

Prolegomena to a General Theory of Iconicity. Considerations on Language, Gesture, and Pictures

Göran Sonesson (Department of Semiotics, Lund University, Sweden)

Too often the word “iconicity” is used simply as a scientifically sounding term for similarity. In order to develop a real theory of iconicity, it is not enough, but perhaps a good start, to return to Peirce. In this paper, I use the reconstruction of the notion of iconicity inspired by my work in pictorial semiotics to throw some light on iconicity in language and in gesture. I suggest that there are several possible iconic relationships within the sign, and that these relations may involve properties, proper parts, or perspectives. In particular, I criticize the idea of iconicity being a question of degrees. The article looks at parallels between Lessing’s classic distinction between the resources of language and pictures and contemporary studies of “dual coding” in thinking. It also considers the segmentation of movement in different languages and gesture systems, in particular in relation to Satellite-framed and Verb-framed languages.

1. Introduction¹

There is not much point using the scholarly term “iconicity” simply as a synonym for similarity. Nor is it of much use employing oneself to find out “what Peirce really thought” about iconicity, though it cannot hurt starting from there. Students of language and gesture have often been guilty of the first sin. Philosophers, when they take an interest in iconicity, tend to be austere Peirceans waiting for their ultimate illumination from the *Collected Papers*. Instead, I suggest we start from wherever we can – from Peirce, from Saussure, from McNeill, or wherever –, and then we go on according to the Peircean principle that, within the scientific enterprise, made up of a community or scholars, you can always reach a further interpretant, but never the final one.

2. Iconicity as a phenomenon, and semiosis

In semiotical parlance, which is derived from Peirce, an icon is a sign in which the “thing” serving as expression is, in one or other respect, similar to, or shares

¹ The extension of my theory of iconicity to aspects of language and gesture was particularly stimulated by my participation in the SGB project at the Faculty of Humanities at Lund University (“Language, gesture, and pictures, from the point of view of semiotic development”), as well as in the still ongoing European Union project SEDSU (“Stages in the evolution and development of sign use”). I wish to thank Jordan Zlatev, member of these projects, as well as the editors of this review for their useful comments.

properties with, another “thing”, which serves as its content. We can dispense with Peirce’s peculiar terminology for the moment. However, if we are to believe in 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.

In spite of it being plagued by the equivocation inherent in the very term of iconicity, the study of visual semiosis seems to be apt to throw some light on the general issues of iconicity. Let us start with what icons are *not*. It might be fairly obvious that icons in this sense have nothing to do with the most common religious and art historical sense, referring to a pictorial representation of persons or events derived from the sacred history of Christianity. Indeed, icons in the religious sense are very bad instances of icons in the semiotic sense, for they are, as 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 should also be evident that “cultural icons”, in the sense of objects being characteristic of, or central to, some society or subculture, do not have to be iconic in the semiotic sense, and most icons in the semiotic sense are not cultural icons. There is certainly much more tendency to confuse iconic signs with icons in the sense given to this term in the jargon of computer programming, or in cognitive psychology (e.g. Kolars 1977), where it is used to refer to all things visible, or everything the elements of which are graphically disposed. Contrary to the icons of computer programs and those of cognitive psychology, iconic signs may occur in any sense modality, e.g. in audition, notably in verbal language (not only onomatopoeic words, but also in the form of such regularities and symmetries which Jakobson 1965a,b terms “the poetry of grammar”) and music (cf. Osmond-Smith 1972), and not all visual signs are iconic in the semiotic sense; indeed many icons found in computer programs are actually aniconic visual signs. As for the “iconic codes”, parallel to the “verbal codes”, of cognitive psychology, they do not even have to be made up of signs.

Even though Peirce is certainly not clear about this notion, I will here propose a definition of the concept of sign. Taking a clue from Piaget, I will claim that expression and content must be differentiated from the point of view of the subject (irrespective of the corresponding object being objectively separated or not). Following Husserl, I will say that the expression is something that is directly perceived but not in focus, whereas the content is indirectly perceived while at the same time being the focus of the relation (cf. Husserl 1939). This constitutes a double asymmetry between expression and content (cf. Sonesson 2001a, b; 2006).

Certain passages in Peirce’s work may be understood in this sense. Pure icons, he states (CP 1.157), only appear in thinking, if ever. Indeed, it is only for a floating 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 1989, III.1). A pure icon is thus not a sign, in the sense defined above. Peirce specifically refers to the case in which the sign loses its sign character, when it is not experienced as a sign but is confused with reality itself (which could actually happen when looking at a picture through a key-hole with a single eye), when, as Piaget would have said, there is no differentiation between expression and content, nor any asymmetry involving focus and directness between them.

Indeed, it would seem that, 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” (CP 4.447). Thus, it seems to be very close to the “phaneron”, the unit of Peircean phenomenology (itself close to the Husserlean “phenomenon” or, in one possible interpretation, the “noema”), which is anything appearing to the mind, irrespective of its reality status. In this sense, the Peircean icon is somewhat similar to that of cognitive psychology, for it involves “sensible objects” (CP 4.447), not signs in any precise sense: however, it still comprises all sense modalities.

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. In most cases, when reference is made to icons in semiotics, what is actually meant is what Peirce termed *hypoicons*, that is, signs which involve iconicity but also, to a great extent, indexical and/or “symbolic” (that is, conventional, or perhaps more generally, rule-like) properties. There are supposed to be three kinds of hypoicons: 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 on the sheet of paper to the extent that the population augments. The Peircean concept is however much broader, as is the notion of metaphor, which would, for instance, also include the thermometer. Moreover, no matter how we choose to understand the simplicity of “simple qualities”, and how ever much that goes against Peirce’s self-understanding, the Peircean category of images cannot include ordinary pictures (which would in fact be metaphors of metaphors, in the Peircean sense of this term): if anything, a Peircean image might be a colour sample used when picking out the paint to employ in repainting the kitchen wall.

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 schemas, which are based on conventional signs, are those most often discussed in his work.

There is still 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 understood as 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” (CP 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, not only of a photograph (which Peirce often pronounces to be an index), but also in the case of a painting or: 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 painting Gertrude Stein or Kahnweiler. And it is as true of a synthetic computer picture showing a lamp as of a photograph with the same subject.

Peirce’s claim that the properties of expression and content pertain to them independently seems more relevant to identity signs (like Franklin representing Rumford) than to pictures. In another sense, on the other hand, pictures are far more iconic than, for instance, objects representing themselves: they can do with far less indexicality and convention. From this point of view, and contrary to what has been suggested by Morris (1946, 98ff.), and often is repeated in theatre semiotics, an object is not its own best icon, if icon is understood, as in the above-mentioned context, to mean iconic sign.

