The Phenomenological Semiotics of Iconicity and Pictoriality—Including Some Replies to My Critics

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Abstract

Instead of rejecting the notion of iconicity, as has often been the case in semiotics, we should inquire deeper into its specific nature, and also into the peculiar way in which it is manifested by pictures. In order to show why Umberto Eco, Nelson Goodman, and others were fundamentally wrong in their classical critique of iconicity, we will pursue a close reading of Peirce, but we will interpret his work in accordance with more recent findings in cognitive and perceptual psychology, and we will modify the theory as a result of our interpretation. At the same time, we will rely on phenomenological insights, both those made explicit by Edmund Husserl in his studies of pictorial consciousness, and those which are implicit, notably in the work of the psychologist James Gibson. As a result, we will distinguish iconicity as such from iconic grounds and iconic signs, and we will delineate two very different kinds of iconic signs, which we will call primary and secondary iconic signs. Even so, pictorial iconicity has its peculiarities, which we will also try to elucidate. In so doing, we will consider to what extent the linguistic model is still helpful, and in which respects it is misleading.

Keywords: iconicity, picture sign, ground, phenomenology, abstraction, relevance, type

Unlike most other domains of study nowadays integrated into semiotics, the semiotics of pictures has hardly any precedents outside of semiotics proper: if we take pictorial semiotics to be involved with the study of pictorial signs per se, of some general property more peculiar to pictures than iconicity, which may be termed pictoriality, or picturehood, and if we suppose it to apply empirical methods to this study, then it certainly is a novel endeavour, far more so than linguistics, more, in fact, than literary semiotics, film semiotics, and even the semiotics of architecture, all of which have known some more or
less elaborate theoretical approaches before the coming of semiotics. This is so because
the only other domain ever devoted to pictures, art history, always has been, and mostly
continues to be, fascinated by the singularity of the individual work of art, which explains
(without necessarily justifying) the fact that it tends to shun all kinds of conceptual
analysis.

Indeed, pictorial semiotics is something of a newcomer within semiotics itself, for
although Peirce gave us one of our most important theoretical tools for understanding the
picture sign, i.e. the concept of iconicity, he himself hardly took any interest in pictures,
and even the sub-category which he introduced to take care of them, the image, on closer
scrutiny does not appear to adequately characterise pictorial iconicity. As for the other
founding-father of semiotics, Saussure, he repeatedly insisted on linearity being one
of the peculiar properties of verbal language, and at least once he opposed this feature
to the multi-dimensionality found in pictures (cf. Saussure, 1974, p. 39); but though
he was right in pointing to the differences in the ways in which signs are organised in
verbal and pictorial “texts”, multi-dimensionality is not specific to pictures, and, on one
interpretation, it may even be found in verbal language.²

Two accounts could be written of the birth of pictorial semiotics, both taking their
point of departure in the middle of the last century. The first story begins with Roland
Barthes inventing a simplistic, but still inspiring, model which he applies to a publicity
picture; it continues with representatives of the Greimas school, such as Floch and
Thürlemann, explaining why this model is inadequate and constructing a new one, with
Groupe µ proposing their own, rhetorically-based, model, as well as with the Quebec
school insisting on perceptual features, the Australian school taking communicative
functions as being fundamental, and the Lund school inventing a second-generation
rhetorical model based on Lifeworld expectations and cognitive prototypes (cf. Saint-
Martin, 1994; Carani, 1999; now see Sonesson, 2010a, 2014a, 2015a). Peircean semiotics
proper has hardly taken any part in this adventure: at the very most, pictures have
sometimes been brought in to illustrate some Peircean concepts (by Max Bense, Gérard
Deledalle, and others), which could just as well be illustrated in other semiotic domains.
Although he has already dedicated an entire book to this task, this is also what Tony Jappy

The second story, in contrast, is about the specificity of the picture sign, as compared
with other signs, and as related to its sub-types. It does involve the Peircean notion of
iconicity, less as it has been safeguarded by the true Peirceans than as it emerges from
half a century of criticism by philosophers such as Arthur Bierman and Nelson Goodman,
as well as semioticians such as Umberto Eco and René Lindekens; and then rehabilitated,
by, among others, Groupe µ, and the present author; it also concerns the Saussurean idea
of the way meanings may be organised, again as it was put to confused, and confusing,
uses by Eco and others, and then completely reconceived in the light of the findings of
perceptual psychology, in particular by the present author.
1. Reading Peirce Phenomenologically: From Iconicity to Iconic Signs

The point of departure of the present approach to pictorial semiotics is neither Peirce nor Saussure, but the phenomenology of Edmund Husserl, as developed by, among others, Aron Gurwitsch, Alfred Schütz, and Maurice-Merleau-Ponty. In particular, this means that I will take the *Lifeworld*, also known as the *world-taken-for-granted*, the *common sense world*, or, in the adaptation of the psychologist James Gibson, *ecological physics*, as the foundation for all possible meaning. This imposes particular requirements on us to explicate basic notions such as those of sign, iconicity, and pictoriality. In many ways, phenomenological semiotics is closer to, and more compatible with, the basic tenets of Peircean semiotics than with the Saussurean brand, in particular as the latter was transposed outside language by French structuralism. Indeed, as I have suggested elsewhere, Peircean phenomenology, later rebaptized phaneroscopy, is basically identical to the Husserlean brand, though it introduces some fairly arbitrary constraints (see Sonesson, 2013a). In this framework, many of the concepts of Saussure-inspired semiotics retain their import, but only on a secondary level. However, one basic notion of Saussurean linguistics, hardly taken into account by French structuralism (but certainly by the Prague school), the notion of pertinence or *relevance*, will turn out to be a fundamental ingredient in our interpretation of iconicity. It is in fact relevance, together with the notion of the Lifeworld, that will turn out to save the notion of iconicity from the criticism directed at it from outside orthodox Peircean quarters.

If, along with Gibson (1978, p. 228), we describe pictorial semiotics as “the science of depiction”, where the latter is considered to be a peculiar mode of conveying information, its purview will involve, at the very least, a demonstration of the semiotic character of pictures, a study of the peculiarities which differentiate pictorial meanings from other kinds of signification (particularly from other visual meanings, and/or other meanings based on iconicity, or intrinsic motivation), and an assessment of the ways (from some or other point of view) in which the several species of pictorial meaning may differ without ceasing to inhere in the category of picture. In the following, we will have a look, first, at the notion of iconicity, not only to show that it exists, and is involved in pictorial meaning, but that there are at least two kinds of iconicity, and that pictures must be attributed to the first sub-category. The paradoxical nature of the kind of iconicity ascribed to pictures, *primary iconicity*, forces us to reconsider the picture sign as such, taking our inspiration in a very direct way from Husserlean writings. This, in turn, will force us to return to the cardinal issue of whether pictures are, in fact, semiotic objects, or signs. We will then see how the idea of a visual syntax was exaggerated into the idea of a double pictorial articulation, and, at the other extreme, was dissolved into the conception of density and repletion; and we will introduce *resemanticization* as a peculiar feature of pictorial, as against other kinds of visual and iconic, meaning. The question of what distinguishes different picture categories, such as photographs and drawings, advertisements and caricatures, or picture post cards and posters, lies outside the scope of this paper.
In the following, I will first delineate a particular interpretation of Peirce’s division of signs, and then proceed to elucidate the ways in which the criticism levelled against iconicity, as well as against the common sense notion of picture, which it includes, can be eluded. This argument will critically involve a very explicit notion of sign, which is absent from Peirce’s work, but is suggested by Husserlean phenomenology in combination with the psychology of Piaget; and it will also require us to introduce a concept of relevance, which is foreshadowed, rather ambiguously, in the musings about the “ground” which Peirce sometimes entertained, but is more clearly suggested by the Saussurean notion of pertinence. I will then indicate one further way in which Peirce’s conception of iconicity has to be amended in order to account for the kind of iconicity (which I will call primary iconicity) instantiated in, among other things, picture signs, and I will go on to approach some even more peculiar traits of pictoriality, which is where we will make contact with the Saussurean tradition in semiotics, as well as, more intimately, with Husserl’s seminal work on pictorial consciousness.

1.1 The night of all iconicities

During the second half of the last century, the claim that there can be no iconic signs came from two rather different quartered. Philosophers like Bierman and Goodman, only the first of whom explicitly referred to Peirce, started out from logical considerations, together with a set of proto-ethnological anecdotes, according to which so-called primitive tribes were incapable of interpreting pictures; outright semioticians such as Eco and Lindekens, on the other hand, wanted to show that pictures conformed to the ideal of the perfect sign, as announced by Saussure, by being as arbitrary or conventional as the sign studied by the “most advanced” of the semiotic sciences, general linguistics. Since then, the question has largely gone out of fashion, but the results of those disquisitions have, rather undeservedly, been taken for granted by later researchers. In my own work on iconicity, which dates from the period of low tide in the debate (Sonesson, 1989a, 1992a, b, c, 1993a, b, 1994a, b, 1995a, 1996d, 1997b, 1998b, 2000a, 2011a), I have quoted evidence from psychology and ethnology, which tend to show that these conclusions are unfeasible. More importantly, however, I have also suggested that the arguments against iconicity were mistaken, mainly because they construed language and pictures, as well as the world of our experience, i.e. the Lifeworld, in a fashion that is incompatible with our empirical knowledge, i.e. with that which we have good reasons to believe to be true about the world.

Rather than making iconic signs semiotically uninteresting, contrary to what is suggested by these critiques of iconicity, it is only through the recognition of the reality of iconic motivation that iconicity is opened up as a domain for semiotics. This is so at least for three reasons: first of all, since an iconic sign is indeed similar to what it represents, it may be used to manipulate and transform in numerous ways the ideas we hold about its referent, which is what gives rise to visual rhetoric (cf. Sonesson, 1990, 1994b, 1996a, b, c, 1997a, 2008a). In the second place, a little investigation will show us that iconicity
may inhere in signs in several different ways, the two main varieties of which we will call primary and secondary iconic signs, but the sub-species of which may be very numerous (cf. Sonesson, 1993a, 1998a, b). Finally, and perhaps most importantly, iconic signs presuppose an uneasy equilibrium between being the same and being different which may explain why, to all appearance, pictoriality (and perhaps other iconic representations) is a late-comer in the process when human beings distinguish themselves from other animals, and which may account for the unique feats of the human race, just as much as verbal language does (cf. Donald, 1999; Sonesson, 2006, 2007a, b). Nevertheless, it will be useful to start out by revisiting the old iconicity debate, if not, however, before having returned to the original definition of the concept made by Charles Sanders Peirce.

The iconicity debate has not been immune to some simple confusions. It should be clear that, in semiotics, the term “icon” is not normally to be taken in its most common religious and art historical acceptation, to refer to a pictorial representation of persons or events derived from the sacred history of Christianity, which is normally used as an aid to devotion. In fact, icons in the religious sense are not particularly good instances of icons in the semiotic sense, for they are, as Boris Uspenskij (1976) has shown, subject to several conventions determining the kind of perspective which may be employed, and the kind of things and persons which may be represented in different parts of the picture. It seems to be less clear that the term is not to be used to refer to all things visible, or to everything whose elements are graphically disposed, as in the jargon of computer programming, or in cognitive psychology, where “iconic” and “verbal codes” are opposed to each other (e.g. Kolers, 1977). Contrary to the latter usage, iconic signs, in the sense of semiotics, appear in any sense modality, e.g. in audition, notably in verbal language (not only onomatopoetic words, but also in the form of such regularities and symmetries which Jakobson, 1965a, b terms “the poetry of grammar”; see also Sonesson, 2008b) and music (cf. Osmond-Smith, 1972). In a parallel fashion, not all visual signs are iconic in the semiotic sense; indeed, many icons found in computer programs, as well as a great amount of visual signs appearing in public space, are actually aniconic visual signs. Even many semioticians are guilty of such a confusion of these two quite different senses attributed to the term “iconic” (thus still in Eco, 1999, p. 100, in spite of admitting his error in 1998, p. 10, 1999, p. 340 and all through Vaillant & Castaing, 2005).

Nor does iconicity in the Peircean sense have anything specifically to do with what in art history, following Panofsky, is called “iconography”, which is potentially relevant to all pictures, but precisely in their non-iconic sense, as guided by an (explicit) reading program. Finally, the sense in which iconicity is discussed here is quite distinct from that appearing in the expression “cultural icon”—where it seems to refer to just about anything (the sign character or the sense modality) which occupies a central position in a (popular sub) culture.

Sometimes, criticism levelled against Peirce’s conception of iconicity rests on obvious misinterpretations: for instance, iconicity is not limited to the rendering of the appearances of the ordinary perceptual Lifeworld, as many theories would have it (as in many passages
by Eco, as well as in the definitions used by the Greimas school and Groupe μ), but includes much more abstract relations of similarity. Contrary to what is suggested by Groupe μ’s (1992) quotation from Dubois’ dictionary, iconicity, in the Peircean sense, is not limited to a resemblance with the external world (“avec la réalité extérieure”). When conceiving iconicity as engendering a “referential illusion” and as forming a stage in the generation of “figurative” meaning out of the abstract base structure, Greimas and Courtés (1979, pp. 148, 177) similarly identify iconicity with perceptual appearance. In fact, however, not only is iconicity not particularly concerned with “optical illusion” or “realistic rendering”, but it does not necessarily involve perceptual predicates: many of Peirce’s examples have to do with mathematical formulae, and even the fact of being American, as in the Franklin and Rumford example, is not really perceptual, even though some of its manifestations may be (cf. Sonesson, 1989a, pp. 204ff.). It is also common to confound iconicity and picturehood, when in actual fact, if we rely on Peirce’s definition, pictures constitute only one variety of iconicity and are not even supposed to form the best instances of it. On the contrary, as we shall see, something additional is necessary to account for the pictoriality of pictures.

In other cases, the criticism (e.g. that of Bierman and Goodman) turns out to be valid on one, but not another, possible interpretation of what Peirce says: for instance, it is often not clear whether Peirce wants to say that there are three kinds of relationships, iconicity, indexicality, and symbolicity, each of which alone is sufficient to transform something into a sign, or whether he is rather suggesting that, among those things we call signs, for some other reason (the existence of a sign relation), some also have the property of iconicity or indexicality. If we accept the second alternative, for which some indirect arguments may be given, much criticism of iconicity simply becomes irrelevant. However, I will later go on to suggest that both versions are correct and that this, in fact, is what distinguishes primary and secondary iconic signs.

It will be noted that Jean-Marie Klinkenberg (2005) and Börries Blanke (2005) both take a stand on this latter issue, but by refusing the very conundrum: referring to the bewildering variety which the term “iconicity” covers in the Peircean tradition, if we are to believe Eco’s first iconicity critique, they decide to use the term simply to mean pictoriality. I find this position regrettable, not only because I am not at all convinced that the notion of iconicity is incoherent (and, indeed, Goodman 1968 claimed the same thing with reference to the common sense notion of picture) if we do not try to understand it by taking the picture as our prime example, but also because it means giving up what I believe is the positive part of the Peircean, as well as Saussurean, heritage in semiotics, the search for a system: it means discussing picture signs without relating them to other iconic signs (or whatever you want to call them), nor to signs in general. In short, it means giving up semiotics as a comprehensive enterprise (or a “totalizing” one, as the postmodernists were wont to say, a term which we in our post-postmodern age should be able to reclaim in a positive sense). The very point of semiotics, as I take it, is to continuously relate the kind of signs we are investigating to all other kinds of signs.
Semiotics first and foremost is a comparative science.

1.2 Avatars of triadic structuralism

Peirce is often taken, by semioticians and other scholars alike, to say that, given the class of all existing signs, we can make a division into three sub-classes, containing icons, indices, and symbols. But it is of course easy to show that many signs may have iconic, indexical, and symbolic features at the same time, and even if Peirce never says so in so many words, there are examples of him classifying signs as partaking of several of these properties (i.e. photographs being both indexical and iconic). This seems to mean that, at least as applied to signs, iconicity, indexicality, and symbolicity do not separate things, such as signs, but relationships between things, such as parts of signs. While Peirce never seems to pronounce himself on this issue, he has said that the perfect sign should include iconic and indexical as well as symbolic traits. We may not care whether there are such things as perfect signs, but this affirmation clearly implies (whether Peirce was aware of it or not) that iconicity, indexicality, and symbolicity are relationships rather than objects. This is why I will conceive of them in terms of “grounds” (which I will take to mean foundations).

It is important to realise that there is a fundamental structural (but of course not binary) argument following from Peirce’s whole conception. He tells us there are three kinds of signs (or rather, sign relationships), at least from the point of view that he has chosen (i.e. what motivates the relationship between expression and content). As far as I understand, this implies (again, whether Peirce was aware of it or not) that we are not free to add further kinds of signs using quite different criteria (as, for instance, Thomas Sebeok and André Helbo have done), nor to interpret some of these sign types in such a narrow way (e.g. indices as motivated by causality, or icons as rendering perceptual appearances, the first of which is very common, and the second of which characterises the Greimas school and Groupe µ) that the domain of possible sign relations cannot be exhausted by the means of three categories. Two ways stand open to us: either we accept that there can only be three kinds of relationships between expression and content in a sign, which will severely restrict our options for choosing among the numerous definitions of the three sign relationships given by Peirce, or else we have to demonstrate that, from this same point of view, further sign relationships may be established. Here, I have decided to follow the first path.

If iconicity is part of a (trinary) structure, then it cannot be discussed outside the framework of Peirce’s division of signs into icons, indices, and symbols. Within philosophy, many divisions of signs have preceded the one proposed by Peirce, ending up with two, or four, or more categories. In some ways, these divisions may be more justified than the Peircean one. However, there are two reasons for taking our point of departure in Peirce: first, it is within these frames that most of the discussion has been conducted; and second, when we look beyond those elements which have usually been addressed in the discussion, we will find that Peirce’s theory offers some help for developing a subtler approach to iconicity.
In Peircean parlance, to put it simply (but we will later see that this is all too simple a manner of putting it), an icon is a sign in which the “thing” serving as expression in one respect or another is similar to, or shares properties with, another “thing”, which serves as its content. In fact, according to Peirce, there are two further requirements: not only should the relation connecting the two “things” exist independently of the sign relation, just as is the case with the index, but, in addition, the properties of the two “things” should inhere in them independently.

Many semioticians, in particular those who deny the existence of iconic signs, apparently believe pictures to be typical instances of this category. There are several reasons to think that this was not Peirce’s view. Pure icons, he states, only appear in thinking, if ever. According to Peirce’s conception, a painting is in fact largely conventional, or “symbolic”. Indeed, it is only for a fleeting instant, “when we lose the consciousness that it is not the thing, the distinction of the real and the copy”, that a painting may appear to be a pure icon (3.362; cf. Sonesson, 1989a, Chapter III.1). It seems, then, that a pure icon is not a sign, in the sense that the latter term is commonly understood (although Peirce will sometimes state the contrary). At first, it may seem that although the icon is not a socially instituted sign, i.e. not something which is accepted by a community of sign users, it could at least, for a short time span, become a sign to a single observer. But even this is contrary to the very conditions described by Peirce: he specifically refers to the case in which the sign loses its sign character, when it is not seen as a sign but is confused with reality itself (which could actually happen when looking at a picture through a keyhole with a single eye, producing what Husserl dismisses as a “Jahrmakteffekte”), when, as Piaget would have said, there is no differentiation between expression and content (see Sonesson, 1989a, Chapter I.2.5, 1992b). Indeed, at least sometimes, the pure icon is taken to be something even less substantial: an impression of reality, which does not necessarily correspond to anything in the real world, for “it affords no assurance that there is any such thing in nature” (4.447). Thus, it seems to be very close to the “phaneron”, the unit of Peircean phenomenology (itself close to the Husserlean “noema”), which is anything appearing to the mind, irrespective of its reality status (cf. Johansen, 1993, pp. 94ff.). In this sense, the Peircean icon is somewhat similar to that of cognitive psychology, for it involves “sensible objects” (4.447), not signs in any precise sense: however, it comprises all sense modalities.

