

MIND IN NATURE: JOHN DEWEY, COGNITIVE SCIENCE, AND A NATURALISTIC PHILOSOPHY FOR LIVING

BY MARK JOHNSON AND JAY SCHULKIN (CAMBRIDGE: MIT PRESS, 2023)

Donald J Morse

Department of Philosophy, Webster University, Saint Louis, MO

It is possible for a book to be a wonderful failure. By that phrase, I do not mean a book which has done a fantastic job failing, but a book which, despite its failure, is a wonderful book. While I would not go so far as to call *Mind in Nature* a failure, nonetheless the book is not entirely successful, in at least two of its own three terms; but it is at the same time a wonderful book, an excellent, aspiring book, which aims to expand our understanding of John Dewey's philosophy and is a joy to read.

Mind in Nature is wonderful particularly because here we get, if not the long-overdue commentary on *Experience and Nature*, Dewey's masterwork, which Pragmatist scholars are waiting for, the closest thing to such a commentary out there. The book aims to provide a rich, detailed account of *Experience and Nature* which validates the authors' claim—validates it for both Analytic and Continental Philosophers, who are their intended audience—that *Experience and Nature* is “one of the most important philosophical works ever written” (1).

Mind in Nature will be successful, I believe, in persuading Analytic philosophers of the massive importance of John Dewey's *Experience and Nature*, if only Analytic philosophers will listen to reason, and will let themselves see beyond their imperious training, with its firmly entrenched prejudice against so much good philosophy out there, which they are routinely taught to reject and denigrate as “not real philosophy.” By demonstrating how “contemporary scientific research from biology, neuroscience, psychology, and cognitive science” can “confirm many of Dewey's most profound insights” in *Experience and Nature*, Johnson and Schulkin do what it takes to convince Analytic

Philosophers of a philosophy's worth: they confirm its main claims by way of science. The authors show also, throughout their book, how, in gaining support from contemporary scientific research in his philosophy, Dewey is not at all to be viewed as Analytic philosophers have “typically viewed” him, namely “as an unclear, nonrigorous[sic] thinker whose prose is obscure, turgid, and ambiguous” (1). The authors demonstrate that Dewey is a clear and rigorous thinker whose arguments are sound and whose work is rationally compelling; and that his main ideas in 1929 were prescient, validated by the best science of our time in the early to mid 21st century. Analytic philosophers should be well on board after reading and reflecting on *Mind as Nature*, provided, as I say, that they can shed the traditional prejudices of their schooling and approach Dewey with an open mind.

Where *Mind in Nature* will not be successful, however, is in convincing Continental Philosophers of its thesis; and this is not the fault, I think, of either Dewey or the Continental Philosopher. For precisely where *Mind in Nature* falls short is in demonstrating something certainly true of Dewey's philosophy for anyone who cares to study it carefully: that those people are wrong who say that Dewey's philosophy is “overly scientific and not existentially engaged” (1). Dewey's philosophy, in other words, is *not* overly scientific and it *is* existentially engaged, especially in *Experience and Nature*, but you would not come to this conclusion (or would not sufficiently appreciate this conclusion) by reading *Mind in Nature* alone, as the authors suppose you would. I will explain why I say this in what follows in terms of a general description of the book's aims, how it goes about trying to achieve these aims, and how the final results do not, at least in two main senses, meet those aims.

Johnson and Schulkin recognize that we are currently amid a Pragmatism Renaissance, yet one that still leaves both Analytic and Continental Philosophers unconvinced (pp. 1-2), and it is in relation to this nuanced background that they set forth their book's thesis, which is “three-fold.” “Our main thesis,” they say, “is threefold: (1) that in *Experience and Nature* Dewey presents the

most important and compelling naturalistic philosophy ever penned, (2) that a good deal of contemporary science and philosophy supports and enriches Dewey's philosophical perspective, thereby confirming our generous assessment of his work, and (3) that Dewey gives us a profound philosophy to live by" (p. 2).