When used to stand for themselves, objects are clearly iconic: they are signs consisting of an expression, which 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, neither that something is a sign, nor 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 other of its properties. A car, which is not a sign on the street, becomes one at a car exhibition, as does Man Ray’s iron in the museum. We have to know the show-case 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 1989, II.2.2. and 1994a).

Convention is thus needed, not only to establish the sign character, but also the very iconicity of these icons. Since iconicity can be perceived only once

the sign function, and a particular variety of it, is known to obtain, the resulting icons may be termed secondary (Sonesson 1994b). This also applies to “doodles”, a kind of limiting-case of a picture exemplified by Carraci’s key, in which a triangle above a horizontal line is discovered to represent a mason behind a stone wall, once we are told so (cf. Fig. 1); as well as the manual signs of the North American Indians, which, according to Mallery (1881, 94f.), seem reasonable when we are informed about their meaning. As for iconicity in language and in music, it most of the time seems to be secondary. Not only is the similarity of *cock-a-doodle-doo* and the sound made by a cock only perceptible to the person familiar with the meaning of the term; this also applies to the grammatical category of the singular being shorter than the plural, the adjective being placed close to the noun of which it is a property, the polite forms signifying more social distance being longer, etc. (cf. Itkonen 2004). However, the difference between “He stood up and sang” and “He sang and stood up” must no doubt be considered a case of primary iconicity. Obviously, program music is only iconic for those familiar with the program.²

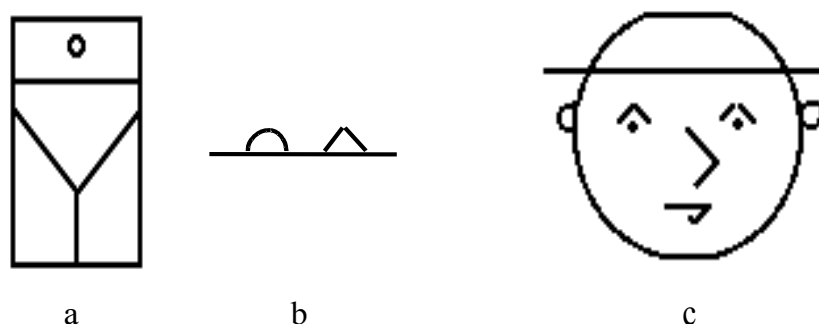


Fig. 1. Two doodles and a picture which can be read as a doodle: a) Olive dropping into Martini glass or close-up of girl in scanty bathing suit (inspired from Arnheim as adapted in Sonesson 1992); b) Carraci’s key (Mason behind wall); c) face or jar (inspired by Hermerén 1983, 101)

In these cases, knowledge about the sign function already obtaining between the two “things” involved is clearly a prerequisite to the discovery of their iconicity. However, the opposite case, in which it is the perception of iconicity which functions as one of the reasons for postulating a sign relation, would seem to be more germane to Peirce’s conception of the icon. Such a primary icon is actually realised by the picture sign. Indeed, we know from child psychology and anthropology that no particular training is needed for a human being to perceive a sur-

² There may, however, be another exception in language: shifters, i.e. words signifying by means of their own enunciation, as is the case with “I”, “here”, and “now”. The iconicity involved must be very abstract, as we shall see below.

face as a picture. The possibility of this feat remains a mystery: the properties possessed in common by the picture and that which it represents are extremely abstract. This is why I have suggested that picture perception is only possible because there is a taken-for-granted hierarchy of things in the world of everyday life which makes certain objects and materials more probable sign-vehicles than others (Sonesson 1989; 1994a, b).

3. On icons and iconicity

Conceived in strictly Peircean terms, iconicity is one of the three relationships in which a *representamen* (expression) may stand to its *object* (content or referent). It is one of three kinds of relationships that may be taken as a “ground” for some two things forming a sign. More precisely, iconicity is the first kind of these relationships, termed Firstness, “the idea of that which is such as it is regardless of anything else” (CP 5.66), as it applies to the relation in question. Considerations of iconicity must start out from the iconic “ground”, or what has been described as the “potential iconic sign”. Peirce himself identifies “ground” with “abstraction” exemplifying it with the blackness of two black things (CP 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 some properties of the thing serving as expression and some properties of the thing serving as content. The ground is a part of the sign having the function to pick out the relevant elements of expression and content. It thus corresponds to what Saussure calls “form”, as opposed to “substance”, and which by his followers, in particular in phonology, has been termed pertinence or relevance.³

It would appear that two items share an iconic ground, being thus apt to enter, in the capacity of being its expression and content, into a semiotic function forming an iconic sign, to the extent that there are some or other set of properties which these items possess independently of each other, which are identical or similar when considered from a particular point of view, or which may be perceived or, more broadly, experienced as being identical or similar, where similarity is taken to be an identity perceived on the background of fundamental difference (cf. Sonesson 1989, III, 1-3). Contrary to the indexical ground, which is a relation, the iconic ground thus 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 also of each other. Indexicality as such involves two “things” (Secondness), and may therefore be conceived independently of the sign function. Since iconicity is Firstness, how-

³ In fact, at least one passage from Peirce (CP 1.551-3; see Peirce 1998, I, 1-10) seems to suggest that Peirce would reserve the term “ground” for the portion of the expression singled out and use the term “correlate” for the corresponding part of the content. This would however seem to do away with the relational character of the notion involved.

ever, it only concerns one “thing”. Indeed, as Peirce (CP 3.1.; 3.362; 4.447) never tires of repeating, a pure icon cannot even exist: it is a disembodied quality, which we may experience for a floating instant when contemplating a painting out of awareness. Perhaps, then, 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 hypoicons, as Peirce sometimes said). 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. This is outlined in Fig. 2 below:

	<i>Firstness</i> Impression	<i>Secondness</i> Relation	<i>Thirdness</i> Habituation/Rule
<i>Firstness</i> Principle	Iconicity	—	—
<i>Secondness</i> Ground	Iconic ground	Indexicality = indexical ground	Symbolicity = symbolic ground
<i>Thirdness</i> Sign	Iconic sign (icon)	Indexical sign (index)	symbolic sign (symbol)

Fig. 2. The relationship between principles, grounds, and signs, from the point of view of Peirce (as revised in the text).