In most cases, when reference is made to icons in semiotics, what is actually meant is what Peirce termed hypo-icons, that is, signs which involve iconicity but also, to a great extent, indexical and/or symbolic (rule-like) properties. There are supposed to be three kinds of hypo-icons: images, in which case the similarity between expression and content is one of “simple qualities”; diagrams, where the similarity is one of “analogous relations in their parts”; and metaphors, in which the relations of similarity are brought to an even further degree of mediation. Diagrams in the sense of ordinary language are also diagrams in the Peircean sense, e.g. the population curve that rises to the extent that the population does so. The Peircean concept is, however, much broader, as is the notion of
metaphor, which would, for instance, also include the thermometer. Contrary to the way in which icons have been conceived in the later semiotic tradition, diagrams, rather than pictures, are at the core of Peircean iconicity; at least, they are of most interest to Peirce himself. Indeed, mathematical formulae and deductive schemes, which are based on conventional signs, are those most often discussed in his work (now see Stjernfelt, 2007). Moreover, no matter how we choose to understand the simplicity of “simple qualities”, the Peircean category of images will not include ordinary pictures (which would actually appear to be metaphors of metaphors), although Peirce sometimes seems to say so: if anything, a Peircean image might be a colour sample used when picking out the paint to employ in repainting the kitchen wall. Indeed, not only is it true that any picture involves the representation of numerous relationships (though certainly not all) obtaining in the perceptual world reproduced, as Stjernfelt (2007) points out, more importantly, it is only at this level that there is a real similarity between the picture and the world, as James Gibson (1982) has shown.

In order to make sense of the theory of iconicity, we have to introduce a distinction between *iconicity per se*, the *iconic ground*, and the *iconic sign*, which is partly, but certainly not unambiguously, supported by Peirce’s writings. This can only be done by starting out from the concept of sign, which is certainly nowhere made explicit in Peirce’s work, or, for that matter, in that of Saussure—and then developing it by means of the Peircean notion of “ground”.

For this purpose, I am obliged to take for granted a much more specific notion of sign than the one found either in the work of Saussure or that of Peirce, which I have discussed extensively elsewhere, where it derives some elements from Edmund Husserl and Jean Piaget (see Sonesson, 1989a, 1992a, b, 2010b, 2011b, 2012a, 2015b). The definition is minimal, in the sense that more has to be added in order to delineate the prototypical sense of sign:

- it contains (at least) two parts (expression and content) and is as a whole relatively independent of that for which it stands (the referent)
- these parts are differentiated, from the point of view of the subjects involved in the semiotic process, even though they may not be so objectively, i.e. in the common sense Lifeworld (except as signs forming part of that Lifeworld)
- there is a double asymmetry between the two parts, because one part, expression, is more directly experienced than the other
- and because the other part, content, is more in focus than the other
- the sign itself is subjectively differentiated from the referent, and the referent is more indirectly known than any part of the sign

### 1.3 The ground as abstraction and relevance

To go from the concept of iconicity to the iconic sign, we have to ponder the meaning of a notion, sporadically, but often significantly, used by Peirce, i.e. the notion of *ground*. As
applied to signs, I will here suppose, iconicity is one of the three relationships in which a representamen (expression) may stand to its object (content or referent) and which can be taken as the “ground” for their forming a sign: more precisely, it is the first kind of these relationships, termed Firstness, “the idea of that which is such as is regardless of anything else” (5.66), as it applies to the relation in question. In one of his well-known definitions of the sign, a term which he here, as so often, uses to mean the sign-vehicle, Peirce (2:228) describes it as something which “stands for that object not in all respects, but in reference to a sort of idea, which I have sometimes called the ground of the representation”.  

According to one of Peirce’s commentators, Douglas Greenlee (1975, p. 64), the ground is that aspect of the referent that is referred to by the expression, for instance, the direction of the wind, which is the only property of the referential object “the wind” of which the weathercock informs us. On the other hand, David Savan (1976, p. 0) considers the ground to consist of the features picked out from the thing serving as expression, which, to extend Greenlee’s example, would include those properties of the weathercock permitting it to react to the wind, and not, for instance, its having the characteristic shape of a cock made out of iron and placed on a church steeple. If we have to choose between Greenlee’s and Savan’s interpretations, all quotations from Peirce which have some bearing on the issue would seem to favour the latter. And yet, it seems to me that, in order to make sense of the notion of iconic signs, we must admit that both Greenlee and Savan are right: the ground involves both expression and content. Rather than being simply a “potential sign-vehicle” (Bruss, 1978, p. 87), the ground would then be a potential sign. Indeed, if we take seriously Peirce’s claim that the concept of “ground” is indispensable, “because we cannot comprehend an agreement of two things, except as an agreement in some respect” (I.551), then it must be taken to operate a modification on both the things involved. In other words: the ground involves an abstraction applied to the content with respect to the expression, as much as it involves an abstraction applied to the expression with respect to the content.

Figure 1. Bühler’s Organon model (with “abstractive relevance” and “abstractive supplementation”)

The operation in question, I submit, must be abstraction or, as I would prefer to
say, typification. In one passage, Peirce himself identifies “ground” with “abstraction”, exemplifying it with the blackness of two black things (1.293). It therefore seems that the term ground could stand for those properties of the two things entering into the sign function by means of which they get connected, i.e. both have some properties of the thing serving as expression and some properties of the thing serving as content. In the case of the weathercock, for instance, which serves to indicate the direction of the wind, the content ground merely consists in this direction, to the exclusion of all other properties of the wind, and its expression ground is only those properties which make it turn in the direction of the wind, not, for instance, the fact of its being made of iron and resembling a cock (the latter is a property by means of which it enters an iconic ground, different from the indexical ground making it signify the wind). If so, the ground is really a principle of relevance, or, as a Saussurean would say, the “form” connecting expression and content: that which must necessarily be present in the expression for it to be related to a particular content rather than another, and vice-versa. This phenomenon is well-known from linguistics, where often conventional rules serve to pick out some properties of the physical continuum, differently in different languages, which have the property of separating meanings, i.e. of isolating features of the expression on the basis of the content, and vice-versa. The difference is, of course, that in the iconic ground, the relation that determines one object from the point of view of the other, is basically non-conventional (cf. Sonesson, 1989a, Chapter III.1).

If the ground is a form of abstraction, as Peirce explicitly says, then it is a procedure for engendering types, at least in the general sense of ignoring some properties of things and emphasising others, for the purpose of placing them into the same class of things. And if it serves to relate two things (“two black things” for example, or “the agreement of two things” in general), it is a relation, and it is thus of the order of Secondness, i.e. “the conception of being relative to, the conception of reaction with, something else” (6.32). All this serves to underline the parallel with the principle of relevance, or pertinence, which is at the basis of structural linguistics, and much of semiotics inspired by it (the work of Louis Hjelmslev and Luis Prieto, notably). But we could take this idea further, adding to the notion of ground a more explicitly constructive aspect. To many structuralists (those of the Prague school notably), relevance is a double movement, which serves both to downplay non-essential elements and to add others which were anticipated but not perceived: thus, it depends on the twin principles of “abstractive relevance” and “apperceptive supplementation” embodied in Bühler’s Organon model (see fig. 1 and Sonesson, 1989a, Chapter II.4.2), as well as in the Piagetian dialectic between accommodation and assimilation (see Sonesson, 1988, Chapter I.3.1).

1.4. A typology of types
In some ways, our model (first formulated in Sonesson, 1989a) is similar to that suggested by Groupe µ (1992, pp. 135ff.) when they claim that the iconic sign is constituted out of three elements: the signifier, the referent, and the type. The status of the “type” as a
third element of the sign in the $\mu$-model is, however, as I have pointed out elsewhere (cf. Sonesson, 1996a, 2008a), intriguing. Indeed, the signifier (and the corresponding signified, absent here, in favour of the referent) is already a type, in the Saussurean conception. One might suggest that the referent and the type of the $\mu$-model should be related to each other in the same way as Peirce’s “immediate” and “dynamical object”, that is, as a part to the corresponding whole, or as Husserl’s “noema” and “object”, where the first is the standpoint taken on the second. If so, however, the terminology is confusing.

Figure 2. Structure of the “iconic sign”, according to Klinkenberg (1996, p. 291)

As I noted above, the ground seems to account for the division between the immediate and the dynamical object on the side of content; but I then proceeded to argue that there must be a similar division on the side of expression. Indeed, if the ground is tantamount to abstraction, as Peirce says, and if abstraction is the generation of types, then we should readily accept the distinction, suggested by Groupe $\mu$, between the referent and the type; but we should add to it the parallel distinction between the signifier and its type. It may seem that this is exactly what Klinkenberg (1996, pp. 291ff., 2005, reproduced in Figure 2) suggests, when transforming the erstwhile triangle into a square comprising a stimulus, as well as a signifier, a referent, and a type, in particular since the signifier is now defined, in contradistinction to the stimulus, as “un ensemble modélisé de stimuli visuels correspondant à un type stable” (1996, p. 293). Yet it seems confusing that only the typification on the side of the content is termed type, while the same procedure on the expression side gets hidden within a strange mixture of Saussurean and behaviourist terminology: for, although the signifier, to Saussure, was certainly a type, this property is not topical in the term as given.

Börries Blanke (1998, 2005) has formulated a similar critique of Groupe $\mu$’s first model, suggesting that the double process of abstraction, which (as he points out) I have diagnosed, should be added to the model. I must confess that for a long time I had trouble seeing the point of this amalgamation, since by adding double abstraction to Groupe $\mu$’s model of iconicity we would simply end up with my model. This was no doubt failing to take
into account the greater degree of explicitness of the $\mu$-model, as well as the dynamical character suggested by the processes of stabilisation and conformity between the type and the referent, and of recognition and conformity, between the signifier and the type (in the first version), or the stimulus and the signifier (in the more recent version). On closer consideration, however, I think that the notion of double abstraction is not explicit enough if it is simply added to the $\mu$-model (Blanke, 1998, 2005 does this). This still does not account for the relational character of the two instances of abstraction, in other words, for the fact that the expression is subjected to abstraction with respect to the content which it represents, and vice-versa.

It should not be forgotten that, to both Klinkenberg and Blanke, iconicity means pictoriality. For us, however, this very peculiar case will have to await later discussion. Therefore, let us now consider some cases, which are clearly iconic, without being pictorial. The weathercock contains, as we have noted, apart from the indexical ground connecting it to the direction of the wind, an iconic ground, which has as its other relatum the perceptual impression produced by a cock, which is thus not only an iconic, but also a pictorial, ground. For the moment, however, we should consider such instances as the balance as a representation of justice, or the signs used in Blissymbolics to indicate the properties of being above or below. There is a similarity between the balance and justice (although we would of course not notice it if this had not been pointed out to us before, and indeed if there were not a convention for attending to this similarity): just as the balance is used to weigh material things, justice has the task of weighing different arguments, claims, and other mental objects. Whereas the expression consists of a perceptual impression, which is at least virtually dynamic, the content is an abstract property, which cannot be perceived in any direct way, but can only be derived from a long sequence of verbal acts and other stretches of behaviour. It is the postulated relationship between a balance and justice as such which operates an abstraction in both objects involved, picking out the property of equilibrium or equity. The case of Blissymbolics (fig. 3) is somewhat different: here both expression and content seem to be clearly material, but what connects them is nevertheless an abstract property. The sign for “above” is a line inscribed above what is the level at which the signs of Bliss are customarily inscribed; it represents “aboveness” in any other material (and no doubt indirectly also mental) domain. Thus, once again, of all the properties possessed by the material mark, only one is singled out by its association to the corresponding content.

Figure 3. The signs of Blissymbolics meaning “man”, “above”, “woman”, and “below”. The first and the third sign are a kind of depiction, however schematic, but the second and the fourth are clearly abstract.
Given these preliminaries, it might be said that an indexical ground, or an indexicality, involves two “things” that are apt to enter, in the parts of expression and content (“representamen” and “object” in Peircean parlance), into a semiotic relation forming an indexical sign, due to a set of properties which are intrinsic to the relationship between them, such as is the case independently of the sign relation. Indexicality, which is a ground, and therefore a relation, is thus basically different from iconicity, which consists of a set of two classes of properties ascribed to two different “things”, which are taken to possess the properties in question independently, not only of the sign relation, but of each other, although, when considered from a particular point of view, these two sets of properties will appear to be identical or similar to each other. This is the sense in which indexicality is Secondness, and iconicity Firstness. As for the Peircean symbol, or generic sign, it is literally groundless, as least until it becomes a sign: there is nothing in the thing serving as expression, nor the thing serving as content which explains the sign relation. The principle of relevance obtaining between the two parts of the signs is produced merely by the sign relation, which is why it is Thirdness (see Table 1).

Table 1. The relations between principles, grounds, and signs in the present interpretation of Peirce

<table>
<thead>
<tr>
<th>Principle (Firstness)</th>
<th>Secondness</th>
<th>Thirdness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iconicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground (Secondness)</td>
<td>Iconic ground = indexicality</td>
<td></td>
</tr>
<tr>
<td>Sign (Thirdness)</td>
<td>Iconic sign (icon)</td>
<td>Indexical sign (index) = Symbolicity = Symbolic ground = Symbolic sign (symbol)</td>
</tr>
</tbody>
</table>

If iconicity is Firstness, but the ground is a relation, then the only solution, it seems to me, is to admit that, contrary to indexicality, iconicity is not in itself a ground. Perhaps, to use some of Peirce’s own examples, the blackness of a blackbird, or the fact of Franklin being American, can be considered iconicities; when we compare two black things or Franklin and Rumford from the point of view of their being Americans, we establish an iconic ground; but only when one of the black things is taken to stand for the other, or when Rumford is made to represent Franklin, do they become iconic signs (or hypo-icons). Just as indexicality is conceivable, but is not a sign, until it enters the sign relation, iconicity has some kind of being, but does not exist until a comparison takes place. In this sense, if indexicality is a potential sign, iconicity is only a potential ground.

Projecting the distinctions made in accordance with the preceding interpretation of Peirce onto the µ-tological square (Figure 2), we end up with a model that has at least the advantage of distinguishing the expression type, the content type, and the transformation type (Figure 4). It is difficult to know to what extent this model, as proposed here, still conforms to the intentions of Groupe µ. From our point of view, however, it helps clarifying the issues involved. It still does not say very much about the specificity of the iconic, let alone the pictorial, sign. This specificity resides in the nature of the transformations and the different kinds of conformity.
1.5 Summary
So far, I have tried to show that the concept of iconicity may still be rendered useful in modern semiotics, conceived as an empirical science, involved with pictures and other signs as we encounter them in our everyday world. In part, this section has consisted in a reading of Peirce’s writings, which, as all readings, but rather more explicitly, is made from a particular angle of vision, that of phenomenological semiotics. In order to render possible this reading, we have relied on a concept of sign which is very much more specific than that found in Peirce’s work, and we have had recourse to the notion of ground, with rather scant evidence from Peirce, in the sense of the structural principle of relevance and the Husserlean process of typification. As a result, we have established a distinction between the properties of iconicity and indexicality per se, and the signs to which they give rise, with the iconic and indexical grounds constituting some kind of intermediate level. As we shall see later on in this paper, the establishment of such a separation of iconicity and indexicality, the grounds that they form, and their corresponding signs, has the added advantage of liberating indexicality and iconicity for other tasks than that of constituting signs. For the moment, however, this discussion has permitted us to clarify the structure of the sign, separating the various instances of typicality from the corresponding tokens.

2. Iconicity Regained: The Logic of the Lifeworld
The two most important arguments against the possibility of iconic signs were given
by Arthur Bierman (1963), in the form of a direct critique of Peirce. They were later repeated, independently, as it seems, in a much more well-known version, and without any direct address to Peirce, by Nelson Goodman (1968, 1970). These arguments have later been called the *arguments of regression* and *of symmetry* respectively (Sebeok, 1976, p. 128). Both arguments can be evaded, I believe, the first simply by accepting the specific concept of sign which I introduced in the second lecture, the second, more laboriously, by taking the Lifeworld as being the presupposed background of all ordinary sign processes. To take care of the argument of symmetry, therefore, we will not only have to introduce the idea of a Lifeworld hierarchy of prototypicality, but we will have to distinguish between two kinds of iconic signs, one of which seems to change the nature of iconicity in ways which Peirce could never have foreseen. Then we will see that both primary and secondary iconic signs, though for very different reasons, do not fulfil Peirce’s requirement that iconicity should be independent of the sign function.

### 2.1 Regressive iconicity and the sign function

According to *argument of regression*, all things in the world can be classified into a number of very general categories, such as “thing”, “animal”, “human being”, etc., and therefore everything in the universe can refer to, and be referred to by, everything else. Thus, if iconicity is at the origin of signs, all things in the world will be signs. Peirce himself would probably not be in the least impressed by these consequences: he certainly seems to think that Rumford can be an icon of Franklin since they share the property of being Americans, which is, if not a metaphysical property, at least a very general one. Nor would Giordano Bruno, or other thinkers of the Middle Ages and the Renaissance be shocked (cf. Yates, 1966; Gombrich, 1972; etc.); neither would the *Naturphilosophen* of German Romanticism, or Baudelaire and other believers in the theory of “correspondences”, including the surrealists, and even latter-day New Age mystics. Hence, iconic signs of this kind are not only conceivable; they have been conceived throughout the greater part of human history.

Yet, it is true that these are not typical signs, let alone typical iconic signs, and pictures are most certainly not of this kind. The undesirable consequences anticipated by Bierman can be avoided, in his own view, if we introduce the provision that no icon should contain universal characteristics as part of its meaning. Thus, it seems, Bierman is satisfied, but it is obvious that such a provision must be problematical, in particular because it is not clear how we shall establish the limit beyond which characteristics become too general to be included in the meaning of iconic signs. It would also seem that, even apart from the “correspondances”, there are cases in which iconic signs have very general features in their contents, at least if metaphors and symbols in the European sense are considered to be iconic. It is arguable that some pictograms stand for relatively universal features, in particular if based on synaesthesia. Indeed, both the balance as a sign for justice and the signs of Blissymbolics considered above would be ruled out by such a provision (i.e. “equity” and “aboveness” as discussed in Section 1.4). As it stands, Bierman’s provision
is scarcely acceptable.

The import of the argument of regression really depends on how we interpret Peirce’s theory. If he meant to suggest that there are three properties, iconicity, indexicality, and symbolicality, which, by themselves and without any further requirement, trigger the recognition of something as a sign, then the argument of regression will create trouble for his conception. On the other hand, if he merely wanted to suggest that something that was already recognised as being a sign could be discovered to be an iconic sign, rather than an indexical or symbolic one, by means of tracing it back to the iconic ground, then the argument of regression will have no bearing on it. No matter what Peirce would have thought, the separation of the sign function from the iconic ground, explicitly introduced in our reading, makes this argument completely irrelevant.

2.2 Beyond the symmetry argument

According to another argument, first voiced by Bierman, which has later been termed the symmetry argument, iconicity cannot motivate a sign, for while similarity is symmetrical and reflexive, the sign is not. Pigments on paper, or carvings in a rock, could stand for a man, but not the reverse; nor will they, in their picture function, stand for themselves. This argument is based on an identification of the common sense notion of similarity with the equivalence relation of logic. No doubt, the equivalence relation, as defined in logic, is symmetric and reflexive, and thus cannot define any type of sign, since the sign, by definition, must be asymmetric and irreflexive. As far as I can see, there is no way to evade this argument within a purely Peircean framework, except of course by using the same argument as against the argument of regression, if this is a genuinely Peircean argument; in any case, this distinction is needed to separate primary and secondary iconic signs (see below, Section 2.3). Phenomenological semiotics, however, has an answer to offer.

The error consists in the identification of similarity with the equivalence relation as defined by logic. To make such an identification is to suppose that man lives in the world of the natural sciences, when in fact he inhabits a particular sociocultural Lifeworld. Similarity, as experienced in this Lifeworld, is often asymmetric and irreflexive. That this is true of ordinary comparisons in verbal language and in metaphorical visual displays has now been experimentally demonstrated (notably by Rosch, 1975; Simpson & Miller, 1976; Tversky, 1977; Gati, 1978; cf. also Sonesson, 1989a, pp. 220ff., 327ff.). Here, I will just consider one example: in a task involving comparisons between countries, Tversky (1977, pp. 333ff.) found that the statement “North Korea is similar to China” was chosen in preference to its inversion in 66 out of 69 instances; it was also located higher on a scale. On the whole, that item which is most prominent becomes the reference point, and prototypicality is only one of the factors making an item eligible for the position, others being frequency, intensity, celebrity, information, and so on.

