THE PHILOSOPHY OF ORGANISM AND PROCESS: BOOKS BY ALFRED NORTH WHITEHEAD

Alfred North Whitehead, *Science and the Modern World* (1925; 1st paperback ed., New York: The Free Press, 1967)

_____, *Process and Reality: An Essay in Cosmology*, corrected ed., ed. David Ray Griffin and Donald W. Sherburne (1929; corrected ed., New York: The Free Press, 1978)

_____, *Adventures of Ideas* (1933; 1st paperback ed., New York: The Free Press, 1967)

_____, *Modes of Thought* (New York: The Free Press, 1938)

Review by Herman Greene

There is a philosophical tradition known as "process philosophy." It is an ancient tradition, though designation by that name is recent. The term came into being to identify the neo-classical metaphysics of Alfred North Whitehead (1861-1947). Once the name was in place, certain philosophers, both ancient and contemporary, have been identified as being process philosophers.

In its simplest form, process philosophy means that change is at the essence of existence. The Greek philosopher Heraclitus who wrote "No man ever steps in the same river twice," was a process philosopher, while Parmenides who wrote "what-is-is" was not. These two philosophers are considered to be the founders of ontology. The meaning of ontology can be expressed in several ways: It is the philosophy of the nature of existence, or of being, or of what is really real, or of what is the essence of all beingness. Heraclitus articulated the philosophical concept of "becoming" as being fundamental. Whereas for Parmenides "reality (coined as what-is-is) is one, change is impossible, and existence is timeless, uniform, necessary, and unchanging."[1]

In addition to Heraclitus, much of Eastern thought is considered process oriented, including Taoism and Buddhism. Sri Aurobindo of India, a Hindu, is also considered a process thinker. In the West, in addition to Whitehead, Henri Bergson, Charles Sanders Peirce, William James, John Dewey, Alan Watts, Robert M. Pirsig, Charles Hartshorne, Nicholas Rescher, Jacques Derrida, and Gilles Deleuze, are considered process philosophers. Teilhard de Chardin and other evolutionary thinkers are considered process thinkers; and in physics, Ilya Prigogine distinguished between the physics of being and that of becoming. Many Indigenous traditions are process-oriented. Process thought involves, not only philosophy, but many other

[1] Wikipedia contributors, "Parmenides," *Wikipedia, The Free Encyclopedia,* https://en.wikipedia.org/w/index.php?title=Parmenides&oldid=861473243(accessed November 6, 2018).

disciplines and can serve as a bridge between science and the humanities and between ancient and modern philosophies and religions.

Whitehead did not, however, consider himself to be a process philosopher. This name was given to his philosophy by his students. He called his philosophy, the philosophy of organism. The *American Heritage Dictionary* defines an organism as an individual living being made up of parts that work together to carry on the various processes of life. With reference to non-living realities, it means a system regarded as analogous in its structure or functions to a living body. One can think of the universe as a mechanical system of inert objects in motion, or one can think of it as an organism, something that has a unity of experience with parts that work together analogous to a living being. Whitehead chose the latter.

Another way of putting this is that one can begin with the objects of physics and chemistry and the laws of motion and work up to explain all the phenomena in the universe, or one can begin with the idea of a universe as an organic unity having characteristics analogous to living beings and work down to the smallest parts that function together to carry out the processes analogous to life. Whitehead chose the latter.

It's important to note that Whitehead developed his philosophy after a career in mathematics and science, one where he was fully aware of the science of the nineteenth and early 20th century including the science of electromagnetism, relativity theory, and quantum mechanics. What he observed was that science and philosophy were focused on objects or substances and on knowledge of those objects through the senses and mathematics. This left out a more basic awareness, that of bodily awareness, and also aspects that we associate with feeling, intuition, consciousness, interrelatedness, meaning, purpose, and experience that are not detectable by sensation and measurement (mathematics) alone.

Thomas Berry used to talk about these missing elements this way: "Science can tell you how many times a violin string vibrates, but it can't hear the music." The music is something real to our experience. A hidden assumption in much modern philosophy and science is that it is the violin string and the vibrations that are real and not the music. The music is a subjective interpretation of the vibrations by an individual, not a real something that comes to all of us from the playing of the violin.

In *The Universe Story* Brian Swimme and Thomas Berry also wrote about these missing elements:

> Over the last three centuries cosmology has come to mean "mathematical cosmology," the search for empirically based answers to a core set of questions . . . . Each of these questions focuses on a different aspect of the physical universe and has, at least theoretically, a mathematical answer . . . . that satisfies the query.
>
> [Now as we consider the discoveries mathematical cosmologists have made, we might ask:] Given the existence of mountain wildflowers, what is the nature of the Flaring

> Forth at the beginning of time? Given Mozart's symphonies, what is the nature of the dynamics of the universe that could have led to such structure? Given the care with which a mother lark will nurture and protect her young, what is the universe made of?
>
> Cosmology aims at articulating the story of the universe so that humans can enter fruitfully into the web of relationships within the universe. (Pp. 22-23)

