A Final Move in Chess. Beyond the Picture Sign in Visual Semiotics

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Abstract

It is something of a paradox that, within semiotics, the science of meaning, there has been fairly little discussion about the specificity of the picture sign, in particular in relation to other visually conveyed meanings. In fact, visual semiotics is mostly about pictures and picture-like signs such as film and audiovisual means of communication, to which architecture and sculpture may be added, whereas in actual fact visually conveyed meaning includes most of what happens in the theatre and indeed in everyday life. In recent decades, new interdisciplinary endeavours such as visual studies and visual culture have pretended to take on a wider field, but as such these conceptions do not seem to be endowed with any adequate theoretical apparatus permitting them to go beyond mere description. If we admit that, with the exception of language, human perception is predominantly visual, it is reasonable to think that all phenomena conveyed by the visual senses have something in common, but then visual semiotics will comprehend much more than painting, sculpture, and architecture. The double coding hypotheses of cognitive psychology, as well as Lessing's classical opposition between language and painting, tell us something about this basic opposition. In my 1989 book, Pictorial concepts, I discussed some philosophical and psychological conceptions of the specificity of the picture sign, from Husserl to Goodman and Wolheim, and I also took into account some other visual artefacts that carry meaning, such as the tailor's dummy and wax food. John Searle's discussion of representation involves many examples that are visual in nature. More recently, «cognitive artefacts» (which are often visually conveyed) have become a theme in cognitive science. Chess, which was used as a central metaphor for language and signs generally by a number of thinkers from Saussure, Husserl and Wittgenstein to Searle and Deacon, is certainly a cognitive and visual artefact. But we must start from perception – including the visual world on non-human animals.

It is something of a paradox that, within semiotics, the science of meaning, there has been fairly little discussion about the specificity of the picture sign, in particular in relation to other visually conveyed meanings. In recent years, a number of authors have claimed for themselves the amorphous field (or whatever they think it is) of «visual culture» or «visual studies», struggling in vain to determine what it is all about (Cf. Mirzoeff 1999; Howles 2003; Bal 2003). The case of «visual culture» is actually even more problematic than that of «visual semiotics», both because visual things only have in common being visual (which is true of most things we are aware of in the human Lifeworld), but «visual signs» are at least also signs; and because the scholars involved in the study of «visual culture» always seem to argue that it is about more than mere visual things. The most paradoxical case is that of Mieke Bal, who, directly after having pointed out some of the (most obvious) contradictions of the earlier authors, immediately goes on to accept the label. It might be argued, however, that since the visual sense is predominant in the course of all human meaning making, practically all semiosis is visual, as well as all culture. This would make «visual culture» into a pleonasm. The exception, of course, as always, is language.

1. SOME CRITERIA FOR BEING A SIGN

If we admit that, with the exception of language, human perception is predominantly visual, it is reasonable to think that all phenomena conveyed by the visual senses have something in common, but then visual semiotics will comprehend much more than painting, sculpture, and architecture. On the face of it, visually conveyed meaning includes most of what happens in the theatre and indeed in everyday life, starting from ordinary perception. Indeed, some things are visual without being signs; and some visual signs are not pictures. But if we attend to what is really studied by people involved in visual semiotics and visual culture, we will find that they are mostly concerned with pictures and picture-like signs such as film and audiovisual means of communication, to which architecture and sculpture may be added.

Late in his life, Peirce realised that all his notions were too narrow: instead of «sign», he reflected, he really ought to talk about «medium», «branching» or «mediation» (CP 4.3 and MS 339, quoted by Parmentier 1985). Indeed, he even remarked that there was something «injurious» to making the word «sign» do a much bigger job than that to which it was fitted (cf. CP. 4.3). Here Peirce sounds very much as Humpty Dumpty becoming at last aware of his ruse. And yet, it is also in accordance with Peirce's «ethics of terminology», which states that we should not introduce terms that «interfere with any existing term» (cf. Peirce 1998,II, 263-266; Deely 2001: 662ff). Strange to say, those who like to think of themselves as the true Peirceans do not seem to have taken into account this piece of self-criticism on the part of Peirce.