Since the iconic ground is established on the basis of properties the two items possess only because of being what they are, the standard of comparison must be something like similarity or identity. Indeed, Peirce also says that an icon (more exactly, a hypoicon) is “a sign which stands for something merely because it resembles it” (CP 3.362) or “partak[es] in the characters of the object” (CP 4.531). This point of view was pursued by Charles Morris (1946, 98ff.), who considered that a sign was iconic to the extent that it had the same properties as its referent. According to this conception, iconicity becomes a question of degrees: a film is more iconic of a person than a painted portrait, but less so than the person itself. Abraham Moles (1981) has elaborated on this proposal, constructing a scale, which comprises 13 degrees of iconicity going from the object itself to the zero degree, epitomised by a verbal description. Such a conception of iconicity is problematic, not only because distinctions of different nature appear

to be involved, but also because it takes for granted that identity is the highest degree of iconicity, and that the illusion of perceptual resemblance typically produced, in different ways, by the scale model and the picture sign, are as close as we can come to iconicity short of identity. Although Peirce does mention paintings and photographs as instances of iconic signs, he much more often refers to abstract properties.

Curiously, Umberto Eco's (1968; 1976) critique of iconicity is almost exclusively concerned with pictures. In pictorial semiotics, both as conceived by the Greimas school, and in the version of Groupe μ , iconicity is supposed to account for one of the two semiotic functions of the picture sign, the one giving the illusion of seeing something depicted in the sign, opposed to the plastic function which is concerned with the abstract properties of the pictorial surface. However, if a circle, as in one of Groupe μ 's (1979) examples, is taken to stand for the sun on the iconic level, and on the plastic level for roundness, which, in turn, as we know from psychological tests, may signify softness, etc., then what is called here the plastic language is at least as iconic, in Peirce's sense, as the iconic layer: for roundness is certainly a property possessed both by the circle representing the sun in this hypothetical drawing, and by the circle prototype; and, beyond that, there must be some abstract, synaesthetically experienced property which is common to the visual mode of roundness and the tactile mode of softness (Sonesson 1994b).

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, 148 and 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 (cf. Sonesson 1989, 204ff.), have to do with mathematical formulae, and even the fact of being American is not really perceptual, even though some of its manifestations may be. For the same reason, McNeill (2005, 38), in his gesture studies, is wrong in reducing iconic gestures to those that "present images of concrete entities and/or actions".

The whole issue of iconicity must be divorced from the very specific case of pictoriality. Not only is pictoriality a kind of iconicity that engenders a perceptual illusion, but it also supposes a mapping from each of the parts of the expression to a single part of the content. Just like the word "face", the picture of the face only gains a meaning as a whole; but once the whole is interpreted as a face, separate components of the drawing become carriers of the meanings corresponding to the different parts of a face. Even considered from the point of view of the whole, the /f/ never comes to stand for the forehead, the /a/ for the eyes, etc. But even in the visual mode, there are more abstract kinds of iconicity. Consider Blissymbolics (invented by Charles K. Bliss, 1897-1985): the signs standing for man and woman may be seen as very schematic, simplified pictures.

But the signs signifying “up” and “down” are clearly iconic in a more abstract sense. The sign being “up” in relation to the line of writing comes to signify “aboveness” in general (Fig. 3). This is the kind of iconicity we would expect to find in language or in music.

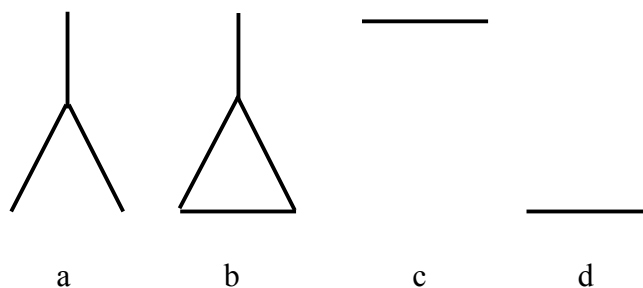


Fig. 3. Blissymbolics with the meaning: a) man; b) woman; c) up; d) down

4. The case against pictoriality

During the renewal of semiotic theory in the sixties and seventies, most semioticians were eager to abolish the notion of iconicity, again taking pictures as their favoured example, while claiming that pictures were, in some curious way, as conventional as linguistic signs. Bierman, Goodman, Lindekens, and Eco, have all argued against using similarity as a criterion in the definition of iconic signs and/or pictures; and even Burks and Greenlee have introduced some qualifications on Peirce’s view, which serve to emphasise conventionality. Some of these thinkers, such as Bierman and Goodman, were mainly inspired by logical considerations, together with a set of proto-ethnological anecdotes, according to which so-called primitive tribes were incapable of interpreting pictures; Eco and Lindekens, in addition, wanted to show that pictures, conforming to the ideal of the perfect sign, as conceived by Saussure, were as arbitrary or conventional as the signs studied by the most advanced of the semiotic sciences, general linguistics.

The most interesting arguments against iconicity were adduced by Arthur Bierman (1963), and were later repeated in another form, by, notably, Nelson Goodman (1970). According to one of these arguments, which may be called the argument of regression (Sebeok 1976, 128), 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, everything else. Thus, if iconicity is at the origin of signs, everything in the world will be signs. This may not be so far from what Peirce thought: at least Franklin and Rumford are, as we know, potential signs of each other. It is certainly a conception of the world common in the Renaissance, and among

Romantics and Symbolists. In the case of more common iconic signs, however, like pictures and models, a conventional sign function must either be superimposed on the iconic ground, or the iconic ground must itself be characterised by further properties. Even in the former case, however, iconicity is still needed, not to define the sign, but to characterise iconic signs (cf. Sonesson 1989, 220ff.). According to another argument, which has been termed the symmetry argument (Sebeok 1976, 128), iconicity cannot motivate a sign, for while similarity is symmetrical and reflexive, the sign is not. Pigments on paper could stand for a man, but not the reverse; nor will they, in their picture function, stand for themselves. But to identify similarity with the equivalence relation of logic is to suppose man to live in the world of the natural sciences, when in fact he inhabits a particular sociocultural Lifeworld (a *Lebenswelt*, according to Husserl). Similarity, as experienced in this Lifeworld, is actually asymmetric and irreflexive. Indeed, this fact is not only intuitively obvious, but has been experimentally demonstrated (notably by Rosch 1975 and Tversky 1977; cf. also Sonesson 1989, 220ff., 327ff.). 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.

