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Homo Pictor Redux. The Cognitive Semiotics of Temporally and/or Spatially Distant Objects

Before encountering Hans Jonas, we will here introduce the study of pictures from a semiotic point of view. Semiotics is certainly not a specific model, a method, a philosophy, or just any interdisciplinary approach, simply because it makes use of different models and methods, and may be based on different philosophies, and there are many other interdisciplinary approaches. Thus, as I have shown elsewhere,[1] it must be conceived to be a discipline or, stripping away the social foundation which is foreign to its epistemology, a research tradition, which, through the centuries, has been throwing up different questions and solutions to these questions which, in turn, engenders other questions to which other solutions are proposed.

If semiotics can be termed a meta-analysis, that is, an analysis applied to other analyses, then it cannot be just of any kind, because there are many such approaches, but it must be a meta-analysis geared to the discovery of meaning, here taken to be a broader concept than the sign. Indeed, semiotics shares with cognitive science the property of being basically a kind of meta-analysis, but while semiotics is an endeavour after meaning, cognitive science could be said to be directed to the study of the subject and its mental operations, often, but not necessarily taken in a reductive sense. Therefore, as I have suggested elsewhere,[2] semiotics and cognitive science would be better off working together, cognitive science furnishing the empirical approach, and semiotics some of the basic concepts (which is not to say that some other concepts may not be taken over, and revised, from cognitive science and other domains). This necessarily leads to a non-reductive approach to cognition, since a subject striving for meaning must be endowed with consciousness. However, such an amalgamation does not only make experimental approaches available

1 Sonesson 2012a; Sonesson 2016a; Sonesson 2018.

2 Sonesson 2012a; Sonesson 2016a; Sonesson 2018.

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to semiotics, but, at the same time, it liberates semiotics from any pretention to be "autonomous" or "pure", as postulated by structuralism. Not only are we allowed to account for results from psychology, sociology, and other disciplines, but we can set up our own experiments, defined in specifically semiotic terms.

On human specificity

When human beings ponder their own specificity, that is, what makes us, as human beings, different from other animals, we always seem to come up with the same answer, both in the classical tradition, and in contemporary studies of biocultural evolution: it is (verbal) language. If you then go on to ask what more than language might be unique to human beings, you generally get blank stares and then, laboriously, people come up with the following proposals: gesture ("bodily mimesis" in an elaborated form, e.g. declarative pointing); imitation (in evolved form, that is, excluding neonatal mirroring); signed languages; all kinds of more or less artificial sign systems (Morse, Bliss, traffic signs, writing, quipus, etc.). Curiously, nobody seems to bring to mind the case of pictures. And yet, the creation of pictures, at least in the sense of depiction (as opposed to scribbles) is certainly unique to human beings, and so would seem to be the interpretation of pictures (in the sense of not confusing them with reality). There have been societies which apparently did not have the custom of creating pictures, but all serious studies have shown that these people were nevertheless able to understand pictures when shown some instances, to the extent that they were familiar with the objects depicted.[3] On the other hand, even accultured apes do not normally understand iconic signs, as opposed to indexical ones.[4] Just as language in some form can be explicitly taught to apes, they may be instructed to interpret pictures, but they do not evolve picture understanding spontaneously. This is true, for instance, of the amply gifted bonobo Kanzi.[5]

In the case of the ontogenesis of picture understanding, the case is more complex. Julian Hochberg showed that a 19 months old child who had never seen pictures was able to interpret them – first as line drawings, and then as photographs.[6] Still, this does not tell us whether the child is aware of any difference between the picture and the real object – or whether, as many other animals, it will try to grasp and even to eat the picture. If the picture is taken to be a sign, expression and content do not go over into each other in time and/or space (as in perception), and expression and

3 See Kennedy 1974.
4 See Zlatev et al. 2013.
5 See Persson 2008.
6 Hochberg – Brooks 1962.

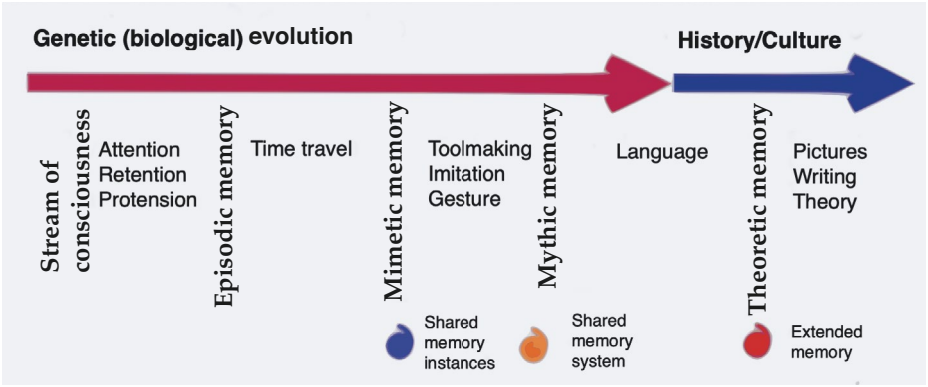


Fig. 1: Merlin Donald's evolutionary stages as types of memory (as interpreted in Sonesson 2019, 44).

