



Tommi **Vehkavaara**, tommi.vehkavaara[at]uta.fi  
University of Tampere, Finland



## **Making semiotic concepts for cognitive semiotics – many rather than one concept of sign**

Cognitive semiotics (CS) has been characterized “as an interdisciplinary matrix of (subparts of) disciplines and methods, focused on the multifaceted phenomenon of *meaning*” (Zlatev 2012). One of the many difficulties of this challenging project is the integration of conceptual and empirical studies. Often in empirical studies, the used semiotic concepts (e.g. meaning or sign) are referred only in some vague intuitive senses. Theoretical studies, in turn, easily stuck into debates between competing abstract definitions without any criteria specific enough which would control their applicability (Sonesson 2008 and Zlatev 2009). In order to apply abstract semiotic concepts controlledly in concrete empirical data, we need to make the used semiotic concepts clear.

Another difficulty is inherited from the initial idea of CS which was to integrate cognitive sciences and the humanities, “with the ultimate aim of providing new insights into the realm of human signification” (Zlatev 2012). Now as this has been further extended to cover also non-human signification, we may ask whether the study of non-human signification and its theoretical concepts should somehow be subordinate to the study of human cognition or rather be considered *per se*, independently on its implications to human signification. If those forms of cognition that are shared by humans and non-human agents without language faculty, there is a risk that the choices and definitions of the preferred theoretical concepts of CS are ill-advisably linguistically or humanistically biased (especially because many of the leading cognitive semioticians are linguists or have got their basic education in linguistics).

One way to proceed in both of these problems is to look beyond the mere abstract definitions of our concepts to the *perceptions* or *intuitions*, from which the defined concepts of sign and meaning are derived, how these *derivations* are executed, and what kind of “essential features” they are supposed to preserve. For help of this meta-semiotical question, I will recall C.S. Peirce’s notion of concept formation: all the elements of concepts are originated by perception/intuition:

“The elements of every concept enter into logical thought at the gate of perception and make their exit at the gate of purposive action;” (EP 2:241, CP 5.212, 1903)

In this formulation of Pragmatism (that it is!), the meaning of an (intellectual) concept can be found by considering the possible “exit gate”, but the content is inherited from the perceptual/intuitive origin. The role of origin is not to justify or warrant the abstracted concept or its possible applications – quite the contrary – there is no guarantee that the abstracted concept will after all be applicable to describe the common sense prototype from which it was derived. Origin does not in principle limit its applicability to completely different kind of phenomena either. But the inspection of the intuitive origin and the derivation of the concept may teach us what kind of concept it is, what kind of hidden structure it has, i.e. what kind of implicit elements, relations, etc. its derivation requires and which are not abstracted away.

As there are several concepts of sign that have been applied in CS, they can be compared with respect to their derivation. Happily, three concepts of sign have clear and explicit derivations: Peirce’s logical sign, Saussure’s structural-linguistic sign, and Sonesson’s phenomenologically derived concept of sign. All of them can be found collaterally useful concepts for CS, but having their own restrictions due to their origins.



The International Association for Cognitive Semiotics



UMCS  
WYDZIAŁ FILOZOFII I SOCJOLOGII

Peirce's concept of sign was derived as a mean for *representative cognition* familiar to us in scientific or rational *inquiry*, and the initial problem is how a rational inquirer interprets his/her (surprising) observations or perceptions (sign) in order to compose a truthful conception (interpretant, "Dicisign" of Stjernfelt 2014) about their real conditions (object). Although many Peircean semioticians, especially biosemioticians (like Stjernfelt), feel justified to abstract this concept further and apply it even to the metabolic processes of the most simple forms of life, the look to Peirce's derivations of his logical sign shows that the basic triadic structure of sign is dependent on interpreter's conscious interest on truth – a faculty that bacteria (and often also humans) certainly lack. This does not mean that Peirce's concept would be completely inapplicable in biosemiotics, only that the constitutional requirements of the sign relation should be fulfilled in its application.

Saussure's prototype of sign, in turn, was meant to be a vehicle of (linguistic) *communication* of mental ideas and its derivation led to the abstracted concept lacking the referential content. Although Sonesson's derivation of his concept of sign is more phenomenological than structuralistic, his starting point intuition seems to be not very far from Saussure's one – sign consists minimally of the union of expression and content). But Sonesson's derivation starts from the core phenomenon of CS, *perception* (and not from communication) resulting a hierarchy of "meanings" of which only the highest one deserves to be called as sign. The vague idea of linguistic sign and meaning seems nevertheless to constrain the derivation to some extent, which is not problematic *per se* unless it is claimed that such concept of sign is somehow privileged in CS (or the only "true" concept of sign).

Besides these three intuitive origins, rational inquiry, communication of ideas, and meaningful perception, there is still (at least) one possible starting point. I have suggested (Vehkavaara 2006) that certain applications require differently derived concept of sign starting from the idea of *intentional action*. Any action that is more directed than blind compulsive reactions requires some kind of anticipation of the result of a planned action. Such anticipation can be thought to be an internal sign by which the actor uses as a mean to guide or constrain the results of action. The resulting *practical* or *constructive* concept of sign is a normative and dynamic sign but its triadic structure is different than the one of Peirce's concept. When the empirical studies are made in CS, we should seriously consider which one(s) of these types of concepts (or perhaps some fifth one) are the best to model the studied cognitive phenomena.

#### References:

- Brandt, Per Aage (2004) *Spaces, Domains and Meanings. Essays in Cognitive Semiotics*. Bern: Peter Lang.
- Deacon, T. W. (1997). *The symbolic species: the Co-evolution of language and the brain*. New York: W.W. Norton.
- El-Hani Charbel, João Queiroz, Claus Emmeche 2009. *Genes, information, and semiosis*. Tartu: Tartu University Press.
- Kull, K. (2009). Vegetative, animal, and cultural semiosis: the semiotic threshold zones. *Cognitive Semiotics* 4/2009: 8–27.
- Peirce Charles S. (CP): *Collected papers of C. S. Peirce*.
- Peirce Charles S. (EP): *Essential Peirce*.
- Saussure, Ferdinand de 1916. *Course in General Linguistics*. (Transl. Roy Harris, 1983). Chicago & La Salle (Ill.): Open Court 1997
- Stjernfelt Frederik (2007): *Diagrammatology*. Springer.
- Stjernfelt Frederik (2014): *Natural Propositions*. Docent Press.
- Sonesson Göran (2008): From the meaning of embodiment to the embodiment of meaning: A study in phenomenological semiotics. In Ziemke, Zlatev, Frank (eds.): *Cognitive Linguistics*



*Research, 35.1: Body, Language, and Mind, Volume 1: Embodiement.* Mouton de Gruyter: 85-127.

Sonesson Göran (2012): The Foundation of Cognitive Semiotics in the Phenomenology of Signs and Meanings. *Intellecta* 58(2)/2012: 207-239.

Vehkavaara Tommi (2002): Why and how to naturalize semiotic concepts for biosemiotics. *Sign Systems Studies* 30(1)/2002: 293-313.

Vehkavaara Tommi (2006): Limitations on applying Peircean semeiotic. Biosemiotics as applied objective ethics and esthetics rather than semeiotic. *Journal of Biosemiotics* 1(2)/2006: 269-308.

Zlatev Jordan (2009): The Semiotic Hierarchy: Life, consciousness, signs and language. *Cognitive Semiotics* 4/2009: 169-200.

Zlatev Jordan (2012): Cognitive Semiotics: An emerging field for the transdisciplinary study of meaning. *Public Journal of Semiotics* IV(1)/2012: 2-24.