



## Articles

# Three Hundred Years of Whitehead: Halfway

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*ABSTRACT: This article was originally delivered as a lecture at the Library of Congress, February 17, 2011, to commemorate the installation of a letter from Whitehead to his student Henry Leonard in the collection of that institution. See the Appendices to Phipps for a copy of the letter and Leonard's response. The present article summarizes the history, development, and importance of Whitehead's work for the present and delineates perspectives for potential Whitehead research in the future.*

How to approach the phenomenon of Whitehead in 40 minutes? What to say, and what to conceal? How to unfold his complex work, reaching from mathematics and logics to philosophy and theology, with physics and evolutionary theory in between? And what to remember of Whitehead the human being who grounds the immense breadth of this work? Whatever I highlight will be overshadowed by a much greater cloud of oblivion. I should concede to the impossibility of the task!

While pondering this calamity, I decided to lay out the landscape of Whitehead's universe by using a more pragmatic tool, or rather, a mnemonic device structuring the task. I call it a "binocular view." Whitehead knew of it as a "dipolar" view of things. By this he not only indicates that it is always better to investigate more than one perspective, but indeed he suggests that reality is always incurably complex, while our understanding of reality tends to employ the antagonisms of opposites.

My title already hints at such a double perspective of opposite directions: It is not enough to review the *past*, the genesis of Whitehead's thought, its

influence and currency, as important as this may be. We may also want to envision its *future*, the prospect of its potential. Whitehead himself was intensely concerned with the intellectual reconstruction of the thinkers of the last 300 years, their inventions and revolutions of thought and social life, while adamantly critiquing their shortcomings and downfalls, especially their newly arrived at ideology of scientific materialism.

Yet Whitehead was also deeply engaged in matters of the future, possible developments of society and structures of thought that would avoid the pitfalls of the past and, instead, express the transformative processes his own thinking was meant to initiate. In 1940—Whitehead was already 80 years old—he suggested in a conversation with Charles Lindbergh that, despite the Great War under way, he believed without fear that over the “next two or three hundred years” humanity might work out the problems of civilization without undue suffering.

This hope demonstrates a deep trust in the human potential to always decide anew *for* a civilized world. And this trust is steeped in a virtually unending series of binocular perspectives that pervade Whitehead’s work throughout its different levels of development: from the dipolarity of mathematics and philosophy, and the rejection of a bifurcation of nature into independent systems of matter and mind, to the co-valence of science and religion; from the *critique* of abstractions taken for the concrete, and yet the *cherishing* of abstractions as motors of the evolutionary process, to the formulation of a philosophy of organism in which both abstract ideas and concrete processes may rest reconciled; from the unending rhythms of becoming and perishing to the eventful intersection of fact and value and the meaningful oscillation between the world and God.

For Whitehead, all of these oppositions, juxtapositions, double perspectives, and bipolarities are, of course, themselves always in motion—neither sedated on abstract grounds, nor fused into a higher unity that puts their dynamism to rest. Instead, Whitehead always found ultimate refuge in this dynamics *itself* as it motivates the binary perspectives to coalesce. In forming *contrasts*, these differentiated, complex, moving perspectives bind together, neither by dissolving their otherness nor by remaining in mere opposition.

No wonder that Whitehead in his *magnum opus*, *Process and Reality*, claims that the ultimate ground of everything—that beyond which one cannot think and search for truth—is itself not anything we can arrest: neither Being or God, nor matter or mind, but the creative process itself,

graciously groundless. Whitehead might well have been one of the first thinkers to reference “creativity” in such ultimate, metaphysical terms.

This indicates a mystery in Whitehead’s thought: If you have ever tried to read Whitehead for the first time, and even if you have become an expert, it is almost unimaginable to understand how a philosopher with such an inclination toward “creativity” could develop the most complex system around it. One can only grasp this paradox, laid out in a whole series of books in the 1920s and 30s, if one recognizes that his very aim is to help us avoid getting caught up in our tendency to stabilize fluency again. Instead of making us kings of reality and gods of the mystery of existence in mastering fixed conceptual abstractions, the complex apparatus of Whitehead’s conceptual language presents itself as a gift—a method of unknowing, if you will—forcing us always to reenter the process of thinking again. Whitehead wants us, always anew, to become creative seekers and creators of new realities and ideas in the pursuit of the art of life.

