Space, Time, and Interpretation

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There are different views of how we experience and interpret the space we live in. These views depend, of course, on how we understand experience and on our conception of the subject of experience, the one who is experiencing. The following paper makes use of certain basic principles of the pragmatism of Charles Sanders Peirce and is based on the naturalistic assumption that we, as living organisms, are products of natural and cultural evolution. Culture is a product of nature, and there is no need to oppose them to each other. This type of naturalism should be distinguished from the naturalism discussed in analytical philosophy (Määttänen 2006). Analytical hard naturalism takes natural science and its methods as a model, and there is a tendency to reduce mental and cultural phenomena to the physical level or otherwise see nature and culture as opposed to each other.[1]

In a looser definition of naturalism there are no methodological commitments and there is no need to oppose culture to nature. On the contrary, we should see the continuity between them, and one way to do so is to draw upon a notion of meaning that is wider than that of linguistic meaning. There are other meanings than linguistic meanings, and there are other meaningful practices than discursive practices. At this point we can turn to the semiotic theory of Peirce. It gives us the basic elements of a notion of meaning that can also be used in analysing non-linguistic practices and activities as meaningful. It turns out that our habitual methods and practices of moving around in space can be understood as meaningful practices of experiencing and interpreting our everyday surroundings.

The semiotic triangle

The basic ideas of Peirce's semiotics can be presented in the form of the semiotic triangle (Fig. 1). The triangle was developed (in Määttänen 1993) for the analysis

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of the concrete interaction of a living organism with its environment. This interaction consists of perception and action. We perceive the space around us and act upon it in order to achieve our various goals. In order to see the connection between linguistic discourse and other meaningful practices, we have to assume that the chain of interpretation, which may in principle continue into the indefinite future, is terminated in 'the veritable and final logical interpretant', which is a habit of action (CP 5.491). Habits of action have the interesting feature that they are always realised through single acts (or a series of acts). For example, most of us have the habit of exiting a room through a door (instead of a window), and every time we do so we have an instance of this habit. This concrete action closes the semiotic triangle that can be applied in situations where the object of perception is also the object of action. Generally speaking the whole of our environment is this kind of object, but the analysis also applies in special cases. The perceived object is, ultimately, interpreted by habits of action that have the same entity as the object of action. Peirce distinguished between action and perception, for example, by saying that in action 'our modification of other things is more prominent than their reaction on us' as compared to perception 'where their effect on us is overwhelmingly greater than our effect on them' (CP 1.324). From the triangle we see that perception and action are different sides of the triangle.

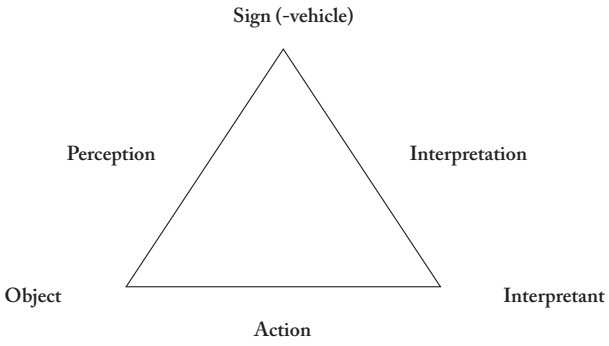

Figure 1] The semiotic triangle.

The concept of the final logical interpretant is the key element of Peirce's pragmatist doctrine that meanings are ultimately habits of action. Objects of perception are interpreted in terms of habits that are somehow related to these objects. Peirce writes that 'what a thing means is simply what habits it involves'

(CP 5.400, see also CP 5.495). For example, a perceived banana is ultimately interpreted by habits of action, presumably by habits of eating. This analysis can be applied to any perceived object in our environment, including buildings, roads and squares, places and locations. There are different kinds of habits and practices involved in this kind of object, starting from ways of movement in our environment. At a basic level we are moderately sized pieces of flesh moving around in space and time, and even at this level we experience and interpret our environment through our activities. A house is a home if the basic practices of everyday life, such as sleeping, eating and the like, are concentrated there. This is the meaning of a home.

Of course, we also have other interpretative capacities that are somehow built on this. There are specifically social and cultural habits of discourse. But linguistic meaning can be analysed along the same lines. The Wittgensteinian principle 'meaning is use' can be understood as an instance of the pragmatist notion of meanings as habits of action (see Määttänen 2005). The use of linguistic expressions is habitual, and the instantiation of these habits requires some concrete action as well. Not a word is emitted without some bodily behaviour. The point is that linguistic discourse and other meaningful practices can be analysed through the same principle. The result is a kind of multilayered system of meanings where meaningful embodied practices are intertwined with cultural habits of discourse. Here culture and nature are not separated from each other but united under the same principle: meaning is the use of linguistic expressions, use of material tools, buildings and places, or even one's own body in the process of experiencing and interpreting the world.