If we generalise this finding to the case of signs, there is every reason to suppose that a three-dimensional object, rather than some lines on a surface, would count as a natural standard of comparison. While this relationship between three-dimensional and
two-dimensional objects may well be a universal, it is easier to show the principle at work in cases that vary cross-culturally. Among numerous apocryphal stories of tribes failing to recognise pictures as such, there is one verified case in which the group (the Me’ studied by Jan Deregowski) had never seen paper, and was therefore led to focus on the material *per se*. When pictures were instead printed on cloth, the Me’ immediately recognised their sign function and perceived the pictures as such. To these people, paper, being an unknown material, acquired such a prominence that it was impossible for them to see it as a vehicle for something else; on the other hand, it is precisely because paper is so trivial a material to us that we have no trouble construing instances of it as pictorial signifiers (cf. Sonesson, 1989a, pp. 251ff.). In a similar vein, it is natural that a Mexican woman, coming for the first time to Sweden, should wonder at the presence of “Barbies” everywhere: in her experience, real-world blond women were far less prominent than the doll made in their image.

Figure 5. The basic model of the Lifeworld hierarchy

It thus becomes necessary to posit a kind of taken-for-granted hierarchy of prominence among the things of the Lifeworld (see Figure 5). For something to be a sign of something else, it must be ranked relatively low on the scale of prototypicality applying to the “things” of the Lifeworld. Such a scale would be similar to the basic metaphor underlying ordinary language, which Lakoff and Turner (1989, pp. 160ff) call “The great chain of being”. Indeed, these regularities of the Lifeworld, together with the similar laws of environmental physics formulated by James Gibson, stand at the origin of an even broader domain of study, which I have called the semiotic ecology (cf. Sonesson, 1993a, 1994a, b, 1996a, c, 1997a, b, 2000a). Husserl, Gibson, and Greimas all called for a science of “the natural world”, because they realised that nature as we experience it is not identical to the one known to physics but is culturally constructed. Like Husserl’s Lifeworld and Gibson’s ecological physics, but unlike Greimas’ natural world, semiotic ecology will suppose this particular level to be a privileged version of the world, “the world taken for granted”, in Schütz’s phrase, from the standpoint of which other worlds, such as those of the natural
sciences, may be invented and observed (cf. Sonesson, 1989a, Chapters I.1.4, I.2.1). This world is characterised by a particular spatial and temporal structure, by types, and, by regularities, or as Husserl says, “the typical way in which things tend to behave”. The latter are the kinds of laws of “ecological physics”, in Gibson’s sense, which are “defied by magic”, and which also form the foundations for Peircean abduction.

In my earlier publications, I have referred to the hierarchy of prominence of Lifeworld things, in two different, but complementary, ways. On the one hand, objects, such as the human body itself, in particular the face, but also common objects like chairs, are so central to the human sphere that they will be recognised with only scant evidence, even though the invariants embodied in a particular picture are found in other objects as well (cf. Figure 7c). In this case, the objects at the highest levels of the scale stand the best chance of being selected. On the other hand, I have argued that only objects low down on the scale will be recognised as susceptible of embodying a sign function, without being particularly designated as such, which in our culture is true of a sheet of paper or a canvas. A human being, a shape which is easily recognised as such with very rudimentary indications, is perhaps also that object which is most difficult to see as a mere signifier of something else if it is not explicitly so designated, as in the theatre or in a ceremony. On the other hand, the human face, which is probably that object which is most easily identified of all, serves at the same time as support for conveying other signs, the expressions of feelings and attitudes; but then again, it is not the face but its movements which are signifiers of these other signs. It is just that, unlike that of the Cheshire cat, the human smile cannot exist independently.

Contrary to the argument of regression, the symmetry argument may thus be warded off, without introducing a supplementary sign function and without amending the definition of the iconic ground. On the other hand, it supposes a complete reconstruction of semiotic theory, in which ecological physics, also known as the Lifeworld, is taken as the point of departure of all possible meaning construction.

2.3 Primary and secondary iconic signs
The alternative analysis in terms of conventionality suggested by Goodman, Eco, and others is conceived to take care of the case of pictures, but paradoxically, it seems that it would really be needed, not for pictures but for some other iconic signs which rely on identity—and some others, such as “droodles”, e.g., in the extreme case, a line perceived as “a dirty French card seen from the side”. Goodman’s, Greenlee’s, and Eco’s contention that the referent of each picture is appointed individually, is incompatible with what psychology tells us about the child’s capacity for interpreting pictures when first confronted with them at 19 months of age (as demonstrated in a famous experiment by Hochberg). On the other hand, we do have to learn that, in certain situations, and according to particular conventions, objects which are normally used for what they are become signs of themselves, of some of their properties, or of the class of which they form a part: a car at a car exhibition, a stone axe in a museum showcase or a tin cane in a shop window,
an emperor’s impersonator when the emperor is away, and a urinal (if it happens to be Duchamp’s “Fountain”) at an art exhibition. There is never any doubt about their pure iconicity, or about their capacity for entering into an iconic ground—but a convention is needed to tell us they are signs.

When used to stand for themselves, objects are clearly iconic: they are signs consisting of an expression that stands for a content because of properties which each of them possess intrinsically. And yet, without having access to a set of conventions and/or an array of stock situations, we have no possibility of knowing either that something is a sign or what it is a sign of: of itself as an individual object, of a particular category (among several possible ones) of which it is a member, or of one or another of its properties. A car, which is not a sign on the street, becomes a sign at a car exhibition, as does Man Ray’s iron in a museum. We have to know the showcase convention to understand that the tin can in the shop-window stands for many other objects of the same category; we need to be familiar with the art exhibition convention to realise that each object merely signifies itself; and we are able to understand that the tailor’s swatch is a sign of its pattern and colour, but not of its shape, only if we have learnt the convention associated with the swatch (cf. Sonesson, 1989a, Chapter II.2.2, 1994a, b, 1998b).

When Man Ray makes a picture of a billiard table, we need no convention to recognise what it depicts, however surrealistically deformed it looks (fig. 6a). However, if Sherrie Levine’s (real, three-dimensional) billiard table is to represent Man Ray’s picture, there must be a label inverting the hierarchy of prominence of the Lifeworld (fig. 6b). This shows that among the properties determining the probability of an object functioning as the expression of an iconic sign is to be found three-dimensionality rather than the opposite. Since the inception of modernism, and particularly in the phase known as postmodernism, the sign function of pictures has been at the centre of interest: it is thus not surprising that artists, such as Levine, should employ themselves to inverse the normal Lifeworld hierarchy, which makes two-dimensional objects stand for three-dimensional ones, rather than the reverse. But similar things also happen in the world of everyday life: the Mexican woman who found Sweden to be full of “Barbies” made the same inversion, because, building on her particular Lifeworld experience, she took real animate persons as being, at least for the duration of a speech act, representations of assembly-line fabricated objects, made of inanimate matter, i.e. of dolls.

The relative part played by iconicity and conventionality in a sign may be used to distinguish primary and secondary iconicity. In fact, to be more precise, we should distinguish primary and secondary iconic signs, since we are really involved with the way iconicity is assigned to signs. A primary iconic sign is a sign in the case of which the perception of a similarity between an expression E and a content C is at least a partial reason for E being taken to be the expression of a sign the content of which is C. That is, iconicity is really the motivation (the ground), or rather, one of the motivations, for positing the sign function. A secondary iconic sign, on the other hand, is a sign in the case of which our knowledge that E is the expression of a sign the content of which is
C, in some particular system of interpretation, is at least a partial reason for perceiving the similarity of E and C. Here, then, it is the sign relation that partially motivates the relationship of iconicity.

Figure 6. Primary and secondary iconic signs: a) Man Ray’s “La Fortune”; b) Sherrie Levine’s “After Man Ray”

In a sense, what I here call secondary iconic signs are not very good examples of iconicity, as the latter is characterised by Peirce, for the definition clearly implies that, in at least one sense, the iconicity of the signs is not independent of their sign character: on the contrary, it is a precondition.\(^9\) Perhaps this does not have to be taken as an argument against Peirce’s definition: iconicity per se may well be independent of the sign function, even though its presence in signs may sometimes be conditioned by it.

Figure 7. Two droodles and a picture which can be read as a droodle: a) Olive dropping into Martini glass or Close-up of girl in scantly bathing suit (inspired from Arnheim as adapted in Sonesson 1992a). b) Carraci’s key (Mason behind wall); c) face or jar (inspired by Hermerén, 1983, p. 101).

Pictures are of course primary, iconic, signs, in this sense, and they may well be the only kind there is. However, identity signs do not constitute the only case in which the sign function has to precede and determine iconicity. In the case of identity sign, the problem does not consist in discovering the shared properties—but in seeing that one item is a sign for another, rather than both just being two members of the same category. In other cases, the sign function must precede the perception of iconicity because there is too little resemblance, as in the manual signs of the North American Indians, which, according to Mallery (1972[1881], pp. 94f.), seem reasonable when we are informed
about their meaning. In Arnheim’s terms (1969, pp. 92f.), a “droodle” is different from a picture in requiring a key, as Carraci’s mason behind a wall (cf. fig. 7b), or in “Olive dropping into martini glass or Close-up of girl in scanty bathing suit” (cf. fig. 7a). While both scenes are possible to discover in the drawing, both are clearly underdetermined by it. There are two ways in which we can try to avoid such an ambiguity. One is to fill in the details, in particular the details that are characteristically different in an olive and a navel, in the air and a pair of thighs, etc. At some point the droodle will then turn into a genuine picture. The other possibility, which is the only one considered by Burks and Bierman, is to introduce an explicit convention, such as Carraci’s key.

According to Göran Hermerén (1983, p. 101), it is only because of “the limitations of human imagination” that we see fig. 7c as a human face, for it can equally well be perceived as “a jar from above, with some pebbles and broken matches on the bottom, and a stick placed across the opening”. It all depends on what is here meant by “the limits of human imagination”: Gestalt principles, the face as a privileged perceptual object (see Gibson, 1969, pp. 347ff.), and so on, all conspire to make one of the readings determinate. While it is possible to find the elements which, Hermerén suggests, should be there in the picture, it is impossible to see them without the primary interpretation of the figure as a face disturbing this interpretation. Thus, it seems that when an expression has similarities to different contents or referents, one of these may be favoured because of properties of the expression itself, and is not overridden by convention.

In a curious little essay, Davidsen and Davidsen (2000, p. 82) take me to task for thinking that the notion of a hierarchy of prominence can solve the problem of accounting for the natural asymmetry of the iconic sign: while it “might be taken to explain why an image of a man is the iconic representation of this man /…/, this does not contribute much more than to systematising relativism.” This is certainly not the case: primary iconic signs are more or less beyond relativism, but secondary iconic signs have to rely on the specific conditions in which they are perceived. The point is precisely that the sign is a sign in relation to a given Lifeworld—in relation to the general structures of the Lifeworld, as in the case of three-dimensionality, or in relation to a particular socio-cultural lifeworld, as in the case of the meaning of paper to the Me’. Phenomenological semiotics is interested in accounting for “the limitations of human imagination”, to use Hermerén’s term—not to do away with them as an obstacle to a deeper truth.

While all this serves to clarify the nature of the pictorial sign, as a particular kind of iconicity (though we will see that pictoriality is peculiar in other ways), it leaves a large residue: secondary iconic signs can hardly be said to be determined more than in a negative way. Consider a counter-example to my prototype hierarchy offered by Bordon and Vaillant (2002, p. 59): an ice statue of a motorcycle is less familiar to Parisians than a real motorcycle, and yet when the former is exhibited in front of the town hall, there is no doubt to anyone that the ice statue is the signifier, and the motor cycle the signified. The authors are guilty of several errors of interpretation, and yet their example is interesting. The prototype hierarchy is based on the notion of prominence characterised by the
cognitive psychologists Rosch and Tversky as corresponding to prototypicality, frequency, intensity, celebrity, information, and so on. In this sense, if “familiarity” may, on some occasions, be the opposite of prominence, there are many other possibilities. But this also means that the concept of prominence is rather unclear: at least, it seems to be too open-ended. In any case, as I have conceived it above, the prototype hierarchy would not apply to objects as such, but to some of their properties. Not the ice statue of a motorcycle, but perhaps ice as a material, might be argued to be “less prominent” (perhaps in the sense of more homogeneous, more ubiquitous in the history of mankind, etc.) than motorcycle parts. In the Me’ story, it is paper, not particular things made out of paper, which is ranked too high on the scale.

But the example is also quite different from those I have discussed above, which either involved a two-dimensional object representing a three-dimensional one (as in the case of pictures), or a single three-dimensional object being the sign of the class of which it is a part, of some of its properties, and so on. It is, however, similar to cases I have taken up elsewhere (notably Sonesson, 1989a, Chapter III.6.5): the tailor’s dummy and artificial food made out of plastic or wax, as seen in Japanese restaurants. The outcome of that discussion was that there were certain properties that were intrinsically more prominent in the human world, such as, apart from three-dimensionality, animateness and movement. Indeed, movement may be the factor that makes the real motorcycle more prominent than the one made out of ice. But a more general argument could in fact be made from the example of artificial food. There is a reason why the wax food is taken to represent the real food, rather than the opposite. Food is defined by the functional property (or the “affordance” as Gibson would say) of being edible, and that is exactly the property which wax food lacks. The motorcycle, similarly, is defined by the property of being a vehicle, which is an expectation that the ice statue can hardly fulfil.22 If this shows that the ice motorcycle is no real counter-example, it also demonstrates the complexity of secondary iconicity. The prototype hierarchy should not be expected to form some rigid structure fixed once and for all.23

Another more important lesson of this discussion, however, is that primary and secondary iconicity should not be taken to be an all-or-none affair: just as a sign may contain iconic, indexical, and symbolic properties at the same time, it may very well mix primary and secondary iconicity.

My original impression when reading Eco (1998, pp. 27ff., 1999, pp. 382ff.) was that he had merely changed the names of my two iconicities into mode Alpha and Beta respectively, using the same definitions and similar examples; and I have suggested elsewhere (Sonesson, 2001c) that he should have referred to me, arguing that the article where I first made this distinction was found in his bibliography (Sonesson, 1993a, though given as 1994). Piero Polidoro (2012, p. 72) recognizes that Eco’s notions are very similar to mine, but he claims, rightly I think, that, although some of the underlying concepts are present in the article cited in Eco’s bibliography, the distinction is there not explicitly made. Indeed, I think the first paper in which I spelled out this distinction was
in Sonesson (1994b), still well before the publication of the original Italian edition of Eco’s (1997) latest theoretical book, but not present in his bibliography.

The originality of Eco’s proposal, however, is in the suggestion (which is never spelt out) that the property that I suggested separates two kinds of iconicity could also be found in other grounds. Polidoro (2012), who, on the contrary, makes a lot out of this distinction, still presents it as “a new tool with which to investigate visual texts” (Polidoro, 2015, p. 159). On the other hand, Polidoro (1915, p. 157) points to an (to me) important passage in Eco’s (1999, p. 383) book, which runs as follows: “It is through alpha mode that we perceive pictures (or photos, or a film image: note the reaction of the first spectators at the Lumière brothers’ projection of a train arriving at the station) as if they were the ‘scene’ itself. It is only on subsequent reflection that we establish the fact that we are confronted with a sign function”. This shows that Eco still is unable to grasp the distinction between two kinds of iconicity, as opposed to real perception, which I think is fundamental to making the study of iconicity concord with real-world experience. The distinction between his two modes would rather seem to correspond to the distinction I make between iconicity, which is not even a ground, on the one hand, and iconic grounds as well as iconic sign, on the other. This also means that he fails to understand the mechanism of resemanticisation (see Section 4.3 below).

2.4 The criterion of independence
Apart from the reasons mentioned at the beginning of this essay, there is another sense in which pictures are far from being central instances of icons. As was noted above, the fact that an object serving as the expression of an icon and another object serving as its content possess, in some respects, the same properties should not be a result of one of them having an influence on the other. In the case of an icon (contrary to the case of an index), “it simply happens that its qualities resemble those of that object, and excite analogous sensations in the mind for which it is a likeness” (2.299). Since both Franklin and Rumford are Americans, Peirce claims, one of them may serve as a sign of the other; but the fact that Franklin is an American is quite unrelated to Rumford’s being one. But there is at least one sense in which this is not true of pictures, not only in the case of a photograph (which Peirce often pronounces to be an index), but also in the case of a painting: in each case, the “thing” serving as the expression is expressly constructed in order to resemble the “thing” serving as the content, although a direct physical connection only exists in the first instance. Leonardo painted the canvas known as Mona Lisa in order to create a resemblance to the wife of Francesco del Giocondo, and, although the resemblance is of a much more abstract kind, the same is true of Picasso’s painting of Gertrude Stein or of Kahnweiler. And it is as true of a synthetic computer picture showing a lamp correctly illuminated from above right as of a photograph with the same subject.

In this sense, Peirce’s claim that the properties of expression and content pertain to them independently seems more relevant to identity signs than pictures. When Franklin is made to represent Rumford, or, to take a more clearly iconic (and visual) example,
when a blond girl plays the part of Marilyn Monroe, it is obvious that each of the “things” involved has an independent existence and a presence in the world independent of the other; but in the case of the painting, the “thing” which serves as expression is actually created in order to resemble the “thing” which serves as the content; it comes into being precisely in order to accomplish this function. Thus, it seems that the iconic ground of primary iconic signs, or at least one particular case of them (which may be the only one), pictures, is not independent of the fact that it connects the relata of a sign function, whereas there is such an independence in the case of secondary iconic signs, or at least in some cases of them (the exception being perhaps droodles).

On the other hand, we have already observed that there is a sense in which primary iconic signs, but not secondary iconic signs, realise such an independence. So what kind of independence are we talking about? It seems that Peirce’s criterion is insufficiently specified. Tentatively, I would like to suggest the following distinction: secondary iconic signs are made up of entities that have an existential independence (they exist independently of the sign function and the iconic ground) but no semiosic independence (they are constituted as iconic grounds only as a consequence of being recognised as signs). As for primary iconic signs, they have no existential independence (the expression does not exist, as a likeness or as anything else, independently of its relation to the content), but they do possess a semiosic independence (the iconic ground is constituted prior to the recognition of the sign function).

If it is possible to distinguish existential and causal independence, then there may perhaps be some further kind of independence that is really characteristic of all iconic signs. Or perhaps—and I think this is the safest bet for the moment—iconicity per se is really independent, while iconic grounds and iconic signs may possess only causal or existential independence, but never both.

2.5 Summary
In this section, some pieces of criticism have been addressed to the Peircean notion of iconicity, in order to show that it cannot stand on its own, if it is not complemented by a few essential elements. First of all, to ward off the argument of regression, we need to use a more specific concept of sign than that offered by Peirce and Saussure. In the case of the symmetry argument, our only way of escape turned out to require a radical remake of semiotic theory, basing it on the world-taken-for-granted, as developed by Husserlean phenomenology and Gibsonian psychology, and further elaborated by means of the introduction of the concept of a hierarchy of prototypicality. We ended up with a division of iconic signs into two very different kinds: the primary ones, where the perception of similarity is at least part of the reason for postulating the sign character, and the secondary ones, in which case knowledge of the sign function is a prerequisite for discovering the likeness. It should be clear that secondary iconic signs violate one of Peirce’s basic requirements for iconicity: the independence of iconicity from the sign function. Fortunately, it may seem, pictures are primary iconic signs: but there are ways
in which pictures do not seem to measure up to Peircean iconicity either. We have already touched on one of these ways: one property, which Peirce insists on as a defining criterion of iconicity, independence from the sign function, will not translate onto pictures, at least if independence is taken in the sense of existential autonomy. But the case of pictoriality is even more convoluted, as we will see shortly.

