



BOOK REVIEWS

Wendy Wheeler, *The Whole Creature: Complexity, Biosemiotics and the Evolution of Culture*. London: Lawrence & Wishart, 2006. Pp. 172. ISBN-10: 1-905007-30-2. \$29.50 pb.

It is rare indeed to find a book that seeks to articulate and integrate some of our intellectual culture's latest insights by making use of Polanyi's thought, which plays a leading—perhaps the leading—role in the book's complex set of arguments. Such a book has been written by Wendy Wheeler. I just recently ran across *The Whole Creature* even though it was published some ten years ago, and I found she states clearly and quite fully some of the insights I have been groping towards in recent years (see my article in *TAD* 39:1 especially).

In brief, Wheeler argues that complexity theory and biosemiotics are disciplines that display most thoroughly the inadequacies of modernism's dualisms and offer an integrated alternative vision. These disciplines illuminate processes operating in Polanyi's tacit dimension—not, of course, making tacit operations fully explicit, but indicating how semiotic messaging operates in life-sustaining ways at all of life's many levels, including all human biological and cultural levels. Her vision is holistic. Thus, for instance,

Wheeler shows how the nature-culture dichotomy is overcome by seeing culture as nature's path of evolution in human existence. She was originally influenced to think in such terms through the writings of Raymond Williams, especially as articulated in his *The Long Revolution*. Wheeler states, "the world we sense is not there in any positivist 'objective' sense, but is made by evolution in the conjunction of creature and environment. For humans, environment includes, of course, culture..." (15). Further, "the living world is a vast interconnected, interdependent web of relations—a complex whole in which emergence produces different strata of beings with generative fields which are complexly interwoven" (73).

Surely the ideas introduced in the previous two quotations, referencing problems with positivistic objectivity, affirmation of emergence, and proclaiming a stratified world, indicate the affinity of her vision with Polanyi's. The overlap of ideas is deep and mostly made explicit. She cites his reliance upon tacit intimations of coherence in reality as key to scientific discovery and emphasizes his claim that scientific progress occurs through "the discovery of rationality in nature" (*PK*, 64). In her third chapter, she supports his understanding that creative thought in science, religion, and the

arts unfold in largely parallel ways. The development of culture is our species' expression of the forward directedness of life, unfolding in terms of feedback systems evident throughout nature. But Wheeler is especially taken by the dynamics of tacit knowing, making multiple references to Polanyi's notion of how, in consciousness, humans disattend from one idea in order to attend to a new focus. She sees from-to relations to be existent throughout nature.

At the center of Wheeler's interest is replacing Western individualism and rationalistic instrumentalism with a holistic social vision that more truly envisions human excellence. In this pursuit, three authors in addition to Polanyi upon whom Wheeler relies heavily are Brian Goodwin (author of *How the Leopard Changed its Spots: The Evolution of Complexity*), Margaret Boden (author of *The Creative Mind: Myths and Mechanisms*, 2nd ed.), and Jesper Hoffmeyer (author of *Signs of Meaning in the Universe*).

The following quotation, which contains the phrase found in the book's title, gets at the core of Wheeler's thought: "It is the *whole* creature (mind-body-environment) and the *whole* system (minds-bodies-cultural-social-and-natural-environments) which must be taken into account by anyone interested in human flourishing and creative living" (33). We humans are embedded in what von Uexküll termed an *Umwelt*, a rich world-creating environment that is species- and even individual-specific, an environment perfused with

signs (see 126). Interestingly, Wheeler's vision suggests that Poteat's emphasis on our mindbody, important though that is, is incomplete. A more adequate expression for human reality would be mindbodyUmwelt, or in more idiomatic terms, mind-body-environment.

The paradigm shift to a new scientific worldview Wheeler is urging has much in common with Polanyi's post-critical philosophy. She uses Robert Laughlin's description of the new stance as moving from the Age of Reductionism to the Age of Emergence (see pp. 20, 25, 28, 62, 145 and 155).

The current time, of Laughlin's Age of Emergence, is a particularly propitious time for such a re-engagement between 'the two cultures' because what complexity science, and its identification of phase-shifts and emergent levels, shows us quite clearly are the ways in which evolution, from the basic laws of physics all the way up through chemistry, biology and the emergence of language, culture and society in *Homo sapiens*, is a continually evolving story of the fundamental *physical* relatedness of space, matter and life (28).

Wheeler's emphasis above on physical relatedness and what she calls her "good materialist argument about the nature of human sociality" (12) would benefit, it seems to me, from different terminology.