Although the sign relation is thus not needed in order to render similarity asymmetric and irreflexive, it is required in order to distinguish similarities that are signs from those that are not. At this stage, then, it would seem that the picture could be defined by the sign relation, together with similarity; but Eco rightly observes that, on closer inspection, there is really no similarity between the painted nose, and the nose of a real person. However, this observation has no bearing whatsoever on iconic signs which are not picture signs: indeed, the American-ness of Franklin and Rumford is identical, as far as it goes, as is the roundness of circles and other round things, and the pattern and colour of a tailor's swatch and the cloth it exemplifies. Also the aboveness of the sign of Blissymbolics or the openness of the vowel /a/ paradigmatically projected onto the syntagm, such as Jakobson (1965a, b) conceived the poetic function, is entirely identical as such.

The alternative analysis in terms of convention 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. Goodman's and Greenlee's contention that the referent of each picture is appointed individually, and Eco's proposal that the relations of the picture are so correlated with those of the referent, are 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 part: a car at a car exhibition, the

stone axe in the museum show-case or the tin cane in the shop window, the 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.

5. The multiple iconicities of words and pictures

When talking about the arbitrariness of the (linguistic) sign, Saussure in fact was concerned (as noted most clearly by Malmberg 1977, 131ff.) with two different relationships: within the sign, between expression and content; and between the sign as a whole and the world of our experience, often called the referent. The first relationship is arbitrary, because there are no properties possessed in common by the content and the expression; the second relationship is arbitrary, because (according to Saussure) the way in which signs segment the world are not prefigured in the division of the world itself. Thus, there is not more justification for calling a "bull" /bul/ than for using the sound sequences /bøf/. And on the other hand, reality does not give us any clues whether a certain phenomenon should be characterised with one sign, such as "wood", or divided between two different signs, such as "bois" and "forêt". If arbitrariness can be found between different elements of the sign, its opposite, motivation, which is the term Saussure used for iconicity, must also be able to manifest itself in multiple relationships (cf. Fig. 4 and Sonesson 1989, 203ff).⁴ More cautiously, we should perhaps talk about three potentially iconic relationships: between expression and content, between expression and referent, and between content and referent.

Moreover, the two cases mentioned pertain to different aspects of similarity or its opposite: in the first case, we are concerned with the different subdivisions of expression and content; in the second case, it is the outer borders of the sign and the corresponding phenomenon in the world which are involved. If the first is on the level of what was known in structuralist semiotics, following Hjelmslev, as "figurae", the latter is firmly on the sign level. In addition, the former concerns the properties of expression and content, respectively, while the latter has to do with the way signs and the corresponding chunks of reality are divided up. Even though the radical version of what was derogatively known, in early Chomskyan times, as the Humboldt-Sapir-Whorf-hypothesis (with the injustice done to the scholars mentioned decreasing somewhat from left to right)

⁴ It would be natural to understand motivation to include both iconicity and indexicality, but this is not how the term is used by Saussure. In the *Cours*, Saussure is really only interested in "relative motivation", which is a relationship between signs, not between expression and content, such as for instance "pommier" ("apple tree") being justified by "pomme" ("apple"). In other passages, however, which I quoted in Sonesson 1989, he talks about mime being motivated but having "a rudiment of arbitrariness".

seems by now to have been falsified by empirical research, there is still room for some attenuated version of the hypothesis. It may be more necessary to divide “red” from “black” and “white” than to do so with respect to any other colour (cf. Berlin and Kay 1969), but there is still nothing that tells us whether words are of one or two kinds. On the other hand, the thesis of linguistic arbitrariness pertaining to the relation between the properties of expression and content is not likely ever to be declared basically wrong.

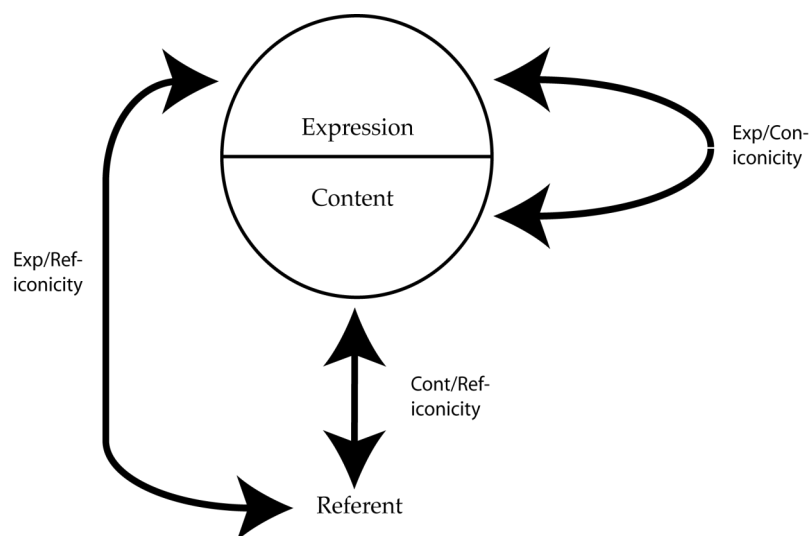


Fig. 4. The linguistic sign. Arrows stand for (potential) iconic relationships

In the picture, the case is even more complex. It has been argued by Husserl (1980), and, no doubt independently, by Wollheim (1980), that we “see in” the depicted object directly into the physical object which is the picture expression, making more or less each element of the expression correspond to the content. But Husserl goes on to note that this is not the whole story, because although we can see human figures “into” the spots on the surface of the photograph, what we see still has “photographic colours”, and not the colour of real human skin. This may seem a dated observation, but in fact all pictures reduce the scope of colours rendered in relation to reality. In Husserl’s terminology, the picture thing is that which may hang askew on the wall, the picture object is the child in black and white which is seen into it, and the picture subject is the object of the world which is taken to be depicted, the real child with rosy cheeks. But here Husserl’s cautious phenomenology does not seem to go far enough. To separate the picture object and the picture subject Husserl also offers the distinction between the palace that is seen into the picture and the real palace which is in Berlin. However, the fact that there may no longer be any palace in Berlin does not deter us from noting the difference between a palace in black and white and a real palace. Thus, the referent must be separated from the picture subject,

which remains at the level of types, since it is different from the picture object simply by adding our knowledge of the nature of things in the world.

