

A review for *PAN 13 (2017)* of

Wendy Wheeler, *Expecting the Earth. Life, Culture, Biosemiotics* (London: Lawrence and Wishart, 2016)

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Expecting the Earth explores biosemiotics, a relatively new development whose intellectual and cultural potential, both subversive and healing, is far-reaching. Wheeler's welcome account, not only scholarly but visionary, may well be definitive for some time to come. This is not the abstract and anthropocentric dyadic semiotics, so widely influential but now largely exhausted, of Saussure. At its heart is the very different semiotics – dynamic, ecological and triadic – of Charles Sanders Peirce (1839-1914). (A supplementary figure is the philosophical biologist Jakob von Uexküll [1864-1944].)

Peirce is a notoriously difficult philosopher, and Wheeler does an excellent job in rendering his ideas useably clear. I am not going to attempt a further simplification except to say that a sign, in his account, is irreducibly three-fold. It consists of what the sign stands for, whatever that is; the aspect of the sign that a living being can potentially apprehend, or its significance; and its meaning as actually interpreted and taken up, or its effectiveness. So it is a pragmatic phenomenon (although not necessarily in William James's sense).

The logic of Peircean semiotics is what he called abduction, the kind of metaphor that Gregory Bateson, one of his principal modern heirs, called 'syllogisms in grass':

We die.

Grass dies.

We are grass.

In terms of Aristotelian deductive logic this is, of course, a faulty syllogism. But deductive logic cannot discover or create anything new, whereas abduction is how the entire natural world, including human culture, comes into being, changes and adapts and, with its failure, dies. It is thus not merely epistemological, let alone literary, but ontic. As Bateson wrote, 'metaphor is right at the bottom of being alive'. Here we can also sense the presence of Paul Ricoeur (1913-2005). As Wheeler points out, the original title of his seminal book on the subject was 'Living Metaphor'.¹

The result, which Wheeler summarises as 'an ecological ontology of sign relations', is difficult to grasp for minds, cultures and institutions steeped in the dominant view of the cosmos as one of purely material objects subject to causality in ways that can be fully captured in abstract mathematical laws. Rather the fundamental unit for understanding life is not the gene, or any other contextless causal agent, but the sign. And signs are not material, although they require material bearers to become effective. Instead, they are *relations*: neither matter nor energy, nor even information (which is only one part of the semiotic sign).

As Bateson repeatedly stressed, it follows that mind and meaning, being a sign relation, are not to be found 'in' any particular item, such as a brain; they are properties of the unbounded networks of what he called 'organism = environment', or contexts. Purpose and meaning are distributed unevenly and incompletely throughout the whole of life, and can therefore be reclaimed from the limbo of 'teleology' into which modern science has cast them. Mind too is liberated from the 'intelligent species burden' of being anthropocentric, or indeed, psychological. It is, in Wheeler's words, 'embodied, enworlded and relational.'

In all major respects, the resonance with Bruno Latour's later actor-network theory is unmistakable. It seems that both Peirce and Bateson were also a big influence on Giles Deleuze. But this is not a work of intellectual genealogy as such. Wheeler is chiefly

concerned with how a biosemiotic perspective allows a deeper, richer, non-reductive understanding on phenomena from biology to culture, with remarkable new connections along the way. They include, for example, the ways in which ‘an essentially non-conscious and poetic intelligence of nature’ play out in poetry itself, along with other kinds of creativity. (There are some marvellous reflections on the biosemiotic poetics of Hardy, Heaney and Hughes.)

Those insights themselves result from metaphor. They are bridges thrown over differences resulting in new things, partly created and partly discovered. For biosemiotics itself is, of course, reflexive: an instance of what it theorizes. How could it not be? The nature of a sign is to cross and transgress all the putatively exhaustive dualisms with which we have been plagued: spirit, or its modern placeholder, mind, vs. world; subject vs. object; culture vs. nature; real vs. imaginary; true vs. false; inside vs. outside, and so on. So every putatively external point-of-view, which has been widely identified as scientific objectivity and therefore, by implication, truth, is internal to another relevant context.

This apprehension runs counter to by far the dominant Western metaphysical tradition, as it has formed and continues to inform not only philosophy and religion but also science. For that tradition and its subsets, almost all important questions have become epistemological, concerned with the representation of reality and its possibility, adequacy, accuracy, etc.² Hence the obsession with methodology, shading into methodolatry. It is therefore inherently unself-critical, because it cannot recognise itself as in fact ontological: one ‘way of life’ among an effective infinitude of other possibilities. (The term itself is, of course, Wittgenstein’s. His work remains a beacon of sanity in this context, as does that of his student, in effect, Paul Feyerabend.)

Wheeler deepens our understanding of our present predicament, both its persistence and power, by laying bare its historical roots – at once metaphysical, social, cultural and intellectual, as these things are – in two earlier movements. One is Gnosticism, the evil twin-brother of early Christianity that it could neither own nor entirely disown, whose hatred of the Earth, the body and the female still survives, even thrives, in our own time. The other is nominalism, the philosophy that surfaced in the early fourteenth century with William of Ockham. Nominalism’s severe doubts about the knowability, even the reality, of the world harked back to Augustine’s pessimism about the effects of the Fall, and forward to Descartes’s so-called scepticism.