content are experienced as being of different categories (they are not simply members of the same class). In DeLoache's experiments it was shown that children only understood pictures (as defined in the experiment) around 2 ½ years.[7] Not only are pictures understood later than language, but scale models turn out to be comprehended even more belatedly, at 3 years of age. But DeLoache's experiments involved finding a hidden object in another laboratory room after a picture or a replica of it had been presented to the child. Nevertheless, Lenninger found that also after eliminating hiding and playing the events out in a familiar environment, the results were confirmed. But her results also suggest that children could much earlier on identify an object from one picture to another, even when the object was presented from different vantage points.[8]

In his scheme delineating in four stages of the evolution onto human specificity (**Fig. 1**), Merlin Donald does include, in the final stage, the ability to use pictures, but his emphasis is on the third stage, mimesis, comprising such things as tool use, skill, imitation and gesture.[9] Picture use is here placed in the fourth stage, together with such things as writing and theory, clearly because they form a kind of memory which is independent of the single human mind, a kind of artefact which may be preserved, but not understood, distant from human minds. As I have observed elsewhere, however, pictures may have been originally made on less enduring surfaces, such as sand, as in the case of drawings and paintings traditionally composed in many cultures only to be effaced shortly afterwards, or even human skin, where it could rarely outlast the life of the individual.[10] This would seem to bring picture

7 DeLoache 2000; Burns 1994.
8 Lenninger 2012.
9 Donald 1991; Donald 2001; Donald 2010.
10 Sonesson 2007; Sonesson 2016b.

use closer to the level of mimesis, together with gesture and similar signs. If there is anything like a total semiotic act, it is (something similar to) sand painting, because it tends to involve gesture, speech, and even more complex semiotic constructs such as ritual.[11]

Distant objects in space and time

As I was to find out, I was not the first to single out picture use as a *differentia specifica* of human beings. As Hans Jonas observes:

> Die Frage nach dem Unterschiede, der differentia specifica, des Menschen kann gestellt werden als die Frage nach einem Merkmal, in dem sich der Unterschied sinnfällig und überzeugend äußert. [...] Ein bildmachendes Wesen ist daher eines, das entweder dem Herstellen nutzloser Dinge frönt, oder Zwecke außer den biologischen hat, oder die letzteren noch auf andere Art verfolgen kann als durch die instrumentale Verwendung von Dingen. Jedenfalls ist in der bildlichen Darstellung der Gegenstand in einer neuen, nichtpraktischen Weise angeeignet, und eben die Tatsache, daß das Interesse an ihm sich an sein Eidos heften kann, bezeugt eine neue Objektbeziehung.[12]

The proof of the specifically human character of pictures is brought about, for Jonas, by a consideration of "der fiktiv angenommenen (heute nicht mehr so phantastisch fiktiven) Situation von Weltraumfahrern, die sich in der ihnen völlig fremden Lebewelt eines anderen Planeten umtun und sich vergewissern wollen, ob es dort 'Menschen' gibt." When, in these circumstances, people encounter something similar to a picture, he observes,

> von ihren Lippen bricht der Ausruf: Dies haben "Menschen" gemacht! Warum? Die Evidenz bedarf für ihre Gültigkeit nicht der Vollkommenheit der Altamira Fresken. Die roheste, kindischste Zeichnung wäre so beweiskräftig wie die Kunst des Michelangelo. Beweisend für was? Für die mehr-als-tierische Natur ihres Erzeugers; und dafür, daß er ein potentiell sprechendes, denkendes, erfindendes, kurz ein "symbolisches" Wesen ist.

