Naturalizing Phenomenology, Phenomenologizing Nature

Ben Schewel

ne of the great paradoxes of modern thought has been the relationship between nature and life. For there is no place for life or mind in the materialistic image of the world of external nature deriving from 17th century philosophical and scientific thought. Yet, clearly life and mind do exist, in that we ourselves are alive, both biologically and mentally. From Cartesian dualism, Deistic materialism, and Romantic cosmology, to contemporary cognitive science, complex systems theory, and enactment theory, we seem incapable of surmounting the tension between naturalism and the fact of life and mind. Though perhaps too simplistic, there is much truth to seeing the course of Anglophone and Continental philosophies determined largely by diverging responses to the question of life, mind, and nature: either a) we put our trust in modern science and the naturalistic habit of mind, believing that a sufficient explanation of the relations between these three spheres will ultimately emerge through sufficiently disciplined and sustained inquiry, or b) we abandon the anachronistic desire to mold philosophy in science's image, seeking instead to retrieve and explore the patterns of intelligibility internal to human life, as such patterns forever underlie scientific inquiry and modes of intelligibility. Not surprisingly, the first approach has thus far determined the dominant

Anglophone approach to mind, cognitive science, and the latter the dominant Continental approach, phenomenology.

Yet recently, an increasing number of thinkers have sought to combine the two approaches, to open cognitive science to the descriptive sensitivity of phenomenology, and to ground phenomenology in the rigorous scientific disciplines of cognitive science. The most pressing methodological question for such thinkers, then, is how we can naturalize phenomenology, given that phenomenology itself was formed out of an explicit rejection of all such naturalization. As for many, phenomenological cognitive science appears the most promising route to bridge the gaps between mind, body, and nature, one hears much today of naturalizing phenomenology.

The subject received its most sustained treatment in the volume Naturalizing Phenomenology: Issues in Contemporary Phenomenology and Cognitive Science, as well as a 2004 special issue of the journal *Phenomenology and the Cognitive Sciences* on the subject of naturalizing phenomenology.² The aim in naturalizing phenomenology is to enable the use of phenomenology's fruit as an aid to cognitive science. This process of naturalization arises in response to the question of the conditions of possibility by which phenomenology could yield meaningful scientific insight. There must be some scientifically explainable relation, the thought goes, between our subjective states as lived in the first person and neurophysiological structures, and when discovered this relation will make clear to us what phenomenology can lend to the scientific study of the human mind. To naturalize phenomenology, then, is to render its meaning in terms of our contemporary scientific understanding of the natural world. The field has matured significantly in the subsequent years, as evidenced by the recent publication of such groundbreaking works as Mind in Life: Biology,

¹ Jean Petitot, Francisco Varela, Bernard Pachoud, and Jean-Michel Roy, eds. *Naturalizing Phenomenology: Issues in Contemporary Phenomenology and Cognitive Science*, (Stanford, CA: Stanford UP, 1999). Parts three, "The Nature and Limits of Naturalization", and four, "Skeptical Attitudes", are particularly relevant for the questions engaged with here. Also relevant is the editors very fine introductory essay, "Beyond the Gap: An Introduction to

Naturalizing Phenomenology".

² Phenomenology and the Cognitive Sciences no 3.4 - Special Issue on Naturalizing Phenomenology (2004): 325-400.

Phenomenology, and the Sciences of Mind,³ The Phenomenological Mind: An Introduction to Philosophy of Mind and Cognitive Science,⁴ and Handbook of

Phenomenology and Cognitive Science,⁵ among others.

There are other views of nature, though, than the one currently espoused by naturalists: there is Wordsworth's nature, filled with spiritual presence, alive with meaning; and there is the nature of Plato's *Timaeus*, ensouled and driven towards the supreme Good. Though these views have for most fallen out of favor, perhaps even out of memory, this is not to say that we have exhausted their insights, as they are far more suited than the naturalist cosmos to explain life and mind. The question I want to ask here is what kind of nature phenomenology itself suggests us to live within. If phenomenology does indeed yield valuable insight into nature's patterns, what is to say that it will reveal the cold geometrical materialism stemming from 17th century naturalism? I follow Charles Taylor here in my use of the term naturalism: "by which I mean not just

the view that man can be seen as a part of nature – in one sense or other this would surely be accepted by everyone – but that the nature of which he is a part

³ Evan Thompson, *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*, (Cambridge, MA: Belknap of Harvard UP, 2007).