Johnson and Schulkin organize their endeavor around ten chapters. The first nine chapters are taken up with explaining and defending Dewey's version of naturalistic philosophy as it appears in *Experience and Nature*. Working through Dewey's great text, *Mind in Nature* explains, in the first nine chapters, what Dewey means by experience (and why he starts from experience); it explains Dewey's naturalized metaphysics, which can account for mind, and then meaning and thought, entirely in naturalistic terms. The book further explains how consciousness, for Dewey, emerges from mind; how knowing itself occurs solely in nature, as does the self, and the book explains the central role of aesthetics in the emergence and functioning of mind, consciousness, meaning, and knowing. Then, in the last chapter, called "Living with Naturalism," the authors approach the topic of what difference Dewey's naturalistic account of mind, meaning, and thought makes in human life as we live it and understand it.

In these first nine chapters, devoted to explaining and defending Dewey's naturalism in *Experience and Nature*, the authors do demonstrate that contemporary research in a wide variety of scientific fields time and again confirms Dewey's specific claims about how, precisely, mind, meaning, and thought are parts of nature. If an aspect of mind, for example, occurs as a phase of our qualitative experience, like the "anxiety" (111) we experience within what Dewey famously calls a "problematic situation" (or in its preceding state of being an "indeterminate situation"), and if we actively inquire to more precisely characterize and to rectify the indeterminate situation, then the biological account of our "bio-behavioral systems" is the explanation for

that qualitative experience of addressing indeterminate situations: what is going on here, the authors claim, is that we are obeying the biological "need-search-satisfaction" imperative (111). Such a biological account of the immediate experience, the authors assure us, captures the reality of what is occurring when we have an anxious, unsettled experience. Referring to this immediate, qualitatively felt experience, the authors say: "It is all about" the biological processes (i.e., "the sense of irritation and unease that characterizes a doubtful, indeterminate situation, is rooted in the biology of the organism. It is all about the recurring phases of appetitive search and consummatory satisfaction, as a means to survival and wellbeing") (111). This phrase bears repeating: *it is all about biology*. The immediate experience is all about what the scientific narrative says it is about.

Indeed, delving even more deeply into the biological explanation of the processes involved, namely at the chemical and neuronal levels, the authors claim that our anxiety in a *qualitatively utterly unique* situation (for this is what Dewey says each situation is) actually involves "diverse chemical modulators, such as peptides, neuropeptides, steroids, and neurotransmitters across both the brain and the major body and organ systems" (112). The idea is that these "diverse chemical modulators" (the appropriate scientific research being cited) can be said to "ground" (111) or underlay the situation, and in an entirely naturalistic manner all the way through: from out of these chemical modulators, etc., there emerges, through a continuous process of development, with "no need to postulate supernatural or transcendent agents, entities, causes, or forces" (3), the actual experience of anxiety and indeterminacy that constitutes the qualitatively unique situation.

This is where *Mind in Nature* excels, and then gravely errs. The book takes us through each of the main aspects of *Experience and Nature* and provides compelling evidence for Dewey's claims. The supporting evidence derives largely from the sciences, as I mentioned, but not

entirely so. An excellent chapter, Chapter 8 “The Aesthetics of Life and Mind,” draws on supporting experiences from the arts and from phenomenological descriptions of aesthetic experience in order to show that aesthetic experience actually forms the basis of all our meaningful experience (a claim that *prima facie* is opposed to the authors’ previous claims that chemical and biological processes form the basis of all our meaningful experience: for *prima facie* an aesthetic experience—such as the bittersweet melancholy of a Mahler symphony—is not the firing of neurons—which is a glop of mucus with electrical charges running through it). In any case, this is where the authors’ book excels, in working through key details of *Experience and Nature*, chapter by chapter of Dewey’s work, and offering a compelling, insightful defense of Dewey’s claims that is drawn from contemporary research, especially his claims for the emergence of mind and consciousness from naturalistic processes exclusively. *Mind in Nature* is particularly good at clarifying many of Dewey’s more difficult concepts and maneuvers in *Experience and Nature*. Moreover, *Mind in Nature* is comprehensive, showing how the various details of Dewey’s text fit together to form a single naturalistic philosophy. For instance, by taking “activity” as a central feature of Dewey’s naturalistic vision (22) and then explaining activity further in terms of the processes of “homeostasis and allostasis in the maintenance of life” (24), particularly in terms of the different levels or “plateaus” of an emergent consciousness, the authors provide a helpful general framework for understanding Dewey’s vision in terms of which its specific details now more readily fall into place. This aspect of their work will help any reader of Dewey’s text, at whatever level of expertise, to make sense of any number of the key details of *Experience and Nature*, which the reader might have overlooked or failed to understand. The result of Johnson and Shulkin’s efforts in more general terms is then the presentation of a comprehensive and defensible naturalistic philosophy, which succeeds in demonstrating the great explanatory pow-