I do not know whether Jonas's remark is inspired by some real event, but I am in the position to suggest one which fits this procedure of interpretation. The astronomer Richard Hoagland claimed he had discovered in pictures taken of the planet Mars

11 See Green 2014.
12 Jonas 1961, 161.

a sculpture of a monkey's head, together with some other strange constructions, which, in his view, must be traces of an ancient Martian civilization.[13] For obvious reasons, other astronomers think this is as absurd as affirming that the man in the moon has been painted by intelligent beings. Yet there is nothing arbitrary about Hoagland's claim: the photograph which he presents is clearly an iconic sign which might be taken to show another iconic sign representing a face (though not necessarily of a monkey). It is just that, like in the case of the man in the moon, we have no other reasons for thinking there could be anybody around capable of producing pictures.[14]

It is more common for human beings to make pictures they hope will be decoded by extra-terrestrial beings, abusively projecting our human capacity to understand pictures to those beings, which, even if they exist, will probably not share our body, nor the features of our common-sense Lifeworld. Even in a normal picture, we can only recognize objects of the world with which we are already familiar – at least with their general type. Thus, if the extra-terrestrials have different body shapes from ours and have never seen human beings, they obviously cannot recognize the human shape. But the problem does not only consist in recognizing the shape of human bodies. The faculty to interpret pictures at least presupposes the ability to perceive wholes as such, to take contours to be equivalent to the sides of objects, and to accept 2D forms as stand-ins for 3D objects. There is no particular reason to suppose this forms part of the ecology of extra-terrestrial beings. But the problem goes further: Suppose that those people are right who think that our conception of mathematics, as well as our contemporary theories of physics, astronomy, and chemistry, must be known to extra-terrestrial beings – either because they accept the same theories, or have entertained them at some earlier stage of their development (as we would recognize the notions of Newtonian physics in other intelligent beings). Even so, this would only be relevant to the content side of the sign. Although, the content is situated within the domain of the natural sciences, the expression side of the signs is wholly within the limits of our human Lifeworld.[15]

But we do not have to follow Jonas into outer space, because similar interpretation problems can occur, *mutatis mutandis*, in the temporal dimension. Many archaeologists may doubt whether the Berekhat Ram figure – an object dated to between 280000–250000 BP – is really the likeness of a woman, as claimed by, among others, Alexander Marschack. We may try to answer this question by investigating whether the traces of abrasion left on it show regularity in a fashion suggesting

13 Cf. Wikipedia Contributors 2013.
14 Sonesson 2013a, 188 f.
15 See Sonesson 2013a, 197 f.

"anthropogenic" movements.[16] More pertinently, perhaps, this question may be asked about the recent findings of pictures in the Biombos cave (100000–70000 BP). It is not sufficient to ask, nevertheless, whether we can distinguish anthropogenic movements from all other movements leaving traces on stones, but there remains the question whether such humanly specific movements were the same at the time as they are today for us.

Pictures as a special kind of sign

Taking my clues from both Husserl and Piaget, and endeavouring to amplify their intuitions, I have suggested elsewhere that the sign, or semiotic function, can be minimally defined by the following properties: (1) it contains (a least) two parts (expression and content) and is as a whole relatively independent of that for which it stands (the referent); (2) these parts are differentiated, from the point of view of the subjects involved in the semiotic process (the addresser and the addressee, which may be the same person), even though the parts may not be objectively differentiated, that is, not separate instances of experience, in the common sense Lifeworld (except as signs forming part of that Lifeworld);[17] (3) there is a double asymmetry between the two parts, because one part, the expression, is more directly experienced than the other; (4) and because the other part, the content, is more in focus than the other; and (5) the sign itself is subjectively differentiated from the referent, and the referent is more indirectly known, as given in the sign, than any part of the sign.[18] Another way of saying this, in the vocabulary of Husserlean phenomenology, it that the sign constitutes a many-layered hierarchy of intentionality, on one extreme becoming ever more deeply mediated with respect to the object and more directly accessible to the subject, while the reverse is true at the opposite vertex.

From this point of view, the picture sign is clearly more elaborate or, more precisely, more multi-layered, than the linguistic sign. Jonas notes, as we did above, that

> wo wir bloße Ähnlichkeit wahrnehmen, nimmt das Tier entweder ein Selbes oder ein Anderes wahr – aber nicht beide in e i n e m, wie wir es in der Erfassung der Ähnlichkeit tun. [To be more precise:] Die vollständige Artikulation ist dreifach: Das Substratum kann für sich betrachtet werden, das Bild für sich, der Bildgegenstand für sich: das

16 See Sonesson 1994; Sonesson 2013a, 189.

17 As hinted at above, I take subjective differentiation to mean (at least) two things: expression and content do not go into each other in time and/or space (as in perception); expression and content are experienced as being of different categories (they are not simply members of the same class). This is one respect in which I have found it necessary to be more precise than Piaget.