⁴ Shaun Gallagher, and Dan Zahavi, *The Phenomenological Mind: An Introduction to Philosophy of Mind and Cognitive Science*, (London: Routledge, 2009).

⁵ Shaun Gallagher and Daniel Schmicking, eds. *Handbook of Phenomenology and Cognitive Science*, (Dordrecht: Springer, 2010).

⁶ See Ralph Pite, "Wordsworth and the Natural World," in *The Cambridge Companion to Wordsworth*, ed. Stephen Charles Gill (Cambridge: Cambridge UP, 2003) pp. 180-95.; and Alfred North Whitehead, "The Romantic Reaction," in *Science and the Modern World*, (New York: Free, 2008), pp. 75-94.

⁷ For two interesting and recent studies of Plato's cosmology, see Gabriela Roxana Carone, *Plato's Cosmology and It's Ethical Dimensions*, (Cambridge: Cambridge University Press, 2005); and Joseph Cropsey, *Plato's World: Man's Place in the Cosmos*, (Chicago: University of Chicago, 1995). For other relevant studies of the concept of nature in ancient Greek and Neoplatonic thought, see David J. Furley, *Cosmic Problems: Essays on Greek and Roman Philosophy of Nature*, (Cambridge: Cambridge UP, 2009); Gerard Naddaf, *The Greek Concept of Nature*, (Albany, NY: State University of New York, 2005); and Riccardo Chiaradona, and Franco Trabattoni, eds. *Physics and Philosophy of Nature in Greek Neoplatonism: Proceedings of the European Science Foundation Exploratory*, (Leiden: Brill, 2009).

is to be understood according to the canons which emerged in the seventeenth-century revolution in natural science."8

One of the distinguishing features of naturalism is its methodological ban of 'anthropological properties', or those properties that emerge only inside living (and particularly human) beings. In their stead, we must base our thought only in terms of 'absolute properties', or properties that make up the way things are in the world as known by science. Though this methodological principle can "be more or less stringently interpreted and can be applied at different levels," it underlies nevertheless the diverse reductionist perspectives developed since. Yet, is there something about phenomenology itself that is falsified in being so naturalized?

In what follows, I will argue that there is. I will not take the traditional antimetaphysical transcendental route, though. Rather, my purpose is to ask if there are other views of nature that prove adequate to (Husserlian) phenomenology's insights without engaging in an equally egregious falsification of science. In the end, I argue that the view of nature offered by the likes of Alfred North Whitehead and Charles Peirce, which I call spiritual emergentism, is uniquely suited to frame phenomenology, preserve the fruits of scientific

⁸ Charles Taylor, *Human Agency and Language*, (Cambridge: Cambridge University Press, 1985), p. 2.

⁹ Ibid., 3.

¹⁰ For example, consider the opening lines of Jean-Luc Marion's *Being Given*: "In all science – therefore in metaphysics – it is a question of proving. To prove consists in grounding appearances in order to know with certainty, leading them back to the ground in order to lead them to certainty. But in phenomenology – that is to say, at least in what it intends, in the attempt to think in a non-metaphysical mode – it is a question of showing." By implication, Marion here argues that scientific or metaphysical thinking is irrelevant for phenomenology. While as a methodological principle, it certainly does provide phenomenology defense against naturalistic critiques, it is this kind of strategy precisely that I hope to avoid in asking after phenomenology's implications for a scientifically adequate view of nature. See Jean-Luc Marion, *Being Given: Toward a Phenomenology of Givenness*, (Stanford, CA: Stanford University Press, 2002), p. 7.

¹¹ I should make clear that I take in this essay a distinctly Husserlian, and hence Finkian and Henryan, interpretation of phenomenology, focusing as they do on the power and telos of reduction. Others might see Merleau-Ponty as a better representative of phenomenology, as he is more attuned to the primordial dialectic between world and life, such that phenomenological life is alternately seen to be dependent upon yet ultimately irreducible to material nature.

inquiry, and resolve our perplexity before life and mind.¹² Towards this inquiry, I will examine several contemporary approaches to nature, considering to what degree they accord with phenomenology's insights. I will begin with two of the most widespread forms, which I call respectively *geometrical materialism* and *vague materialism*.¹³

By geometrical materialism, I mean the belief that reality is fundamentally material in nature, that this matter is structured according to geometrical patterns, and that the mathematical natural sciences give us the best possible knowledge of the way things really are. Bertrand Russell¹⁴ and Richard Dawkins¹⁵ are clear examples of this position.

