Language, world, and structure

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Language is a vehicle of thinking and communication. Dots and noises, the external and public elements of language, have this function because of meanings attached to them. Conceptions about how language fulfils this function depend obviously on the accepted notion of meaning. The present paper discusses the issue from the viewpoint, developed by Charles Peirce and Ludwig Wittgenstein (see Määttänen 2005), that the meaning of a linguistic expression is its use in a linguistic community.

Crudely speaking this approach can be developed in two ways. A narrow notion of meaning presumes that meanings are ultimately linguistic. Meanings associated with other things have their origin in language and are made possible by language. A wide notion of meaning applies the principle that meaning is use not only to linguistic expressions but also to tools, instruments and other things that can be used in specific ways. The meaning of a hammer, say, is the way it is used for hammering, and anyone who has the skill of hammering understands the meaning of a hammer.

Acquaintance with the use of an instrument makes it possible to understand that this instrument refers to possible acts of using the instrument, possible objects of the use and so on. In other words, an instrument functions also as meaningful entity, as a sign-vehicle that can be used for communicating meanings. By showing an instrument one can express a meaningful thought even when linguistic means of communication are not available.

This approach can be applied to all physical objects that are in a systematical way related to meaningful practices, linguistic or other. Peirce expressed this by stating that "what a thing means is, simply, what habits it involves" (CP 5.400). Chairs, tables, houses temples and so on are meaningful objects by virtue of related meaningful practices.

The point can be expressed also in the terms of Peirce's semiotic theory. Sign-vehicles must be interpreted to refer to their objects. This takes place through an interpretant. Sign-relation is thus a three-place relation between an object, a sign-vehicle (or a representamen) and an interpretant. The interpretant may be a further sign-vehicle that requires a further interpretant in order to fulfill its function as a sign-vehicle. In this way the process of interpretation may go on to the indefinite future.

The process of interpretation may, however, stop to a specific kind of interpretant, to the final logical interpretant that is a habit of action (CP 5.591). As noted above, habits are also meanings for Peirce. This all amounts to saying that things are ultimately interpreted to be meaningful entities by virtue of habits (meanings) that they involve.

This approach can be applied to the analysis of the interaction between living organisms and their environment (see Määttänen 1993). The outcome of this analysis is that objects of perception are ultimately interpreted to be meaningful entities by virtue of habitual practices that are in a systematic way related to them. This fits well in with the general principle that meaning is use, although not all objects of perception are used in the same sense as linguistic expressions or tools and instruments.   The point is that objects of perception are experienced as meaningful entities by virtue of non-linguistic habitual practices.

The wide notion of meaning thus gives us a multilayered system of meanings where linguistic and other meaningful practices are related to objects and to each other in various ways. The non-linguistic practices are meaningful in their own right in the sense that the meaning is defined as the use of the corresponding object or as habits that are in a systematic way related to these objects. Linguistic discourse has an effect on our interpretation and understanding of non-linguistic practices, it may change those practices, but the non-linguistic practices have their objective conditions that are independent of discourse.

The physical properties of non-linguistic sign-vehicles restrict the use of these objects. There are things you can do with a hammer and things you cannot do. This entails that the meanings attached to these sign-vehicles cannot be conventional in the same sense than linguistic meanings can, in principle, be. The objective limits of using these sign-vehicles are, by definition, also objective limits of their meaning. These limits are manifest to us as objective conditions of action, for example in situation where muscular effort meets resistance, as Peirce would say. Most of us have the habit of using the door and not the window when exiting a room, for obvious reasons. And this use of doors is a central element in the meaning of doors.

The idea that physical nature sets objective limits to meanings is a simple consequence of a soft version of naturalism (outlined by John Dewey, see Määttänen 2006) according to which we as biological organisms as well as social and cultural beings are a product of nature. Human culture is a phenomenon developed by biological organisms, and no amount of conceptual change or changes in our use of language or other symbolic systems can change this fact of our embodied existence.

It may be objected that the science of physics is still looking for the ultimate structure of matter. However, the distinction between solids, liquids and gases, for example, is still a valid distinction in physics, and its validity is independent of any theory about the ultimate structure of matter. Solid objects admittedly consist of smaller particles, but it is unconceivable how our possible *knowledge* about these particles could make the solids disappear. And it is this sort of physical facts that set the limits of the meanings of non-linguistic sign-vehicles like hammers, tables and buildings.

Another possible objection is the claim that the way the world is curved up is determined by concepts and theories, and this is why any particular categorization, like for instance the categorization into middle-sized three-dimensional objects, cannot be a prerequisite and a starting point for conceptualizing and theorizing. This is a point where we simply have to make a choice between concepts and nature as a starting point. I shall try to argue for the latter.

For one thing, those who appeal to the conceptual categorization of the world should tell explicitly what are these concepts, what is their mode of existence and the mechanism through which the categorization actually takes or could take place. Concepts are either outside or inside of nature. If they are outside, it remains an open question what could be the non-causal mechanism through which they can have an effect on the causal processes of nature (which is causally closed). The burden of proof is on the side of this sort of Neo-Kantians. If the conceptual structures are inside of nature, they have to be realized through causal processes and material structures, and it remains an open question what causal processes do realize conceptual structures and how these structures could change the categorizing principles of themselves. It should be clear that we cannot change the laws of nature just by changing the way we use words and other symbols.