3. In the Looking-Glass, Somewhat Less Darkly: Eco’s Three Critiques

No other semiotician has been as preoccupied by the issue of iconicity, in particular as manifested by pictorial signs, as Umberto Eco. In so doing, he has formulated most of the fundamental questions which have to be resolved by a theory of iconicity. His answers to these questions, nevertheless, have often been less than satisfactory. The different versions of Eco’s critique of iconicity are too numerous ever to be fully assessed (now also see Polidoro, 2012; Morgagni & Chevalier, 2012), but we can distinguish three essential periods: at the first stage, Eco (1968, 1970, 1972) is basically concerned with showing that iconic signs (the basic example being pictures) are similar to linguistic signs in being conventional and analysable into features; at the second stage (1976, 1978, 1984a, b), he abandons the idea of feature analysis but wants to dislocate the required similarity sideward, into some kind of proportionality. In the final stage, however (1998, 1999), he seems to give up almost everything he has so far believed in, and, while retaining a tiny part for convention, basically goes to the other extreme, making all icons into mirrors affording a direct view onto reality.

3.1 This nose is not a nose: The case for conventionality

When Peirce says that the sign is similar to its object, and when Peirce and Morris alike claim that they have properties in common, Eco (1968, p. 188, cf. 1976, pp. 327f.) thinks this is to some degree trivially true, but false to the extent that it is interesting. For, Eco goes on to ask, what can it mean to say that Annigoni’s portrait of Queen Elizabeth II has the same properties as the queen herself? The example is of course not chosen arbitrarily: Pietro Annigoni is a painter of the 20th century purporting to work in the tradition of the Italian Renaissance and mostly known because of his portraits of celebrities such as Elisabeth II, John F. Kennedy, and the Shah of Iran. It may seem, therefore, that the difference between the portrait and the corresponding reality is minimal. Lindekens, later on, will choose photography to have a good whipping boy with which to bring home the cause of conventionality.

For what Eco wants to show is that, even so, the distance between the picture and reality is considerable. Perhaps we could agree, he suggests, that the shape of the nose is the same. But the nose of the real queen has three dimensions, and that of her portrait must remain satisfied with just two; the surface of the real nose is full of pores and other irregularities, but that of the painting is smooth; and corresponding to the nostrils of the queenly nose, there are no apertures in the canvas, but only two black dots. Morris,
Eco admits, is well aware of such problems, and has therefore proposed that iconicity is a question of degrees; but such a definition, Eco contends, can be stretched to include anything, and must lead to the destruction of the concept of iconicity. For semiotics, Eco therefore concludes, it is not enough to say that the iconic sign resembles its referent in certain respects.

Oddly enough, it is precisely with this definition that Eco (1968, p. 191) seems to end up a few pages later: iconic codes are said to reproduce certain selected conditions on the perception of the corresponding object. This selection in turn depends on the codes of recognition, and also on graphic conventions. In our culture, for instance, the zebra, contrasted with the horse, will be identified by its stripes; but a society only acquainted with zebras and hyenas will need to focalise on some other feature. In the same way, Eco (1976, p. 349) says about Gombrich’s (1963, pp. 1ff.) hobbyhorse, that it is iconic in the most abstract sense, because it only reproduces the straight line formed by the horseback. Nothing of this is particularly original, however. In the most general sense, Peirce was well aware of the conventional nature of iconic signs. As for the codes of recognition, Vierkant (1912, p. 352) had already noted their existence when he observed that some “primitives” make their pictures, including only that which must be observed in reality, from the practical point of view of the hunter; but of course, Vierkant thought Occidental man would not make use of such operations. A more impressive testimony of the workings of recognition codes is Figure 8a-b, which reduces the difference between a bird and a man to a minimum (drawings of the Bakairi, according to Vierkant, 1912, p. 344). Paraphrasing Aristotle, we could say that to this tribe man is a beakless biped.

But rather than specific picture conventions, all this may well be conventions of the Lifeworld, either in some specific socio-cultural variety of it, or in its general human form. More astute is the observation that the selection of similarities is also conditioned by the possibilities of the particular pictorial expression used. But Eco does not pursue this idea further. Nevertheless, none of these observations are sufficient to answer the fundamental criticism which Eco himself addressed to iconicity: even if we select just the stripes, or the propeller, or the horseback, it remains true that, on closer inspection, those of the picture are basically different from those of reality. But even so, this is not necessarily an argument against the presence of similarity: rather it concerns the locus of similarity.

Figure 8. Bird and man, according to the Bakairi conception, as shown by Vierkant (1912, p. 344): a) bird; b) man
Sometimes Eco (1968, pp. 201, 208, 1976, p. 359) appears to return to his original radicalism: iconic signs only seem to reproduce the properties of their objects. A simple continuous line, we are told, will form the contour of a horse, and yet, “the only property the line has”, i.e. that of being “a continuous black line”, is “the only property that the real horse does not have” (1968, p. 192, cf. 1976, p. 328). It should be obvious, nonetheless, that there are other properties that the real horse does not possess; and, more to the point, the line has other properties, at different intensional levels—and so, the common property may appear at one of these levels (see Sonesson, 1989a, Chapter III.4). In fact, Eco even mentions another property of the line a few lines later, viz. that it separates the inner space, the horse, from the outer space, the non-horse; but he adds that neither is this property found in reality. Then, mitigating once again the radicalism of his critique, Eco speculates that the horse may really look like that if seen in profile contrasted against the background of the sky. This is certainly admitting too much: the light may be such that the horse loses its aspect of possessing a volume, but then it will appear as a silhouette. And silhouettes have limits (“Grenze”), but no contours (“Kontur”), as Volkelt (1963, pp. 28ff.) says: the latter, but not the former, detach themselves equally from outer and inner space. There is nothing comparable to that in reality; more precisely, nothing like that is to be seen in reality (in a photograph, a similar effect can be obtained only by solarisation).

Curiously, the zebra, which to Eco is a horse with stripes, also appears in Kennedy’s (1974b, pp. 231ff.) psychological study of picture perception. Children were able to interpret lines to stand for uneven surfaces as in a landscape layout, uneven illumination as in shadows, uneven texture as in the hems and cuffs of knitted garments, and uneven pigmentation as in the hide of a zebra. Here then, contours, not coloured surfaces, are used for the stripes. Kennedy concludes that any discontinuities that are sources of optical structures may be rendered by lines. Thus, we may answer Eco that the limits of the horse’s body and the black continuous line have in common the property of being discontinuities in optical organisation.

If the iconic sign has any property in common with something, Eco (1968, p. 201) says, then it is not with the object itself but with its perceptual model; for the iconic sign constructs a model which is homologous to the model of perceptual relations which we construct when we recognise an object or remember it; only the matter in which the model is realised differs. But it seems doubtful that there has ever been anybody who has claimed that pictures are similar to anything else than what we perceive and/or know about their objects, say, to the deeper nature or essence of things, except perhaps a Neo-Platonist or Heidegger contemplating van Gogh’s boots. Goodman, it is true, tells us about the numerous ways “in which the world is”, in order to dismiss the similarity argument; but, clearly, the obvious candidate for similarity comparisons is our ordinary, perceptual, Lifeworld.

Pictures, according to Eco, depend for their meaning on a code, but only a very weak one; i.e. it is only with difficulty that they can be dissolved into their elements. Oddly enough, both Eco’s argument for the coding of pictures, and his argument for this code being weak, are off the mark. In principle, Eco (1968, pp. 212, 217) says, any analogue
sign may be dissolved into a digital sign. As an example, Eco (1968, pp. 215ff., 1976, pp. 323ff.) cites the photograph, which must be dissolved into dots before being reproduced in the newspaper; and the telephotographic technique for transmitting photographs from one place to another. Now, these cases are plainly irrelevant: only when the dots are brought together again will configurations appear, and the picture is seen as such. The possibility of transmitting photographs dot by dot is no more relevant than the possibility of making any picture into a jigsaw puzzle.

Such a “digitalisation” is difficult in practice, Eco continues: it is hard to tell the elements of articulation apart (1968, p. 203) and to distinguish optional features from distinctive ones (p. 204). The signs (!) of the picture are not comparable to the phonemes, for they have no opposition value: the same dot may at one time signify an eye, and then something completely different (Eco, 1968, p. 204, cf. Eco, 1976, pp. 355ff.). Eco thinks these features must either be infinite in number, or else they should correspond to the elements of geometry—but he also gives a list comprising figure/ground, light contrasts, etc. These are then combined into signs, corresponding to objects which may be recognised: a nose, an eye, a cloud—further combined into “iconic statements” like “this is a horse”, or perhaps “this is a standing horse seen in profile” (Eco, 1968, pp. 234f.; see also Sonesson, 1989a, Chapter III.4.3).

What Eco says about pictures could equally well be said about verbal language. There is no way of finding the elements of a language without being acquainted with its particular scheme of interpretation. It is a common experience that one is unable to discover even the limits between the words when listening to an unknown language. In verbal language we can only distinguish optional features from distinctive ones in relation to a given content; and the case is of course the same for pictures, only that these would seem to have different contents on different intensional levels, so that a feature which is optional on one level becomes distinctive on another. Thus, in Velázquez’s “Las Meninas” more traits are necessary for determining the sign “the Spanish infanta” than for the sign “little girl”, although these traits partially overlap. Physically identical sounds will be heard as different phonemes in different contexts, just as Eco’s dot changes meaning with context; and in fact, physically quite different sounds are heard as the same phoneme (cf. Malmberg, 1966). On Eco’s account, it would seem, verbal language would also be a “weak code”.

In the first version of his critique of iconicity, as we have considered it in this section, Eco makes the important observation that there is a sense in which the picture and its referent may be seen, on closer inspection, to have no properties in common. Nonetheless, he seems to end up presenting as his own the very same theory of pictures resembling their object in a few selected properties that he rejects in Morris. To say that a resemblance exists between the picture and the model of perception of the object is hardly to add anything new. Both when arguing that pictures depend on a code, and that this code is “weak”, Eco relies on erroneous conceptions of verbal language, which are contradicted by modern linguistics.
Eco would have been better advised to use his insights in order to criticise the Peircean division of icons into three types: the *images*, which rely on simple qualities, the *diagrams*, which concern similarities between relationships, and *metaphors*, which involve relationships between relationships. For if we take this categorisation seriously, ordinary pictures are not images, but rather some curious case of diagrams or, rather, metaphors. Indeed, perceptual psychology has shown us that what is similar between the expression plane of a picture and reality as depicted can only be found on the level of relations between relations between relations (see Gibson, 1982; Sonesson, 1989a). The Annigoni portrait is a perfect illustration of this point.26 The only candidate for an image in Peirce’s sense would seem to be a colour sample, of the kind you bring home to verify whether a particular shade of paint will go together with the rest of the furnishing of your apartment: here the simple quality of colour is supposed to be the same. Yet a picture is of course different from a diagram in the ordinary language sense of the term, which is included among the Peircean diagrams: perhaps we could say that the picture, as well as the diagram and the metaphor, are *caused* by the perception of relations between relations of some or other degree, but that pictures are *experienced* as statements about similarities of simple qualities, while diagrams and metaphors are seen as statements about relationships. Thus, the similarity, which serves as a condition upon the perception of the picture signs, is not of the same order as the similarity, which is part of the meaning of the selfsame sign.

### 3.2 Saccharine by any other name…: A plea for proportionality

Most elements of Eco’s earlier critique of iconicity recur in the iconicity chapter of *A Theory of Semiotics* (1976, pp. 325ff.), but the main point now is different. First, Eco tells us that there are no mutual implications between “digital”, “arbitrary” and “conventional”, nor between “analogue”, “motivated” and “natural” (1976, pp. 323ff., see 1968, pp. 208ff.; Sonesson, 1989a, Chapter III.1.4). And then he argues that it is naive, not only to think that iconic signs have the same properties as their objects, or are similar to them, analogous to them, or motivated by them, but also to claim that they are arbitrarily coded, and that they can be analysed into pertinent units forming more than one articulation. On the other hand, Eco (1976, p. 327) still believes that iconic signs are *culturally or conventionally coded*, without however being arbitrary, nor discrete. In the case of the dimension conventional vs. natural, however, Eco clearly opts for the first term: iconic signs are *not natural*, whatever that means. So far, we only seem to have a more explicit expression for the rather limited kind of conventionality propounded by Eco in his first critique of iconicity. However, the same premises, which have previously (in Eco, 1968) been used to demonstrate that iconic signs depend on weak codes, now serve to show that there can be no iconic signs, nor any *figurae* of iconicity, but only “iconic texts”, which cannot be further analysed (1976, pp. 354ff.). These reasons continue to be invalid, even though the thrust of the argument has now been changed.

This time, it seems that Eco seriously rejects Morris’s selection model: for although
some of the earlier examples and formulations reappear, they have lost their central position in the argument. In their place, new elements come to the fore. For instance, common sense tells us, says Eco (1976, pp. 329f.), that sugar and saccharine are similar, but, in fact, their chemical formulae share no properties, and in its visual appearance, saccharine should rather remind us of salt. It is only the effects produced on our papillae by sugar and saccharine that resemble each other, and this they do, because the distinction between sweet and salty things is taken to be fundamental in our culture. Thus, at the very moment that Eco rejects distinctive features, he argues for the existence of constitutive oppositions in absentia, which are, at least in part, responsible for the impression of similarity. This does not have to be a contradiction, however, for these oppositions must be abductive rather than structural, i.e. they are not sufficient in themselves to interdefine the elements, but depend on our observations of the regularities appertaining to certain elements of the Lifeworld (cf. Sonesson, 1989a, Chapter I.3.3). Unfortunately, Eco gives no pictorial examples of this constitution process: but such examples are easily discovered in the Bakairi version of the difference between a bird and a man (fig. ), and in some pictograms for ladies’ and gentlemen’s lavatories as well as the corresponding signs of Blissymbolics (Figure 3). Nevertheless, it seems intuitively clear that the more important such abductive oppositions are in the constitution of a sign, the less iconic it is felt to be. And if a number of such oppositions tend to form a structure, or something vaguely structure-like, iconicity further decreases.

In Eco’s view, however, all similarity is based on precise rules, which have to be learned, and which stipulate which aspects of the object are pertinent. Only when we are familiar with the rules, Eco believes, will we be able to discover the motivation of the signs. This is, of course, what Mallery (1972[1881]) called “reasonable” similarity which is, as we have already argued above, only found in droodles, identities and other kinds of secondary iconic signs, and certainly not in prototypical pictures. The only thing that is necessary to know beforehand, we noted, is the hierarchy of the general and particular Lifeworld we inhabit.

If “analogy” is not just another term for similarity, it means proportionality, Eco (pp. 337f.) claims; but then, he thinks, it must be a rule, which establishes a relation between at least three (?) terms. This rule may state that, if 10 corresponds to 1, then 20 corresponds to 2; or it may just as well stipulate that as 3 corresponds to 9, 6 shall correspond to 18; therefore, Eco concludes, no similarity is required between the first and the second term but this is created by the rule (Eco, 1976, pp. 335, 346, etc.). Eco is of course right in thinking that the first two terms of a proportionality do not have to be similar in any way; although, in his first example they are (cf. Sonesson, 1989a, Chapter III.1.2). But even in Eco’s second example, similarity is presupposed: not, of course, a similarity of the first two terms, but of the relation between these terms and the relation between the second pair of the proportionality. In fact, there are a number of relations between 3 and 9; therefore, given Eco’s three terms (i.e. 3:9::6:x, if that is what he means), we could neither fix the fourth term, nor determine the relation. But we could still predict the few possible
ones: if the rule is to multiply the first term of each pair by three, the second term of the second pair will be 18, as in Eco’s example; if the rule says we should add 6 to the first term, the term searched for is 12; and if the rule requires us to multiply the first term of the pair with itself, the term to be mentioned is 36. If we are presented with all four terms, however, they will make up a simple *structure in praesentia*, which only serves to select one among the possibilities given by a *structure in absentia* (cf. Sonesson, 1989a, Chapter I.3.4). Similarity is defined by the latter, not by the former. That is, it is defined by the structure of mathematics.

And yet, even if Eco’s mathematical parallel proves wrong, he might be right in his claim about pictures, so now let us consider this thesis independently. Suppose we want to know the length of some marks: in a system describing a continuous world, there will be different expressions for the mark which is 3/4 cm, and for the mark which is 1 1/4 cm, but in what Eco would call a “digital” system, they might both come out identical (see Roupa, 1977, pp. 69ff.).\(^\text{7}\) The former example is a particular case of a *structure-preserving* mapping (see Janlert, 1985, p. 184), and this raises the question in which other organisations may be preserved. First, it is possible that reality, i.e. our particular Lifeworld, is not continuous or at least that some parts of it are not; indeed, I have argued that reality is *categorised* (see Sonesson, 1989a, Chapter I.2.), that is, discontinuous. In this case, organisation is preserved if the semiotic system uses the same categories as the Lifeworld and relates them to each other in the same way; but if Lifeworld categories are abolished and/or the members are redistributed among the categories, the system modifies the organisation (as in Matisse’s “Nu bleu”, analysed in Sonesson, 1989a). Although Eco claims “iconic texts” can be no further analysed, his notion of analogy plainly supposes both expression and content (or referents) to be segmentable and differentiated. Neither continuity nor the precise categories need to be preserved, but the relations between the categories have to be kept up; and this would seem to presuppose the separability of the categories.

The only example considered by Eco (1976, pp. 33ff.) is Peirce’s existential graphs, where the relations between the propositions of a syllogism are rendered by concentric circles. For instance, a reasoning like “All men are subject to the passions—all saints are men—all saints are subject to the passions” is expressed as the inclusion of the circle of men in that of the passions, and the inclusion of the circle of saints in that of men. Eco censures Peirce for claiming this to be a completely analogical, iconic sign, for that which is represented is not even spatial. Instead, he thinks there is a convention which establishes that space \(a\) is to be taken to be related to space \(b\), just like the element \(a'\) is related to the element \(b'\) (p. 335). To begin with, such an operation clearly requires both the spaces and the elements to be segmentable and differentiated. In the second place, while there may be conventional elements in such a specialised representation as an existential graph (better known as a Venn diagram), this proportionality is essentially based on an iconic representation of the topological property of *inclusion*, a very abstract property, whose representation is in no sense less iconic that that of visual appearance. As so often, Eco’s
critique of iconicity (and that of many others) is based on the misconception that iconicity is somehow essentially visual.

In any case, the only property preserved here as such is inclusion. In a typical picture, however, a great number of relations obtain between each two units, or even between every two elements of the pattern. A convention specifying all these relationships would have to be very complex indeed, and would probably have to be made separately for each picture. As a general theory of iconicity, or even of pictures, this conception is not feasible. But suppose instead that the relations correlated in iconicity are prior to their relata, i.e. that they are relational properties. Something of this kind seems to be suggested by the theories of perceptual psychologists formulated by, for instance, Gibson, Kennedy, and Hochberg (see Sonesson, 1989a, Chapter III.). While still claiming pictures to be conventional, Eco now denies the possibility of analysing them into features. He fails to realise that his own examples suppose there to be a basic motivation in the relationship between the picture and its referent, as well as some kind of segmentation of both reality and its signs. Interestingly, to many psychologists engaged in the study of perception, pictures are motivated and resolvable into features!

In relation to Eco’s view, the conception propounded by Groupe µ (1992, pp. 135ff.) separating the iconic sign into three elements: the signifier, the referent, and the type, has at least the merit of positing a categorical level which Eco fails to recognise. It will be remembered that I pointed out above that the ground seems to account for the division between the immediate and the dynamical object on the side of content; but I then proceeded to argue that there must be a similar division on the side of expression. Indeed, if the ground is tantamount to abstraction, as Peirce says, and if abstraction is the generation of types, then we should readily accept the distinction, suggested by Groupe µ, between the referent and the type; but we should add to it the parallel distinction between the signifier and its type.

3.3 Mirror, mirror, on the wall…: What do you signify?

In his most recent work on iconicity, Eco (1998, 1999) sometimes seems to give in completely to his critics, such as the present author, Groupe µ, etc., and then take the “motivated” nature of icons to a further extreme. At other times, however, Eco (1997, 1998, p. 10, 1999, pp. 241f.) reaffirms the conventionality of picturehood, now taken to be compatible with a basic iconicity (which is exactly what Eco’s critics such as myself said). The most remarkable part of Eco’s latest critique, however, is his extension of the mirror model to some phenomena that most semioticians, including the earlier Eco, should have considered to be iconic signs, and, in a way, it seems, to all iconic signs.