18 See Sonesson 1989; Sonesson 2007; Sonesson 2012b; Sonesson 2016a.

> Bild oder die Bildähnlichkeit schwebt als eine dritte, ideelle Entität zwischen den beiden anderen, reellen Entitäten, und verknüpft sie in der einzigartigen Weise der Repräsentation.[19]

This is clearly reminiscent of the analysis of pictorial representation suggested by Edmund Husserl in his posthumous studies on pictorial consciousness. The rapprochement may not be purely accidental, since Jonas studied with Husserl as well as Heidegger in Freiburg. In any case, Husserl spells out the differences between these layers much more clearly. Unlike Jonas, on the other hand, he does not enter into the human specificity of pictorial understanding.

Starting out from Husserl's notion of *Bildbewusstsein*, I have expounded on the nature of the picture sign in several earlier publications.[20] According to Husserl, two similar things assume the character of a picture only when pictorial consciousness is attached to them (and, in addition, the similarity must be *anschaulich*).[21] 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. 2)**. 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 is 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 "photographic colours". It should be noted 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.

The picture thing and the picture object are directly perceived; but the picture subject, which is what is intended (*gemeint*[22]), is only indirectly given; therefore, although Husserl does not tell us so, this would seem to be a case of an *appresentation*, more specifically, what we have called a *semiotic function* above.[23] It is possible to

19 Jonas 1961, 167.
20 Sonesson 1989; Sonesson 2016c.
21 Husserl 1980, 16 f.; 135; 138 f.
22 Husserl 1980, 23 ff.; 30; passim.
23 See Husserl 1939, 174 ff.; Luckmann 1980.

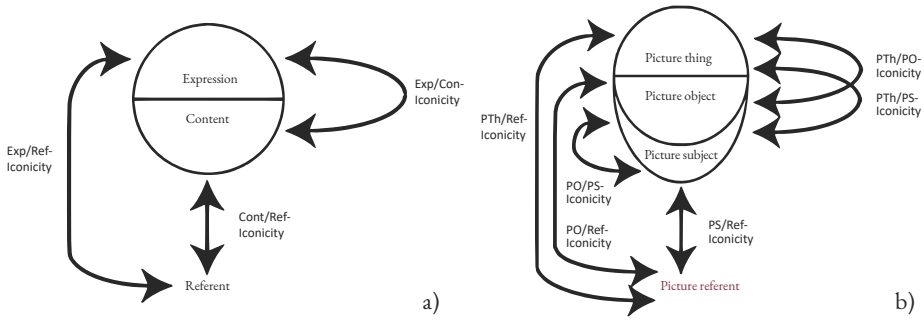


Fig. 2: Relevant distinction in the linguistic sign (a), and the pictorial sign (b), all elements of which may be iconic or not (adapted from Sonesson 2008b).

thematise 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".[24] 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. Unlike the picture subject, both the picture thing and the picture object are "appearances" (*Erscheinungen*), i.e. they are directly perceived.[25] Our seeing of the picture object is of the same kind as ordinary perception, and yet it is somehow "abnormal".[26] 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.[27]

Thus, we see that the picture corresponds to at least three different categories: the picture thing, the picture object, and the picture subject. According to Husserl, however, there is also another kind of difference between the picture object and the picture subject, for while the Berlin castle which we see is here, where the picture is, the Berlin castle itself, as a thing, remains in Berlin.[28] According to one of Husserl's criteria, the picture subject should therefore correspond to the referent of the picture, in the sense of the real object depicted as it is found in a particular location at a particular time. Although Husserl could not know that, the Berlin castle may not be the ideal example to prove his point, since the castle was destroyed in the Second World War, the ruins were obliterated during the East Germany hegemony, and the castle has recently been rebuilt, in some aspects similar to how it looked at Husserl's

24 Husserl 1980, 137; 488.
25 Husserl 1980, 27 f.; 489 f.
26 Husserl 1980, 133 f.; 490.
27 Husserl 1980, 19 f.; 82 f.; 138 f.; 143.
28 Husserl 1980, 18.

time, and in other aspects very much being a building of our post-post-modern period. Whether this is still the same referential object conceived by Husserl is a complex question, which we will not discuss in this paper.