The second point is that by choosing to be naturalists we deny the Cartesian dualism between mental and material substance. This entails that the mind is necessarily embodied. Cartesian skepticism is not of much help for proving the opposite, because mere doubt cannot really make the body disappear. More concrete operations are needed for that. For a naturalist there is no evidence for the view that a mind can really exist without a body. The body (or the brain, if you like) is a necessary prerequisite for there being conscious subjects capable of conceptual thought and using natural language.

Naturalism is, of course, committed to the view that there no *a priori* conceptual truths or unchanging presumptions. Here it is important to distinguish between two possible formulations of this idea. This commitment of naturalism may be expressed by stating that anything could have been otherwise or by saying that any part of our present beliefs may, in principle, be subject to change in the face of new evidence.

The first formulation speculates with logical possibilities. Of course it is possible, as far as we know, that this universe had been different, that there exists other kind of universes or that there are forms of life based on different principles that our life. But why should we here and now take it as a serious alternative for our own existence? These stories are mere fiction as long as someone shows a plausible connection between them and the evidence we face now.

The second formulation follows the naturalistic principle that all claims and generalizations should be evaluated on the face of our present (and future) empirical evidence. The denial of an *a priori* method entails that philosophical and scientific theories and methods are not opposed to each other, that there is continuity between them.

The denial of an *a priori* method entails, further, that there is continuity not only between scientific and philosophical methods. The continuity extends also to everyday experience. From this point of view the fact that we are embodied beings, biological organisms, marks down the intersection of the scientific and the manifest image. In everyday experience, in science and in philosophy we look for new evidence and new knowledge as embodied beings using various tools, instruments and symbolic resources. And it is quite safe to say that new evidence or theorizing will not change this fact in the predictable future. This should be enough for a naturalist.

Now we are in the position to say that our body with its organs is the first instrument of investigating the surrounding world, and the use external instruments and other physical objects requires always an embodied agent. Certain empirical facts set certain limits to how we can use external objects and to what kind of habits may be involved with things external to the body. These limits are also limits of what can be the meanings attached to these objects as non-linguistic sign-vehicles.

The next question concerns the relation of linguistic and other symbolic meanings to these non-symbolic meanings. There are, of course, branches of discourse like fiction where symbolic meanings are not even supposed to be entirely consistent with our non-linguistic practices limited by objective conditions of action. However, if we want our multilayered system of meanings to be a consistent whole, it is not advisable to use symbols in ways that would make us try to act against objective conditions of action.

We can think, we can write novels and we can elaborate philosophical theories based on the possibility that the bodies of biological organisms were sliced differently, but we cannot really act upon this kind of beliefs. It would be acting against the prerequisites of our own existence. Not all symbolic practices are consistent with non-symbolic practices. If we admit that there are non-linguistic meanings as habits of action, we have to admit that there are also non-linguistic beliefs expressible through these meanings (for Peirce habits are also beliefs, see CP 5.398 and CP 5.480). If we hope to be consistent, as I hope, we should consider also the relation between linguistic and non-linguistic practices whenever it is relevant.

Finally there is the question about experiencing the world as meaningful entities. This can be expressed in different ways. It has been said, for example, that the experienced world is already the result of significatory processes, or that the world is necessarily the world under a description, or that nothing is distinct before the appearance of language. This way of thinking leads to two entirely different views depending on what kind of notion of meaning we have.

A narrow notion of meaning, according to which meanings are linguistic, leads to the conclusion that only the emergence of natural language made it possible to experience the world as distinct and meaningful entities. The problem of this view is that it makes it difficult to understand the very emergence of language. How did our ancestors get the ability to use some noises as distinct and meaningful entities and how did this ability change so radically the character of experience that chaos became rational order under description?

The wide notion of meaning has the advantage of showing the continuity. Meaningful dots and noises form only a specific kind of distinct and meaningful entities. All objects of perception may be meaningful by virtue of habits of action that are in a systematic way related to them. The principle that meaning is use is a way to apply this idea to things that are consciously used for different purposes. This entails, of course, that we have to reject the presumption that conscious thinking is a product of mastering a language. Actually it may well be the other way round, as is suggested in various occasions (see, for example, Donald 2001, 276)

From the viewpoint of the wide notion of meaning the experienced world has a meaningful structure as distinct entities independently of mastering a natural language. The objects of perception simply are sign-

vehicles that stand for the outcomes of the action associated with them. The only prerequisite is the ability to guide one's activities purposefully on the ground of previously adopted habits of action associated with these objects of perception. This habitual way of encountering the world is the connecting element that shows the continuity between the ways we experience our natural and cultural environment. It also shows the objective limits of the non-linguistic meanings that follow from our embodied existence and form the basis of all the cultural divergence of symbolic discourse.

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