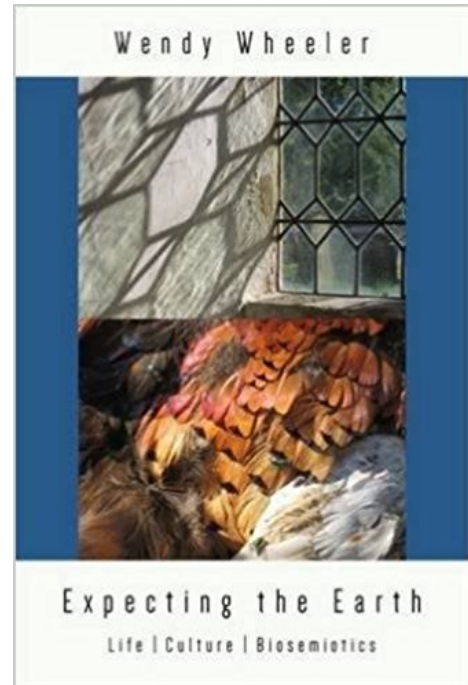


[Iris Smith Fischer reviews Expecting the Earth](#)

Wendy Wheeler. *Expecting the Earth: Life / Culture / Biosemiotics*. London: Lawrence & Wishart, 2016. 276 pp.

Review by [Iris Smith Fischer](#)

The liberal arts are struggling to assert their relevance in a time when scientists often claim that inquiry should be free of the subjectivity involved in interpretation and creation. Investigating the physical world seemingly involves neither meaning nor metaphor. Yet creativity is central to theorizing, method, and experiment. Born of interdisciplinary work in semiotics, linguistics, cultural anthropology, and biology, biosemiotics seeks to reconcile this old divide between arts and sciences. It studies cultural signs as a special case of zoosemiotics, a method of inquiry that first examined mental phenomena in animals and extended to other life forms. “Eventually,” notes Marcello Barbieri, “discovery of the genetic code suggested that the cell itself has a semiotic structure, and the goal of biosemiotics became the idea that all living creatures are semiotic systems.” Following Thomas Sebeok’s argument that “there can be no semiosis without interpretability,” Barbieri finds that biosemiotics treats genetic codes as “a fundamental reality of life.”[\[1\]](#)



In *Expecting the Earth: Life/Culture/Biosemiotics*, Wendy Wheeler similarly argues that “DNA is a library, not a blueprint” (p. 170). She introduces biosemiotics to humanities readers as the study of organism plus environment—a “well-tuned symphony of flesh, sign, and world” (p. 2), resituating poststructuralist understandings of meaning as part of broader life-processes marked by contingency—complexity, chance, and habit. Building on her earlier book *The Whole Creature: Complexity, Biosemiotics and the Evolution of Culture* (2006), Wheeler rethinks identity politics, particularly subject formation, as processes of “symbiotic relation of text and reader” (p. 177).

Drawing on Donald Favareau’s and Patrick Sériot’s new views of Karl Ernst von Baer and Roman Jakobson respectively, Wheeler argues that, while modern science approaches bodies as sense mechanisms only later endowed with consciousness, “bodies, with an evolutionarily necessary sense of aboutness . . . can coordinate those senses, and derive actions in relation to them. This *coordination* of senses and actions is what we call ‘mind’” (p. 162). Using Charles Peirce’s account of science, which combines methods of inquiry with a detailed theory of meaning, Wheeler gives credit to Jakobson, who recognized that Saussure’s structure of semiosis (signifier/signified) should be rethought as relationships evolving over time. Linking Baer’s theory of embryonic development to suggest “dissipative structures-in-process” as one foundation for cultural criticism (p. 173), Wheeler notes, “the gradual emergence of biological or

other form[s] (genre, or the order of a discourse) is thus the effect of the indexical linking of iconic signs in and by time” (pp. 163–64).

Wheeler’s book offers a cogent argument for the uses of biosemiotics. *Expecting the Earth* demonstrates what biosemiotics can do, moving beyond theory to applications in cultural study. The semiotic history of organisms captures successful survival strategies, opening “real-world possibility spaces that are inseparably ‘entangled’ with that sign, and just awaiting exploration” (quoted in p. 166). The humanities have a stake in understanding biosemiosis; it offers an important opportunity to connect human agency to that of other species.

[\[1\]](#) Marcello Barbieri, “Editorial,” in *Introduction to Biosemiotics: The New Biological Synthesis*, ed. Barbieri (Dordrecht, 2007), p. ix.