This is the kind of cosmology Whitehead developed in *Process and Reality: An Essay in Cosmology*. Whitehead's *Science and the Modern World* is in large part an account of how it was that "over the last three centuries cosmology [came] to mean 'mathematical cosmology.'" In that book Whitehead wrote:

> I shall trace the successes and failures of the particular conceptions of cosmology with which the European intellect has clothed itself in the last three centuries. . . . There persists . . . throughout the whole period the fixed scientific cosmology which presupposes the ultimate fact of an irreducible brute matter, or material, spread throughout space in a flux of configurations. In itself such a material is senseless, valueless, purposeless. It just does what it does do, following a fixed routine imposed by external relations which do not spring from the nature of its being. It is this assumption that I call 'scientific materialism.' (P. 17)

Those who are familiar with Thomas Berry's work would recognize that if this is what scientific materialism means, then Berry was anything but a scientific materialist. For Berry everything springs from the "nature of their beings." Thus Berry wrote: "[Each] being has its own spontaneities [arising from within, and they] express the inner value of each being in such a manner that we must say of the universe that it is a communion of subjects, not a collection of objects" (*The Great Work*, 82). It is possible that in writing this, Berry drew on Whitehead's "ontological principle," which was that "apart from the experience of subjects there is nothing, nothing, nothing, bare nothingness" (*Process and Reality,* 167).

Like Whitehead, Berry wrote about the universe by analogy to organism: "[The] qualities that we identify with the human . . . we observe throughout the natural world. Even at the level of the elements we observe self-organizing capacities [and] the capacity for intimate relationships. [These pervasive psychic abilities] are so impressive that we must consider that modes of consciousness exist throughout the universe . . . ." (*The Great Work*, 81).

But let us also consider Whitehead's philosophy in light of the name his students gave to it, "process philosophy." The ontology of classical Western metaphysics rested on "being," not becoming. In other words, they rested on that which was unchanging. First there was an unchanging first principle, God, and then the universe consisted of substances that had unchanging essences that made them what they fundamentally were. Differences in substances were accidents. Thus there was a dog (or dogness), which is a substance, and then there were brown dogs and black dogs. Brownness and blackness were accidents. Classical Western ontology is Parmenidian in the sense that it rests on being or changelessness.

One of the problems that Whitehead saw in science is that the discoveries of science were disclosing a world that was constantly changing and was interrelated and in some sense experiential or psychic like an organism, but it was being conducted with an assumed classical ontology of fixity and only external relatedness. Not only was science struggling with this mismatch, but scientific materialism was being extended into the humanities . . . and still is.

Scientific materialism doesn't allow for novelty or creativity or any of those characteristics described above as characteristic of organisms. Yet we ourselves see and experience this incredible evolutionary, emergent, dynamic, always changing world. The new, the truly new comes into being. Our experience doesn't correspond to scientific materialism; and we are not able to "enter fruitfully into the web of relationships within the universe [so understood]."

In Parmenides thought becoming was not possible because something could not come from nothing. Yet this is what creativity and novelty are, the coming into being (becoming) of something that never was before. Whitehead's ontological ultimate was "creativity." In fact he is credited by some for coining the term creativity. "Creativity" is in Whitehead's thought one of those fundamental notions that can't be explained in terms more far-reaching than itself. He doesn't have an answer as to how novelty occurs—how something new comes into being that was never in being before. He doesn't have an answer to how creativity is characteristic of the universe, rather than a universe controlled by fixed immutable laws. Novelty is. Creativity is.

Berry uses both creativity, spontaneity, transformation, and wildness to refer to novelty and creativity. He wrote: "Wildness we might consider as the root of the authentic spontaneities of any being. It is that wellspring of creativity whence come the instinctive activities that enable all living beings to obtain their food, to find shelter, to bring forth their young; to sing and dance and fly through the air and swim through the depths of the sea. This is the same inner tendency that evokes the insight of the poet, the skill of the artist, and the power of the shaman" (*The Great Work*, 51).

Yet this wildness/creativity/spontaneity/novelty is rooted in the past. It comes into being through a *process*. In Whitehead's philosophy, we draw on the total experience of the universe when we act and it is out of the totality and richness of this experience that creative expression or newness occurs. Perhaps the best way of understanding this is by analogy to jazz improvisation. Novel improvisation occurs, but it only comes out of the experience of the preceding music. This novel expression is a process. The richer the preceding music, the richer the novelty. Berry's great concern about the degradation of Earth and the loss of its diversity was a decline in richness of experience, the richness on which human creativity depended. Whitehead would have shared this concern. Berry shared Whitehead's understanding that in ontology we have moved from being to becoming and that becoming is an adventure.

The four books listed at the beginning of this review are Whitehead's primary, but not only, philosophical works. Much of his writing is difficult to read, especially *Process and Reality*. But

his basic messages are simple: We live in a universe that is (1) creative, (2) in process, (3) composed of subjects, and (4) interdependent both externally and in terms of internal (feeling) relations. The universe is like an organism in process filled with organisms in process and it is going somewhere . . . it is proceeding through a sequence of irreversible transformations.