With *creativity* as ground, and with the method of contrast in mind, we can now add two further characteristics of Whitehead’s binocular perspectivism: *mutuality* as the mode of togetherness and *events* as the place of its happening.

The first, *mutuality*, appears in endless variations throughout Whitehead’s work, leading up to his last public lecture, “Immortality,” given in 1941. Here, for the last time, Whitehead, in the strongest and most universal terms possible, summarizes his view on the ever creative, contrasting process in terms of the “essential relevance” of *every* factor of the universe *for the other*. Even the “contrast of finitude and infinity arises from the fundamental metaphysical truth that every entity involves an indefinite array of perspectives” so that no “finite perspective” can ever “shake off its essential connection with” its “infinite background” (682).

Yet, these mutually contrasting perspectives are in need of a *creative meeting place* within the concrete flux of things. They convene in *events* of the momentary unification of differences. Created from the complex multiplicities they gather, these events add themselves to a new multiplicity of perspectives, issuing into novel expressions of the creative process that generates the universe. Yes, Whitehead was a pluralist! Yet he filtered his pluralism through concrete events in which mind and matter, past and future, facts and values, abstracts and concretes, and flux and permanence find themselves in mutual enjoyment. In such momentary suspensions of inherent conflicts, their *contrasted* opposites avoid the

impasse of motionless coagulation and instead generate a creative passage into the unprecedented.

Because of the enjoyment of togetherness and the pulsation of influx and effluence, the creative contrasting of perspectives always happens as *events of experience*. Conversely, the universe exhibits a cosmic convergence of infinitely diverse perspectives, oscillating in the mutual immanence of *experiences of events*. And it is in this synthesis of universal sympathy that the universe harbors a sense of “eternal greatness” as always already “incarnate in the passage of temporal fact” (*AI* 33).

Beyond all technicalities, this may explain Whitehead’s trust in the future. Dispersed though its intricate modes of flux, the world-process yet exhibits a sense of an “essential rightness of things.” While not a means for “preservation” (*RM* 41), we may trust the world process as harbinger of the ever-renewed *potential to create a world*. And since the “creation of the world” draws on the *mutuality* of perspectives, it augurs the “victory of persuasion over force” (*AI* 25). While Whitehead wants to disperse the suspicion that the “base of things” shall disclose a “mere arbitrary mystery,” the eventful exchange of perspectives *is* its very mystery because this universe is not dominated by “harmony of logic” lying “upon the universe as an iron necessity.” Instead, it is vivified by “aesthetic harmony” that “stands before it as a living ideal.” Its promise is beyond our grasp; yet it stirs “the general flux in its broken progress towards finer, subtler issues” (*SMW* 18).

Let me summarize this first sketch of Whitehead’s thought. It reveals a polyglot thinker with a universal vision who invites us to embark on the adventures of *cosmology*. Following the multiplicity of fleeting experiences as they pervade the very texture of the universe in their rhythmic collection and release, this web of contrastive events manifests *one vast aesthetic whole*, itself infinitely moved by an adventurous harmonics of the unprecedented. As this process is patient regarding the appearance of human civilization, it refines itself through the intensities of art, ethics, and religion, while in humanity’s accompanying investigations into its nature it gives way to the discovery of mathematical, physical, and genetic patterns. As we harbor the potential to understand these realms, we are also offered the opportunity to refine our existence by practicing ever-new propositions of aesthetic satisfaction.

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Yet how did Whitehead’s universe happen in the first place? The shortest way to circumscribe his career is to say that it began at Trinity College

in Cambridge, England, and ended at Harvard University in Cambridge, New England. While his vision arose with mathematics in the tradition of Newton, he transformed himself into a metaphysician in the tradition of Plato. In fact, both mathematics and philosophy were already confluent in Plato, to whom Whitehead thought the Western philosophical tradition added itself only as a series of extended footnotes.