The second approach, vague materialism, arises from the frustration of geometrical materialism's quest for completely determinate universal knowledge. By vague materialism, then, I mean the belief that reality is fundamentally material in nature, that we cannot have a precise understanding of this reality because of our cognitive limitations, that either - and here arise two diverse strands within vague materialism – we a) should not attempt to speak of reality in-itself, though nature unavoidably appears to be only material, and this is the route Kant and countless post-Kantians take, ¹⁶ or b) we should approach

¹² For Whitehead's view on cosmology, see Alfred North Whitehead, *Process and Reality: An Essay in Cosmology*, ed. David Ray Griffin and Donald W. Sherburne, (New York: Free, 1978); also David Ray Griffen, *Whitehead's Radically Different Postmodern Philosophy: An Argument for Its Contemporary Relevance*, (Albany: State University Of New York, 2008). For a concise vision of Peirce's cosmological vision, see Charles Sanders Peirce, *Chance, Love, and Logic: Philosophical Essays*, ed. Morris Raphael Cohen, (Lincoln: Nebraska University Press, 1998); also Andrew Reynolds, *Peirce's Scientific Metaphysics: The Philosophy of Chance, Law, and Evolution*, (Nashville: Vanderbilt University Press, 2002).

¹³ I must emphasize at the outset that I am not bound to these specific names, but am using them for the sake of mapping the phenomenological relation between ideas. I use the term phenomenology here in a more Hegelian manner, watching the unfolding of a series of ontological structures as consciousness seeks to find a formulation adequate to its internal necessity. I am not trying to offer a Hegelian argument, by which I mean an argument that I think Hegel himself would make when faced with this same problem.

¹⁴ Bertrand Russell, *The Philosophy of Logical Atomism*, (London: Taylor and Francis, 2009).

¹⁵ Richard Dawkins, *The Selfish Gene*, (Oxford: Oxford University Press, 2006).

¹⁶See Immanuel Kant, "The Antinomy of Pure Reason, Third Conflict of the Transcendental Ideas," *Critique of Pure Reason*, trans. Paul Guyer and Allen W. Wood, (Cambridge: Cambridge University Press, 1998), pp. 484-89.

material reality through suitably vague general characteristics, à *la* Dewey.¹⁷ Either way, it is held that everything is best understood when rendered in terms of the concepts of vague materialism and approached through a stringently experimental methodology. As many of those claiming today to be naturalists are by habit of mind either geometrical materialists or vague materialists, contemporary attempts to naturalize phenomenology constantly encounter these views. What happens, then, when we try to naturalize phenomenology in such a manner?

Insofar as efforts to naturalize phenomenology are motivated by an attempt to mutually enrich both phenomenology and science, they provide a necessary corrective to the allergic reaction many phenomenologists show to the mixture of their analyses with the sciences. There is a widespread belief within phenomenological circles that Heidegger sorted out science once and for all in naming it technology, and a non-thinking technology at that, freeing us enlightened ones to get down to the serious philosophical questions at hand. While there is certainly a great deal of truth in Heidegger's analyses, to consider the question of science settled by his account is as facile as the claim that Nietzsche made God irrelevant for philosophy. Despite Heidegger's call to ontological purity, the weight of obviousness forces us to acknowledge our material dimensions, that we are flesh, bones, and blood, living in a world governed to some extent by physical laws, with science telling us much about the way things are.

Nevertheless, if we take seriously Husserl's analyses in the *Crisis*, ¹⁹ then we must admit that any attempt to naturalize phenomenology within a geometrical materialist framework falls into paradox: pursued for the sake of bolstering the

¹⁷ See chapter 1, "Experience and Philosophic Method" in John Dewey, *Experience and Nature*, ed. Jo Ann Boydston, Vol. 1. The Later Works, 1925-1953, (Carbondale: Southern Illinois University Press, 1981), p. 10.

¹⁸ For a good discussion of Heidegger's views on science, philosophy, and naturalism, see Joseph Rouse. "Heidegger on Science and Naturalism," in *Continental Philosophy of Science*, ed. Gary Gutting, (Malden, MA: Blackwell Pub., 2005), pp. 123-41.

