

# Extending Biosemiotics.

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The Extended Evolutionary Synthesis also extends the role of biosemiotics. This paper will seek to extend it further, both to the metaphysics of C. S. Peirce and A. N. Whitehead and to Ingold's treatment of inheritance (Ingold, 2022).

Firstness, experience without reaction, is fundamental to Peirce's metaphysics, giving qualia an ontological status equivalent to matter. Thus his broader concepts, such as tychism and synechism, are actually aspects of panpsychism. By bringing Peirce and von Uexküll together, biosemiotics restores meaning, and hence subjectivity, to biology. This paper will propose to move beyond biology to a more universal view of subjectivity.

At first sight it might appear that Hoffmeyer agrees, since he notes "This world is full of subjects and something must have created them." (Hoffmeyer, 1996, page 57). However, he stops short of panpsychism and takes subjectivity to be something that emerges with an evolutionary increase in semiotic freedom.

But to say that evolution proceeds without subjectivity and then at some point it just emerges is hardly an explanation. If evolution is accompanied by an *increase* in subjectivity, there must have been some there to start with. It is more parsimonious to claim that subjectivity occurs universally to a greater or lesser extent.

This paper will suggest that taking this view offers an opportunity to extend biosemiotics, not only towards metaphysics but also towards Ingold's radical view of evolution itself, in which ecology is central. Further, it will propose that this will make biosemiotics more relevant to the ecological crisis facing us all (Pickering, 2023).

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## **Sources used in the presentation:**

In the slide comparing Weissman, Huxley and Ingold, the diagram next to Ingold is taken from *How the Leopard Changed its Spots*, by Brian Goodwin. Goodwin studied with C.H. Waddington, an advocate of A. N. Whitehead.

The contexts for the quotations from Pauli, Planck and Schrodinger are below:

*I regard consciousness as fundamental, matter is derivative from consciousness. We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing, postulates consciousness. There is no matter as such; it exists only by virtue of a force bringing the particle to vibration and holding it together in a minute solar system; we must assume behind this force the existence of a conscious and intelligent mind. The mind is the matrix of all matter.*

Max Planck, *The Observer*, 25 January 1931

*Consciousness cannot be accounted for in physical terms. For consciousness is absolutely fundamental. It cannot be accounted for in terms of anything else.*

Erwin Schrödinger, *The Observer*, January 11, 1931.

*To us ... the only acceptable point of view appears to be the one that recognizes both sides of reality-the quantitative and the qualitative, the physical and the psychical-as compatible with each other, and can embrace them simultaneously ... It would be most satisfactory of all if physis and psyche (i.e., matter and mind) could be seen as complementary aspects of the same reality.*

Wolfgang Pauli, *Writings on Physics and Philosophy*, 1994.

Christof Koch discusses consciousness and panpsychism:

<https://www.wired.com/2013/11/christof-koch-panpsychism-consciousness/>

Chalmers, David J. "Panpsychism and Panprotopsychism." *The Amherst Lecture in Philosophy* 8 (2013): 1–35.

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Peirce, C. S. (1931 - 35) *The entire universe- not merely the universe of existents, but all that wider universe, embracing the universe of existents as a part, the universe which we are all accustomed to refer to as 'the truth' - ... all this universe is perfused with signs, if it is not composed exclusively of signs* (CP 5.449) *Collected Papers* (C. Hartshorne, P. Weiss & A. Burks, Eds.). Cambridge, MA.: Harvard University Press. Citations are by volume and paragraph number.

Peirce, C. S. (1988) ... thought is not necessarily connected with a brain. It appears in the work of bees, of crystals, and throughout the purely physical world... Not only is thought in the organic world, but it develops there (CP 4.551) *The Essential Peirce: Selected Philosophical Writings* (Vol. 2, 1893-1913; N. Houser et al., Eds.). Bloomington: Indiana University Press.

D. Bohm, D. (1969) *It seems to me that everyone has got some kind of metaphysics, even if he thinks he hasn't got any. Indeed, the practical "hard headed" individual who "only goes by what he sees" generally has a very dangerous kind of metaphysics, i.e. the kind of which he's unaware.* The quotation is from further Remarks on the Notion of Order," in C. H. Waddington, ed., *Towards a Theoretical Biology: 2 Sketches*. (Edinburgh: Edinburgh Press 1969), p. 41 – 53.

Bohm, D. (1990) *The content of our own consciousness is then some part of this over-all process. It is thus implied that in some sense a rudimentary mind-like quality is present even at the level of particle physics, and that as we go to subtler levels, this mind-like quality becomes stronger and more developed. Each kind and level of mind may have a relative autonomy and stability. One may then describe the essential mode of relationship of all these as participation, recalling that this word has two basic meanings, to partake of, and to take part in.*

This passage is from Bohm D (1990) A new theory of the relationship of mind and matter. *Philosophical Psychology* 3(2):271–286

Bohm, D. (1985) ... *relationships with nature and with the cosmos flow out of what they mean to us. These meanings fundamentally affect our actions toward nature, and thus indirectly, the action of nature back on us is affected.* The passage is on page 79 of Bohm, D. (1985) *Unfolding Meaning: A Weekend of Dialogue with David Bohm*. Routledge.

The quotation from Ulrich Mohrhoff is from:

<https://aurocafe.substack.com/p/understanding-human-behavior>