In the following, I will use «semiosis» as a general term, without prejudging the nature of meaning involved. The sign, in this sense, is simply one of the (more complex) ways in which meaning may be realised. Let us start out by considering what some central instances of signs could be, and then try to determine what they have in common. The picture sign is, I believe, basically similar to the linguistic signs, and so are at least some gestures. Play-acting, as well as children's symbolic play, would seem to be of the same general kind. I am not, of

course, arguing that these kinds of meaning are all conventional, as would Eco, Goodman, and many others whose arguments I have long ago rejected (cf. Sonesson 1989; 1993, 1994; 1995, 2000). But they possess that which would allow the presence of a convention, just as well as a motivated relation: (at least) two parts.

According to Piaget's account of child development, every child goes through a number of different stages enhancing his or her capacity for understanding. Of particular importance in the present context, however, is Piaget's (1945; 1967:134ff; 1970:342ff) claim that, on the border between sensori-motor thinking and concrete operations, around 18 months of age, the child learns to master «the semiotic function» (originally called the symbolic function), which involves, not only language, but also, notably, drawing and symbolic play. Piaget does not deny that the child experiences meaning before this age, for instance in perception (thus anticipating later criticism), but he thinks that it is only with the attainment of the semiotic function that the child is able to conceive meaning as something differentiated into a signifier and a signified. As in the case of language, the capacity to understand pictures would most naturally be taken to precede any ability to produce them. However, we are not concerned here with the moment of emergence of the sign function, but with its structure.

The notion of *differentiation*, which is normally overlooked, is, I believe, fundamental. But it is also indispensable to maintain the distinction between subjective and objective differentiation. The semiotic function, or, as I will say from now on, the sign (function) requires «a differentiation, from the subject's own point of view, between the signifier and the signified» (Piaget 1967:134f). Thus, for instance, the visible extremity of an object that is almost entirely hidden from view is the signifier of the entire object for the baby, but it also happens to be «an objective aspect of the signified» and thus, according to Piaget (ibid), it cannot be a sign. But when the child uses a pebble to signify candy, Piaget claims, the child is well aware of the difference between them, that is, there is subjective differentiation.

Curiously, Piaget takes for granted that something which is not objectively differentiated cannot be subjectively so. However, we can imagine this same child that in Piaget's example uses a pebble to stand for a piece of candy having recourse instead to a feather in order to represent a bird, or employ a pebble to stand for a rock, without therefore confusing the part and the whole: then the child would be employing a feature, which is *objectively* a part of the bird, or the rock, while differentiating the former from the latter *from his point of view*. Moreover, contrary to what Piaget (1967:134) submits, the hunter, who identifies the animal by means of the tracks, and then employs them to find out which direction the animal has taken, and who does this in order to catch the animal, does not, in spite of the existence of a physical and temporal relationship between the animals and its tracks, confound the tracks with the animal itself in his construal of the sign, in which case he would be satisfied with the former. Indeed, if the tracks are not differentiated from the animals having produced them, they cannot be read as signs, but only as a part of the complex situation of which the animal is a part.

Husserl's discussion of signs may help us spell out what is involved in «subjective differentiation». According to Husserl (1939), indeed, two or more items may enter into different kinds of «pairings», from the «paired association» of two co-present items through the «appresentative pairing» in which one item is present and the other indirectly given through

the first, to the real sign relation, where again one item is directly present and the other only indirectly so, but where the indirectly presented member of the pair is the theme, i.e. the centre of attention for consciousness. This clearly implies that the sign is asymmetrical in a double sense: one part of it is more in focus than the other, and the second of its parts is more directly accessible than the first one.