Habits as beliefs

For Peirce habits of action are not only meanings but also beliefs: 'a deliberate, or self-controlled, habit is precisely a belief' (CP 5.480). 'The essence of belief is the establishment of a habit' (CP 5.398, see also 5.377 and 5.417). To have beliefs about the world is ultimately to have habits of action in this world. As noted above, most of us have the habit of exiting a room through a door and not a window. This habit is formed because of the necessity of accommodating our movements to objective physical facts. This habit consists of a structured series of acts and is a kind of belief about the structure of the real and objective conditions of action. It is a belief that if you use a door you can continue walking quite safely, but if you use a window something surprising may happen.

As physical entities we are bound to take notice of these objective facts, which Peirce called 'hard facts'. His own example was a skeptic walking down Wall Street, 'debating within himself the existence of an external world; but if in his brown study he jostles up against somebody who angrily draws off and knocks him down, the skeptic is unlikely to carry his skepticism so far as to doubt whether anything beside the ego was concerned in that phenomenon. The resistance shows him that something independent of him is there.' (CP 1.431.)

On the other hand, we are also cultural beings. The social and cultural world is a real and objective phenomenon as well. In order to get along in a society, we have to accommodate our behaviour to social facts, which might be called 'soft facts' in contrast to physical hard facts. Soft facts differ from hard facts in that they are, in a sense, imaginary at the same time as they are objective. Imagination may be illusory, but its illusory character is not based on its being imagination, but on its being private imagination. There is a certain continuum between individual fantasy and social or collective imagination. Private fancies of an individual may be classified as fairy-tales, but if these fancies are adopted by a group of people, they may turn to objective social facts: soft facts that are experienced as real and compulsive. For example, Santa Claus is a fictive person, but if we all believe that he exists and gives gifts only to good persons, then, if we want gifts, we tend to behave in the required manner. Money, as paper, is practically worthless, but if sufficiently many people believe in its value, we can use it as a medium of exchange. If not, we have a crisis at hand.

In spite of their imaginary character, soft facts are not independent of hard facts. Beliefs are ultimately habits of action, and even social behaviour is behaviour of concrete biological organisms. Soft facts are based on mutual beliefs about correct behaviour. These beliefs are often communicated through conventional symbols, but outside the purely symbolic sphere, there are certain hard restrictions on conventionality. We may choose which side of the road we drive on, but once the convention is in place, we are forced to obey the convention at the risk of getting involved with quite hard facts. Soft facts, such as thinking, planning and so on, may also change hard facts. Nature is changed into buildings, roads, cities, and these hard facts have an effect on our social and cultural life, on how we experience our social reality. Hard and soft facts form an intertwined system, which, as a whole, forms the physical, social and cultural environment of our everyday lives, the space in which we live.

How is space experienced?

Soft and hard facts differ in one important respect. Hard facts, such as houses, sidewalks and all physical entities, are objects of perception, but strictly speaking it is impossible to perceive social institutions. We can see a policeman standing on the corner, but the police as an institution for the maintenance of order cannot be reduced to this person. From the symbols he is carrying we can conclude that in certain circumstances he will behave in certain ways, but this we can only think of as long as those circumstances prevail. Similarly one cannot, strictly speaking, perceive the border between two states. One can perceive certain sign-vehicles from which one can conclude that there is a border, but actually the border as a social fact regulating the relationship between two states exists only as mutual expectations of behaviour, which (and this is the crucial point) tend to be carried out by certain real and hard physical entities. If we cross the border without following required procedures we can expect that certain people will behave in certain ways, and we will most probably be faced with some fairly hard facts.

That soft facts cannot strictly speaking be perceived does not mean that they cannot be experienced. From the pragmatist point of view, they can be experienced in the same way as hard facts, namely by action. Hard facts are experienced by action when we accommodate our behaviour to the real conditions of action and use a door and not a window when exiting a room. And in the same way we experience soft facts in participating in our social and cultural practices. Besides observable hard facts, we have to anticipate what kind of soft facts we have to take into account in planning our behaviour. And one important reason for the influence of soft facts is their potential capacity to transform into hard facts. In other words, to think about social reality is to anticipate the behaviour of the members of the society, one's own and that of others. We conceive social space by attaching meanings to perceived physical sign-vehicles, and these meanings exist as habits of social practice.

How does social space exist?