er of which naturalistic philosophy is capable. *Mind in Nature*, incidentally, is also contagious in its effect of communicating the great respect, and the reasons for it, which the authors have for *Experience and Nature*, which Dewey’s book richly deserves.

Does *Mind in Nature* succeed in showing, as per the first strand of its thesis, that Dewey’s text is “the most important and compelling” version of naturalistic philosophy out there? One cannot say that it does succeed here, for the simple reason that the book does not compare (nor even mention) the naturalistic philosophy which obviously is the closest competitor for that title, Whitehead’s *Process and Reality*. In fact, *Mind in Nature* does not proceed at all by comparing Dewey’s naturalistic philosophy in *Experience and Nature* with any other competing accounts of naturalistic philosophies, so *Mind in Nature* can hardly be said to show that Dewey’s naturalistic philosophy is better than any others (i.e., that it is “the most” important and compelling naturalism out there). Perhaps this part of the thesis of *Mind in Nature* should have been reworked, later, considering what the book does (i.e., it offers an account of Dewey’s naturalism).

In terms of the second thesis, *Mind in Nature* does succeed wonderfully well, as I have already intimated. It shows us how much contemporary scientific research helps to confirm Dewey’s major revolutionary claims in *Experience and Nature* for a vision of the human condition that overcomes entirely the mind/body dualism.

My biggest reservation concerning *Mind in Nature* pertains to the third strand of the book’s three-fold thesis, namely the idea that the authors will have successfully shown that Dewey’s philosophy in *Experience and Nature* “gives us a profound philosophy to live by.” I believe without reservation that Dewey does give us a profound philosophy to live by. Only, I do not believe that *Mind in Nature* shows this, nor that it strives to show this in the right way. This aspect of *Mind in Nature* is also the part of their work which I believe will

leave Continental Philosophers most unconvinced as well.

The trouble centers around the authors' attempted refutation of the claim that Dewey's philosophy is "overly scientific and not existentially engaged" (1). The problem is that *Mind in Nature* presents us with an overall picture of Dewey's philosophy which is overly scientific and is *not* existentially engaged. The book is quite correct in the statement of its second chapter, "It All Starts with Experience." (Although oddly missing is any reference to Hegel's famous Preface to the *Phenomenology of Spirit*, which is the ultimate statement and precursor to this major theme of how to start in philosophy and in philosophy books: it would be like discussing the fact that philosophy begins in wonder but failing to mention either Plato or Aristotle who set the frame for this kind of discourse). For Dewey, "experience" is, indeed, the starting point. Yet time and time again the authors confuse "experience," in its conception and as the starting point, with what Dewey in *Quest for Certainty* calls "the scientific object." When they say "experience," they too often mean, incoherently, the scientific object.

The major error is that the scientific object cannot serve as the basis of the experience, as the authors keep trying to make it do. At most, it can be a useful account (an instance of knowledge) for talking about our immediate experience sometimes, in some relevant cases of inquiry; but it cannot ever be equated with the reality of what is happening. For Dewey, reality and knowledge are not the same: what is real and what is known are not the same (Dewey fundamentally rejects the copy theory of knowledge).

Another way to explain this point is to keep in mind that, for Dewey, experience is, indeed, the starting point, but it is also the ending point (of his philosophy and specifically of an act of inquiry). Experience, for him, is real; but it is not necessarily (in any given conclusion to an act of inquiry) what is true. What Dewey means by experience is clear: any given, present, immediate, and qualitatively unique situation. In some acts of inquiry,