But we should take these observations further: since what is at stake is a thematic structuring, and this structuring itself is relative to a subject for whom it is a part of the field of consciousness, the first part of the sign is in some sense a stand which the subject may take on the other. In more familiar terms, the first part of the sign is «about» the other. Of course, this more readily applies to the relation between the content and the referent, where the latter corresponds in the world outside of the sign to that with which the sign is concerned. Husserl (1980), in fact, makes this distinction clearly only in his study of picture consciousness, where he notes that the depicted Berlin palace is here in the picture, whereas the real palace is in Berlin (Cf. Sonesson 1989: 270ff). As I have suggested elsewhere (Sonesson 1989:193ff), we would thus have to suppose some kind of thematic hierarchy going (in the ordinary case) from the expression through the content to the referent.

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

There are reasons to believe that the sign, in this sense, is available to very few, if any, animal species apart from human beings, and that it is acquired fairly late in child development. Experiments have shown that even children 5 months of age look longer at a doll than at its picture (DeLoache & Burns 1994). However, it does not follow from this that the children see the picture as a picture. Indeed, 9 months olds, but not 18 month olds, try to grasp the object depicted as if it were a real object (DeLoache 2004); whatever the difference they perceive, then, it does not seem to involve signs as opposed to objects. This result shows that the picture and its object are seen as being different, but not necessarily as forming a sign-vehicle and its referent. The real doll is perhaps seen as a more prototypical instance of the category; or, alternatively, the real object may be more interesting because of having more perceptual predicates.

In an interesting study realized within the SEDSU-project[1], baboons, chimpanzees, and gorillas were tested with pebbles or slices of banana, either real or in photographic pictures, which were presented in different contrasted pairs (summarized in Sonesson & Zlatev, forth-

[1] The SEDSU project (for »Stages in the Evolution and Development of Signs Use) was a EU-financed research project involving semioticians, linguists, psychologists and primatologists from Sweden, Great Britain, Germany, France and Italy (Cf. Sonesson & Zlatev, forthcoming).

coming). A considerable majority, all species put together, chose the real banana, and very few chose the picture of the banana when the real banana was opposed to its picture. Most of the primates tested, except for the chimpanzees, also showed a reliable bias for the banana picture over the real pebble, as well as for the picture of the banana over the picture of the pebble. Moreover, a majority of the primates, but no chimpanzees, show a tendency of trying to eat the banana pictures. Therefore, it might be intimated that the chimpanzees, different from the other primates, have some understanding of signs, rather than simply seeing the banana picture as some less good instance of the category of bananas. Another experiment within the SEDSU-project involved a single chimpanzee, Alex, who had been trained to imitate 20 different action sequences beforehand, and who in a new experiment was solicited to perform these actions, prompted, not by a live model as before, but by being shown the actions on video, colour photographs, black and white photographs and drawings (Call, Hribar, & Sonesson, forthcoming). Of particular interest is the fact that the chimpanzee was able to accomplish these actions when shown pictures representing a pre-final phase of the sequence just as well as when confronted with pictures of the final state. It seems far-fetched to suggest that the chimpanzee is here simply confusing the still photograph and the action, in particular when the photograph shows an incomplete action, where the picture prompting the action is distinct from the action requested, both because it is a static view of the action and because it does not show the action in its complete or most characteristic state. Perhaps, then, the understanding of picture signs is within the purview of chimpanzee capacities.

2. ICONICITY, INDEXICALITY AND SYMBOLICITY

The division between icons, indices, and symbols is one of the Peircean trichotomies (Cf. II.2-3 above). 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. 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.

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

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, however, 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 hypo-icons, 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 Figure 1.

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). Abraham Moles (1981) has elaborated on this idea, 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.