Nevertheless, it should be clear that there is a potential contradiction between Husserl's two criteria for defining the picture subject. Whatever the reality status of the object depicted, there is clearly a difference between what we can quasi-perceive on the pictorial surface, and the information we surreptitiously supply, either, as in Husserl's original examples, because we know that reality is not made up of black and white only, or, because of other kinds of socio-cultural knowledge which we bring to the experience – without there having to be, whether now, in the past, or necessarily in the future any real object corresponding to this description. Thus, although there are no unicorns, we know that unicorns are white, even though a picture may show a unicorn in blue colours. A more straightforward and generalizable example may be that, however much we "see in" the object on the pictorial surface, it does not gain the three-dimensional solidity of the real world object.[29] For these reasons, I have decided to add a fourth layer to pictorial semiosis, the picture referent, which, contrary to Husserl, I claim is (potentially) distinct from the picture subject.

These distinctions have a bearing on experimental studies of children's picture understanding, and they may be suggestive of how pictures were first made sense of by human beings. If, as intimated, children are able to recognize an object when looking from one picture to another, much earlier than when comparing a picture to perceptual reality, even though the pictures involved show the object from different vantage points, what is recognized is certainly not the picture referent, and not the picture thing, but the picture object and/or the picture subject, which might not be differentiated at this early stage.[30]

Primary and secondary iconicity

In my earlier work, I have had recourse to the notion of ground, as it was introduced in some of Peirce's early writings, to designate what in structuralist linguistics would have been called the principle of relevance, that is, the relation between expression and content which serves to pick out those features in the expression which are pertinent to its relation to the content, and vice-versa, but understood in a more gen-

29 Though this is not part of our present concern, it is probable that the linguistic sign, to the extent that it is predominantly iconic, also requires a distinction parallel to that between the picture subject and the picture object. For evidence of the iconicity of linguistic signs, see Ahlner – Zlatev 2010.

30 Lenninger 2012.

eral way, to distinguish those grounds which are iconic, indexical, and symbolic (see **Tab. 1**). According to Peirce, the sign (in my terms, the expression) is something which "stands for that object not in all respects, but in reference to a sort of idea, which I sometimes called the ground of the representamen".[31] In one passage, Peirce himself identifies "ground" with "abstraction" exemplifying it with the blackness of two black things.[32] 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. In 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 makes 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).

In other contexts, this has allowed me to spell out the difference between grounds, which are only potential signs, and signs, where the ground is taken in charge by the sign function, as defined above.[33] A lot could be said about these distinctions, and I have done so in other publications. At present, however, we have to spell out the difference between primary and secondary iconic grounds. 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.

Secondary iconic signs are actually not very good examples of iconicity, as the latter is characterised by Peirce, for the definition I have given above clearly implies that, in at least one sense, the iconicity of the signs is not independent of their sign charac-

31 Peirce CP 2, 228.

32 Peirce CP 1, 293.

33 See Sonesson 1989, III.1; Sonesson 1994; Sonesson 1999 [2012]; Sonesson 2010b; Sonesson 2013b.

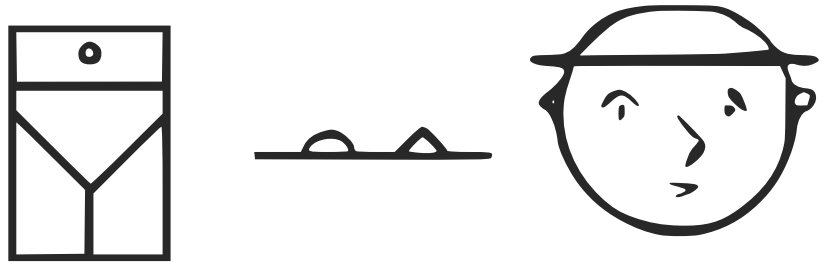
Tab. 1: The relations between principles, grounds, and signs, in the present interpretation of Peirce.

	Firstness	Secondness	Thirdness
Principle (Firstness)	Iconicity	—	—
Ground (Secondness)	Iconic ground	Indexicality = indexical ground	—
Sign (Thirdness)	Iconic sign (icon)	Indexical sign (index)	Symbolicity = symbolic ground = symbolic sign (symbol)

ter: on the contrary, it is a precondition. 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, seem reasonable when we are informed about their meaning.[34] In Arnheim's terms a "droodle" is different from a picture in requiring a key, as Carraci's mason behind a wall (cf. **Fig. 3b**), or in "Olive dropping into martini glass or Close-up of girl in scanty bathing suit" (cf. **Fig. 3a**).[35] While both scenes are possible to discover in the latter 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 is to introduce an explicit convention, such as Carraci's key.