Social space, social reality, exists as mutual expectations of behaviour that tend to be carried out in certain circumstances. In other words, social space exists as habits of action. Soft facts as habits of action are beliefs and facts at the same time. They are a kind of belief about themselves. Social space consists of these facts,

and people experience these habits as real facts but, on the other hand, people's habits of action are beliefs about how people usually behave in certain circumstances. Through participating in these habits and practices, people also constitute social space. These common habits are normative to the extent that people want to live in a community. Usually they do, albeit in different ways and to different degrees.

The question of how social reality exists turns out to be the question of how habits exist. What is the mode of existence of habits? Habits do not hang in the air. They are habits of action performed by embodied beings. Even linguistic discourse requires some bodily behaviour. The use of words and other sign-vehicles, as well as the use of tools, instruments and other physical objects, takes place in public space. However, habits cannot be identified with individual instances of habits. The same holds for any finite number of instances. Habits are general, universal entities.

Habits as general entities do not exist in the same way as particulars, because habits as general entities cannot be identified with any finite number of particular instances but are always habits of particular embodied beings; they can only exist in the indefinite future. The reason is that they don't exist in the past or in the present. Habits cannot exist in the past because in the past there are only a finite number of instances of them, and they cannot exist in the present because at present there are only single instances of them. The indefinite future is the only mode of being where something truly general can exist. 'For every habit has, or is, a general law. Whatever is truly general refers to the indefinite future; [---] It is a potentiality; and its mode of being is *esse in futuro*.' (CP 2.148.)

From the present point of view, the future can exist only in thought. In a sense, however, the future is right in front of us, here and now. It is in front of us in the form of perceived objects, external sign-vehicles that refer to the future results of anticipated action. The meanings of these sign-vehicles are also habits, and beliefs about the space in front of us are also habits. Intentionality, mind's action (CP 2.86), thus exists in the future even though it is we, here and now, who do the thinking. Thinking is anticipation of action, which means that future action is planned on the basis of what one expects the outcome of the action to be, and in this sense the view 'that the future does not influence the present is untenable doctrine' (CP 2.86). From a pragmatist viewpoint, social institutions, soft facts, exist as institutionalised habits and practices, and they too, in a sense, exist only in the future, which is precisely the reason why they cannot be perceived, but can only be thought of.

However, this distinction between what can be perceived and what can only be thought of does not entail ontological distinctions in the way of René Descartes. Habits are still habits of embodied beings, and there is an intimate connection between that which can and that which cannot be perceived. To repeat: perceived objects are material sign-vehicles that refer to themselves as objects of future (anticipated) action. The meanings that are attached to them are ultimately the habits and practices they involve.

To think in terms of habits is to anticipate the future results of one's own activities, other people and the regular processes of the natural environment (Peirce even called laws of nature habits) on the basis on what one has experienced before. Peirce compared this kind of cognition to musical experience. When one listens to a melody or a musical phrase, one always hears only one note at a time, but the phrase is always perceived as a whole. On the basis of what has been heard, one anticipates how it might continue, given the knowledge and experience of the musical tradition in question. From this point of view thought 'is a thread of melody running through the succession of our sensations' (CP 5.395).

Social space exists in the form of this kind of habitual anticipation, which can only be thought of, but social space is experienced quite concretely when these habits are actualised by embodied human beings, without which these habits would not exist at all. Soft facts are necessarily intertwined with hard facts. Social and cultural habits cannot be categorically separated from our habits of bodily behaviour. Power, especially, is a kind of social phenomenon which can resort to hard facts. Through habits we inhabit the world, as John Dewey pointed out (Dewey 1980: 104), and this world contains both hard and soft facts.

Henri Lefebvre on spaces, places and locations

Henri Lefebvre's conception of space comes close to the above considerations. He seeks a spatial code (Lefebvre 2002: 16–17) but refers only to Saussurean semiotic concepts. The semiotic approach of Peirce is more suitable, especially as there are many pragmatist elements in Lefebvre's thought. According to Lefebvre (2002: 47–48), a spatial code 'is not simply a means of reading or interpreting space: rather it is a means of living in that space, of understanding it, and of producing it.' Peircean habits of action as final interpretants, beliefs and meanings will do all this. Habits and practices are ways in which we live, understand and reproduce the social reality which exists in the form of these habits and practices.

Lefebvre's basic distinction is between representations of space, representational spaces and spatial practice. *Representations of space* form a 'conceptualized space, the space of scientists, planners, urbanists, technocratic subdividers and social engineers, as of a certain type of artists with a scientific bent – all of whom identify what is lived and what is perceived with what is conceived' (Lefebvre 2002: 38). The problem with this conception of space is, according to Lefebvre, that it does not show the connection between these conceptualisations and the actual social reality in which people live. In order to really see the connection we need the notion of *representational spaces*, the space 'as directly *lived* through its associated images and symbols' (Lefebvre 2002: 39, emphasis in the original). And this process of living only takes place through *spatial practice*, practice with which people produce, reproduce and change social reality, social space.