3. THE SPECIFICITY OF THE PICTURE SIGN

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. The droodle is a kind of limiting-case of a picture, which is mostly used in making jokes, inspired in the work of the Gestalt psychologist Rudolf Arnheim, who gives as an example a drawing that may show an olive dropping into a Martini glass or a close-up of girl in scanty bathing suit (Fig. 2a from Arnheim 1969:92f). In this case, similarity is discovered only once we have been informed about the precise sign function, or when we have guessed at it, whereas in an ordinary picture the impression of similarity precedes the sign function. However, as observed elsewhere (Sonesson 1994; 1996), drawings that appear to be as rudimentary as the droodle shown here, turn out to be immediately identifiable by human beings as faces or other ecologically important phenomena of the human Lifeworld (Cf. Fig. 2b). Once we have a particular key to the droodle, however, the partial meanings of the object depicted are as easily distributed on to the different parts of the drawing as in the case of true pictures. Both droodles and true pictures work in this sense differently from language. 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. 2c-f).
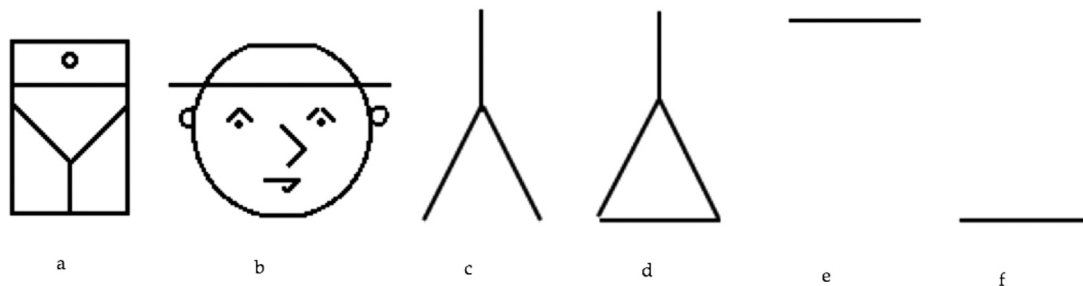

Fig. 2. A droodle (a) and a simple picture (b); Blisssymbolics with the meaning: c) man; d) woman; e) up; f) down

These properties of the picture are connected to a peculiarity of the picture sign that Husserl (1980) has described by the term *Bildbewusstsein*, and which was taken up for discussion again much later, no doubt independently, by Wollheim (1980), according to which we «see in» the depicted object directly into the physical object which is the pictorial expression (Sonesson 1989:262ff). Two similar things assume the character of a picture only when pictorial consciousness is attached to them, Husserl (1980:17, 16, 138f) contends. 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). 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 up «photographic colours». The first, then, which is what is «seen-in», in Wollheim's sense, is the picture object. The second is the picture subject. It should be noted immediately that, although «photographic colours» do not mean the same thing to us as to Husserl, the distinction is still valid, because even high-quality colour photographs, as well as paintings, are unable to render the full scale of colours present in the real world of perception. According to Husserl (p 18), however, there is also a different kind of difference between the picture object and the picture subject, for while that Berlin castle which we see is here, where the picture is, the Berlin castle itself, as a thing, remains in Berlin.

It seems to me that the picture subject is made to accomplish a double task, which it cannot really sustain, that of content type and referent. It is in the relation between the picture object and the picture subject that pictoriality, according to Husserl, 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.). Husserl maintains that there must always be a difference, however small, between picture object and picture subject, in terms of the «extensivity» and the «intensivity» of their respective properties. If so, it should be sufficient to attenuate the «intensive» and «extensive» differences between them, in order to have them approach gradually, and then in the end coincide, at least as a thought experiment. But this could never happen, not even in thought, because the picture object is here, where the picture thing is, but the picture subject is somewhere else, in the place assigned to it in the Lifeworld (cf. pp 18, 79): indeed, as we have heard, the Berlin castle, no matter where the picture is moved, will remain in Berlin. But this makes nonsense of the idea to compare the picture object and picture subject, as to «extensivity» and the «intensivity» of their respective properties.