¹⁹ The whole of Husserl's *Crisis* is in many ways an argument against the sufficiency of objectivism, and more specifically physicalist objectivism, as a ground for philosophical knowledge. See Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*, trans. David Carr, (Evanston: Northwestern University Press, 1970).

natural sciences, geometrical materialism ends up making science, even knowledge itself, a mere subjective construct. This paradox will haunt every form of materialist philosophy, even if it turns towards the kind of "unhealthy positivism which hedges before philosophical abysses, or covers them over on the surface, and comforts itself with the successes of the positive sciences and their psychologistic elucidation."²⁰ Because the geometrical materialist equates his own position with being scientific, in order to make use of phenomenology he inscribes it within the very paradox from which it by definition seeks to escape. Thus, even if such analyses help for a time to advance scientific thinking, the geometrical materialist framework cannot serve as an adequate metaphysics for phenomenology, as it falsifies phenomenology's most fundamental insights concerning the irreducible non-materiality of subjective life.

Making merit out of madness, the vague materialists follow closely behind, explaining science to emerge from our organic interactions with our environment, and describing this interaction as a manifestation of the deepest movements of nature itself. By virtue of their refusal to define nature with the narrow exactness of the geometrical materialist, the vague materialist can thus approach our aesthetic, ethical, practical, and religious experiences as important sources of knowledge, insofar as they help us to live meaningfully and successfully.

Despite this broadening of our appreciation of subjective life, still at base the vague materialist considers subjectivity to emerge as an attribute of material organization, and the vagueness of his account of matter thus does not prevent subjectivity's ultimate collapse. The vague materialist may offer contingency as an explanatory category somehow able to prevent the egregious forms of paradox experienced by geometrical materialism, drawing for support perhaps on the thought of Heidegger and Sartre, claiming never to have wanted certain knowledge of the way things really are in the first place.²¹ The problem is,

²⁰ Ibid., 88.

²¹ I am thinking here largely of Richard Rorty's work in *Contingency, Irony, and Solidarity,* (Cambridge: Cambridge University Press, 1999). Consider his remark, "I call people of this sort 'ironists' because their realization that anything can be made to look good or bad by being redescribed, and their renunciation of the attempt to formulate criteria of choice between final vocabularies, puts them in the position which Sartre called 'meta-stable': never quite able to take themselves seriously because always aware that the terms in which they

though, that the vague materialist wants to have his cake and eat it too, believing implicitly in the geometrical materialist view offered by science yet wanting to preserve subjectivity as possessed of an irreducible content. The vague materialist ends up with neither, though, seeking respite from his unwilling poverty in the claim to have achieved some kind of liberation. Vague materialism accordingly tends to fall apart under the strain of these competing tendencies of thought, moving either in the direction of geometrical materialism or preserving subjectivity, leading us therefore to three further positions I call respectively emergent materialism, vague emergentism, and emergent spiritualism.

Despite the clear evidence of our cognitive finitude, the geometrical spirit reemerges from within vague materialism by focusing on the process of emergence as the key to resolving the paradox subjectivity. The problem was simply that the previous view of matter was too narrow, making it impossible to account for the attributes of life and mind that emerge within certain patterns of organization. The vague materialists saw this fact but were wrong to think that we could not describe material reality in an exact manner. This kind of emergent materialism thus holds that reality is fundamentally material in nature, that such matter demonstrates unique properties such as life and mind when organized in a sufficiently complex manner, that mind has distinct attributes, such as intentionality or affectivity, capable of being examined in themselves, and that therefore the understanding of mind requires the inclusion of some type of naturalistic phenomenological description. Prime examples of this position are found in John R. Searle's biological naturalism,²² Daniel Dennett's heterophenomenology,²³ and Donald Davidson's anomalous monism.²⁴ Despite its advance beyond simple geometrical materialism, emergent materialism loses the vague materialist's sensitivity to the contours of subjective life, hardening into

4

describe themselves are subject to change, always aware of the contingency and fragility of their final vocabularies, and thus of their selves. Such people take naturally to the line of thought develop in the first two chapters of this book," pp. 73-74.

²² John R. Searle, *The Rediscovery of the Mind*, (Cambridge, MA: MIT, 1992).

²³ David L. Thompson, "Phenomenology and Heterophenomenology: Husserl and Dennett on Reality and Science," in *Dennett's Philosophy: A Comprehensive Assessment*. eds. Don Ross, Andrew Brook, and David L. Thompson, (Cambridge, MA: MIT, 2000), pp. 201-18.

²⁴ Donald Davidson, "Mental Events (1970)," in *The Essential Davidson*, (Oxford: Clarendon, 2006), pp. 105-18.

a straightforward evolutionary mode of explanation that increasingly empties subjectivity of its content. Thus, attempts to naturalize phenomenology within an emergent materialist frame falsify as well phenomenology's insights into the irreducible non-materiality of subjective life.