Semiosis through meaningful practices of social life (the Peircean way of talking about spatial practice) shows the connection between representations (conceptualisations) of space and representational spaces, by showing how different types of meanings are associated with buildings, places and locations. It defines 'places – the relationship of local to global; the representation of that relationship; actions and signs; the trivialized spaces of everyday life; and, in opposition to these last, spaces made special by symbolic means as desirable or undesirable, benevolent or malevolent, sanctioned or forbidden to particular groups' (Lefebvre 2002: 288). In the Peircean approach, it is not only that 'spatial practice is lived directly before it is conceptualized' (Lefebvre 2002: 34), but spatial practice is itself a meaningful practice and as such a kind of preconceptualisation of the social space. Habits and practices are ways of interpreting and understanding, ways of living in and thinking of the social world.

From the Cartesian point of view, space seems to consist of individual perceived objects, but in order to interpret and understand the meanings of these objects as different kinds of sign-vehicles we have to pay attention to the habits and practices related to these objects. Lefebvre expresses this pragmatist turn as follows: 'the 'object' of interest must be expected to shift from *things in space* to the actual *production of space*' (Lefebvre 2002: 36–37, emphasis in the original). Social space 'is the outcome of a sequence and set of operations, and thus cannot be reduced to the rank of simple object' (Lefebvre 2002: 73).

However, 'simple objects' in space work as sign-vehicles and as such as a kind of instructions to action. 'Itself the outcome of past operations, social space is

what permits fresh actions to occur, while suggesting others and prohibiting yet others' (Lefebvre 2002: 73). This approach 'would analyze not things in space but space itself, with a view to uncovering the social relationships embedded in it' (Lefebvre 2002: 89). To live, to interpret, to produce and reproduce the social space is one and the same process of spatial practice. This signifying practice 'occurs in space which cannot be reduced either to an everyday discourse or to a literary language of texts' (Lefebvre 2002: 136). Space takes it full meaning when it rejoins 'material production: the production of goods, things, objects of exchange – clothing, furnishings, houses or homes – a production which is dictated by necessity' (Lefebvre 2002: 137).

Space, as observed or perceived, consists of different kinds of objects, such as houses, places, symbols and texts, but from a pragmatist point of view the analysis must be continued to different kinds of meaningful practices. These signifying practices, either discursive practices or more concrete and embodied practices, are not uniform and exact. Meanings depend on context, and contexts are as varied as are different cultures and subcultures in the society. This means that 'the *places* of social space are very different from those of natural space in that they are not simply juxtaposed: they may be intercalated, combined, superimposed – they may even sometimes collide' (Lefebvre 2002: 88, emphasis in the original). 'Both natural and urban spaces are, if anything, 'over-inscribed': everything therein resembles a rough draft, jumbled and self-contradictory. Rather than signs, what one encounters here are directions – multifarious and overlapping instructions.' (Lefebvre 2002: 142.)

Almost everything that Lefebvre writes fits in well with the Peircean approach. The only problem in the previous quote is the phrase 'rather than signs'. A sign is for Peirce a three-place relation, and if we continue the chain of interpretation to final logical interpretants, habits of action, we can see that sign-vehicles are only instructions to action. They instruct us to act in habitual ways, and these habits are the mode of existence of the social reality. These habits are the meanings that we attach to different sign-vehicles in our environment. The problem is that, in comparison with habits, we can at a particular time perform only individual acts. The habituality of an act can only be thought of during the act; it is a projection into the future (because the past is gone and never comes back). On the other hand, we can anticipate on the basis of past experience that different kinds of habits will be continued in the future in one form or another,

and this common and mutual anticipation (or imagination) is one of the ways in which social reality or social space exists. However, it is not the only way. In Peircean semiotics, signs are, as noted, three-place relations and consist of not only habits but also of objects and sign-vehicles. That which can only be thought of, the mental, 'is 'realized' in a chain of 'social' activities because, in the temple, in the city, in monuments and palaces, the imaginary is transformed into the real,' as Lefebvre puts it (Lefebvre 2002: 251).

The material and the imaginary, hard and soft facts, nature and culture, should not be artificially separated from each other. The mode of existence of the social space is spatial practice, a process of intertwined layers of meaningful practices of embodied beings that can be analysed through Peircean semiotics.

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