According to a theory first presented in Eco’s (1984) dictionary entry on the mirror, and enlarged upon in his recent writings (1997, 1998, 1999), the mirror is no sign. In particular, Eco quotes seven reasons for denying the sign status of the mirror, which can be summarised as follows: 1) Instead of standing for something it stands before something (the mirror image is not present in the absence of its referent); 2) It is causally produced
by its object; 3) It is not independent of the medium or the channel by means of which it is conveyed; 4) It cannot be used for lying; 5) It does not establish a relationship between tokens through the intermediary of types; 6) It does not suggest a content (or only a general one such as “human being”); 7) It cannot be interpreted further (only the object to which it refers can). I will deal with all these arguments in the following, though not exactly in the order in which they are presented above. In fact, they cannot be discussed in the order given, since some of the affirmations turn out to be interconnected.

On Eco’s account, then, the mirror is pre-semiotic. It is, according to Eco, an absolute icon, in Peirce’s sense, and it would thus have been a perfect iconic sign, if it had been a sign. This is certainly saying too much, since an absolute icon, in Peirce’s view, can only exist for a fleeting moment, even in thought. Eco goes on to say that the mirror is no index, because, unlike a letter containing personal pronouns such as “I”, which continues to refer to the writer, a mirror sent by post ceases to indicate the sender and will now point to the receiver. It “is not even a Firstness in the Peircean sense” (my italics), Eco continues, because it is already a relation, and thus a Secondness. On this point, I can only agree with him, except for the wording: it would have been more proper to say that the mirror is already more than Firstness. In fact, I have said the same thing, not only about the iconic sign, but about something more general which it supposes, the iconic ground: it is already a relation. In any case, if it is a relation, it is a least already Secondness, so why should it not be causal, as Secondness is in strict Peircean theory? Or, if we take causality to be a sufficient but not necessary criterion on Secondness (as I would prefer), then it might still be causal (see Sonesson, 1995b, 2006, 2007a, b).

With reference to our more precise concept of sign, explicated above (see Section 1.2), I see really no reason to deny the sign character of the mirror: something which is comparatively more direct and less thematic, the mirror image, stands for something which is less direct and more thematic, the object in front of the mirror; and the person or thing in front of the mirror is clearly differentiated from the image in the mirror. Of course, animals and small children may have difficulty making this differentiation, but that is exactly what happens in the case of signs, as Piaget has indicated. The kind of differentiation that does not obtain for animals and children is apparently not the one involving a discontinuity in time and/or space (they do not think the mirror image is part of themselves) but rather that concerned with the different nature of the two correlates (the cat takes the image of a cat to be another cat). Indeed, since I first turned against Eco’s argument, an experimental study has shown that, to small children, the mirror image is as difficult to understand as a pre-recorded video, while direct video-images are more or less as easy to interpret as direct perceptions (see Sonesson & Lenninger, 2015; Lenninger, Persson, van de Weijer, & Sonesson, submitted).

Nevertheless, let’s discuss the issue here from a more theoretic point of view, starting with the first argument, according to which the sign, but not the mirror, supposes the absence of the referent. In the case of many signs, the content (or rather the referent) is present together with the expression. Many signs function in the way they function only in
the presence of their referent: this is the case with those pictures of birds with the names of their species written below them which are attached to the bird case in the zoo. Indeed, it is the case with much of our language use: for although the female personal pronoun, for instance, figures extensively in the absence of a possible referent, it does not tell us very much; and talking about the gorilla in front of it adds more than only shades of meaning.

Of course, bird pictures, and much of verbal language, function also in the absence of their referent, although they function differently. Other signs, however, are more radically dependant on their referents. Indeed, weathercocks, pointing fingers, cast shadows, and a lot of other signs cannot mean what they mean, if not in the presence of the object they refer to. Indeed, as we shall see, co-presence is a precondition at least for one kind of indexical sign. The sign character of these signs only endures as long as the object is in their presence, and such was no doubt originally the case also with personal pronouns such as “I”. The classical definition of the sign, which Eco here refers to, is wrong in requiring the absence of the referent. Differentiation, which defines signs, must be distinguished from absence.

We shall now have a look at the second argument, which says that the mirror image is causally produced by its object, which is not the case with the picture sign. Thus, causality is taken to exclude the sign character. This is curious, because one of Peirce’s most currently quoted definitions of the index (which is a sign) says that it depends on a causal relation between expression and content. In fact, a lot of indices depend on causality, from the knock on the door (caused by the hand) to the cast shadow, the death mask and—something that is definitely also a picture—the photograph.

However, if we choose to define indices in terms of causality, then—following the “structural argument” which I have formulated elsewhere (cf. Sonesson, 2001c and above)—it will be impossible to exhaust the domain of signs by means of only three sign types: indeed, many examples of indices given by Peirce are certainly not causal. “Real connection” (exemplified most notably by contiguity and factoriality) is therefore a better definition of indexicality. Yet this means that there is no contradiction between causal production and the sign function. Even if causality does not define the sign function, nor even the peculiar kind of sign termed index, it is not incompatible with it.

These facts no doubt explain why Eco feels the need to demonstrate, not that the mirror is not an icon, but that it is no index. But his argument is connected to another feature, which he takes to be characteristic of signs: that they imply the possibility of lying (cf. Eco, 1976, pp. 339ff., 1984, pp. 202ff.). Employing one of the more classical instances of indexical signs, Eco (1984, p. 214) claims that one may use certain kinds of chemical substances to produce smoke, thus giving the appearance of there being a fire somewhere in the neighbourhood. On the other hand, he maintains, we cannot lie with a mirror image, as opposed to making something, which is not a mirror image passing as such.

But what exactly does this mean? The human species has been accustomed for a very long time to interpreting smoke as a signifier of fire; but if chemical substances become
common causes for producing smoke, we will have to revise this judgement. This is so because the sign, in this kind of cases, is based on our observations of common Lifeworld regularities. Or to take a more typical example: we have been accustomed for the last centuries to believing that pictures which have a peculiar granular appearance, which we call photographs, have been produced by a more or less indirect contact between the surface of the image and the objects represented; but computer pictures are already forcing us to reconsider this interpretation. It is not clear if this means that those computer images are meant to pass as photographs; or whether they are still the same kind of image, produced in another way. So, if something which looks to us like a mirror image turns out to be capable of appearing without a person being in front of the mirror surface, should we conclude that it is something else trying to pass as a mirror image, or that mirror images are not what they used to be?

Pronouns like “I” change their meaning each time they are used, yet retain this meaning once they are written down (or, one might add, when the speech is recorded on tape). The mirror, Eco contends, continues to change its meaning forever. However, the weathercock, one of Peirce’s favourite examples of an index, behaves in all these respects more like the mirror than like the pronoun: if sent as a message from the seasonal resort, it will indicate the direction of the wind at the place where the receiver lives, not that which the sender observed before putting the device into the parcel. This is not to say that the weathercock functions exactly as the mirror. The difference between the mirror, the pronoun and the weathercock has to do with the relative importance of the constant and variable element in the meaning, that is, with Eco’s “content”.

This thus brings us to the sixth argument, according to which the mirror does not suggest a content, or only a general one such as “human being”. The difference between the pronoun, the mirror, and the weathercock depends on how far the constant elements of signification (Eco’s “content”) go in a sign. We know that “I” refers to the speaker or writer using a particular instance of the sign, and there are usually other ways of discovering who the speaker or writer is, or at least that he is not identical to ourselves. The constant element of the weathercock is the indication of the direction of the wind in the here and now. The constant element of the mirror is the rendering of something visible placed presently in front of it. The variable elements are too many ever to be retrievable; but it may yet be maintained that they all share a number of predicates, such as being visible, present in the here and now, and so on.

The opposition that Eco posits between mirrors and signs is seemingly the same as the difference that other thinkers (e.g. Gombrich) have always postulated between pictorial and verbal signs. It is often expressed between singularity and generality. A picture, it is said, can only show an individual person, not “a guard in general”, but some very particular guard with individual features. As applied to pictures, these arguments are no doubt wrong. It is possible to construct very abstract or schematic pictures (children’s drawings or logograms, for instance), which only convey very general facts. Indeed, they are about “a woman in general”, etc. But even a photograph with an abundance of individual detail
will only signify to me something like “a young woman dressed in 1920s apparel”, if I do not happen to know the person in question. This also applies to mirrors: while looking at myself in the mirror, I may suddenly see some configuration, which I interpret as “a man appearing behind my back”. I do not have to recognise him as Frankenstein’s monster to be frightened. In mirrors, as in pictures, singularity is not, in the last instance, in the sign, but in the use to which we put the sign.

At this point, it will be convenient to attend to a kind of generalisation of the second argument: according to Eco, the mirror image is not an index for the person in front of the mirror, because we do not need it in order to know this fact; only the lack of an image when the Invisible Man or a vampire passes in front of the mirror could perhaps be admitted to be a symptom. Nor is a mark on the nose observed in a mirror an index, Eco says, because it is no different from the mark we observe directly on our hand. However, these observations are irrelevant. The fact that we may see an object, and know that it is there, without it having been pointed out to us, does not make the pointing finger less of a sign, and indeed an index. Nor does the weathercock cease being an index just because we may be able to discover the direction of the wind already from the impact it has on our body.

Curiously, Eco all the time talks as if mirrors were only used to look at ourselves. In fact, mirrors are not only used for seeing oneself but for seeing others and other things. Some mirror types are actually specialised for such purposes. The rear mirror of a car is used for discovering other cars coming from behind. A dentist uses a mirror to investigate the status of our teeth. Indeed, a woman may know very well that she has lips, and still use a mirror to ascertain that she is putting the lipstick on to her best advantage. Even supposing that Eco’s argument would have some relevance, these mirrors are not used to show something that is known beforehand, as the presence of cars, teeth, or lips, but to investigate special properties of these objects. Thus, they are not “symptoms”, if we take this word in the ordinary language sense of an indexical sign that is unintentionally emitted.

We can now go back to the third argument, which claims that the mirror is not independent of the medium or channel by which it is conveyed. It is not clear whether Eco here means to speak about the different materials employed, or about the fact of transference being possible. Historically, mirrors have been made out of different “substances”, that is, different materials: once upon a time, they were made from metal sheets, which explains how Saint Paul could talk of us seeing “obscurely, as in a mirror”. In this sense, the argument is historically wrong. On the other hand, if Eco means to say that a particular instance of mirroring is not transferable from one mirror to another, then something equivalent is true of many signs. If so, this criterion is hardly possible to distinguish from the fifth one, according to which signs suppose types to be mediated by tokens.

Therefore, we now proceed to the fifth argument, which tells us that the mirror does not establish a relationship between tokens through the intermediary of types. We may certainly agree that mirrors do not comply with this criterion—but neither do paintings
existing in one single copy (if we do not admit the reproductions as tokens, which most art historians would vehemently deny). Nor do *any momentary signs* comply with this criterion, from pointing fingers to weathervacks or cast shadows. For though the finger may endure, as does the mirror, the particular act of pointing, just as that of mirroring, does not repeat itself, nor does it admit a change of “substance”.

The notion of momentary signs does not appear to exist for Eco, and yet it is an important one. The problem seems to be that Eco thinks something which once is a sign, must then always be one. However, if we exclude all signs that are only momentarily signs of something, most of the examples given by Peirce and others will not be eligible as signs. You do not have to cut off a finger and send it off by post for it to change completely its meaning; even in its natural position, the content to which it points is continuously changing. In fact, weathervacks, pointing fingers, and pronouns seem to have functioned (and functioned as signs) much like the mirror, before different techniques for preserving tokens (as opposed to types) of signs were invented, a process which perhaps began with writing and now has reached the state of computer memory. This is also the only reason Eco quotes for not recognising my suggestion (from Sonesson 1989a) that the mirror is a “hard icon” in Maldonado’s sense: the indexicality and iconicity of the mirror are only momentary. But this reason will not do, since it would force us to deny the sign status of numerous other signs.

We will now turn to the fourth argument, according to which the mirror cannot be used for lying. There is a more immediate retort: there are indeed mirrors that practice constantly the art of lying. As Vilches (1983, p. 21) points out, the very business of the mirrors in the Fun House is to do that. Indeed, it could be added that they lie in a systematic way: there is always the same distance between the referent and the picture object, at least from a given position in front of the mirror, so there is actually a content (and since it is an abstract predicate, we could say there is a type), which mediates between the subject and the mirror image. In fact, Eco (1984, pp. 217ff.) considers the case of “distorting mirrors” but rejects them as counter-proofs for very obscure reasons. But this is not all: if distorting mirrors are possible, then all mirrors are no doubt somewhat distorting (as are all photographs; cf. Sonesson, 1989b, 1999), although we are too accustomed to them to realise it. So the mirror image is also conveyed to us with the fidelity permitted by the particular channel. This all amounts to saying that, like the picture, the mirror has its “ground”, its principle of abstractive relevancies.

In fact, there are no zero-degree mirrors: as people who use mirrors professionally, from dentists to sales clerks at the dressmakers, will readily point out to us, all mirrors are adapted to particular uses. Actually all mirrors lie, or, more precisely, they interpret: they are adapted to different professional uses, the “channel” having a particular fraction in the case of the dentist, a particular tint for the dressmakers, etc.

Eco’s final argument, the seventh one, says that there is no chain of interpretants resulting from the mirror as in the case of the sign. The mirror cannot be interpreted further—only the object to which it refers can. But of course the mirror may be the
starting-point for a chain of interpretations, just as any feature of the common sense Lifeworld. That is what the dentist does, the woman applying her lipstick in front of the mirror, the driver who sees a car coming up behind him, the person seeing the monster (which is not a vampire) in the mirror, etc. Eco would say this amounts to interpreting the object, but this would only be true if we had accepted his other arguments. If mirrors are adapted to their particular uses, as we just saw, then it really is a question of interpreting the object as it is given in the mirror, roughly similar to the interpretation of objects through the intermediary of a picture.

Contrary to Eco, I think there is every reason to consider the mirror to be a sign, an index, and an icon: indeed, because it combines the functions of index and icon, it is (as observed in Sonesson, 1989a, Chapter III.3.6) what Maldonado has called a hard icon, comparable to X-ray pictures, thermograms, hand impressions on cave walls, “acoustic pictures” obtained by means of ultrasound, silhouettes, the configuration left on the ground by a man out walking in Hiroshima at the moment of the nuclear blast, and pictures made with “invisible light” to discover persons hiding in the woods. It is true, as Eco (1999, p. 369) points out in answering my critique, that these latter signs leave something endurable which serves as the expression plane: but if observed at the exact moment when a shadow is cast, or an image appears in a mirror, these latter phenomena may give the same scientific assurance of existence which Maldonado ascribed to the hard icons.

From here on, Eco (1998, pp. 22ff., 1999, pp. 371ff.) goes on to suggest that the television image is similar to mirrors, and not to ordinary pictures, with the provision that the reflection passes over an electronical channel. He then imagines that the film, the photograph, and the hyperrealistic painting are “frozen” mirror images. The difference here is simply that now expression is separate from the content and thus can survive the disappearance of the latter. Very little seems to be left for the conventionalist theory of pictures, which, in other passages, Eco seemed willing to maintain, in spite of certain modifications. We are back where we started, before Eco’s first critique, at Barthes’ “message without a code”. And once again, iconicity appears as a complete mystery!

3.4 Summary
In contrast to Bierman’s and Goodman’s logical critique of iconicity, Eco assembles a number of arguments, which are more general, common-sense, and “cultural”. Many of these arguments are intriguing, but they always seem to miss the mark. In the first version of his critique, Eco suggests that pictures are conventional and divisible into features. But basically, he seems to confuse the conventionality of the Lifeworld with that of the picture sign (as I will show in more detail in the next section). The second version of Eco’s critique involves one important change: pictures are still supposed to be conventional, but they now are alleged not to be divisible into features. Yet Eco argues for a relation of proportionality between the sign and the world, which clearly implies that both the sign and the world must be segmented into parts. The third version of Eco’s theory of iconicity
starts out from the mirror (image), which is claimed not to be a sign, and then generalises this conception to (almost) all pictures. However, thanks to our more stringent definition of the sign as well as of iconicity, we can show that the mirror is indeed a sign, and an iconic sign at that – and in that sense, it is similar to pictures. In other ways, however, as we shall discuss in the next section, pictures are peculiar.

4 On the Way to Pictoriality: The Case for Resemanticisation

We have seen so far that pictoriality is usually confused with iconicity, which begs the question of to what extent pictures are special. The same arguments, which Bierman directed against iconicity, were used by Goodman in the case of pictures; and Eco constantly confuses pictures and icons, even in his most recent work. Klinkenberg and Blanke even explicitly declare that they are going to use the term iconicity to mean pictoriality. Peirce would probably take pictures to be “images”, that is, icons based on simple qualities, but as we have seen, this will not do, if he is referring to the ground that motivates picture signs (which must consist of relations between relations), as opposed to the impression they create. After showing more in detail why pictures cannot be Peircean “images”, I will suggest that pictures are organised in a special way, which I will call resemanticisation. I will also delve deeper into the foundation of the process of resemanticisation, which is found, in part, in Wollheim’s notion of “seeing-in”, but, more in detail, in Husserl’s considerations on “pictorial consciousness”. Returning to my earlier discussion of these authors (in Sonesson, 1989a), I will expand on my previous conclusions to suggest a modification of the µ-model of the picture sign. Finally, I will suggest a way in which the iconic and indexical grounds, liberated from their function to constitute signs, will offer the foundations for a pictorial rhetoric. We will start, however, from another end: by taking up Eco’s arguments again, and adding to them, to pinpoint the conventional aspects of pictorial and other iconic grounds.

4.1 The conventional residue of iconic signs

Although the general argument for the conventional character of pictures is no doubt mistaken, it remains true (as Peirce was the first to recognise) that all real pictures are largely conventional. Some of the conventional traits of pictures depend, as we have suggested, on the general character of the human Lifeworld. Many of the other conventionalities attributed to pictures are really inherent in the particular socio-cultural Lifeworld. This means that, whenever some peculiarities of an individual or a thing, some traits of the woman or the zebra, are locally given importance, they also make up the features given primary importance in a picture.

Pictures, being a kind of visual thinking, are required to follow the phenomenological rule of all thinking, according to which an object can only be seized each time from a particular point of view, and not in its entirety, which means that a choice has to be made among the proper parts, the perceptual parts, and the attributes of the object. Moreover,
much thinking, also that which goes on in pictures, is made in terms of prototypes, which is to say, construing an object as an approximation to a more typical instance of the same class; and even abductions and simple structures often intervene in the constitution of pictorial signs.

In fact, even a sign grounded in resemblance must pick up some of the infinite number of properties of the object which it takes as its signified, and reject all the others, in order to constitute its own signifier. Only some of the properties of the content are pertinent, or relevant, within the domain defined by the sign function. This appears to be true, not only of pictures, but of all iconic signs, which is why there can be no pure iconicity. In his early study of manual gestures, Garrick Mallery concluded, as we noted above, that many of these signs seem “reasonable”, because the similarity between the sign relata could be observed by a person acquainted with the culture, or once the sign had been explained to him (see Mallery, 1972[1881], pp. 94f. and Kroeber’s introduction, p. xxiv). Thus, for instance, in Mallery’s (1978[1880-81]) dictionary of manual gestures we discover a great number of different signs bearing the meaning “woman” or “female”: imitations of the breasts; of the female sex organ; of the undulating contours of the female body; of small size; of long hair; and of the peculiar hairdo of the Indian woman, with braids to the sides. This is really the story of the blind men and the elephant all over again: the elements are all similar, but the way they are selected and divided up into segments must be separately justified (cf. Sonesson, 1989a, pp. 43ff., 223ff.). This story may be recounted using pictures.