According to Göran Hermerén, it is only because of "the limitations of human imagination" that we see **Fig. 3c** 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".[36] It all depends on what is here meant by "the limits of human imagination": *Gestalt* principles, the face as a privileged perceptual

34 Mallery 1972 [1881], 94 f.
35 Arnheim1969, 92 f.
36 Hermerén 1983, 101.



a) b) c)

Fig. 3: Two droodles and a picture which can be read as a droodle: a) Olive dropping into Martini glass or Close-up of girl in scanty bathing suit (Arnheim as adapted in Sonesson 1992a); b) Carraci's key (Mason behind wall); c) face or jar (inspired from Hermerén 1983, 101).

object, and so on, all conspire to make one of the readings determinate.[37] While it is possible to find the elements 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.

It must be admitted, nevertheless, that, from the point of view of some otherworldly spirit, whether an extra-terrestrial or some supernatural beings, Hermerén is right. But "the limitations of human imagination" are exactly what helps us making sense of our experience. In order to understand the difference between primary and secondary iconicity, we need to explore the notion of what, in different quarters, is known as the Lifeworld, the world taken for granted, the commons, the background, naïve physics including folk psychology, and so on. Primary iconicity is only primary because it can rely on what is taken for granted in the Lifeworld. And I think we are now able to begin distinguishing different levels of what is taken for granted in the Lifeworld, starting from the kind of object with which we are more familiar, the human being, and, more in particular, the human face.

37 See Gibson 1969, 347 ff.

Anati's prayer in the Lifeworld

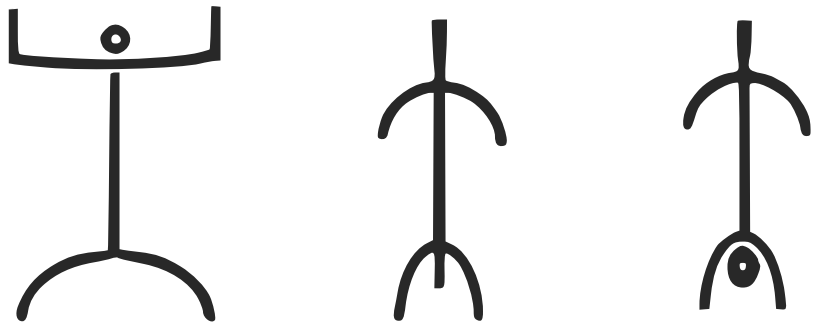
In other papers, I have suggested that a science of normalcy and normativity is required for any explanation of meaning.[38] Husserl termed this the science of the Lifeworld and exemplified it with the observation that, as part of the Lifeworld, and in spite of modern physics, the earth does not move. Gibson called this kind of knowledge "ecological physics", in which the ground is "below" and constitutes a level and rigid support, the air is "above", and water is "under the earth". He went on to illustrate its "laws", that is, those "regularities [that] are implicitly known", such that substantial objects tend to persist, that major surfaces are nearly permanent with respect to layout, but that animate objects change as they grow or move; that some objects, like the bud and the pupa transform, but that no object is converted into an object that we would call entirely different, such as a frog into a prince; etc. Many of the basic patterns distinguished by Lakoff and Johnson,[39] such as

> Happy is up; sad is down; conscious is up; unconscious is down; having control or force is up; more is up; less is down; high status is up; low status is down; good is up; bad is down; virtue is up; depravity is down; rational is up; emotional is down; etc.

are no doubt part and parcel of such a world taken for granted, which is also why they hardly can form the basis of any true metaphors.[40] In the same vein, we should include Mayerthaler's notion of the prototypical speaker (who is also the prototypical perceiver, of pictures and of the environment), having his eyes in front, walking upright, etc.[41]

With this background, let us consider the claim, made as a matter of course, by Emmanuel Anati that **Fig. 4a** shows a man in the process of doing his prayers.[42] The figures appearing in many prehistoric rock carvings curiously resemble our present-day traffic signs, the tadpole men of contemporary children's drawings, the logograms found on the doors of men's and women's washing rooms, Blissymbolics used to communicate with those suffering from different kinds of speech-impairment, the Alchemic symbols of the Middle Ages, the Hobo signs still employed by tramps and vagabonds until the Second World War, and signs stemming from many other, mutually divergent, repertories. Judging only from its shape, Anati's prayer could be compared to a sign denoting the golden number 18 in the clog almanacs

38 See Sonesson 1989.
39 Lakoff – Johnson 1980.
40 See Sonesson 2015.
41 Mayerthaler 1981.
42 Anati 1976. Cf. Sonesson 1994.