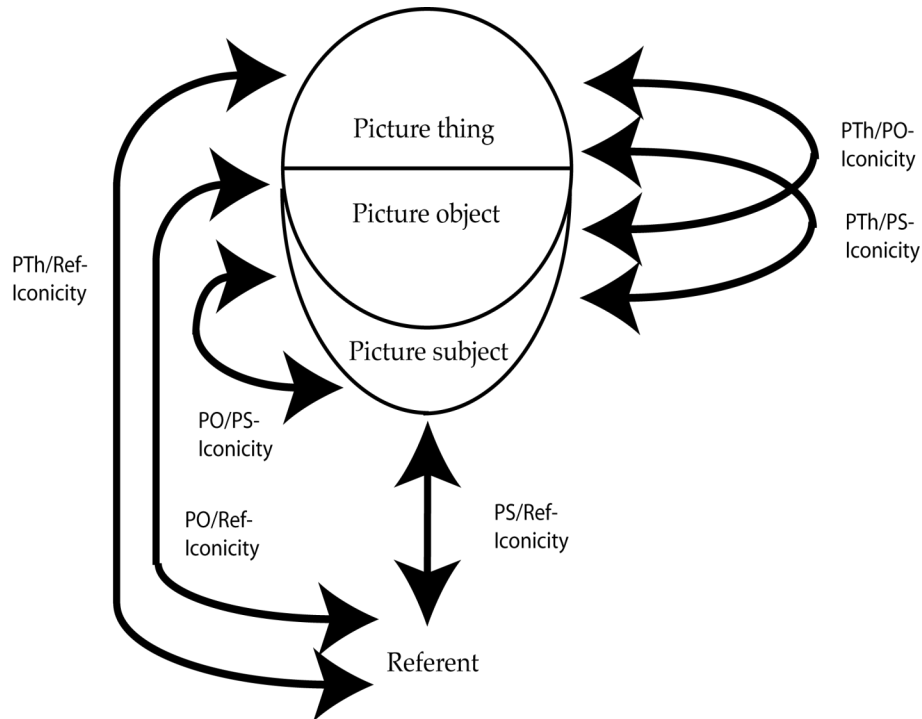


Fig. 5. The picture sign. The arrows are (potential) iconic relationships

Iconicity thus potentially involves *six* iconic relationships: between the picture thing and the picture object, between the picture object and the picture subject, between the picture thing and the picture subject; and between those three and the referent (cf. Fig. 5.). Interestingly, it is for the relation between the picture object and the picture subject that Husserl requires similarity (1980, 138f. and *passim*), i.e. for two instances that are roughly equivalent to Peirce’s “immediate” and “dynamical object”. Except once, when he says that a relief is comparatively more similar to its picture object (1980, 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 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, 56f.). However, there does not seem to be any reason not to apply extensivity and intensivity to all iconic relationships. In addition, extensivity can obtain in relation not only to the division of the object into properties (e.g. “red”), but also into proper parts (e.g. “cheeks”), and, at least in the case of pictures, perspectives

(e.g. seen from upper left). Such a definition derives from mereology, the study of the ways to divide up the things of the world

There does not seem to be any comparable model for the gesture sign, but in many ways gesture appears to occupy a position intermediate to language and pictures. Since it is impossible to consider all the different kinds of iconic relationships mentioned here in the following, we will be essentially concerned with the relation between expression and content (amalgamating picture object and picture subject), on the one hand, and referent, on the other. We will however take into account the different mereological divisions.

6. The resources of verbal and visual semiosis

When comparing visual and verbal semiosis, it is still useful to start out from *Laokoon*, a book first published in 1766 by the eighteenth-century German writer Gotthold Ephraim Lessing. Explicitly, of course, Lessing's observations involve "literature" and "painting" (i.e. pictures and, to some extent, other visual modes of mediation, such as sculpture), and he is concerned to show that in order to fulfil the destiny of art, they must each use iconic signs, which is to say that paintings should use signs the expressions of which are shapes and colours in space, whereas literature must employ sounds in time. Contrary to contemporary semioticians, Lessing does not bother to separate questions of fact from normative issues. He stipulates, e.g., that art must be iconic (cf. Todorov 1977, 169ff.). But if Lessing's description of visual and verbal semiosis is correct, the former can only use iconic signs to signify objects in space and the latter only for signifying objects in time.

To evaluate these claims, we need a more adequate terminology than the one used by Lessing. Wellbery (1984) has reformulated Lessing's analysis in terms taken over from Hjelmslev, unfortunately abusing the latter's terminology (cf. Sonesson 1988). Thus, while the terms content and expression are correctly employed, the use to which Wellbery puts terms such as "material", "substance" and "form" is quite foreign to Hjelmslev's intent, because the difference observed by Lessing has nothing to do with relevance. Instead we shall talk about "resources", "units", and "constraints". Resources are what are at hand, the possibilities that are opened up. Units are the principles of individuation, corresponding to actions in time, and to bodies in space. The constraints, finally, are rules, principles, and regularities of the respective semiotic resources.

The content resources seem to be equivalent to what Benveniste (1969) has called the domain of validity of a sign system, and the expression resources are his mode of operation. Verbal language apparently can talk about everything (i.e. it is a "pass-key language", as Hjelmslev said), while pictures must make do with everything visible, or everything having visible homologues. The expression resources are Lessing's articulate tones, now called phonemes, etc., again

opposed to anything visible (limited to static and bi-dimensional visuality in prototypical pictures).

Since time is not well rendered in pictures, according to Lessing, visual art should ideally pick up one single moment, and, in a parallel fashion, literature, which is not very conversant with space, should be content to describe a unique attribute. Then, as Wellbury reads Lessing, an extension to the whole will take place in the imagination, spatially in language and temporally in pictures, that is, in the domain that the system cannot adequately render. The property that most easily allows such an extension to the whole of the (spatial) object is called the “sensate quality”; and the phase which best permits the anticipation of the complete temporal succession is called the “pregnant moment”. In fact, however, the extension in time is the one most important to Lessing, as shown by his negative view of the possibilities of pictures.

If we are to believe in Lessing, visual art is not only able to describe the whole of space, but it cannot avoid doing so: pictures have to show “fully determinate entities”. Taken literally, this must mean that pictures are unable to pick up “sensate qualities”. Even if we limit this claim, as is no doubt intended, to sensate qualities in the visual modality (which it itself problematic, not only taking into account recent findings involving mirror neurons, but also Gibsonian affordances), this is certainly not true: as I have shown elsewhere (in Sonesson 1989; 1994b), notably against Goodman (1968), the “density” of pictures is only relative, and all kinds of abstraction are found in them. Simply put, “density” to Goodman means that, no matter how fine the analysis of something (e.g. a picture) into meaningful units, it will always be possible to posit another unit between each two of those already given, and so on indefinitely. This is certainly not true of the expression plane, in the case of more or less schematic pictures; nor does it apply to the content plane of some pictures the expression plane of which is fully “dense”. Indeed, for all practical purposes, many pictures are not about a particular person in one or other disguise, but about more or less abstract roles in relatively generic situations. But, contrary to what happens in language, there is no fixed limit between what is relevant and what is not. Properties of some coloured patches which are irrelevant to determine the content “little girl”, become relevant in the determination of the further meanings “girl in 17th century clothing”, “Spanish Infanta”, etc.