Thus, the iconic sign, like any perception, is unable to grasp its object in more than one or a small number of its aspects at the same time. Thus, for instance, a thing must be perceived from a particular point of view, and must likewise be so rendered in a picture, or by means of an iconic gesture; even Cubism is unable to integrate more than a few perspectives at a time. This is true not only of the perceptual parts (perspectives) of a thing, but also of its proper parts, and of its attributes: an object appears as a division block of a more extended perceptual world (the face as part of the body, the body of the room, the room of the apartment, the apartment of the city, and so on); and one or other of its properties is highlighted by the way it is presented (as a human being, a horseman, a general, a husband, and so on). The manual sign for woman obviously represents a woman from a particular perceptual perspective (the braids or the curves are seen from the front), selecting some proper part to the exclusion of others (hairdo, sex, or more global properties like size and nature of border lines), and insisting on particular attributes (secondary or even culturally defined sexual characteristics). Also petroglyphs will insist on some particular perceptual angle (a human being from the front, a ship or an animal in side view, a plough and a chariot from above), some proper parts (arms, legs, and trunk of a person, sometimes no head, but often sexual organs), and some attributes (sometimes man versus woman, but never child versus adult, etc.). Anati’s “prayer” only conveys some very general traits of bodily shape, arms, legs, trunk, sometimes a head; and it picks out one conceivable position, that of raised arms.33
This choice is often not made in an entirely arbitrary fashion, but some proper parts rather than others, some attributes, and in particular some perceptual parts will be favoured over the others, at least if there is no particular reason for picking out some specific part. This choice is determined in multiple fashions. First, manual gestures, like pictures, carry with them the conventional traits of the Lifeworld in which they are first used. Even when referring to the white man’s woman, the user of the American Indian manual signs will make the sign depicting the two braids typical of the Indian woman’s hairdo.

In the context of the prehistoric Lifeworld, it would seem, the inclusion of a penis, or of some kind of weapon, would serve equally well to designate the male sex of a human figure (see Burenhult, 1981; Janson et al., 1989), even though one is a body part, and other a cultural trait; moreover, they may appear even when no sexual act is involved, in one case, and no war scene or hunting party, in the other. In the same way, the raised arms of the “prayer” do not necessarily stand for praying at this particular moment, even supposing that was a possible interpretation of the arm position in question at the time.

Second, like all thinking, pictures and manual signs designate categories of things by describing their prototypes, that is, the best instances of the category. Thus, although not all women have a markedly curvaceous body, the manual sign involving undulating movements may be employed to designate them. Similarly, the petroglyph showing a man urging a mule, or driving a plough, with his over-sized penis in erection (reproduced in Anati, 1976, p. 128 and Janson et al., 1989, p. 20, respectively), may not be making love, either to his plough, or to his mule, but is simply shown as a prototypical man, first because his sexual organ is emphasised, and secondly, because it is shown in its prototypical state (which is not to say its most common state). Indeed, as I have suggested elsewhere (Sonesson, 1988, 1989a, 1990), many visual signs standing for large categories are better seen as ideal types, that is, signs the expression of which exaggerate certain features to a point not found in real instances of the category. The penis, in many petroglyphs, is not only of a disproportionate size, but its erection is outside of natural contexts for such a state. Also Anati’s “prayer” may well be an ideal type in this sense (fig. 9a): it exaggerates the erect posture which differentiates man from other animals, by adding the vertical extension of the arms to the customary stature, and by introducing the raised arms outside a natural context for such an act.
Most beings and objects clearly possess a point of view from which they are most characteristically shown, and more easily identified: it has been demonstrated that the side-view is prototypical to animals and vehicles, but furniture, shirts, and trousers, as well as human beings, from the front (see Rosch et al., 1976, pp. 400f.). What is prototypical to one culture may not be so to another, however, for old Chinese pictures, and the early stages of their writing, show that they preferred to consider a nose from the front, not in profile as we do (cf. Lindqvist, 1989, p. 33). In petroglyphs the plough or the chariot is often shown from above, the animals attached to it from the side (and sometimes one of them upside-down), and the man driving them from the front (see Janson et al., 1989, p. 20).

In order to economise their expressive resources, the users of pictures and gestures, like all other signs may, thirdly, be content to use only those traits in which the designated object differs from other, similar objects. In the case of manual gestures, for instance, women’s small size is relevant, in opposition to the (relative) tallness of men. According to a well-known example given by Eco (1968, p. 191), the zebra, which in our culture may be contrasted to the horse by means of its stripes, would have to be differentiated in another way in a culture being familiar with a single other animal species, the hyena, which also has stripes. A more extreme example is the petroglyphs of the Bakairi tribe contrasting man with a bird (Figure 8): only the upper parts of the figures differ, so that it might be said, paraphrasing Aristotle, that to this tribe man is a beakless biped. Anati’s “prayer” appears to pick out a more basic trait distinguishing man from other animals, which is more firmly grounded in the general structure of the Lifeworld: the erect posture, exaggerated by being extended to the arms.

The signs used for man and woman in Blissymbolics (and also sometimes as logograms to indicate men’s and women’s washing rooms; Figure 12b-c) may be read pictorially, but the traits included are not chosen for the sake of a correct and complete rendering, but to establish the distinction: the trousers’ legs of the male versus the woman’s skirt (Note that, on this interpretation, the pictorial equivalents of the woman’s legs emerging below the skirt are not included; the rendering of the woman’s body is less complete than that of the man). In some respects, this is similar to the opposition, often found in petroglyphs, between the stick figure with a straight line appended, which is easily interpreted as the man’s penis, and an identical stick figure with a dot (or, strictly speaking, a cup mark), which could be the woman’s vagina (cf. Anati, 1976; Broby-Johansen, 1967; Burenhult, 1981; Gudnitz, 1972; Janson et al., 1989). In a general way, the sexual organs are more natural distinctive features between the male and the female than trousers and skirts; but, pictorially, the selection of these traits, rather than any of the other bodily differences between men and women, is quite arbitrary.

Taken together, all this means that, although a part of the expression of a sign can be iconic for a part of the content, it may very well be included in the sign for conventional, and even, in a stronger sense, arbitrary reasons. Of course, in some cases this inclusion is far from being arbitrary, but is then motivated by considerations quite foreign to the pictorial rendering, perhaps by the necessities of symbolism.
If the inclusion in a picture of certain, in themselves iconic, traits is not necessarily iconically, or at least not pictorially, motivated, the exclusion of such traits does not have to be pictorially, or otherwise iconically, justified. Thus, for instance, Anati (1976) repeatedly mentions the presence of “asexual figures”, but in fact, the failure to depict any sexual organ, just as the absence of heads, in other cases, may well lack all pictorial significance; the proper parts in question may have been neutralised, simply because their inclusion was not important in that context. Similarly, Tilley (1991, pp. 68ff., 102ff, 136, 142, 146) makes too much of what might well be the same kind of neutralisations, when he argues that the elks, lacking antlers, must be females, and thus embody a female principle, whereas the stick-figures, which have phalluses or no sexual indication, must represent males. Sexuality may simply not be relevant here.

If Anati (1976, p. 60) is right in suggesting that a couple consisting of one headless figure and one normal one indicates the separation between body and soul in the same individual, then the headless figure is really iconic, but not in the pictorial sense, as we have described the latter function above, but rather in a symbolical sense: no real headless person is depicted.

Finally, it should be mentioned here that pictures and gestures are necessarily conventional because they are themselves objects of different categories from most of the objects that they represent. For instance, since the expressive resources of manual signs are essentially the hands and their movement, the (limited) vertical extension of the female body can only be described as far as one of its properties is concerned, its highest point; and the curvaceousness of the female body cannot be rendered in its totality, but only transposed in time, as an undulating movement. Rock carvings, as all other pictures executed on a surface, lack the third dimension of the real world: actually, because of being carved in the rock, the petroglyphs, unlike most pictures, have a prominent third dimension, but this cannot be used for rendering the third dimension of the perceptual world.

4.2 The picture is no image: The Annigoni case
Another respect, in which Eco (1968, p. 188, cf. 1976, pp. 327f.) does have a point, but not exactly the one he presumes, is when he asks what it can mean to say that Annigoni’s portrait of Queen Elizabeth has the same properties as the queen herself. As he points out, the nose of the real queen has three dimensions, and that of her portrait only has two; the surface of the real nose is full of pores and other irregularities, but that of the painting is smooth; and corresponding to the nostrils of the queenly nose, there are no apertures in the canvas, but only two black dots. And we could certainly go on comparing further details with similar results (see Section 3.). Thus, it can hardly be denied that a painting of the queen (as opposed, for instance, to an actor impersonating her on the theatre, or even a statue) is profoundly different from the queen herself. But this does not show that the painting is conventional, at least not in any obvious sense.

It follows, instead, that there is something wrong with the Peircean division of icons into three types: the images, which rely on simple qualities, the diagrams, which concern
similarities between relationships, and *metaphors*, which involve relationships between relationships. Following these definitions, ordinary pictures are not images, but rather some curious case of diagrams or, rather, metaphors. Indeed, perceptual psychology has shown us that what is similar between the expression plane of a picture and reality as depicted can only be found on the level of relations between relations between relations, and so on (cf. Gibson, 1982; Sonesson, 1989a). The Annigoni portrait is a perfect illustration of this point. Whatever is similar between the portrait and the real queen must be searched for on some higher level of relations between relations. And yet we do not have to search for it. It is directly offered to our perception. Indeed, the similarity is there, not in some real reality, but in the human *Umwelt*. The same goes for the lines, which Eco (following Gombrich) denied any reality. The lines are there, in the human *Umwelt*.

If the Peircean notion of images is not an empty category, then the only candidate for inclusion would seem to be a colour sample, of the kind you bring home to verify whether a particular shade of paint will go together with the rest of the furnishing of your apartment: here the simple quality of colour is supposed to be the same. Yet a picture is of course different from a diagram in the ordinary language sense of the term, which is included among the Peircean diagrams: perhaps we could say that the pictures, as well as the diagram and the metaphor, are *caused* by the perception of relations between relations of some or other degree, but that pictures are *experienced* as statements about similarities of simple qualities, while diagrams and metaphors are seen as statements about relationships. Thus, the similarity, which serves as a condition upon the perception of the picture signs, is not of the same order as the similarity, which is part of the meaning of the self-same sign.

If, as I suggested above, there is an implicit structural argument in Peirce’s division of signs into icons, indices, and symbols, then this should also be true about the further division of icons into images, diagrams, and metaphors. If it is implied that this division should be valid both for the iconic grounds, and for the impression created, then we have falsified this argument. It seems hardly satisfactory to say that the picture is a metaphor at the level of grounds, but an image at the level of perceptual results, but for the time being this is all we are able to do. More than in the case of the primary triad, the present one really stands in need of emendation. This may really be a case in which we had better abandon trichotomy.

Saussure’s (1974, p. 39) observation that, whereas language is one-dimensional, painting depends on a semiotic system deployed in multiple dimensions, has never acquired any followers, and rightly so, for it would be impossible to demonstrate that these dimensions are relevant for the combinations (syntagms) and selections (paradigms) of some kind of pictorial sub-elements (cf. Sonesson, 1988, 1991, 1992e, 1993c). For a long time, however, semioticians tried to demonstrate the existence of some kind of minimal unit of pictorial meaning, sometimes termed *iconeme*, which was supposed to have no meaning of its own, but served to discriminate the meanings of larger wholes, just as phonemes do in relation to words or morphemes. Eco (1968, pp. 234f., 1971, pp. 77ff.), who was an early proponent of this conception, even went so far, at one time,
as to suggest the existence of something similar to a double articulation in pictures (adding a third articulation in the cinema; 1968, p. 244), where dots and lines made up the equivalent of phonemes, noses and eyes corresponded to words, and horses and men were on the same level as sentences; but quite apart from the fact that the latter two levels concern units of the referential world, which may be rendered differently in pictorial signs, such an analysis does in no way account for the peculiarity of pictorial semiosis (cf. Sonesson, 1989a, III.4.2-3).

Eco (1976) later retracted this theory completely, arguing that there could be no distinctive features in pictures. Thus, he ended up holding the same position as that expressed earlier and more clearly by Goodman: that pictures were capable of no further analysis, i.e. that they were, as Goodman puts it, “dense and replete”. Density is a property of sign systems the possession of which implies that no matter how close a division of the signs is made into smaller parts, it will always be possible to proceed with the division, introducing a third unit between each earlier couple of items, and so on indefinitely. Density is semantic when it applies to content units (to referents, in Goodman’s nominalist terms), and syntactic as far as it involves the varieties of expression (Goodman’s “marks”). A dense system is replete when its signs can be divided from many different, perhaps an infinite number, of viewpoints. Density and repleteness, in Goodman’s view, apply to pictures both as carriers of reference and as exemplifications, that is, in terms more familiar to semioticians, as “iconic” and “plastic” language respectively (cf. Groupe µ, 1979). As I have shown elsewhere (Sonesson, 1989a, Chapters III-2.3-5 and III.6.1, 1995a), this would mean that pictures are semiotic atoms, in the original sense, i.e. not susceptible to being divided in any non-arbitrary way into smaller units. However, as I argued against both Eco and Goodman (in Sonesson, 1989a), and as Eco (1998, pp. 12f., 1999, pp. 344ff.) now himself admits, the interpretation of pictures supposes the identification of general categories, both in pictures and in the perceptual world. And there can only be categories that may be correlated to the extent that the world and the picture are susceptible of segmentation.34

In his earlier work, however, Eco claimed all similarity to be based on precise rules, which have to be learned, and which stipulate which aspects of the object are pertinent. Only when we are familiar with the rules, Eco thought, would we be able to discover the motivation of the signs. As pointed out above, the only example considered by Eco (1976, pp. 33ff.) is Peirce’s existential graphs, where the relations between the propositions of a syllogism are rendered by concentric circles. Contrary to what Eco claims, we noted, there is one property that is preserved here, viz. inclusion. In a typical picture, however, a great number of relations obtain between each two units, or even between every two elements of the pattern.35 A convention specifying all these relationships would have to be very complex indeed, and would have to be made separately for each picture. But suppose instead that the relations correlated by iconicity are prior to their relata, i.e. that they are relational properties. Something of the kind seems to be suggested by the theories of perceptual psychologists such as Gibson, Kennedy, and Hochberg (cf. Sonesson, 1989a,
III): no “simple qualities”, but the relations between the relations coincide in the picture and the perceptual world. While still claiming pictures to be conventional, Eco now denies the possibility of analysing them into features. He fails to realise that his own examples presuppose a basic motivation in the relationship between the picture and its referent, as well as some kind of segmentation of both reality and its signs. On the contrary, to many psychologists engaged in the study of perception, pictures are motivated and resolvable into features. This is because their features are relational.

To Gibson, features are the same as “invariants, in the mathematical sense, of the structure of an optic array”; “formless and timeless invariants that specify the distinctive features of the object” (Gibson, 1971, p. 31); “relations between relations, for which there are no names and no mathematical expressions”; “invariants of structure which are nameless and formless” (1978, p. 228). This certainly seems curious, as Gibson’s critics have not failed to notice (see Goodman, 1984, pp. 11ff.; Janlert, 1985, pp. 156ff.): for while it is conceivable that a mathematical invariant cannot “be put into words”, it is difficult to understand how it can lack mathematical expression. According to Kennedy (1974a, p. 44) solid angles are too complex to be computed by the optics of the present time; so mathematical expression is supposedly forthcoming in the future. Purdy and Sedgwick have demonstrated that pictures really do contain geometrical information for depth (cf. Sedgwick, 1980); and Perkins (1973) has shown that, from some angles of vision, certain geometrical volumes can be derived from their orthogonal projection on the picture plane. But that the information is present does not mean that it can be used by the perceptual system, as Hochberg acutely remarks. More important for the moment is the consideration of what kind of information it is that has to be picked up.

It may be remembered that, according to Gibson (1978, p. 228), what is directly seen are things like the cat and not “that peculiar, furry, mobile layout of surfaces”. Therefore, it is not enough to show that there is geometrical information for depth, and for simple geometrical shapes, on the picture plane; we need to find the formula of cat-ness. Kennedy (1974a, p. 44) is aware of this problem: what optics is still not able to do is to discover that which is common to all angles that are projections of human beings. That there are such invariants is however, as far as I understand, simply an article of faith. So why could we not suppose instead that these kinds of invariants, unlike those of depth and simple shapes perhaps, are qualitative rather than quantitative, and have both a name and a time of birth?

This would certainly bring us closer to the Ganzheitspsychologie, though not so much the Berlin school, which Gibson explicitly rejects, but rather the Leipzig school. The examples given by Gibson (1978, p. 230) could easily be understood in this qualitative way: straight lines, curves, closure, intersection, parallelism, coincidence, and other features are invariants which the child must discover and correlate with invariants of the environment, such as occluding edges, corners, pigment-borders, etc. Features of this kind have been studied more thoroughly by Kennedy and Hochberg. Although Gibson clearly identifies his invariants with features, Kennedy seems to feel that his features are different.

Kennedy (1974a, pp. 28ff.) starts out radicalizing Goodman’s critique of similarity,
in order to include subtler relationships. Langer, who, in Kennedy’s view, is more precise than Peirce and Wittgenstein about the distinction, says that similarity may consist in “a proportion of parts”, “an arrangement of elements analogous to the arrangement of salient visual elements in the object” which, as Kennedy (p. 34) observes, is really two criteria, for a stretched rubber sheet changes its proportions but retains the adjacencies of its parts, i.e. its topology. Two configurations close to each other on the pictorial surface may, as Kennedy points out, represent a neighbouring house and a distant hill. Thus, it is certainly not in terms of the distribution of chemicals on the pictorial surface that pictures can be defined. It could be added, I think, that if there is similarity, it exists between the content and the referent (between the picture object and the picture subject, in Husserl’s terms, as we will say below), not between either of these and the expression (i.e. the picture thing). This problem is assumed to be resolved by both Langer and Kennedy.

The convention theory is also rejected by Kennedy for obvious reasons. Gibson’s original point-projection theory will not do either: the same configuration can be formed with white chalk on the blackboard, and with blue ink on white paper, and there will be no single identical spot (p. 42). Later, however, Kennedy suggests that the projection theory can be made feasible, if it is reformulated for features instead of spots. Indeed, if we are concerned with outline pictures, Gibson’s colour spots are clearly irrelevant for there is no colour (pp. 06ff.); so perhaps, instead, Kennedy suggests, it is the whole object which is projected from the world to the picture. Since it is possible to depict, and to recognize the depiction of, unknown objects, Kennedy argues, entire objects cannot be projected, so perhaps it is parts of objects that combine to form new configurations, which are projected. But different objects have different parts, Kennedy continues his argument, so this would give us an infinite number of elements. In order to arrive at “a small set of units—a small vocabulary”, Kennedy (p. 108) suggests another analysis in terms of contours, shadowing, highlights, etc. Contours, for instance, have features like “concave corner, convex corner, occluding edge, occluding bounds, strands, cracks, etc.” (pp. 110ff.; cf. fig. 10). Features like these must be higher-order variables, so it is not clear how they differ from Gibson’s invariants, at least from Gibson’s examples quoted above.

Figure 10. Features according to Kennedy (1974b, p. 231): 1) occluding bound with background air; 2) occluding bound with background surface; 3) occluding edge with background air; 4) occluding edge with background surface; 5) concave corner; 6) convex corner; 7) crack
In any case, Kennedy’s features result in a new segmentation of perceptual reality, a new “form” given to the old “substance”, for the human body will no longer dissolve into head, trunk, legs, etc., but into bounds, edges, and corners. Of course, at some unconscious level, perceptual reality is supposedly analysed in the same way. But this means that to Kennedy, and perhaps to Gibson, pictures are motivated, and analysable into features—which is exactly the opposite proposition to that of Eco. So far, Kennedy’s suggestion certainly seems the more reasonable.

Like Kennedy, Hochberg (1972, p. 69, 1978a, pp. 190ff., 1980, p. 51, 1994, 1998) thinks picture perception is essentially based on perspectival cues. Pigment on paper can stand for the edge of a surface, such as the contour indicating the silhouette of a key; it may represent the corner where three surfaces meet, as in the Necked cube; or else it can represent the line where a round surface, for instance a doll’s body, passes out of sight, just as the earth disappears from view at the horizon. At least some of these features, like many of Kennedy’s, are already on the content side: the edge and the “horizon”, for instance, look exactly alike, until they are seen as parts of the object they compose on the pictorial surface. The case of the different angles between the lines is different, for they can be interpreted by a properly programmed computer (cf. Winston’s programme discussed in Boden, 1977). In addition to the perspectival features, Hochberg (1972, pp. 73ff., 1980, pp. 76ff.) also considers distinctive or canonical features, the nature of which can most easily be grasped from an example: given a facial oval, a toothbrush moustache is sufficient to indicate Chaplin, if the potential set is made up of movie stars: but in a wider context, a bowler hat, instead of the characteristic fringe, is needed in order to distinguish Chaplin from Hitler. The insistence on “potential sets” gives the argument a distinctly structuralist ring; but neither the fringe, the moustache, nor the hat are “purely negative terms”, and so must somehow be recognized for what they are in themselves. If we can explain how this is possible, we have also perhaps the general explanation for picture perception.

