering the sphere of Culture, while others are let in, and still other are actively received; there are also texts once acceptable within Culture, which later are declared to be non-texts. This is exactly what happened in that particular culture know as Art, when Modernism changed the criteria for something being a text in the art-world: new things were taken in, but old things were also thrown out (cf. Sonesson 1993a, 1995; 1999).

Much of what has been discussed so far can be recognised in the famous Funktionskreis described by Uexküll (1928; 158; 1956: 22). Most notably, what we have seen are instances of his Merkwelt: that which, so to speak, are coming from the outside world and going into the organism. In fact, we have only attended to the Wirkwelt, to the extend that the organism may be helping actively some of the message from the outside world coming in, or resisting their penetration. This is obviously a very limited view of the way in which the amalgamated Ego/Culture/organism works on its outside world. What theories such as cultural semiotics, proxemics and the theory of the Umwelt have in common is that they are, in a fundamental way, input/output-devices. The distinct advantage of Uexküll’s conception, however, is the attention is gives to the ‘output’: the active intervention of the organism in the outside world. After all, it is clear that every cultures tries to intervene in the no-man’s land it chooses to define as non-culture. Colombo certainly did. It is significant that the Romans conceived the limes as forming the border with those which as yet were not Romans. Similarly, the ego at the centre of the various proxemic layers is not only subjected to actions coming from the outside; he concomitantly intervenes within the protective shells of the other.

The important lesson which can be derived from the notion of the functional circle, however, is not just that that which is inside operates on that which makes up its outside; it is also that what it accomplishes on the outside is done according to the interpretations elaborated on the inside. Like cultural
semitotics and proxemics, the functional circle may be an input/output-device, but it would be misleading to describe any of them as ‘black boxes’. What happens on the outside is formed on the inside. They all carry their semiosis within. Or, to put it in terms we have used once before: intentionally, the *Umwelt* is part of the organism.

The final apotheosis of autopoiesis

To Maturana & Varela (1992), the cell is equally and input/output-device; and it could reasonably be argued that part of the autopoetic character of this device consists in the inside being able to define the impact of what goes in and out. Although Maturana & Varela refuse to take a definite stand of the issue, I will, for the sake of the present argument, simply suppose that combinations of cells at different levels of organisation, from the biological organism over colonies to societies, are not only second-order autopoetic units, that is, units made up of elements which are autopoetic, but also first-order autopoetic units in their own right. Then our notion of a border permeable to different kinds of meaning seems to be equivalent to the membrane separating the autopoetic unit from its environment.

If this generalisation is valid, the advantage of the concept of autopoiesis will be to reorganise the traditional division of Nature as a subject matter for the natural sciences, and Culture as a subject matter for the humanities and the social sciences. Instead, the latter domain, together with biology, would be found on the side of the sciences of autopoiesis — to which we could perhaps attribute a familiar name, that of semiotics. The natural sciences would come out somewhat diminished, although they would still rule both the microscopic and the macroscopic level of inquiry. Similar conclusions could really be drawn already from the notion of *Umwelt* — for, in both cases, it would seem that what is outside is defined form the inside. In other words, intentionally, the environment is, in both cases, part of the organism.

If so, however, it would seem that we are stuck with the canonical model defined by Cultural semiotics: there is no place for the inverted model, nor for the extended one. This may not be too serious if we apply the model globally, having put all zoosemiotical as well as phytosemiotical creatures on the side of Culture. In this revised sense of the term, I think we can go along with Habermas’ (1976) pertinent critique of the earlier generation of the Frankfurt
school, according to which there is no possibility of communicating with Nature.\footnote{21} We do not have to empathise with this residue of Nature, as the inverted model supposes, nor do we have to enter a dialogue with it, as suggested by the extended model.\footnote{22}

However, if we apply the model locally, that is, at the level of each society, each organism, and even each cell, we seem to be faced with a dilemma. Each Culture, in such a generalised canonical model, would only be able to communicate with itself; everything else would be filtered out or, differently put, reinterpreted.\footnote{23} Culture would stand beside Culture, Ego side to side with Ego, and organism next to organism, in a manner comparable to Spinoza’s monads, but with a difference: each of the monads would certainly reflect the outside world within themselves, but in mirrors more distorting than those found in any funhouse. At this point, communication is reduced to self-communication, and autopoiesis to autosemiosis.

If this is not, as I believe, a desirable outcome, then there may simply be something wrong with our models. In this essay, I have not had the intention to resolve any issues, but rather to propose some (all too) simple analogies, and thus to start a dialogue. For, if anything, the sciences of nature and of culture must be able to function according to the inverted model and the extended one: to empathise, and to entertain a dialogue.

Bibliography:
— (1986) *Speech Genres and other Late Essays*. Austin, University of Texas.
— (1990) *Art and Answerability*. Austin, University of Texas.
— (1993) *Toward a Philosophy of the Act*. Austin, University of Texas.
— (1979) Culture as collective intellect and problems of artificial intelligence, in Russian Poetics in translation, 6, University of Essex, 1979; 84-96.
Smith, Barry & Casati, Roberto (1994) Naïve Physics: An essay in ontology, Philosophical Psychology, 7/2, 225-244.
Smith, Barry, & Varzi, Achille (1999), The niche, in Nous, 33:2, 198-222.
— (1993b) The multiple bodies of man. Project for a semiotics of the body. in Degrés, 74, d-d42.