Whitehead was not a Platonist, however. He rather admired the depth of Plato's thought and his dialogical method, never fixating on anything, but always developing alternative views of what might have been missed in any crystallization of thought. Depth can never be systematized; it is always unspoken; its truth can only be approximated with utmost sensitivity to the vastness of the universe and humility before its never-ceasing becoming. If we are meant to find rhythms in it—mathematical, physical, and metaphysical—then it is because of the *relationality* of the cosmic ingredients rather than because of any prefabricated order simply “there” to be discovered.

We can divide Whitehead's work into three phases—roughly coinciding with the positions he held in Cambridge, London, and Harvard.

Although Whitehead was interested in many other things—history, philosophy, theology, politics, women's emancipation, and education—his professional focus at Cambridge was on mathematics, or more precisely, its interface with the physical universe in terms of topology and logics. *Universal Algebra*, *Mathematical Concepts of the Material World*, *Principia Mathematica*—to name three major works of this period—circumscribe his interest: to understand the relationship between the fundamental units of the physical world and their conceptualization. His quest has a distinctive flavor because of its sensitivity for expansive concreteness. Reality cannot be reconstructed in terms of mere abstractions, built up from dimensionless points, arrested through exact measurements, or captured by lifeless logical concepts. Instead, since physical reality is fundamentally relational, connections flow extensively over time and space, and our reasoning employs fluent symbolisms rather than fixed formulae.

With Whitehead's move to London, a reflection on the tacit philosophical presuppositions of mathematical, logical, and scientific reasoning begins to emerge that differentiates his approach from those commonly employed. Another element of Whitehead's thought appears, so prominent in his later philosophy: By conceptualizing nature on the basis of its *perception*, Whitehead defines his task against the prevailing bifurcation

of matter and form, substance and relation, external and internal causality. Without yet addressing the accompanying philosophical discussion in Locke, Hume, Descartes, and Kant, he asserts that any knowledge of nature that already *includes its very perception* has already undercut the dualistic isolation of natural objects from human experience.

The works of this period—*The Principles of Natural Knowledge*, *The Concept of Nature*, and *The Principle of Relativity*—refine Whitehead's earlier proposal: that reality is expansive and, hence, cannot be reduced to dimensionless mathematical or pre-symbolic logical formulae; that measurement is secondary and contingent on the rules of the concrete universe, which, in turn, are also contingent. His method of "extensive abstraction" demonstrates his philosophical agenda of redefining concrete reality as a multiplicity of natural events in a unification of interactions that, by forming relatively persistent characters, generate a web of threads of spacetime. He now famously interprets the natural universe by a series of mutually interacting polarities: of events and objects, expansion and process, abstract persistence and creative passage.

This was revolutionary, indeed! If the "stuff" of the world itself consists in pulses of fleeting events to which all objects, especially scientific objects, owe their reiterative character, then *scientific* knowledge is far from *capturing* nature—as the *Tractatus* of the early Wittgenstein led us to believe—and is a far cry from its creative passage. Its abstractions are mere snapshots of a life that, if they are *substantialized* into inanimate, inert, mutually external particles of matter, only retains a funeral service, symbolically conjuring up the ghosts of disappeared souls.

Because of this inversion, Whitehead also objects to the philosophical underpinning of Einstein's General Relativity—not Relativity *per se*, to be sure, that is, the relational continuum of different, unprivileged systems of spacetime with a maximum causal velocity as the average of all of its systems in a given universe. Rather, Whitehead attacks the implication that these systems' intersecting topology be *bound* by the very particles of matter—their mass and gravity—that he viewed as mere abstractions from the continuum of events with its production of a general geometry of which matter and light are mere expressions.

The third phase of Whitehead's work coincides with his move to America. Since it is known as his *metaphysical* phase, one may wonder whether this constitutes a break with the earlier developments. All readers of Whitehead, who at that time may have mistaken him for a

mere mathematician, logician, or philosopher of science, were, indeed, astounded by his metaphysical reinvention. They may have expected a different trajectory because of what they believed to be the “true” potential of Whitehead’s work: namely, laying the ground for further explorations into logical positivism or the inception of analytic philosophy; or they may have simply stopped reading his later works. From today’s perspective, however, we can better understand this “conversion” as a fairly *logical* extension of Whitehead’s earlier thought. With his philosophical reconfigurations in place—the creative advance of nature, the perpetual passage of extended events of spacetime, the repetition of abstract characters of events as objects, and the relation between causality and perception—their philosophical synthesis as a systematic “critique of abstractions” seems almost inevitable.