Lessing’s and Goodman’s views are reminiscent of the contemporary distinction within cognitive psychology between “iconic” and “verbal” codes. These “codes”, it will be remembered, are not really signs, but rather units for the organization of memory and thinking. But “iconic codes” are said to be “specific”, “concrete” and “contextual” (Rubin 1995, 55ff.). Both in the case of “imagery”, to use the classical term, and pictures, it is probably sufficient to say that they take bigger chunks out of reality than does language, and that the parts continue to be intricately enmeshed into each other. This should be enough to explain that people can faster decide the size of objects from drawings than from words, and

that irregular objects may be rotated in the mind to different degrees, where to accomplish the rotation will take longer time to the extent that it would do so in real perception (as in Shepard's famous experiments, described, for instance, by Rubin 1995: 42f) . In this sense, pictures and imagery seems to be more iconic than language as far as segmentation is concerned. Indeed, Paivo (1986), the principal advocate of the "dual-coding" approach, sounds very much like Lessing when he claims that imagery is better for spatial processing (what is to the right, strait on, etc.) and language for sequential processing.

Deriving his inspiration from Peirce, Bayer (1975; 1984) formulates Lessing's problem differently: it concerns the relation between the schema of distribution for the expressions and the schema of extensions for the referents. Bodies are carriers of actions, which is to say that without bodies serving as background actions cannot take place. Actions are continuous, but can only be rendered iconically as discrete states. The distribution schema of pictures does not allow for succession, only for actions rendered indirectly by means of bodies and collective actions where several persons act together.⁵ It will be noted that Bayer supposes all continuous objects to be temporal. But, clearly, space is also continuous from the point of view of our perception, so there should also be spatial continua. Pictures actually render certain spatial continua better than language – in fact, this is the other side of what was called "fully determinate objects" above. It is indeed the "spatiality", as opposed to the "sequentiality", of Paivo.

However, since spatial objects are (potential) carriers of actions, all spatial details serve to suggest potential stories, in particular if they are sufficiently familiar to us to fit in with many action schemas. Thus, it seems to me that, everything else being equal, a picture containing more spatial details will evoke more virtual courses of action, i.e. it will suggest a greater number of possible continuations of that which is going on in the scene rendered by the picture. In terms of narratology, pictures actually contain a larger amount of "disnarrated elements", that is, alternative courses of actions starting out from the given moment (cf. Prince 1996) – and in this respect (though of course not in many others), they actually are better than verbal language at suggesting a story line (cf. Sonesson 1997). Thus, pictures and imagery also have a stake with sequentiality.

The difficulty posed by narrativity in pictures, as Bayer reads Lessing, is that the picture is unable to abstract: Homer may show the gods drinking and discussing at the same time, but that is too much information to put into a single picture. Actually, it is not the amount of information that is crucial (the picture

⁵ It is strange that Lessing as well as Bayer claim that, contrary to individual actions, collective actions are rendered equally well in pictures as in language. It seems to me that collective actions must be a conjunction of individual ones, which simply are distributed in space, and they therefore cannot be rendered if the latter cannot.

may easily carry more) but the possibility to organise it: verbal language has fixed means for conveying relative importance, newness, focus, etc. The picture, however, in the prototypical sense of the term, may possess some corresponding mechanisms which are not sufficiently known, but hardly any systematic and content-neutral means for organising such information: that is, in Halliday's (1967-1968) terms, there are no fixed devices for separating that which is given from that which is new, and that which is the theme (what we talk about) from the rheme (what is said about it). Indeed, although "background", as applied to language, is originally a visual metaphor, just as is "perspective", that which the picture places in front is not always the most weighty element, with importance decreasing according to increasing apparent distance; nor is necessarily the central figure "semantically" the most prominent one.⁶ One of the principal difficulties is that, in the ordinary picture, the space of representation is, at the same time, a representation of the space of ordinary human perception, which impedes an organisation by other systems. In the history of art, these difficulties were at least partially overcome by Cubism, Matisse, as well as some forms of collages and synthetic pictures, and it has been even more radically modified by visual systems of information, logotypes, Blissymbolics, traffic signs, etc. (cf. Sonesson 1988; 2004). Yet it remains true that pictorial representations lack systematic means for rendering what Halliday has termed "information structure".

In the present context, it will be sufficient to spell out two conclusions: although pictures do not render the world in the form of "fully determinate entities", they have to divide up the world in bigger chunks in order to convey information about it than is the case with verbal language, and they lack any general means for imposing an internal structuring on these chunks, apart from the one given in perception. In terms of modern cognitive linguistics, the same two points might be driven home by saying that pictures cannot pick one image schema without also having to choose several others, and they are unable to organise these schemas in order of relative importance. Here I do not intend to use the term "image schema" in the sense of such linguists as Lakoff, Langacker, and Johnson, because I have nowhere seen any clear definition of what it means. The words certainly imply that linguistic meaning is different from what logicians call propositions, but is in some way more similar to pictures.⁷ The visual representations used, in particular, by Langacker and Talmy, suggest that image schemas are some abstract kinds of pictures corresponding to a single or a very limited number of objects or events. We could still differentiate language from

⁶ Kress and van Leeuwen (1996) make a lot of unsubstantiated claims of this kind (also as applied to the left and right side). Curiously, although they declare Halliday to be one of their principal sources of inspiration, they do not even differentiate between given and new, on the one hand, and theme and rheme, on the other.

⁷ To criticise the notion of image scheme is beyond the scope of this essay. See Zlatev 2005, as well as the editor's contribution to the same anthology.

pictures by claiming that, in the latter, no image schema can stand on its own. Considered in relation to the referent, this seems to make pictures “more iconic”.