Indeed, the modification of Gibson’s picture theory was provoked by the Ryan and Schwarts experiment, which showed that cartoon-type drawings were more rapidly recognized than more literally correct pictures, including photographs (cf. Gibson, 1969, pp. 100ff.; Hochberg, 1978a, pp. 193ff.; Perkins, 1975; Perkins & Hagen, 1980); and yet the rejection of the point-projection theory could, as Kennedy (1974a, p. 42) observes, be motivated from the common sense observation that white chalk on a blackboard can form the same picture as blue ink on white paper. But what if cartoon features, or “canonical notation”, are crucial to all pictures? What if there are some “invariants” for moustache-hood, bowler hat-ness, and fringe-ness, which are not perspectival in nature, i.e. which do not refer to spatial layout? Consider again Kennedy’s landscape (cf. figure 15): how much would we make of it, if the house had not been a typical house, just as the hills, and the quite non-perspectival cloud and sea? The perspectival cues, then, would be secondary to some more qualitative types of holistic properties; and this would explain, not only that non-perspectival pictures are readily interpretable, but also the possibility of “impossible
pictures”.

More recent proposals, which do not distinguish between the perception of pictures, and that of perceptual reality, such as those of David Marr (discussed, for instance, by Bermúdez, 2005) or Irving Biedermann (cf. Peissig, Young, Wasserman, & Biedermann, 2000) do not show any fear of an “infinite number of elements” which, according to Kennedy, must result from different objects having different parts. Marr, for instance, discusses the single example of the human body, conceived as a series of interlocked parts inscribed into three-dimensional shapes. Bidermann’s theory more explicitly takes into account the difficulty of recognizing objects when seen from different points of view, and so may include the pictorial view as an instance; at least, the perceptual abilities of pigeons are studied using pictures. “Geons” are such components of objects which can be recognized from different perspectives and which include the relation to other components of the same objects.

While no agreement seems possible at present as to the nature of the parts into which objects and pictures are analysed, it is clear that, if anything, pictures, just like perceptual reality, must somehow be analysable into features, for some identification to take place, and these features must be, at least in part, motivated by similarity, if a mapping from what is for all practical purposes an “infinite” number of features is to take place from reality to the picture and vice-versa.

4.3 The process of resemanticisation
In spite of the existence of pictorial features, Goodman’s observations on density are not entirely off the mark. Indeed, once we have determined whether a particular scribble realises the category of a tree or of a woman’s profile, the drawing will tell us a lot about the particular conformation of the crown, or the nose, the hair-cut, and so on (see Figure 11a-b). Similarly, once we realise that a “black wiggly line”, as in Goodman’s example, does indeed represent Mount Fuji, rather than a population graph, its minute details and variations will inform us about the particular shape of this mountain ridge. But not indefinitely: only up to a point set by the principle of pertinence embodied in the pictorial medium.

Figure 11. Gregory’s tree: a) seen a tree; b) seen as smoking woman’s profile; c) quadrangular face

Consider Hünig’s (1974, pp. 5ff.) argument regarding the impossibility of pictorial
features. Fig. 12a looks like a fish, but fig. 12b is easily seen to be a bird; since the only
difference between them is the elements found in fig. 12c, one might suggest that they are
indirectly signifying units, like phonemes. Against this proposition, Hünig adduces the fact
that fig. 12d, which does not contain the elements in fig. 12c, can also be seen as a bird,
as well as the further facts that the very same elements are parts of a star in fig. 12e, and
form the arms of a man standing on his hands, in fig. 12f, which, without these elements,
would instead be similar to a tree, as in fig. 12g. Unfortunately, this argument is invalid.
To begin with, if both fig. 12b and fig. 12d mean “bird”, they will simply be synonymous
expressions, and this fact has no bearing whatsoever on the existence of features, for
synonyms cannot be expected to have the same set.\footnote{In the second place, the other cases
cited actually confirm the thesis they were designed to oppose: for if the elements in fig.
15c are able to enter into so many configurations having quite different meanings, they
really appear to be units lacking meaning in themselves, exactly as phonemes are. The
real point, however, is that once the elements in fig. 12c are added to fig. 12a, the fish
is not only changed into a bird, but the elements added themselves take on the aspect of
bird’s legs; and when the same elements are introduced into fig. 12g, the tree is not only
transformed into a man standing on his hands, but the elements themselves now appear to
be the arms of the man. The difference is not where Hünig expected it to be.

Figure 12. Iconic figures and configurations (from Hünig, 1974, pp. 5f. and Sonesson, 1989a, p. 297)

\begin{figure}
\centering
\includegraphics[width=\textwidth]{iconic_figures}
\end{figure}

It has been noted by philosophers, from Husserl (1980) to Wollheim (1980) that we
seem to “see” the content of the pictorial sign directly “into” its expression. This is true in
a quite concrete sense. For instance, although no real faces are quadrangular, we have no
trouble identifying fig. 11c as a face; and, more to the point, we can even indicate the precise
place of the expression plane where the ears are lacking. This certainly has something to do
with that peculiar property of iconic signs, observed by Peirce, and called exhibitive import
by Greenlee, which makes it possible for icons to convey more information than goes into
their construction (see Sonesson, 1989a, Chapters III.3.6 and III.5.1)
The specificity of pictorial meaning can be illustrated by Magritte’s familiar picture, “Le viol” (fig. 13) which may be seen either as a face or as a woman’s trunk; it is precisely because of this double, contradictory appresentation that it is instructive. Beginning with the smallest elements, no particular meaning is suggested. But at least when putting the two half-circles containing two smaller circles side-by-side, we seem to be seeing two breasts. This interpretation is at its most determinate at the penultimate configurational level; but, at the highest one, when the hair is added, another interpretation, that of a face, gains the upper hand. Once we reach this level, some details which were present beforehand lend their support to it: the holes in the small circles, and their relative dimension, make them look much more like the pupils of eyes than as nipples; indeed, the proportional location of the inner details are more nearly those of a face than of a trunk.

Now this points to the second property which is peculiar to pictorial meaning: the parts which are meaningless in isolation become carriers of particular portions of the overall meaning, once they are integrated into the whole. Like the phonemes /m/, /æ/, and /n/ forming the word /mæn/, the strokes and dots making up the picture of a man are in themselves meaningless even when considered in their particular spatial location; however, after having been put together, the phonemes continue to be deprived of meaning as such, whereas the strokes and the dots begin to take on the aspects of different proper parts and attributes of the man they contribute towards forming. Put simply, the different parts and properties of the man are not distributed among the phonemes /m/, /æ/, and /n/, as they are among the strokes and dots forming the corresponding picture. This does not mean, of course, that every detail of the picture may be given a particular reading in terms of details of the object represented; there is a lower, as well as a higher, level where this projection of meaning from whole to parts ceases to operate. This process, by which meanings accrue to pictorial features, may be termed resemanticisation. It will be noted, then, that pictures do not have double articulation, as was once argued by Eco and Lindekens, nor do they lack elements without their own signification, as has been widely argued since their case is different again. And this is precisely the property that is not found in mirrors, nor in identity signs: it is peculiar to pictures.

Figure 13. The double analysis of “Le Viol” and its consequences for resemanticisation
It has been suggested by Vaillant and Castaing (2005) that what I have here, as well as elsewhere, termed the process of resemanticisation, is really only the familiar device known as the hermeneutic circle, by means of which some elements are determined by the whole of which they form a part. The comparison is interesting, although I don’t think it is entirely correct. To begin with, if resemanticisation is identical with the hermeneutic circle, it is at least operating at another level: while the hermeneutic circle, as we normally understand it, works on the foundations laid down by the ultimate constituents of language, that is, phonemes and words, resemanticisation starts from scratch. The case is similar to what I have in another context claimed about the operations of rhetoric: whereas the transformational rules of verbal rhetoric work on and modify the result first brought about by the combinatory rules of grammar, pictures first arise from rules of transformation applied to perceptual reality. In this sense, they are immediately rhetorical (see Sonesson, 1997a, 2004a, 2005, 2008a). But there is a second difference, which may point to something even more peculiar to pictures: whereas the hermeneutic circle distributes the meaning of the whole back to the parts, it does so only on the level of content. But resemanticisation operates more immediately on the level of expression. This is because resemanticisation, as I have described it, depends on what Wollheim calls “seeing-in”, and what Husserl has described as being “perceptually imagined”, which is a phenomenon that I believe to be unique to pictures.

4.4 The Husserlean triad: Picture thing, picture object, and picture subject
To determine the nature of pictoriality (which he calls iconicity), Börries Blanke (2003, 2005) also has recourse to the theories of Wollheim and Husserl, using them to argue that pictoriality is essentially a case of double categorisation: something is both a tangle of lines on paper and a rabbit. Both as an interpretation of Wollheim and Husserl, and as an elucidation of the nature of pictoriality, this characterisation seem to me rather misleading. At least if we follow Husserl, we really would have to recognise a triple categorisation (into picture thing, picture object, and picture subject). More importantly, however, I do not think we are justified in conceiving categorisation to be the essential operation involved in pictorial consciousness, because, just as in any other sign, as we have seen, expression and content are present to us in different ways within the picture. It is, however, an excellent idea on the part of Blanke to bring Husserl’s work to bear on the µ-model of iconicity. To show this, I have to return, however briefly, to my own earlier discussion of Wollheim and, in particular, Husserl (in Sonesson, 1989a, Chapter III.3.5-6).

Wollheim’s contribution consists in pointing out that, in Wittgenstein’s (originally Jastrow’s) famous duck/rabbit picture, the phenomenon of “seeing-in” something in the surface, whether it is a duck or a rabbit, is distinct from the phenomenon of “seeing-as”, that is, of seeing something as being either a duck or a rabbit. We see the rabbit or the duck alternately, but we see the surface and what it depicts at the same time (for which Wollheim refers to the work of Pirenne, which can however be substantiated by the later experiments of Hagen, Elliott and Perkins, quoted in Sonesson, 1989a, Chapter III.3.5).
The first is not restricted to pictorial consciousness: even in the real perceptual world, we may mistake a shrub for a ruffian, if perhaps not a rabbit for a duck. 

Husserl’s much earlier work delves much deeper into the issue. Two similar things assume the character of a picture only when pictorial consciousness is attached to them, Husserl (1980, pp. 17, 16, 138f.) contends (and, in addition, the similarity must be “anschaulich”; Husserl, 1980, p. 135). Pictorial consciousness puts three instances into relation: the picture thing (originally the “physical picture”), the picture object, and the picture subject (“Bildding”, “Bildobjekt”, and “Bildsujet”, respectively; see fig. 4b). When the picture is said to be lopsided, this concerns the picture thing; but when we complain about the failure of the photograph to resemble the person photographed, it is the picture object that is incriminated. However, it might seem less clear what constitutes the difference between the picture object and the picture subject. 

In the photograph of a child, a figure can be seen which is in some respects similar to the child, but differs from it in size, colour, etc. The miniature child in a greyish violet is of course not the child that is “intended”, i.e. conceived (“vorgestellt”). The real child, the picture subject, is red-cheeked, has blond hair, and so on, but the picture object can only show up “photographic colours”. The first, then, which is what is “seen-in”, in Wollheim’s sense, is the picture object. The second is the picture subject. It should be noted immediately that, although “photographic colours” do not mean the same thing to us as to Husserl, the distinction is still valid, because even high-quality colour photographs, as well as paintings are unable to render the full scale of colours present in the real world of perception. According to Husserl (1980, p. 18), however, there is also another kind of difference between the picture object and the picture subject, for while that Berlin castle which we see is here, where the picture is, the Berlin castle itself, as a thing, remains in Berlin. 

Non-coincident traits stand out on the background of the coincident, depicting ones, Husserl observes; and, while the extent to which picture object and picture subject differ varies from one picture type to another, and for each particular case, there must be some difference, for without a difference and an awareness of it, there can be no pictorial consciousness (Husserl, 1980, pp. 30ff., 20, 82, 138), merely “Täschungen à la Panoptikon, Panorama, etc.”, i.e. “Jahrmarkteffekte” (Husserl, 1980, p. 41). Unlike the picture subject, both the picture thing and the picture object are “appearances” (“Erscheinungen”), i.e. they are directly perceived (Husserl, 1980, pp. 27f., 489f.). Our seeing of the picture object is of the same kind as ordinary perception (Husserl, 1980, pp. 133f.), and yet it is somehow “abnormal” (Husserl, 1980, p. 490). For picture thing and picture object can by no means be identified: the latter is no part of the physical picture, as the pigments and the lines are; and while the picture thing is flat, the picture object is three-dimensional (Husserl, 1980, pp. 19f., 82f., 138f., 143). Interestingly, it is for the relation between the picture object and the picture subject that Husserl requires similarity (Husserl, 1980, pp. 138f. and passim), i.e. for two instances which are roughly equivalent to Peirce’s “immediate” and “dynamical objects”.

Except once, when he says that a relief is comparatively more similar to its picture object.
(Husserl, 1980, pp. 487ff.), Husserl never discusses the similarity of the picture object and the picture thing. Nor does he consider the similarity of the picture thing and the picture subject, which is the closest we can come to Peirce’s relation between the “representamen” and the “object”. It is in the relation between the picture object and the picture subject that pictoriality may be more or less extensive, and more or less intensive, i.e. concern a greater or lesser number of properties, and realise them to a greater or lesser degree (“Extensität” and “Intensität der Bildlichkeit”; Husserl, 1980, pp. 56f.).

Figure 14. Relevant distinction in the linguistic sign (a), and the pictorial sign (b), all elements of which may be iconic or not (adapted from Sonesson 2008b)

The picture thing and the picture object are directly perceived; but the picture subject, which is what is intended (“gemeint”; Husserl, 1980, pp. 23ff., 30, passim), is only indirectly given; therefore, although Husserl does not tell us so, we would seem to have an appresentation (see Husserl, 1939, pp. 174ff.; Luckmann, 1980), in other words, what we have called a semiotic function above. It is possible to thematize the picture thing, as when we note that the picture is lopsided, but “trotz meinender Zuwendung zum Bildding bleibt die erregte Erscheinung des Repräsentierenden Bildes mitbemerkt” (Husserl, 1980, pp. 37, 488). Likewise, it appears to be possible to thematize the picture object, at least in order to note the “extensity” and the “intensity” of its pictoriality.

Husserl’s term for the equivalent of Wollheim’s seeing-as is competition (“Wettstreit”), as when we are not sure whether we see a human being or a wax-doll (Husserl, 1980, pp. 277, 401, etc.). This is opposed to the condition of contradiction (“Widerstreit”), in which case one of the percepts is perceived without “belief”, in other words, is “cancelled out”, as when we see the doll and the human being it stands for. According to Husserl, however, pictures are different again: they do not simply constitute “illusions”. The picture object is no doubt a fictum, but not an illusionary one for, unlike the latter, it is discordant already in itself, so that no attention to the environment is needed in order to cancel it out (Husserl, 1980, p. 490). Also, while the illusionary fictum appears in the ordinary world, the picture presents itself in a reserved space (Husserl, 1980, p. 480). Indeed, the paper surrounding the drawing can be observed, as can the frame, the wall where it is placed, the room, etc.,
but there is no ordinary perceptual apprehension (“Wahrnehmungsauffassung”) for that part of the paper where the drawing is. Of course, the paper apprehension is all the time “co-conscious”, for it is part of the continuous field of vision, but it has lost its contents to the picture object apprehension. There is a contradiction, but the picture object prevails (Husserl, 1980, p. 45f). And yet, the picture object is unreal, for it contradicts that which is present in the here and now: in the consistent wall perception, a piece is “covered” by the picture (Husserl, 1980, p. 482).  

In conclusion, it seems that while the picture object has a kind of existential priority, because it is most immediately seen, the picture thing has another claim to the same priority, because it is compatible with the most extended range of the environment. This should not impede us from seeing the picture as a sign, in the sense of the semiotic function, although of a rather peculiar variety. From the picture thing via the picture object to the picture subject (and, as I will later argue, to the extrapictorial referent), there is (if the aesthetic function does not apply) increasing thematization, and, roughly speaking, there is also decreasing directness. There is decreasing directness only if the most large-scale consistent reading is required, for otherwise the picture object is the most directly given, and directness decreases in both directions from there.

Thus we see that the picture corresponds to at least three different categories: the picture thing, the picture object, and the picture subject. Indeed, I will go on to suggest that the latter must be distinguished from the picture referent. Moreover, it becomes clear that these categorisations do not occur at the same level of perception: while the picture thing is an ordinary percept, the picture object is merely “perceptually imagined”, and the picture subject is not perceived at all. They are not related to each other as categories, but as levels of thematisation and directness within the sign.

4.5 Pictorial consciousness and the scale of typicality

Although typification is an important ingredient of the Lifeworld, as so often described by Husserl, he never seems to take it into account in his discussion of pictorial consciousness. Actually, he does, but only implicitly so. The difference between types and occurrences is in fact contained in the distinction between picture thing, picture object, and picture subject, to which must be added the picture referent. It will be remembered that, to Klinkenberg (1996, 2005), in the second version of the µ-model, the referent stands to the type as the stimulus stands to the signifier, but the fact that the former item of each couple is a typification is blurred by the terminology. In Husserl’s case, typicality is hidden by being found between the different instances.

As we noted above, Husserl maintains that there must always be a difference, however small, between picture object and picture subject, in terms of the “extensivity” and the “intensivity” of their respective properties. If so, it should be sufficient to attenuate the “intensive” and “extensive” differences between them in order to have them approach gradually, and then in the end coincide, at least as a thought experiment. But this could never happen, not even in thought, because the picture object is here, where the picture
thing is, but the picture subject is somewhere else, in the place assigned to it in the Lifeworld (Husserl, 1980, pp. 18, 79): indeed, as we have heard, the Berlin castle, no matter where the picture is moved, will remain in Berlin. Moreover, the picture object is perceived, but the picture subject is only something about which information is conveyed (see Sonesson, 1989a, Chapter III.3.6). But this makes nonsense of the idea, suggested by Husserl himself, to compare the picture object and picture subject, as to “extensivity” and the “intensivity” of their respective properties.

It seems to me that the picture subject is made to accomplish a double task, which it cannot really sustain, that of content type and referent. It would of course be an error to identify the triad picture thing, picture object, and picture subject with expression, content and referent. The picture object is perceived, which the content of, for example a verbal sign, is not; and there is a real sense in which the picture object is present here and now, together with the picture thing, which the verbal content can hardly be said to be. Nor is it feasible to assume that the picture subject is identical to the referent, in the sense of a concrete object of the world, or even in the sense of being a type standing for a number of such instances. Many pictures may not have referents, in any of the latter senses, but they clearly have picture subjects: such is the case not only of the notorious unicorn, but of all the creatures emerging out of Escher’s and Reutersvärd’s pictures (see Sonesson, 1989a, Chapter III.3.4).

The whole point of “impossible pictures” is that they point beyond themselves to something which cannot exist, their equivalents in the three-dimensional world: indeed, their picture things are quite possible, as are in this sense their picture objects (consider the importance of “recognisability” to Escher). This is, I submit, the most interesting interpretation of the notion of picture subject: as the potential real-world equivalent of that which is “seen in” the picture thing, that is, of the picture object. Husserl (1980, p. 490) could be taken to suggest just this, when he claims that what is seen in the picture is corrected for its deviations from the idea we have of the corresponding type, which imposes constraints on the possibilities of perception: being made of plaster contradicts our idea of a human being, so we withdraw it from the picture object.