it is helpful and correct (it helps to resolve some indeterminate situation) to describe what is going on in that situation in terms of the scientific object. But we must never confuse the scientific object (that is, the content of any judgment, the content of any conclusion of any act of inquiry) for the immediate, qualitatively unique, and real situation, which is always "had." Our immediate experience is always "had" and felt in a unique way, and it is never reducible to how we conceptualize it or to any conclusions we form about it in any of our acts of inquiry (even scientific conclusions in our experimentally controlled acts of inquiry). (Again, knowledge and the real of the immediate experience in a situation are not the same for Dewey). What ends up being knowledge in some contexts—such as the scientific object in scientific contexts—is what we say about the immediate experience that has happened, in some specific pertinent cases, to help us to transform some unique indeterminate situation into a determinate one. Indeed, Dewey (as a pragmatist, and as an advocate of instrumentalism in particular) insists that any abstraction—even the abstraction of the scientific object like a "neuron"—is only a tool that functions (when it functions well) to return us to the immediate, unique, and concrete (non-abstract) situation we are in, to the immediate experience, which will now be more enriched and intensified by the addition of the action that is brought about by the action's being directed by how the abstraction specifies (i.e., intelligently).

What follows from Dewey's position (and something that he insists upon) is that multiple, different accounts of what is the case can all be equally true, although for different situations, for he means that multiple, different accounts of the content of judgment that ends up transforming an indeterminate situation to a determinate situation, in any given act of inquiry, will differ (see, for example, the opening paragraphs of Chapter 8 "The Naturalization of Intelligence" in the *Quest for Certainty*). Indeed, it is this approach to the truth which Dewey claims can help him to avoid the many con-

troveries surrounding the existence of so many different approaches in epistemology to the question of what knowledge is). In short, there is no warrant in Dewey's philosophy for thinking, in advance, that the scientific object is any better or truer an account of the qualitatively unique situation we find ourselves in than is any other kind of account. It all depends on the needs of the unique situation, on how inquiry operates there. It all starts—and ends—with experience.

This point about not confusing the known object for the experience “had” is point 101 of *the Quest for Certainty*. It is also found throughout *Experience and Nature*. It is this point which the authors miss, and it renders their account of Dewey too scientific. For the authors do seem to hold that neurons firing in the brain, for instance, really are the basis of what is going on for us in any and every response to a problematic situation, rather than seeing this account of neurons as only a useful way, at times, and only for certain purposes, to speak about the immediately irreducible, unique experience you are having (111-112).

They hold this, for example, even after they quote Dewey admonishing us not to hold this: “The situation as such is not and cannot be stated or made explicit... The situation cannot present itself as an element in a proposition” (58). They then go right on to state (as the element of a proposition) that “the neuroscience of control mechanisms” can make explicit what the situation is (58).

To be more precise, for Dewey, the *reality* is the qualitative experience, not the scientific object (accounting for it). That account is *knowledge* helping us in a situation of inquiry thinking about the situation--knowledge which is instrumental to helping us to return to the original qualitative situation in a better or more useful way, helping to make the situation more clear or less troublesome, for example—but this account of the situation is *not* the reality of the situation, is not the reality of what is happening. That reality, the reality, is (as per Dewey's “postulate of immediate experience”) just “what it is

experienced as being” (not any one object of knowledge about it, which only functions to aid the immediate, qualitative experience). This point is what Dewey's *Quest for Certainty* demonstrates again and again. It is also present in *Experience and Nature*. (Thus, Dewey's stated aim in *Experience and Nature*, for example, is “creating and promoting a respect for concrete human experience and its potentialities” (See *Experience and Nature*, end of chapter one). *Mind in Nature* misses this fundamental point entirely. The book thereby sinks back into the very reductionism that Dewey seeks to avoid.

Here I fear the scientist among them has spoken, but not the philosopher. For nothing else in Johnson's brilliant and extensive body of work should be leading to this mistake—a body of work far too rich, sophisticated, and knowledgeable to have fallen into this major misinterpretation of Dewey's philosophy.

The related issue to this scientific reductionism is the level of existential engagement the authors can draw out of Dewey's philosophy. Quite admirably, they show what, at a fundamental level, Dewey's overcoming of the mind/body dualism really means (at least, in existentialist terms). It means, they say, that “we are never radically alienated from nature.” Dewey's naturalism “makes it possible to be ‘at home in the world’” (71). “Mind can be seen to develop naturally and to learn the meaning of what is experienced” (71). If only the book had dedicated more than one chapter to explaining in what way Dewey overcomes the profound and persistent problem of human alienation!