1 This antinomy obviously does not exist in all version of cultural semiotics, such as, for instance the
“evolutionary cultural semiotics” of Koch (1986). For reasons which will become apparent, I prefer to start out from the original Tartu school model.

2 The Tartu school model has been variously described in a number of texts, some of which were written together by Jurij Lotman and Boris Uspenskij, and some involving several other authors (cf. bibliography). In the following I will present the Tartu model in the schematic form of two overlapping squares representing Culture and Nature, respectively, which are connected by different arrows, referring to the inclusion and exclusion of texts and non-texts (cf. Fig. 1 and Sonesson 1987; 1992; 1993a; 1994a,b; 1995; 1996; 1997a,b,c,d; 1998; 2000; 2001; forthcoming).

3 See, in particular, Sonesson 2000 and also (for some of the examples) Todorov 1982: 81f

4 For a more complete analysis, see Sonesson 2000, and for the facts, cf. Todorov 1984: 40, 41f, 36f

5 A parallel which will be developed below.

6 Real-world national borders, or even natural ones, are rarely as simple as suggested by these descriptions. Some complications are noted by Smith 1994, 1995a, b — but I hope to return to further issues in another article.

7 Mathematics may seem to avoid this conundrum; but not even the natural sciences can be entirely quantitative.

8 I suggest some possible interpretations which, in the end, seem unacceptable, in Sonesson 2000.

9 In a conference given at the Second Congress of the Nordic Association for Semiotic Studies, Lund 1992.

10 Curiously, the concept of dialogicity, for which Bakhtin and the other members of his circle are famous, is very rarely applied to the relation between the other as listener, and thus potential speaker; is rather concerned with the other as seen from the outside, the one about whom we are talking. Cf. in particular Voločinov 1973 and the contributions by the same author in Shukman, ed., 1983, as well as Bakhtin 1981 (an exception is the notion of ‘super-addressee’).

11 To illustrate this point, we would have to invert Fig. 1: it is the other/Non-culture which is an open space with definite limits, while the self/Culture is a square limited on all sides (Bakhtin 1990: 12 claims the Hero is included in the Author). I don’t think there is any real contradiction here, however, for the ‘insideness’ and ‘outsideness’ involved are of different kinds: in the canonical model, they concern the position of the Ego, of that which is known, etc; in Bakhtin’s version, they concern limits in space and time.

12 It is in the sense that Ego and Alter are not interchangeable that we side with Bakhtin; for we can certainly not follow him in treating the other as a mere subject of conversation.
For a more complete discussion, see Sonesson 1997e,f: 2000

Such a linguistic bias is also a problem with Ricœur’s (1990) discussion of Ego and Alter (which contains a reference to Benveniste’s ideas).

Dialogue should not be understood in Bakhtin’s rather truncated sense. As noted above, the other of the Bakhtin circle is rather the one we speak about (the hero) or even only look at (as when we see the other’s body but not our own in its entirety). This is even true about dialogicity as it is understood in the later books, familiarised as ‘intertextuality’ by Kristeva: the author relates to the speech of the other, but the other has no way of talking back. In the Rabelais book and the late version of the Dostoevsky book the quoted other is curiously supposed to be able to talk back; but then the asymmetry between Ego and Alter is also given up (cf. Also Morson & Emerson 1990: 172ff).

There are also the semi-personal and the semi-social levels. Elsewhere, I have used this system to develop a semiotics of clothing (Sonesson 1993b)

It could be argued that the bodily envelope constitutes a bone fide boundary, whereas the proxemic layers are fiat borders. However, there are other reasons for thinking this division, however useful at first sight, is rather problematical: at least, a third term would be needed. But there is no place to discuss this here.


They fail to note, however, that also penetration through the designated openings may be experienced as a break-in, not only for the woman being violated or the child who does not want to eat, but also if the penetration is not of the adequate kind, such as penetration of the eyes by anything else than light.

As I pointed out in Sonesson 1989, if the different orifices are meant to indicate the site of our primordial experience of, notably, intrusion and inception, then, hopefully, the little boy and the little girl will have had many earlier experiences of the kind, prior to those occurring in their sexual zones. Moreover, as anyone who has ever made love must know, sexual intercourse is not a good example of inception, if the latter is taken to be passive. But I may be overinterpreting the parallel suggested by Gardner.

In Sonesson 2000, I quoted this argument against Todorov’s (1984: 69ff, 75, 102f) claim that there are two basic forms of communication, between men, and between men and nature, and that while the Spaniards are good at the first kind, and the Indians at the second kind, we really need to master both.

I am not sure that our models are really sufficient here, however. We cannot empathise with the ozone layer, nor enter a dialogue with it, but this is no good reason for simply ignoring the state which it is in.

To be exact, even in the canonical model, the accumulation of many distorted messages may force the
Culture to set up a new system of interpretation. But this stills amounts to slow-motion communication.