Thus, if the picture subject is the projection onto the common, three-dimensional Lifeworld of the picture object, the reverse is also, and primarily, true: at least on some intensional level, Titian’s Sacred Love (to pick one of Husserl’s favourite examples) and the Escher-Reutersvärd kinds of objects also reflect potential things of the common Lifeworld, in relation to which they are felt to be incomplete. For instance, at the level of perceptual parts, the picture object is normally based on just a single noema (or a few noemata in the case of Cubism), and no real world object and so no picture subject can have just one noema (or only a few; see Husserl, 1980, p. 38: the picture object renders the picture subject in one of “seiner Erscheinungen aus der Synthesis”). Furthermore, the picture object differs in its attributes both “intensively” and “extensively”, as Husserl puts it, from the picture subject; or at least this is the usual case. It is also possible for a picture object to show just a proper part of a picture subject and, at least in one sense, only
complete objects can exist in the Lifeworld. Thus, we could take the picture subject to be the picture object as it must be completed in order to be something, which could possibly be encountered in the Lifeworld. But this is only possible because, at least as types, at a general level, we know the Lifeworld objects beforehand. We can easily complete our Lifeworld prototypes of a woman, a sitting person, an almost naked person, and so on, to arrive at the picture subject which is Titian’s Sacred Love (though not at the iconographic level); but the picture subjects corresponding to the “impossible objects” can only be anticipated as some very general kind of Lifeworld objects, as “box-like”, or something of the kind (and outside the purview of real box possibilities).

This analysis should help us realise what else has to be put into the model of iconicity (which is actually a model of pictoriality) envisaged by Groupe μ (see Sonesson, 1989a, Chapter III.3.5-6). Many years ago, I suggested that there are really three iconicity questions (see Sonesson, 1989a, Chapter III.1.1): the relation between expression and content, the relation between content and referent, and the relation between expression (or perhaps rather the sign as a whole) and the referent. In the case of the picture, as we have seen, the issue is further compounded by the existence of a fourth instance: the picture object (see Figure 4b). It is the possible iconicity of the relation between the picture object and the picture subject that is discussed by Husserl. But all similarity breeds a certain dissimilarity. Husserl, as we saw, talks about the extensivity and the intensivity of the common properties. Thus, if there are three (or four) relations of iconicity, there is the same number of places in which transformations may take place.

Consider the story of Marco Polo’s discovery of the unicorn (retold by Eco, 1999, pp. 57ff.). Or rather, let us consider the preconditions of that story (not mentioned by Eco). How did Marco Polo get his idea about the looks of a unicorn? He might have read about it, but most probably he had also seen pictures, which would allow him to have a more complete idea of its appearance. He might have seen paintings, tapestries, book illuminations, but perhaps also reliefs or even statues. He had certainly not been made to think that unicorns are beings of paint, woven tissue, ink, or stone, nor that they are flat as they appear in the first series of representations. So, apart from what he had been able to “see into” the surface of the pictures and the reliefs (and what is already there in the statues), that is, apart from the picture object, which emerges directly, but already transformed, from the different picture things encountered, he must have had recourse to a number of typifications, such as the notions of concrete object, living being, horse-like creatures, and so on, which helps in constituting the picture subject. As we know, this did not impede him from finding, at the end of his search, the referent we now know must have been a rhinoceros. Others, of course, have come up with the empty set.

It follows that the extrapictorial referent, if there is one, is something quite distinct from the picture subject (unlike the case of mirrors; cf. Sonesson, 1989a, III.3.5, 2003a). Thus, it seems, we must think of the picture thing as being on the expression side of the sign, while the picture object occupies some kind of intermediate position; the picture subject is similar to the content; and the referent, which, strictly speaking, falls outside the
sign, is still the referent. The picture object must be seen as a reflection within the sign, of the picture subject: and thus, the similarity of the picture object to the picture subject, in absolute terms, matters less than the place of the picture subject in the hierarchy which allots their relative centrality to the objects of the Lifeworld. This is what determines the possibility for pictures to say new things about a very old world.

At the beginning of this paper, I suggested that the recognition of the iconic character of pictorial signs was only the beginning of a real semiotics of pictures. In fact, if the primary property of the picture sign is to suggest a similarity to real-world perceptual appearances, then the very point of their sign function is to subtly modify our view of these real-world appearances. Similarity makes us expect more similarity, and connection makes us anticipate integration. But, in pictures, these expectations are generally deceived. This is what constitutes the foundations for pictorial rhetoric. The first systematic approach to pictorial rhetoric was realised by Groupe μ (1979, 1992). For reasons that would be too long to review here (but see Sonesson, 1996a, b, 2001a, 2004a, 2008a), I find their model rather unsatisfactory in the end. But I think another model may be established which relies on several dimensions, some of which are iconicity and indexicality.

In the first section of this essay, we liberated the iconic and indexical grounds from their absorption into their respective sign functions. This is what we need here, because the elements which are connected iconically or indexically are not parts of signs, but elements depicted, on one hand, and elements which are expected to be depicted, on the other. There are two indexical dimensions, one involving contiguity, and the other factoriality (the relation of parts to whole): both operate by an increasing degree of divergence from expected integration. For instance, on the level of factoriality, we expect to see pupils in Haddock’s eyes, but instead there are bottles; and, on the level of contiguity, we anticipate that ice cubes and an aperitif bottle should be placed in an ice-pail, but instead they are located inside the Coliseum. On the iconic dimension, there may be more similarity than expected (e.g. the roof and the street which have identical forms in Magritte’s “Les promenades d’Euclide”), or more commonly, more dissimilarity than expected, going to the extreme of contrariety (the male adult mouth on van Lamsweerde’s little girl) and even contradiction (Magritte’s pipe contradicted by its title). The third dimension may perhaps also be called the dimension of symbolicity, for it concerns signs containing other signs (e.g. pictures of pictures). Thus, we see that the ground, in the sense in which we have taken the term, is not only useful for constituting signs: it also may explain operations within signs (cf. Sonesson, 1996b, 1997a, 2001a, 2004a, 2008a).

4.6 Summary
There is no tradition in semiotics for determining the specificity of pictures, within the domain of iconic signs. The category which Peirce calls “images” may have been invented precisely to do this job, but we have seen that it cannot serve such a purpose: if understood in terms of grounds, pictures are certainly not made up of “simple properties”. 
Against structuralist semiotics, which tried to import the notion of double articulation from linguistics to, among other things, pictorial semiotics, I have shown that pictures function according to a very different, quite peculiar process, which I have called resemanticisation. This is a property whose specificity to pictures must itself be explained relying on what Wollheim calls “seeing-in”, and which Husserl, in an earlier and much more thorough investigation, called “pictorial consciousness”. Even Husserl’s account is seriously incomplete, and the notions of picture thing, picture object, and picture subject do not only have to be made more precise, but the latter must also be distinguished from the picture referent. When confronted with the µ-model of iconicity, Husserl’s analysis shows us however that there are several different relations of iconicity, and, for the same reasons, several distinct loci of transformations. Finally, we have seen that iconic and indexical grounds, and in a way also the sign function, may be used within the picture sign in other ways than just to constitute the sign.

Pictorial semiotics, I have argued, must determine the specificity of pictures, within the general domain of iconic signs, and not just offer models for the analysis of particular pictures. Although my own point of departure is Husserlean phenomenology, reviewed by newer approaches within perceptual and cognitive psychology, I have found it useful to start out from the work of Peirce and his critics, in order to develop my own, more complex, conception of iconicity. The latter model involves a distinction between iconicity per se, the iconic ground, and the iconic signs, and it supposes a much more explicit concept of sign than those found in the Peircean and Saussurean traditions alike. I have also suggested that there are at least two very different kinds of iconic signs, primary and secondary ones, which inverse the relations of conditioning between the ground and the sign function, and that the primary kind can only exist because of more general assumptions embodied in the Lifeworld or ecological physics. In determining the specificity of the picture sign, we were led to reject its identification with the Peircean concept of “image” as well as the independence (in one sense) of iconicity from the sign function. Unlike both the first and second articulations in verbal language, I argued, pictures gain their meaning from a process I called resemanticisation: the projection back from the whole to the parts of a globally constituted meaning, at the level of expression as well as that of content. But resemanticisation itself is only an effect of something more fundamental: the specific functioning of the distinct instances making up the picture sign: the picture thing, the picture object, the picture subject, and the picture referent. Between them, there are different relations of iconicity—and thus different possibilities of transformation.

Notes
1 The bulk of this paper was written for a thematic issue of the journal VISIO, scheduled to appear in 2005, but the journal ceased publication before that time. Other articles meant for this issue are referred to here in their manuscript form. I still think this is my most complete and relevant statement on the issue of iconicity. The present version has been thoroughly
updated to take into account the internal, as well as the external, developments of semiotic theory during the last ten years.

2 An argument could, however, be made for Lessing being the real pioneer of pictorial semiotics. Cf. Wellbery, 1984; Sonesson, 1988, pp. 105ff.

3 I exclude “symbolicity” under the supposition of it being identical to the sign relation (but we will later see that this may not be all there is to it).

4 It must, however, be said, as I noted above, that, contrary to other domains of semiotics, pictorial semiotics is justified as such, since there is no comparable discipline otherwise interested in pictures at a general level.

5 Whatever we may think about this principle as such, Peirce’s claim that all indices contain icons, and all symbols indices, is sufficient to show that he conceived of these properties as being apt to combine with each other.

6 In fact, some predecessors of Peirce in the business of sign classification, such as Degérando, thought that to be possible.

7 The Peircean use of the term “symbol” is of course problematic, since it contrasts with another sense, more common in the European tradition, and found for instance in the work of Saussure and Piaget, where it is a peculiar kind of icon, or, as in the work of Cassirer, a synonym for “sign”. However, it appears that “conventional sign” is not an adequate term for what Peirce means by “symbol”, which may involve “law-like” relationships of other kinds, such as, for instance, habits.

8 It should be noted that I will be avoiding peculiarly Peircean terms in the following pages, as long as no harm is done by that procedure: I will use “expression” for what Peirce calls “representamen” and “content” for his “object”: more precisely, I will roughly identify “immediate object” with “content” and “dynamical object” with “referent”, though it might have been better to say that the former is what is picked out of the latter by the ground. For the purpose of this article, I will completely ignore the “interpretant”, which is clearly also a part of meaning, though not in the simple way suggested by Ogden’s and Richard’s all too familiar triangle. In many of my earlier works, I have argued for a relationship between the ground and the interpretant, and Johansen (1993, pp. 90ff.) even claims the latter was historically substituted for the former, but I now think the relationship cannot be that straightforward, for reasons which will partially emerge below.

9 On the ground as Firstness and, paradoxically, as abstraction and comparison, and its relation to the “correlate”, see Sonesson, 2010b, 2013.

10 Although Greenlee does not say so, this would seem to make the ground into that which separates the “immediate object” (that part of the content which is directly given through the sign) from the “dynamical object” (roughly, the referent, i.e. meaning connected to the content but not given in the sign but present in other past or future signs).

11 I would not like to conceal the fact that there are many other passages in Peirce’s work (many of which are given by Eco, 1998, pp. 44ff., 1999, pp. 59ff.) which seem to state rather clearly that the ground is Firstness, which means that it cannot be a relation, nor any kind of abstraction, as I understand it, that is, no typification.
12 Strangely, Klinkenberg (1996, pp. 299f.) points out that the type is not simply identical to the signified!

13 Indeed, in relation to the examples, it appears to make more sense to relate the type to the kind of “transformation” connecting the expression (“signifier”) and the content (“referent”); however, this is not congruent with the definition. It does, however, correspond to the following passage (where also the stimulus has its type): “Le stimulus, comme le référent, sont tous deux des actualisations du type. Mais entre eux, ils entretiennent des relations que l’on nommera ci-après transformations” (Klinkenberg, 1996, p. 293).

14 It is not clear to me, however, why it should be necessary to distinguish stabilisation and recognition on the two axes. We will treat them as equivalents.

15 In a way, this is better suggested by the original µ-model of iconicity, in which the type presides over the apex of the triangle, and thus over the process of transformation between (what I here call) expression and content. However, the arrows do not seem to justify this interpretation, nor does the text. As we shall see later, when turning to pictoriality, there may really be several different processes of abstraction and/or transformation involved.

16 This, no doubt, is what Peirce must have meant—but I have my doubts about this idea. Some iconic signs seem to rely on pre-existing conventions and/or habits, which exist in the Lifeworld prior to any signs. Thus, for instance, the sign meaning “woman” in the gesture system of the North American Indians consists of describing the braids on both sides of the head (see Mallory, 1972[1881], 1978[1880-81]) This sign is of course iconic to the extent that it imitates the braids, and indexical, because it relates to the head of the sign producer; but it only means “woman” because there is a pre-existing convention in the society of North American Indians for women to wear their hair braided. Of course, the reason for this discrepancy is no doubt the vague character of the Peircean sign concept.

17 Contrary to what is suggested by Morgagni and Chevalier (2012, pp. 126f.), I never meant this to be the decisive argument undermining Peircean semiotics. There are many other arguments, some of them voiced in other parts of this essay, that do not accept Peirce’s musings as the final word on semiotic theory, but there are also excellent arguments for taking his thinking as an excellent point of departure for further investigation.

18 For an overview of studies concerning children’s and apes’ understanding of pictures, including some experiments initiated by the present author, see Sonesson, 2013b.

19 As we shall see later, there is quite another sense in which primary iconic signs do not conform to the criterion of independence.

20 It is undoubtedly because he is mainly involved with droodles or logotypes close to being droodles that Vaillant (1997, pp. 45ff.) fails to see the relevance of the prototype hierarchy. This also explains the same argument by Bordon and Vaillant (2002, p. 59), who, however, proceeded to offer a more pertinent counter-example to the prototype hierarchy suggested here, which will be considered below.

21 Later on in their essay, Davidsen and Davidsen (2000) appear to criticise me for finding the same sign iconic, indexical, and symbolic, but that is only a problem, as mentioned at the beginning of this article, if we take these terms to apply to objects rather than to relations.
It might also be relevant, as has been suggested to me, that the motorcycle is a more enduring type of artefact than the ice sculpture. However, this argument could then be used to claim that the bronze statue of Caesar is more basic than Caesar himself.

This also shows that the “Barbie” example given above is much more complex than what I hinted at: from the point of view of animateness, and the like; even the Mexican woman would not really consider the doll to be more prominent than human beings who are blond (or so I would hope). It is when attending to hair, skin colour, and the like, that she ranks the Barbie doll higher on the scale than those alien human beings seen in Sweden. This is the stuff of which metaphors are made (see Sonesson, 1989a, 2003c, 2005). Interpreted in another way, this anecdote might be the point of departure of the distinction that is basic to cultural semiotics. Cf. Sonesson, 2000b.

Lopes (1995) seems to have happened on a very similar, if not identical, distinction independently of Eco and me. Vaillant and Castaing (2005) interpret Eco’s distinction in quite a different way, which seems to me quite unwarranted.

In his third critique, Eco (1998, pp. 14f., 1999, pp. 349f.) explicitly rejects what he says here, but he sometimes seems to go to the opposite extreme of thinking there are lines in nature, and sometimes he accuses Gibson of holding this theory (“outlines are already offered by the stimulating field”), when in fact Gibson’s point is that perception is based, not on simple properties, but on relations between relations.

Another illustration could be the story Eco (1998, pp. 16f., 1999, pp. 355f.) tells us about Diderot observing a painting by Chardin and speaking first as if he was seeing the real objects, and then stepping closer to note the layers of paint on the canvas.

Roupas is really discussing Goodman’s distinction between “dense” and “finitely differentiated” systems. See Sonesson 1989a and 1995. Although he uses a figure taken from Palmer, instead of my example from Roupas, Eco (1998, pp. 12f., 1999, pp. 344ff.) now makes the same argument for the necessity of postulating general categories.

For some examples, see the notes to the earlier discussion of Eco’s critiques.

There are certainly some serious issues looming behind these interpretations, which cannot be dealt with here. See, however, Sonesson, 2003a, 2011a, b.

The first is the common interpretation of Hjelmslev’s distinction between form and substance, but the latter is closer to being the correct one.

Indeed, Gregory (1997, pp. 47ff., 57) who maintains that the first mirrors were made of polished copper, silver, gold, or obsidian, and before that were bowls filled with water, the direct descendants of which were wetted slates hung on the wall, also suggests that St Paul’s looking glass may have been an instance of “obscura mirrors which were so poor optically that they stimulated the imagination more than the eye.”

If, as our experimental studies suggest (Sonesson & Lenninger, 2015; Lenninger, Persson, van de Weijer, & Sonesson, submitted), mirror images are similar in difficulty, at least to small children, as pre-recorded video, which, in spite of Eco’s claim to the contrary, is the most common kind of television image, Eco is right to compare mirror images and television, but he is quite mistaken to think that any of them are comparable to direct perception.
33 As is clear from the name, Anati (1976) takes this figure to be engaged in praying. This seems to me a risky hypothesis. Perhaps there really are anthropological universals for praying, but I think it is safer to describe this figure as a picture of a man, but only a droodle of praying. If so, it remains to show that the key is universal. See further Sonesson, 1994a.

34 Simple spatial features are not enough, of course, as I argued (in Sonesson, 1989a) against both Kennedy and the usage to which Bouissac puts Hubel and Wiesel’s spatial detectors, and as Eco (1998, pp. 14f., 1999, pp. 350ff.) now argues against Hubel and Wiesel.

35 This argument, formulated already in Sonesson (1989a, Chapter III) would seem to take further the claims made by Stjernfelt (2005, 2007).

36 The fact that animate action (and the action of different animals, as well as different movement patterns of the kind we call walking, running, etc.) can be perceived simply from the movement of a constellation of dots seen in the dark would seem to lend some plausibility to this claim—but even if these constellations may be mathematically described, it does not follow that this is how they are perceived.

37 In fact, these pictures should really be intentionally specified, at least as ‘standing bird’ and ‘flying bird’, respectively; then verbal language appears to be more motivated in this case than pictorial semiosis, for in the latter there is nothing standing proxy for the invariant birdness.

38 Vaillant (1997, pp. 101ff.), who adopts my notion of resemanticisation, rejects the idea of upper and lower iconic thresholds (Sonesson, 1989a, pp. 317ff.), but he interprets them wrongly to imply a level “en-deçà duquel l’unité de plan de l’expression ne veut plus rien dire”, etc., which would make resemanticization identical to double articulation of sorts. All that is meant is that, beyond these levels, the projection of meaning back from the whole to the part is no longer a one-to-one mapping.

39 This argument is given more fully in Sonesson 1989a, Chapter III.4.

40 As they note, there is also a parallel to Gestalt psychology, but that is recognised already in my description, since I distinguish different configurational levels of the picture, at which it can be interpreted as being complete, for instance, in “Le Viol” as a face or as a trunk.

41 Of course, one might prefer to take the hermeneutic circle in a more general, abstract sense, as all kinds of determination of the parts from the whole, in which case resemanticisation is a special case of the hermeneutic circle.

42 Husserl uses the very phrase “seeing in” all through his extensive research manuscripts (e.g. Husserl, 1980, pp. 24f., 28, 30f., 32, 34f., 167, etc.). Unfortunately, each time he becomes more precise, it appears that he is thinking about the relation between the picture object and the picture subject.

43 For reasons discussed in Sonesson 1989a, Chapter III.3.6, I would not give such importance to the impression of three-dimensionality as Husserl does, but I will not enter this discussion here.

44 That third part of the iconicity question elected for consideration by Husserl is thus not the same as that chosen by Peirce (Cf. Sonesson, 1989a, Chapter III.1.1).

45 Many more complications envisaged by Husserl are discussed in Sonesson, 1989a, Chapter III.3.5-6.
46 Husserl himself claims there is a sign relation even between the picture thing and the picture object, but he does so for erroneous reasons: he thinks the sign function (here clearly identified with conventionality) to be required for us to know which side of the picture is up and which is down. However, as a simple experiment using the comic strip “The Upsidedowns” shows, this information is part of the very picture object. See Sonesson, 1989a, Chapter III.3.6.

47 As I have often pointed out above (and in Sonesson, 1992a, 1994a), one of the many ways in which predominantly iconic signs like pictures and gestures are necessarily conventional derives from the fact that they are themselves objects of different categories from most of the objects which they represent. For instance, since the expressive resources of manual signs are essentially the hands and their movements, the (limited) vertical extension of the female body can only be described as far as one of its properties is concerned, its highest point; and the curvaceousness of the female body cannot be rendered in its totality, but only transposed in time, as an undulating movement. Rock carvings, as all other pictures executed on a surface, lack the third dimension of the real world: actually, because of being carved in the rock, the petroglyphs, unlike most pictures, have a prominent third dimension, but this cannot be used for rendering the third dimension of the perceptual world.

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