Such emergent levels as cultural meanings and human consciousness, although based on material reality, transcend the strictly physical. Indeed, semiosis itself, so crucial to her account, is a mediating relation rather than a physical object. It seems best to call her ecological, evolutionary, emergent account neither physical nor mental, neither materialistic nor idealistic. It transcends such dualistic categories.

The comprehensive social nature of Wheeler's thought, although perhaps centered in epistemology, has ramifications that extend far beyond cognition. In this respect, too, her thought is like Polanyi's. Among the common theoretical positions that her semiotic worldview challenges are those that stress the crucial nature of genetic inheritance while ignoring environmental factors (22). She also rejects philosophies that overemphasize the importance of language, especially "the 'postmodern' idea that 'reality is constructed in language'" (26). Closely related is her dismissal of overly rationalistic thought. "A complex totality and tacit skills understanding of human societies should also make us sharply reject any account of human behavior which depends (as does utilitarianism, for instance) on the assertion that conscious reasoning is the prime motivator of human action" (55). Rather she appreciates with Damasio and Polanyi the way that "feelings (which are the form in which intimations arise in us) are an essential part of rational behavior" (82). Humans share tacit, embodied relationships in social settings that deny what she

calls "the gospel of liberal individualism" (153). Her evolutionary perspective makes her suspicious of political or economic quick fixes: "The short-termism which dogs capitalism's search for quick profits is radical in all the wrong ways: it is continually upsetting and destabilizing of the longer time-scales involved in really creative exploratory and transformational innovation" (156).

Does a positive account of human flourishing also emerge from Wheeler's writing? It does indeed. Among the eclectic influences she brings to bear on her topic are Romantic literature (reacting on behalf of the body and its emotions against sterile Christian asceticism and Enlightenment rationalism [18, 44]), Buddhism (understanding the inter-related co-arising of all life [97]), Marx (his socialist thinking [45]), and the psychoanalytic tradition (understanding how reasoning is always informed by unconscious factors [55]). But most telling in her modeling of human excellence are ideas she takes from epidemiology and psychoneuroimmunology. Michael Marmot, her guide in the former discipline, shows that a person's social connectedness, ability to affect others, and degree of control in a situation determines the degree of that person's flourishing (110-115). Similarly, Paul Marin's psychoneuroimmunological research strongly suggests that "not only environmental control, but human sociality itself, is a significant aspect of healthiness. We do better (very literally, in terms of health, recovery from illness when ill, susceptibility to accidents and

death) when we are richly socially integrated and supported” (118). One net effect of these various influences is that Wheeler believes the social worldview she advocates has ethical power lacking in traditional moral nostrums.

If I am mindful of the processual self that I am, and mindful of the subtlety of my co-arising, co-dependent processual existence among other creatures, and mindful that this means that *all* my doings reach out into all life, my reaching out will be spontaneously directed in right ways which are not primarily motivated by narrow self-interest. This is not a matter of some mystical fantasy of being ‘good’, or ‘spiritually pure’, by renouncing self-interest and consciously going about ‘caring for others, or the Other’: it is about recognizing the processual nature of self (as constituted) in community, and pursuing the furtherance of, and real experience of joy in, that (98).

Some persons, especially students, might be put off by Wheeler’s writing style. But despite the rather Teutonic length and complexity of some of her sentences—evident in the foregoing quotations—her thought is clear and compelling. There are redundancies in her writing, but these merely underscore what she thinks is important. In sum, this is a rich and impressive work on its own.

It can also inspire those who are eager to see Polanyi’s thought making important contributions to contemporary thought.

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Silver Rattasepp and Tyler Bennett (eds.), *Gatherings in Biosemiotics*, Tartu Semiotics Library 11. Tartu, Estonia. University of Tartu Press 2012. Pp. 244. (<http://www.ut.ee/BOSE/tsl.html>) ISSN 1406-4278; ISBN 978-9949-32-048-6.

This collection in the Tartu Semiotics Library (an international series on semiotics) packages interesting material which can serve to introduce the relatively new area of interdisciplinary inquiry called “biosemiotics.” If one googles “biosemiotics,” Wikipedia points out the etymological roots of the term in “life” and “sign” and that there is now a growing field of semiotic biology that studies the production and interpretation of signs and codes in living nature. To dig deeper, look at essays in the opening section, “Approaches to Biosemiotics,” which discusses the importance of semiotics for biology and the issues currently facing this new field. The brief essays in the second section provide a more historically-oriented overview of the development of biosemiotics and the series of international conferences, the *Gatherings in Biosemiotics* (hereafter *Gatherings*) that have been held since 2001. This volume pulls together material that commemorates the first