The scientism of their approach emerges here to undermine their account of the existential aspects of Dewey's philosophy. The authors' treatment of *anxiety*, which I discussed above, is a case in point for the claim that *Mind in Nature* will not be convincing many Continental Philosophers that Dewey's naturalism offers us a philosophy to live by. For what the authors say about anxiety, if you recall, is that “it is all about” the biological and even chemical

processes involved in its production. But for Dewey, as for existentialists, the experience of anxiety is ‘had;’ it is a quality that pervades a situation. You miss what Dewey is saying and lessen the force of the reality of the experience of anxiety that is “had” by reducing it to chemical terms (for Dewey’s naturalist metaphysics, the experience is revelatory of what nature is; it is not something reducible to your account of nature).

And, for the existentialists, to be sure, *anxiety* is precisely not an experience that falls into the need-search-satisfaction model. Heidegger, for instance, stresses in “What is Metaphysics?” that there is no explicable cause of anxiety, as there is for fear. We feel anxiety in the face of the world in general, in terms of “beings as a whole.” We are made aware of the possibility that we could be nothing—we become aware of death, in other words—and there is no solution for this. We experience the most awful dread; we tremble and break down and are shattered, undergoing a kind of inescapable animal panic in general at the nature of our situation and existence as such. To refer to all this—to refer to anxiety and dread and being shattered at the prospect of death—as a chemical process (using phrases like chemical modulators” and “neuropeptides” and “allostais”, or even need and search) is about as un-existential as you can get! Indeed, if anything, an existentialist who sees this reductionism at work here is likely to write it off as just one more way to evade existential anxiety by turning it into an abstraction: “Death is just a natural, chemical process. Don’t worry.”

Which brings us more directly to the matter of death. The authors want to persuade us, as the third strand of their three-fold thesis, that their version of Dewey’s naturalism provides a philosophy to live by. Quite appropriately, then, the authors try to resist, although only at the end of their book, the common belief that naturalistic philosophy is useless for helping people to understand death. The authors’ message about death? “It’s ‘Lights Out’ for us.” (228). In other words, there is nothing here that we did not already know about death. So far, the common

belief seems to be correct: *this* account of (Dewey’s) naturalistic philosophy, at any rate, does seem to be useless on the topic of death.

The authors do add that, even though we will all die, and everything eventually will become nothing, ourselves and our precious loved ones included, we can still find things that matter to us while we are alive. (Incidentally, note that, when discussing Camus’s Meursault, who asserts that “Nothing matters,” *Mind in Nature* surreptitiously substitutes the true question of whether anything matters with the very different question of whether anything “lasting” matters, 229). The authors say that in response to Meursault (and to the most powerful and devastatingly honest part of *The Stranger*) death is not so bad, because we can still find things in life that matter to us. But can we? Is it not begging the question to say so? If the realization of death makes us understand that nothing matters, is it not begging the question to assert in response that something matters? If “the dark wind of death” levels everything that might matter in life, then that means everything, and then Meursault is right that nothing matters. The dark wind levels even the profound insights that Dewey and Holmes give about being connected to nature or being a link in the chain of humanity together with others. Or is the idea that Meursault is wrong when he says that the fact of death means that nothing matters? But if he is wrong, the authors have not shown it. (And how then do the authors account for Meursault and, I dare say, for the deep truth that is contained in the passage about the levelling wind?). The authors have not proven Meursault is wrong when he says that death destroys all meaning in life (and the meaning of life). They have simply asserted at the very close of the book the somewhat facile view that, though death is truly terrible, nonetheless we can still find things that matter to us while we are alive, and that this makes life okay. If that is all Dewey can offer us in *Experience and Nature* by way of an existentially rich, naturalistic philosophy to live by, especially in response to the profound problem of

human mortality, then Dewey's book surely is not what the authors claim that it is: one of the most important philosophical works ever written. Yet I do believe that *Experience and Nature* is as important as the authors say it is. I can only conclude, therefore, that as wonderful

and insightful as *Mind in Nature* is, there is something else entirely different yet to be said about why *Experience and Nature* is such an important work and especially about the profound existential insights it contains.