Aware of this tendency to nihilate subjectivity's phenomenological content within a too precise emergentist perspective, a number of thinkers I call vague emergentists arise. Vague emergentists tend to hold that reality displays both spiritual and material attributes at base, that reality should be understood as the interplay between these, and perhaps other, elements of fundamental reality, 25 that fundamental reality is too subtle and profound to be contained in any concrete account, 26 that such an equiprimoridal structure accounts most adequately for our knowledge of and existence within the world, and that therefore phenomenological descriptions must play an essential role in scientific and philosophical methodology, without having to be rendered in terms of a materialist naturalism. Prime examples of vague emergentism are William James²⁷ and Henri Bergson, 28 both of whom are uniquely attuned to the tensions between matter, life, and mind. I include Evan Thompson, one of the leading voices within the discourse on naturalizing phenomenology, within the category of vague emergentist, though he tends toward emergent materialism. This is

 $^{^{25}}$ Life, for example.

 $^{^{26}}$ And thus the argument over the ontological primacy of any of its elements has little meaning.

²⁷ See David C. Lamberth's analysis of James' metaphysics in David C. Lamberth, *William James and the Metaphysics of Experience*, (Cambridge: Cambridge University Press, 2009). Particularly relevant is chapter 3, sections 2 and 3, pp. 209-223, respectively entitled "Realism or Antirealism?" and "Absolute truth."

²⁸ As Lawlor and Moulard explain concerning Bergson's view of matter and spirit, "On the basis of the division into extremes or into a duality, one can then confront our everyday 'mixtures' of the two extremes. Within the mixture, one makes a division or 'cut' into differences in kind: into matter and spirit, for instance. Then one shows how the duality is actually a monism, how the two extremes are 'sewn' together, through memory, in the continuous heterogeneity of duration." See Lawlor and Moulard, "Henri Bergson," in *The Stanford Encyclopedia of Philosophy* (Fall 2011 Edition), ed. Edward N. Zalta, forthcoming URL = http://plato.stanford.edu/archives/fall2011/entries/bergson/.

²⁹ Thompson's interest in Indian and Buddhist no-self philosophies reflects to me the same interest that Schopenhauer had, albeit with a more comfortably neutral view of nature. While Thompson has yet to make clear his ultimate metaphysics commitments, thereby making my interpretation tenuous, I find the combination of materialist leaning vague emergentism and no-self Indian and Buddhist philosophical to be practice coherent, perhaps even mutually

the risk within vague emergentism, as the materialistic habit of thought is so strong today that it eventually takes hold of any vague position. Physicist David Bohm is another vague emergentist, though he too shows the tendency to drift out of his vagueness, yet in the opposite direction by virtue of his distaste for materialistic and mechanistic habits of thought, leading him towards a position I call emergent spiritualism.³⁰

Emergent spiritualists hold that reality consists fundamentally of a spiritual energy, that matter, life, and mind are all crystallizations of this spiritual energy, that the latent potencies of spirit progressively reveal themselves as it achieves increasingly complex internal organization, and that though science serves as a most potent instrument for understanding reality, it must adopt non-materialistic methods and conceptual foundations to account for subjectivity and to learn from other spheres of human endeavor, such as ethics, aesthetics, practical life, and religion. Examples of emergent spiritualists are Alfred North Whitehead,³¹ Charles Peirce,³² and Pierre Teilhard de Chardin.³³

suggestive, positions. See George Dreyfus and Evan Thompson, "Asian perspectives: Indian theories of mind," in *The Cambridge Handbook of Consciousness*, eds. Philip David Zelazo, Morris Moscovitch, and Evan Thompson (Cambridge University Press, 2007).

³⁰ Bohm's biography tells the story of his intellectual evolution from a pure physicist, to a metaphysical Marxist, believing Marx to have discovered the deepest patterns of material reality, to a spiritual seeker working under Indian guru Krishnamurti, believing in the end spirit to be the foundation of reality. See F. David Peat, Infinite Potential: The Life and Times of David Bohm, (Reading, MA: Addison Wesley, 1997). Though increasingly celebrated for his scientific genius, yet persistently controversial for his involvement with Krishnamurti, Bohm never fully articulated his understanding of spirit. Despite remarks such as the following, it remains unclear whether or not by "subtle", Bohm simply means a deeper and finer level of materiality, or whether his notion of spirit is purely non-material: "The field of the finite is all that we can see, hear, touch, remember, and describe. The field is basically that which is manifest or tangible. The essential quality of the infinite, by contrast, is its subtlety, its intangibility. This quality is conveyed in the word spirit, whose root meaning is 'wind, or breath.' This suggests an invisible but pervasive energy, to which the manifest world of the finite responds. This energy, or spirit, infuses all living beings, and without it any organism must fall apart into its constituent elements. That which is truly alive in the living being is this energy of spirit, and this is never born and never dies," p. 322.