a) b) man c) woman

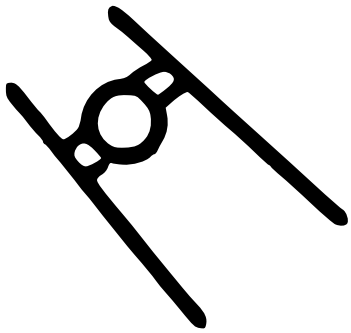
Fig. 4: a) One variety of Anati's 'prayer' (from Anati 1976, 46, passim); b–c) Prehistoric petroglyphs.

of the Middle Ages, or one of the letters of an Rumanian alphabet used around the year 1000, the alchemical signs for test, for essence, or for mix, or the astrology signs for Pisces or the fixed star Spica, Neptune's or Jupiter's staff, and so on.[43] In none of these cases does the figure represent a person: indeed, in most of them, it is not even a pictorial sign. Yet it is easy to imagine that the same figure may stand for a human being also in a drawing made by a contemporary child. And in such a drawing it may indeed represent a man in the course of praying (see **Fig. 4b**). It is much more difficult to maintain that, at the time when this petroglyph was traced, it was meant to suggest a person praying. This claim is hardly different from von Däniken's proposition that some other ancient depiction must have been the creation of some more advanced extra-terrestrial culture because, if it had been drawn today (or rather yesterday, before the advent of the iWatch) it might have represented a wrist watch (see **Fig. 5a**).[44] In both cases, what is taken for granted are features of a particular socio-cultural lifeworld, not the structures of the Lifeworld shared by all human beings.

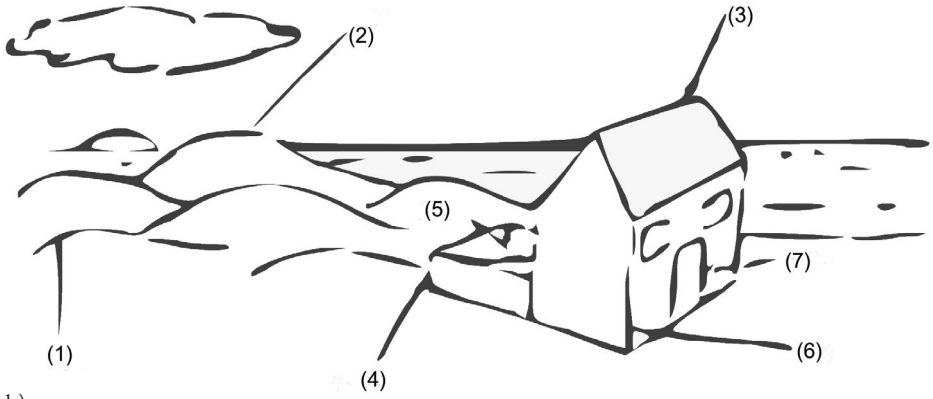
No key is needed to see a human being. And, the evidence for the human beings on the rock being so scant, I think we must conclude that the willingness of human beings to perceive other human beings, wherever possible, is great indeed. It is not an accident that very little information is needed to "see in" a face or a human body on a surface with a few strokes, or anything else which happens to be close to us in the human Lifeworld. We clearly have more exigencies when the things depicted are less familiar, or we need more detailed information about them. No doubt the occluding

43 Cf. Liungman 1991, 117; 118; 155 f.; 434.

44 von Däniken 1973.



a)



b)

Fig. 5: a) von Däniken's prehistoric wrist-watch; b) Features according to Kennedy 1974b, 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.

bounds and edges, the concave and convex corners and the crack allow out to see the spatial layout in scene **Fig. 5b**, but we need much less to recognize a house and a set of slopes as such – and a cloud , although in this drawing it does not feature any bounds, edges, corners or cracks.

Thus, it might be said that there is primary iconic evidence for the Anati's prayer being a human being and perhaps, even, if compared with other petroglyphs (in **Fig. 4b–c**), a male human being. It is not clear, from reading Anati's book, however, why we should take the man to be in a position of praying. Perhaps Anati has some evidence for this, though the remains of decayed action sequences are certainly rather difficult to come by; or perhaps there is really a kind of anthropological universal of praying which may be profitably invoked here. Secondarily iconic evidence for the 'prayer' should have to be offered here, but none such seems to be forthcoming. A much less risky hypothesis, with more general validity, may be proposed to explain the position of the arms of the 'prayer' figure: it may be suggested, that in the context

of a fairly limited set of other motifs, including many animals, the outstretched arms are there to signify "humanity" in an emphatic sense, that is to say, prototypically: to single out the peculiar feature which marks off human beings from other animals, and the discovery of which was a decisive step in the process of hominization: the erect posture; and thus to indicate the horizontal directiveness which remains a determining characteristic of the human Lifeworld, the terrestrial environment of ecological physics. Perhaps it is only a way of showing the way human beings, while "rest/ing/ on a horizontal surface of support", as Gibson says, surmount it, which may be a reason as good as any for happy being up, as Lakoff and Johnson put it. But, for the time being, I rest my case: Anati's 'prayer' is a man by primary iconicity, but a prayer only by some as yet uncertain further determination due to secondary iconicity.