As Wheeler shows, these two movements came together, and tacitly triumphed, in radical Protestantism. Furthermore, in addition to continuing in its own right, the Reformation provided a major impetus to, and formative influence upon, modern science. Under their joint pressure, a collective premodern biosemiotic sensibility, which had survived in the common medieval and Renaissance understanding of nature as a ‘book of life’ alongside the Bible as a book of revelation, finally collapsed. That left only the shrinking islands of indigenous life-ways.

Science gradually took up the materialist and objectivist pole of the dominant dualism, as against the spiritual and subjective pole, but that move left untouched the radical distinction itself: the very one that biosemiotics undermines. It also left us with a toxic legacy of antagonism and manipulation, for as Wheeler says, ‘If you think only in nominalist terms about material things...then you cannot think about relations’.

In contrast, the abductive logic of biosemiotics runs through both nature and its unruly child, culture. Its study thus has the potential to connect, even reconcile, the natural sciences and the social sciences with the humanities and even the arts in a non-reductive way. (The contrast with E.O. Wilson’s earlier proposed ‘synthesis’, entirely on the terms of natural science, is striking).

Wheeler is clearly working within, and as part of, a movement. Others cited or quoted in her book include Jesper Hoffmeyer, John Deely, Paul Bains, Terrence Deacon and Thomas Sebeok. If you view biosemiotics (as I do) with sympathy and hope, this is a good sign. *Expecting the Earth* is naturally subject to the same kind of processes, contexts and interpretations that constitute its subject-matter, however. Here, I am less sanguine than Wheeler about the extent to which the scientific establishment is capable of taking it up, along with the kind of intellectual, social and institutional reforms that that would require.

It does seem that neo-Darwinian dogma – that random mutation plus natural selection suffices for all explanatory purposes – is at last weakening, along with pernicious gene-centrism. On the other hand, it wouldn't do to underestimate the continuing grip of the materialist monocausal metaphysics she so ably analyzes on contemporary technoscience, not least theoretical biology. Will biosemiotics be kept out, and/or expelled as alien, just as General Systems Theory, chaos and complexity theory, and Batesonian epistemology largely were? Or, worse, will its insights be mined and some appropriated as fodder for the megamachine? For all our sakes, I hope that Wheeler's optimism turns out to be right.³

No author can mention everyone relevant but biosemiotics will need all the friends it can find, so I want to cite a few potential allies who do not figure in Wheeler's account. It rightly emphasizes experience as prior to appearing as either subject (mind) or object (world), but dismisses phenomenology. However, post-Kantian phenomenology, especially when influenced by the Goethean science she mentions sympathetically, resonates closely with biosemiotics. Henri Bortoft, for example, talks about 'non-Cartesian' events which happen 'upstream *before* the separation into subject and object.' Such phenomenology also shares the non-Platonism of biosemiotics: 'There is nothing behind the appearances but that doesn't mean there is no more than the appearances.'⁴

Wheeler also remarks that 'the stuff of the world, for us, and for all other organisms, is primarily sensual', and commends 'a renewed animistic relation to nature'. In relation to these two important points, I think acknowledgement of the pioneering ecological phenomenology of David Abram would be just.⁵ (For reasons I don't understand, the academic ecohumanities in general often seem averse to doing so.)

A fascinating prototype of biosemiotics, particularly as regards the interlinked phenomena of habit and abductive innovation, is *Life and Habit* by Darwin's most feared contemporary critic, Samuel Butler.⁶ Finally, I want to commend to biosemiotic practitioners of the humanities the great modern (but not modernist) poet, Wallace Stevens. Both his poems (one of them is entitled 'Reality is an Activity of the Most August Imagination') and his essays are in the spirit, as well as the letter, of Wheeler's work. In one, he says that nature's prodigy 'is not identity but resemblance and its universe of reproduction is not an assembly line but an incessant creation', before adding that 'Because this is so in nature, it is so in metaphor.'⁷

¹ Paul Ricoeur (2003), *The Rule of Metaphor. The Creation of Meaning in Language*, transl. Robert Czerny, Routledge, London.

² For an excellent critique, see Eduardo Viveiros de Castro (2004), 'Exchanging Perspectives: The Transformation of Objects into Subjects in Amerindian Ontologies', *Common Knowledge* 10 (3) pp. 463-84.

³ For a more pessimistic analysis, but relevant on other counts as well, see my paper 'Defending the Humanities in a Time of Ecocide':

<http://www.patrickcurry.co.uk/papers/Rio%20paper%20-%20Feb%202015.pdf> and https://www.academia.edu/29923393/Defending_the_Humanities_in_a_Time_of_Ecocide

⁴ Henri Bortoft (2012), *Taking Appearance Seriously. The Dynamic Way of Seeing in Goethe and European Thought*, Floris Books, Edinburgh, pp. 103, 26; emphasis in original.

⁵ David Abram (1996), *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, Vintage Books, New York.

⁶ Samuel Butler (2007 [1877]), *Life and Habit*, Bibliobazaar, Charleston.

⁷ Wallace Stevens (1960), *The Necessary Angel: Essays on Reality and the Imagination*, Faber and Faber, London, p. 73.