³¹ See footnote 6.

³² See footnote 7.

³³ See Teilhard's highly controversial magnum-opus Pierre Teilhard de Chardin, *The Human Phenomenon*, trans. Sarah Appleton-Weber, (Brighton: Sussex Academic, 1999). The most recent academic study of Teilhard's work is David Grummett, *Teilhard De Chardin: Theology, Humanity, and Cosmos*, (Leuven: Peeters, 2005).

It is important to remember that emergent spiritualism is a movement of thought closely associated with science, as its advocates seek a harmonious account of the new physics, subjectivity, life, and evolution, and believe that no such account can be offered by materialism. Whitehead's remarks from Science and the Modern World are paradigmatic of the emergent spiritualist's critique of materialism: "It has been the basis of the materialistic theory," he explains, "that the happenings of nature are to be explained in terms of the locomotion of material."34 Yet, the "requirements of physics now suggest an idea consonant with the organic philosophical theory," which holds reality to be constituted by "a vibratory ebb and flow of an underlying energy, or activity." It is this energy that I call spiritual, insofar as it serves as the divine well-spring out of which matter, life, and mind spring through the creative operation of the divine will. This idea is mirrored to a relevant extent in the philosophy of Peirce and Teilhard de Chardin. And if we follow Husserl's deepest phenomenological analyses, as well as Eugen Fink³⁶ and Michel Henry's, ³⁷ we are lead in the exact same direction, as they too argue that there can be no materialistic basis to subjective life, as possessed of an irreducible content of affective spiritual life. Accordingly, of the above-mentioned conceptions of nature, only emergent spiritualism proves adequate to the insights of phenomenology. Most philosophers and scientists concerned with naturalizing phenomenology have understandably not shown much interest in such directions of thought, as materialism has become so intertwined with scientific thinking as to now be almost indistinguishable. Nevertheless, habit is not justification, and paradigms must eventually shift. It is precisely for this reason, that "the cosmology derived from science has been asserting itself" as our epoch's "dominant preoccupation,"

 34 Alfred North Whitehead, *Science and the Modern World*, (New York: Free, 2008), pp. 131-133.

³⁵ Ibid., 35.

³⁶ For a study on the relationship between Edmund Husserl and his student, assistant, and colleague, Eugen Fink, see Ronald Bruzina, *Edmund Husserl and Eugen Fink: Beginnings and Ends in Phenomenology, 1928-1938*, (New Haven, CT: Yale University Press, 2004). Note: the scholarly consensus is that Bruzina overemphasizes the manner in which Fink completes Husserlian phenomenology. Despite this reservation, though, the study is an excellent presentation of the Husserlian womb of Fink's understudied and underappreciated phenomenological insights, particular concerning the meontic.

³⁷ For a discussion of the relationship between Husserl, Fink, and Henry, see my article (Author, forthcoming).

that spiritual emergentists believe their "displacement of scientific materialism...cannot fail to have important consequences in every field of thought."³⁸

Whitehead saw very clearly that "the scientific philosophy of this age was dominated by physics," and that the concepts developed therein proved entirely unsuitable to understanding biological life. Instead of continuing the "unsuccessful attempts to impress biological notions upon the materialism of the seventeenth century," Whitehead instead sought to orient his metaphysics around our knowledge of biological life.³⁹ It is this insight that lies at the heart of emergentist theories today. Yet, Whitehead went even further than this, and so too did Peirce, using phenomenological reflection to expand even further their metaphysical reflections, moving thus into the territory of spiritual emergentism. Nevertheless, neither of them reached the kind of phenomenological sophistication developed in the school of thought known by that name. If we truly want to use phenomenology's insights to learn about the natural world, and to resolve our perplexity before life, mind, and nature, then, following the great methodological insights of Whitehead and Peirce, we must not only naturalize phenomenology, but phenomenologize nature as well, removing from our conceptual schemas any trace of materialism, with adequate finesse centering our thoughts instead on the living spiritual energy pulsating within all things.

³⁸ Ibid., 36.

³⁹ Whitehead, Science and the Modern World, (New York: Free, 2008), p. 41.