Similar over-interpretations have been suggested more recently. Klaus Schmidt no doubt made an important contribution to archaeology in suggesting that the site he pioneered digging out, Göbekli Tepe in present-day Turkey, which is several thousand years older than Çatalhöyük (13000 BCE), was a ceremonial centre, without there being any traces of contemporary living quarters.[45] Nevertheless, while discussing a number of stelae, some of which show on the margin details which can be interpreted as arms and legs, Schmidt hastily concludes that these stelae represent human beings, or human-like godly beings. There is, I think, some reasons for claiming that the shapes on the side of these stelae can been taken to be, by primary iconicity, arms and legs. To conclude from this that the stelae as such represent humanlike creatures, however, requires secondary iconicity, which means a lot of background knowledge is required to justify this interpretation. And while there may be such local knowledge available, now or at some further point in the excavations, it is not available in Schmidt's book.

Conclusion

In my version of the communication model (**Fig. 6**), which – deriving its inspiration from the Prague school of semiotics – takes into account the active construal of the message on the part of the receiver, the pool of knowledge, including norms, abductions, and sign systems held in common by the protagonists of the communication process is – following the parallel suggestions of Lotman and Moles – supposed to overlap only in part at the beginning of the process.[46] This means that, rather than

45 Schmidt 2012; cf. Sonesson 2016d.

46 Sonesson 1999.

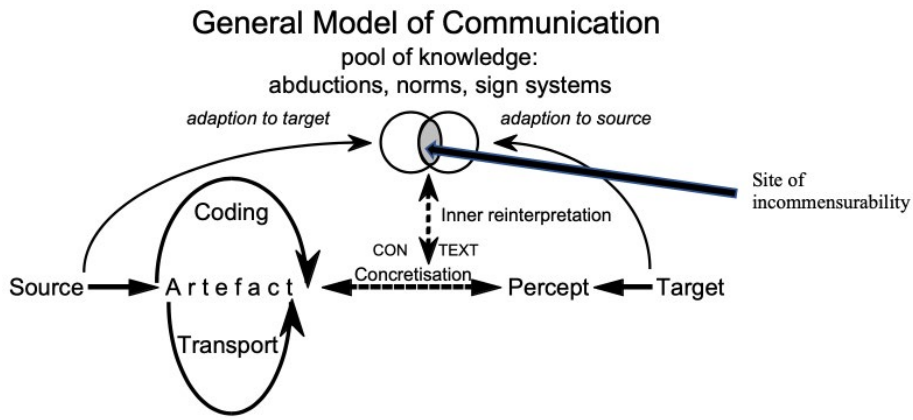


Fig. 6: General model of communication situating Vakoch's "incommensurability problem".

simply handing down an object from one position to another, the sender by creating an artefact sets a problem of interpretation for the receiver. In the process of the communicative act, the common pool of knowledge can be extended and amplified. But in many typical situations of communication, there are serious obstacles to the realization of such a process. When discussing the possibility of making ourselves understood while fashioning messages to putative receivers on other stars, Douglas Vakoch coined the term "the incommensurability problem" for such a situation.[47] Between the archaeologist as a receiver of a message from earlier periods and the sender (with or without a purpose) of such a message, the extent of incommensurability is great, but it is certainly very small in comparison to that obtaining between a sender or receiver from outer space and his partner in this act of communication here on earth. At least as long as the civilisation we are investigating can be taken to have been created by Homo sapiens and no doubt also by Neanderthal man, many invariants of the general Lifeworld can be taken for granted. This accounts for the part of primary iconicity in the pictures found at these sites. But we must make a very strict distinction between such parts of the pool of knowledge which are given for free by own common humanity, and those pieces of information which can only be established by gaining a detailed knowledge of the particular socio-cultural Lifeworld which existed at the site, and which, therefore, can only be justified at the level of secondary iconicity.

47 Vakoch 1999.

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