A further observation pertaining to the ability of language to render temporal objects can also be made. Lessing’s claim, upheld by Bayer and Wellbery, and, no doubt independently, repeated by Paivo, that language is somehow more capable or rendering temporal continuity than pictures, depends on the idea that linguistic expression, unlike pictures, is itself an action (where of course oral expression is taken as the prototypical case). However, except for a small set of particular cases such as onomatopoeic words, performatives, pronouns and the like taking their meaning from the process of enunciation, quotations, and some cases of preferred word order, the action accomplished by the linguistic expression very rarely is the same as the one rendered by its content. Being actions, linguistic acts may be said to manifest the abstract quality of “actionness”; but it does not follow that this property is in any way connected by means of a sign function to the action described. We are faced with one of these “general categories” mentioned by Bierman that can only function in a *secondary* iconic function. In the semiotic sense, linguistic actions are normally not iconic of the actions they talk about. At some very high and abstract level, the words, sentences or at least the paragraphs used by the radio journalist describing a horse race at the same time as it occurs also uses linguistic actions iconically for the actions accomplished by the horses (e.g., describing the horse as crossing the finishing line at the same time as this occurs). But this is of course a fairly marginal case, even though it may be more common now than at Lessing’s time. In any case, this is secondary iconicity, because it can only be so interpreted given our knowledge about the direct transmission of horse races and the like. As we noted above, however, language can do doubt make use of its own continuity to distinguish different meanings (such as “He stood up and sang” and “He sang and stood up”). This means that, as a general case, language is no better at rendering temporal continuity than pictures are. Thus, language does not only have to isolate the “sensate” quality, but must also, just like pictures, pick up the “pregnant” moment, i.e. the phase when something significant happens.

On the other hand, theatre, as Lessing himself recognised, and film, as Bayer added, are able to render temporality in an iconic way: they are “moving pictures”. What makes pictures, in the central sense of static displays, not very apt at rendering sequence is precisely their static nature. As soon as sequence is added on the expression side, sequential content can be more iconically reproduced than in language. This also goes for visual imagery. Paivo emphasizes that imagery is especially well suited to transformational thinking, e.g. the rapid movement from one situation to another. Somewhat paradoxically, one of Lessing’s arguments for language being especially apt to render sequence really seems to show the opposite. When describing objects, such as the shield of Achilles, Homer chooses to tell the stories illustrated on the shield. But such a procedure is not typical of language, but of oral tradition, and students of oral

tradition have pointed out that such feats of memory as represented by oral tradition are only possible thanks to visual imagery, precisely because of its higher contextualisation (cf. Rubin 2005).

Much more coarse-grained differences between “linguistic” and “visual structures (which most of the time are taken to be pictures) have been suggested by Kress and van Leeuwen (1996, 75ff.): thus, for instance, they claim that an affirmation such as *Mary gave him a book* must be expressed in pictures as “Mary book-gave him”. In their terminology, inspired in Halliday’s linguistic theory, processes with three participants, the third of which is a “beneficiary” (often equivalent to the “indirect object” of traditional grammar), are transformed into processes with only two participants, “actor” and “goal”.⁸ This seems to me to be a completely arbitrary claim. It is true that some languages have specific grammatical constructions that express the part of “participant”, but they also have such constructions for “actor” and “goal”. The picture has no specific resources for expressing any of these parts. But, just as in perceptual reality, all the parts of participation can be projected onto the picture.

Perhaps Kress and van Leeuwen want to suggest that the relation between actor and goal may be more directly “seen” in the picture than that to the beneficiary. Indeed, they follow the Gestalt psychologist Arnheim in supposing the presence of “vectors” (some kind of directional indications) in pictures. Even supposing such “vectors” to exist, and to be as abundantly present as suggested by Arnheim and Kress and van Leeuwen, there is really no reason to accept curious entities such as “book-give”. It could be argued, of course, that the act of giving is not as analytically distinct from the book in the picture (and then also in perceptual reality) than in language. However, other things than books may be given, and books may be the vehicle of other actions than giving. This would thus simply be a particular case of the fact that pictures present reality in bigger chunks which are more difficult to separate from each other (Lessing’s “wholly determinate entities”) than language. In fact, I don’t understand why Kress and van Leeuwen do not go on to suggest that the pictorial equivalent of *Mary gave him the book* is “book-gave-Mary-him”. This would have been a way of saying that the pictorial analysis of reality is accomplished in bigger, more closely intertwined chunks than language. If so, one may wonder whether this means that language or pictures are more iconic in relation to reality. The answer is probably that pictures are “more iconic” to the segmentation of the episodic here-and-now, where Mary’s action of giving the book to someone cannot be resolved into parts without a residue, while language is “more iconic” in relation to wider spans of memory, in which certain entities, such as Mary, the man, the act of giving, and

⁸ It is perhaps only a curiosity that exactly this kind of example is used by Peirce to claim that triadic relations cannot be reduced to dyadic relations – which would imply that neither pictures nor other semiotic resources could accomplish this feat.

the book are separated out by repetition and continuity all through their different histories.

7. Iconicity in gesture

It is very unfortunate that David McNeill (2005, 38ff.), who in recent decades has been the most influential figure in the study of gesture, uses the term “iconic” in such a misleading way: to him, iconic gestures “present images of concrete entities and/or actions”. He opposes them to “metaphoric gestures” which “present images of the abstract”, such as, for instance, “holding an ‘idea’ or ‘money’ or some other abstract ‘object’”. In an earlier terminology, initiated by David Efron and taken up by Ekman and von Friesen, these are pictographic (referring to “entities”), kinetographic (referring to “actions”), and ideographic gestures, respectively (Cf. Kendon 2004, 92ff.). In addition, McNeill’s “beats”, which are Efron’s batons, mark the time of the ideational process itself, being, in McNeill’s graphic words, “the equivalent to using a yellow highlighter on a written text”.

All these four types of gestures are of course iconic, but in different ways. Metaphors, as we have seen, form a sub-category of Peirce’s icons, those which are based on relations between relations. It is important to note the difference between pictographs and kinetographs: in the first case, the expression, which is a sequence of movements, is iconic for the content, which corresponds to the limits, or some other static property, of the object rendered; in the second case, however, both expression and content are temporal sequences, and may thus possibly be mapped onto each other iconically in every detail. In fact, there is of course every intermediate case, from the direct quotation of a non-gestural, or even gestural, movement, to some rather schematic correspondence, as the transposition of the movement of the legs to the fingers. Batons are iconic in a very abstract sense: they may be just about anything, which coincides in time and space. Both Efron and McNeill also mention deictic gestures, which, whatever else they are, are clearly indexical. Finally, Efron points to emblems, which are largely conventional.