The major works of this period—*Science and the Modern World*, *Process and Reality*, and *Adventures of Ideas*—are important not only with regard to their new metaphysical method and their inherent will to create a comprehensive cosmological system, but precisely because they were *thereby directly answering* the lingering *metaphysical* problem inherent in the rise of modern science and philosophy over the course of the previous 300 years. Now Whitehead *directly attacks and systematically deconstructs* the lingering *scientific materialism*, which was still underpinning the new physics of relativity and was only slowly loosening its grip on the revolutionary concepts of quantum physics. Since this materialism interacted with modern philosophy by isolating human subjectivity (and with it the humanities) from physical reality (and the sciences), its mechanism also led to the dismissal of values, leaving us in a meaningless, dull universe. This is, I think, the precise intellectual place at which Whitehead’s letter to Leonard, that this symposium is gathered to evaluate, begins to speak.

Whitehead’s new metaphysics is a grand proposal, envisioning an *alternative* that *inverses* the hardened oppositions and oppressive abstractions that motivated the wars of the last centuries, intellectually and socially, by offering a peace-making proposition. Clothed in the construction of a universal system of creative contrasts, and contrasts of contrasts, Whitehead releases us not only into a renewed understanding of the world as a whole, but invigorates a re-envisioning of the creation of a civilized society.

Whitehead’s new, *organic* paradigm establishes itself with a series of *alternatives*. Instead of invoking an onto-theological ground of being,

Whitehead posits the immanence of creativity in its instantiations as the driving force of the becoming of the universe. Instead of Descartes' disconnection of extension and mind, and Spinoza's subsumption of both under a divine substance, Whitehead posits an open universe comprised of myriads of events in their organizationally diverse nexūs. Instead of adopting Leibniz's view of a pre-established order of this multiplicity in the mind of God, Whitehead delegates order to the interplay of all actualities as *their* decisions to realize their potentials, even if they were offered by the mind of God. Instead of Plato's system of ideas, flowing from an essentialized structure, Whitehead insists on grounding ideas in a trans-structural activity of becoming and poses their relative inherence in the actual becoming of the cosmos. Against Aristotle's isolated substances, Hume's digital streams of impressions, and Leibniz's hermetic holism of isolated spheres of mentality and physicality, Whitehead fuses *all* of these spheres in events of relational, physical, and creative "growing together." In this synthesis, the whole universe convenes in the moment of the activity of events and effectively releases itself again to a transcendent future beyond these events.

These *alternatives* are accompanied by an equally profound series of *reversals* of the philosophical tradition. While the substantialist scheme of the past was haunted by a division of active form and passive matter, Whitehead *reverses* this association: forms, structures, patterns, characters, and laws of nature are *not* the origin of activity, but sedimentations of the possible; events of becoming are *not* the mere realization of pre-given forms, but are the harmonization of actualities and their associated possibilities. Hence, Whitehead's "eternal objects" are *not* possible actual realities, as yet unrealized or realized in an alternative world, but evocations, seductions, and invitations for creative actualizations of the unprecedented.

While Kant isolated subjectivity from reality by transcendently reconstructing empirical knowledge from projections onto the phenomenal, Whitehead *reverses* the generative relations. If subjects are *effects* of reality from which they gather themselves, they become not only all-relative to the reality they gather in their process of "concretization" or "concrecence," but also all-relative to a reality beyond themselves in which they are gathered into new syntheses of becoming.

In reversing the Western substantialist preference of being over becoming—so that now that which *is* has always had its *becoming*—Whitehead also upsets the undisputed primacy of the higher capacities of intellect



and consciousness—as inherited by Descartes, Hume, Kant, Hegel, Husserl, and Heidegger. With the cosmological primordially of *each* event *feeling* its actual past and *desiring* its relevant possibilities, intellect and consciousness are only complex modes of experiencing. This again inverts the status of humanity in the universe: while Western culture, philosophy, and religion have disconnected humanity from the evolution of nature, Whitehead articulates its ecological cradle.

