A 'holographic' sign as a package of multimodal information: research hypotheses

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This analysis takes as its departure point the theoretical framework which I have been building for several years now, and which I refer to as the ecology of language and communication (i.e. ecolinguistics) (Boguslawska-Tafelska, 2008, 2011; 2013; 2015) and relates it to multimodality of communication channels. In the first part of the paper, ecolinguistics is delineated with reference to this chosen paradigmatic and methodological unfolding and its relevance for the multimodal communication; Also the 'epistemological lesson of quantum mechanics' is introduced (Bohr as cited by Plotnitsky, 2010). In the second part of the paper, the way I define the human mind, and the way I define the 'sign' are presented being the elements of the 'eco' theory of human language and communication, their role in the communicative processes being delineated.

The ecolinguistic paradigm has located itself outside the current research paradigms of mainstream linguistics for the fundamental ontological, epistemological and methodological reasons. While analysing life phenomena - human language being one of life processes as proposed by ecolinguists - we can adopt either 'classical thinking' - to operate within the Newtonian model; or 'nonclassical thinking' to operate within the post-Newtonian model (Plotnitsky, 2004; Walach and von Stillfried, 2011). Hence, in my ecolinguistic model building it was a natural choice to choose the post-Newtonian model of reality because it is the most recent one. The ecolinguistic proposals in the current study are formulated with reference to such interdisciplinary models as Generalised Quantum Theory (Atmanspacher, Romer and Walach, 2002; Walach and von Stillfried, 2011), Quantum Brain Dynamics (cf. Globus et al. 2004) and Giulio Tononi's consciousness-as-an- information-field model (Tononi, 2012).

The ecolinguistic model of the language/communicational process, constructed on such foundations, indeed challenges the formal or cognitive linguist's mindset and his/her general intuitions. In it, *the sign* is proposed to have a holographic nature being a package of multimodal information to be received by the multimodal communicative mechanism in the human communicator; *the mind* is a participant in the communicative process, not the ultimate reference mechanism.

In this context, the linguistic sign, in its singularity, starts to function as a 'hologram', to use this term more as a metaphor rather than a specialized concept (hologram being a three-dimensional compression of a multidimensional picture of an object; each element of the hologram contains the whole). The sign is co-profiled universally and exhibits a process-like, emergent, momentary nature. One sign when sent by the multi-modal organism is of a multimodal nature; in it, the totality of the message is compressed, to be decomposed and read by the receiving living system(s). The message an organism intends to send through sign(s) can be described/understood as a package of multimodal informational load to be internalized by the receiving living system in the communicative process. All human communicators have this multimodal mechanism available to them. Without the awareness of

being in possession of these resources, though, most communicators today focus only on the audiovisual modality (Boguslawska-Tafelska, 2013; 2015).

References

Atmanspacher, H., Römer, H. and H. Walach. 2002. 'Weak quantum theory: complementarity and entanglement in physics and beyond'. **Foundations of Physics**. 32. 379-406.

Boguslawska-Tafelska, M. 2008. 'Cognitivism in linguistics. Why sciences are to fall into one interdisciplinary paradigm'. In Puppel, S. and M. Boguslawska-Tafelska (eds.). **New Pathways in Linguistics.**

Boguslawska-Tafelska, M. 2011. 'Manipulation in communication. Or: how ecolinguistics returns a communicator's powers back to him/her'. In Puppel, S. and M. Boguslawska-Tafelska (eds.). **New Pathways in Linguistics**. Olsztyn: KFA. 9-23.

Boguslawska-Tafelska, M. 2013. **Towards an ecology of language, communication and the mind**. Frankfurt am Main: Peter Lang.

Boguslawska-Tafelska, M. 2015. 'Human communication: evolution towards a 'holographic' sign. Research hypotheses'. Forthcoming.

Chandler, D. 2007. Semiotics. London and New York: Routledge.

Cibangu, S. K. 2010. 'Paradigms, methodologies, and methods'. **Library and Information Science Research**, vol. 32. 177-178.

Eco, U. 1984. 'On fish and buttons: semiotics and philosophy of language'. **Semiotica.** Vol. 481/2. Amsterdam: Mouton Publishers.

Globus, G. G., Pribram, K. H. and G. Vitiello (eds.). 2004. **Brain and being. At the boundary between science, philosophy, language and arts**. Amsterdam/Philadelphia: John Benjamins.

Haugen, E. 1972. **The ecology of language.** Stanford, California: Stanford University Press.

Penrose, R. 1995. The shadows of the mind. London: Vintage.

Plotnitsky, A. 2004. 'The unthinkable: Nonclassical theory, the unconscious mind and the quantum brain'. In Globus, G. G., Pribram, K. H. and G. Vitiello (eds.). **Brain and being. At the boundary between science, philosophy, language and arts**. Amsterdam/Philadelphia: John Benjamins.29-45.

Plotnitsky, A. 2010. **Epistemology and probability. Bohr, Heisenberg, Schrödinger and the nature of quantum-theoretical thinking**. Berlin/New York: Springer Scientific Publisher.

Sale, J., Lohfeld, L. and Brasil, K. 2002. Revisiting the quantitative-qualitative debate: implications

for mixed -methods research'. Quality and Quantity. Vol. 36. 43-53.

Tononi, G. 2012. 'Integrated information theory of consciousness: an updated account'. In **Archives Italiennes de Biologie**. 290-326.

Walach, H. and N. von Stillfried. 2011. 'Generalised quantum theory - basic idea and general intuition: a background story and overview'. In **Axiomathes**. Vol. 21. 185-209.