In his recent book, McNeill (2005, 41ff.) finally realises (as I argued in Sonesson 1989) that terms such as these do not stand for entities but for dimensions: a given sign is more or less iconic, deictic, and so on. Dimension may not be the best term for what is involved, however: it tends to suggest that iconicity is a question of degree, which would bring us back to the Morris/Moles’ scale of iconicity. Taking a clue from Kendon, McNeill earlier on proposed something he called “Kendon’s continuum”, which goes from gestures which are used in conjunction with speech, while at the same time being global in their mode of functioning, to gestures which substitute for language, such as emblems (e.g. the V-sign, the nose thumb, etc.) and, beyond that, sign languages. In his latest work, McNeill (2005, 5ff.) proposes to dissolve this construct into four different

continua, relating gesticulation, pantomime, emblems, and sign language in different sequences: more or less speech related, more or less similar to verbal language, more or less conventionalised, and more or less analytical. Here nothing indicates that the continuum of convention is meant to be the inversion of an iconic continuum. But this seems to be Gullberg's (1998, 95ff.) idea: she inserts McNeill's four gesture categories, beats, deictics, metaphors and iconics between gesticulation and mime, and then goes on to relate iconics and mime as to their degree of iconicity (which she calls "mimesis"), going from hand gestures which take the viewpoint of the observer, over gestures taking the viewpoint of a story character, to the inclusion of other articulations than the hand, and notably the head. As Kendon (2004, 104ff.) observes, this is really more than an expansion of the Kendon-McNeill continuum: it is a "scale of iconicity". But, as such, it is also misleading. Gullberg accepts McNeill's notion of iconicity as being pictoriality. In fact, deictics are not at all iconic, and beats, however abstract they may be, certainly are. It is not a question of a scale: the difference between pictographs, kinetographs, ideographs, and beats involves diverse properties or parts of the world, not degrees (what is counted in Husserlean intensity, not extensivity). It is in relation to these diverse parts or properties that they are iconic.

The iconicity relationships that we are talking about is naturally that between content and referent. A sign model resembling that of language seems sufficient for gesture. After all, the difference between picture object and picture subject is only justified by the fact that pictorial content is close to being perceived ("perceptual imagined", in Husserl's paradoxical phrase), though the perceptual illusion does not contain everything we know about the referent. In gesture, such a distinction does not seem warranted.

8. Partitioning the world in language and gesture

There is by now an extensive literature in linguistics about what is usually termed S(atellite)-framed language and V(erb)-framed languages (cf. Talmy 1985), exemplified, to pick some familiar examples, by Germanic languages, on the one hand, and by Romance language, on the other. In S-framed languages, movement verbs obligatorily (i.e. in the verbs involved) express the manner in which the movement is accomplished. The path of the movement must be given expression by other means, such as verbal particles. On the contrary, in V-framed languages, verbs obligatorily express the path of the movement, whereas manner must be conveyed by other means. In English, which is a Germanic language having been very much influenced by Romance languages, examples can easily be found for both types: "roll", "walk" and "crawl" express manner, but "descend" expresses path. In French and Spanish, V-framed constructions predominate: "sortir" and "entrer", "salir" and "entrar", respectively. This

certainly is a way in which languages segment reality differently, not only in the sense of dividing it in different ways, but also putting more emphasis on certain types of properties of the world than on others. Intuitively, it would seem that path and manner of a movement are inextricably connected in real world perception. There is thus no obvious claim for the S-language type or V-language type being “more iconic” than the other. Thus, it becomes interesting to compare this with the way the same actions are rendered in gesture.

Referring to evidence from Sign language, Zlatev (in press) suggests that the lack of conflation between manner and path is probably characteristic of “the vocal modality, which displays more linearity and less iconicity than the manual-brachial one”. However, McNeill (2005, 195ff.), in his study of speech-accompanying gestures, claims that Spanish speakers tend to add manner by means of gesture, whereas English speakers, instead of adding path, appear to be occupied with further modulation of manner. This is reminiscent, at another level, of Lesing’s claim that while pictures have to compensate for the lacking rendition of time, language, rather than compensating for the lack of space, indulges in more temporality. Another curious fact is the existence, in Nicaraguan Sign Language, of separate signs for the path and manner of actions. This would seem to suggest that also the visual modality (though perhaps only due to the “manual-brachial” analysis) is able to sequence what in perceptual reality appears to be a simultaneous whole. Nicaraguan Sign Language (NSL) is a so-named “home language”, socially constructed by the group of deaf people attending a vocational school in Managua. When Senghas, Kita and Özyürek (2004) compared the speech accompanying gesture of Spanish speakers with the signs used by the first, second and third generation of NSL-users, they found that the first group used only holistic gestures, and that the three generations of NSL-users employed progressively more signs separating manner from path. Thus, they conclude that, even at the prize of becoming “less iconic”, gesture may use sequentialization as a way to digitalization.

It remains, of course, that the visual modality is also able, should it care to, to render the whole in its simultaneity, which language seems unable to do. If anything, however, the digitalization accomplished by NSL is only relative. Path and manner, which are simultaneous in perception, may well be separated, but the exact way in which path and manner are varied (size, velocity, shape, etc.) is still able to vary iconically, which is more or less impossible in language.⁹ In Husserlean terms, the extensivity (the number of properties) of the iconic relationship between content and referent has been modified, but the intensivity (the degree to which the properties are rendered) largely remains as before.

9. Summary

⁹ As confirmed by an answer to my question given by Kita during a lecture in Lund on April 1, 2005.

There is an extensive scholarly literature about iconicity in language, and iconicity is often mentioned in the studies of gesture. My own earlier studies have concerned iconicity in picture and other visual displays. It has been the exclusive concern of this article to investigate what these studies of visual iconicity may have to tell us, a contrasting example, about iconicity in language and gesture. In the course of this study, I have distinguished iconicity from the iconic sign. I have also suggested that there are a number of different iconic relationships within the sign, between expression, content, and referent. I have also explored the analogies between Lessing's classical comparison between literature and visual art, and what the idea of "dual coding" in cognitive psychology. Finally, I have critically reviewed the discussion of iconicity in gesture studies and in the investigation of the relationship between language and gesture.

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Göran Sonesson, who is Secretary General of the International Association for Visual Semiotics and Vice Secretary General of the International Association for Semiotic Studies, is Professor of semiotics and Director of the Department of Semiotics at Lund University, Sweden. Starting out from general linguistics, he has been working through the years on the semiotics of gestures, visual semiotics, cultural semiotics, rhetoric, and general semiotic theory, in which he bases himself on Husserlean phenomenology and empirical research into cognitive and perceptual psychology. His recent work, notably within the EU-project "Stages in the Development and Evolution of Sign Use", concerns the phylogenetic and ontogenetic background of language, gesture, and pictures. He has published *Pictorial concepts* (Lund University Press 1989) on visual semiotics as well as articles in various semiotic reviews and anthologies, such as *Semiotica*, *VISIO*, *European Journal of Semiotics*, *Recherches sémiotiques / Semiotic Inquiry*, and *Sign systems studies*.