It would of course be an error to identify the triad picture thing, picture object, and picture subject, with expression, content and referent. The picture object is perceived, which the content of, for example a verbal sign, is not; and there is a real sense in which the picture object is present here and now, together with the picture thing, which the verbal content can hardly

be said to be. Nor is it feasible to assume that the picture subject is identical to the referent, in the sense of a concrete object of the world, or even in the sense of being a type standing for a number of such instances. Many pictures may not have referents, in any of the latter senses, but they clearly have picture subjects: such is the case not only of the notorious unicorn, but of all the creatures emerging out of Escher's and Reutersvärd's pictures.

The whole point of the «impossible pictures» is that they point beyond themselves to something which cannot exist, their equivalents in the three-dimensional world (cf. Sonesson 1989,III.3.4.*).*: indeed, their picture things are quite possible, as are in this sense their picture objects (consider the importance of «recognizability» to Escher*)*. This is, I submit, the most interesting interpretation of the notion of picture subject: *as the potential real-world equivalent of that which is «seen in» the picture thing, that is, of the picture object.* Husserl (p 490*)* could be taken to suggest just this, when he claims that what is seen in the picture is corrected for its deviations from the idea we have of the corresponding type, which imposes constraints on the possibilities of perception: being made of plaster contradicts our idea of a human being, so we withdraw it from the picture object.

4. VISUAL MEANINGS WHICH ARE NOT PICTURES

In precedent discussion, the picture was already contrasted with some kinds of visual signs which are not pictorial, such as droodles and Blissymbolics. Other visual signs, which do not function as pictures, are all kinds of scale models, as well as what I have elsewhere called identifications, such as the car at the motor show, or the tin can in the shop window, standing for the categories of which they are members; the tailor's swatch, standing for some properties of the cloth of which it is made; and the artwork standing for itself at the art exhibition; as well as pseudo-identities, such as the wax food in Japanese restrauants and the dummy in the shop window, which share all properties but the defining one, such, in these cases, edibility and life, respectively, with the thing the represent (Sonesson 1989). Clearly, perception as such is meaningful, without answering to the criteria for being a sign, and it is largely visual in scope. But I would like to finish by considering another case, that of chess, which depends on visual meanings which are not signs.

Saussure, it will be remembered, used chess as a ready analogy to language, arguing that any odd set of buttons may be used to play chess, as long as the rules specifying the possible movements of each button were known, just as, in principle, any sound may stand for any meaning in a language. Anything can be a King, as long as it is permitted to move in the ways a King moves, just as anything (with some exaggeration, no doubt) may be an /a/, as long as it functions as an /a/ in the vowel system. This may be true, but to someone knowing how to play chess, only a chessman looking like the king immediately *affords* the kinds of movement that are allowed to the king in the game of chess. Indeed, chess is, in my view, an organized system of affordances, which are, according to Gibson (1977: 67), combinations of the properties of things taken with reference to an animal, such as, for instance, graspability, edibility, and so on. Each chessman, in this sense, has a specifically defined movability on the chess board. Nevertheless, it is no accident, that the parallel between language and chess

has suggested itself to many prominent thinkers, from Husserl, Wittgenstein and Saussure to Searle and Deacon: even if chess is made up of affordances, the latter would seem to form an integrated system.

Searle (1995: 43ff) describes the constitutional rules giving rise to games (and to institutional reality generally) using the formula «X counts as Y in C». His examples are such things as paper money and chess. To my mind, we may very well say that a chessman (or a button having been substituted for it on the board) *counts as* an item apt to move in certain specified ways on the board. To say that an expression (of a word, a gesture, a picture, and so on) counts as its content, however, is fairly misleading. Signs may really be surrogates for things, in a way; however, they fulfil different functions than the things themselves. They permit us to take a stand on things, so as to determine, for the purpose of the Lifeworld, the meaning of these things. No chessman, nor even a move by a chessman, really counts as a statement modifying the meaning of the game of chess, let alone what is outside of the world of chess.

5. CONCLUSION

There are numerous kinds of visual meanings, some which are also signs. If visual semiotics is to be concerned with all kinds of visual semiosis, its task has harndly begun to be realised. In order for visual semiotics to exist, we may start by characterising the specificity of the picture sign.

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