A last observation on Whitehead's development: In a quartet of books accompanying the metaphysical phase—*Religion in the Making*, *Symbolism*, *The Function of Reason*, and *Modes of Thought*—Whitehead emerges as a thinker on the regeneration of civilization. While he has already made his metaphysical case for the inevitable mutuality of fact and value in all cosmic processes without any anthropocentric bias, in these works he again *reverses* the priorities, demonstrating how the factors that drive the development of human existence— aesthetics, symbolism, art, religion, reason, and social organization—emerge from cosmic forces that suggest a “civilized universe.” They appear as an excess of the creative process, but must be *refined* in order to contribute to the delicate “aim” Whitehead attributes to the universal process as a whole: the appearance of Beauty through intensifications and harmonizations in processes of cosmic organizations.

Surveying the development of Whitehead's thought over these four phases could lead us to the conclusion that it was driven by a polarity of *expansion* and *inversion*: an expansive move toward the utmost universals of metaphysical magnitude *and* an inverse move towards a humble recognition of the relativity of all universal insights within the motive-force of the evolutionary process toward its aesthetic “aims”: Truth, Beauty, Art, Adventure, and Peace.

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To estimate Whitehead's importance is an extremely delicate matter—because of three reasons. First, since the breath of his vision grounds itself in a comprehensive reversal of the intellectual sedimentations of the preceding 300 years, we cannot expect the full extent of its relevance to be grasped in such a short time, less than 70 years after his passing. We may not yet have found *the* approach that fully unfolds its significance. Second, since the depth of his cosmological intuition develops considerably over a lifetime, any appraisal of his work is crucially limited by the perspective from which it starts or the phase in which it anchors itself. Third, if

Whitehead's universe of thought is itself *untimely*, it will always remain in some tension with the orthodoxies it questioned and the prevalent paradigms by which it is scrutinized. While Whitehead undertook the reshaping of the conceptual conditions under which the scientific revolutions of the early 20<sup>th</sup> century departed from past paradigms, his new philosophical prospect may well be ahead of their limitations and in tension with their currently accepted boundaries.

In a first, sharp look at the immediate impact of Whitehead's new cosmological paradigm, we find much grappling with his alternatives and inversions mixed with a flavor of disbelief toward his polarities and contrasts. Whitehead foresaw that he might not be appreciated in a prophetic passage in *Adventures of Ideas*, when he noticed that "mental functioning introduces into realization subjective forms conformal to *relevant alternatives excluded* from the completeness of physical realization" (AI 259). In other words: when the virus of novelty strikes, an established organism may initiate defensive counter-measures to immunize its old ways of life.

Whitehead's own development complicated things. Because of ever-widened horizons that, at the same time, overturned earlier, limited perspectives, it was only a question of time before acceptance at one level was dissolved with the arrival of a new phase. While integrating his earlier endeavors, he also contrasted its narrower conditions, in which adherence or opposition had anchored itself.

Consider only the cohabitation of mathematics and philosophy in Whitehead's work. Does Whitehead's metaphysical phase subsume the mathematical, critically resituate it, or even, at least partly, abandon its earlier preconditions? Does Whitehead's critique of the scientific, philosophical, and religious traditions isolate his alternatives outside their sphere (and can they therefore be ignored?) or does it instigate a new contrast with hitherto ignored alternatives? Does Whitehead's inclusion of a secularized cosmological function of God make him a dead man walking—given the magnitude of the impact of Nietzsche's declaration of the death of God on the intellectual climate of the 20<sup>th</sup> century with its two all-encompassing wars—or does it harbor a viable alternative whose relevance we have hardly understood yet? And finally, is Whitehead's organic paradigm that finds a place for purpose in all realms of the universe a dream of lost times, to which meaningful sciences and philosophies must resist, or is it the stroke of a genius that will be part of any satisfying understanding of the eco-cosmic continuum?

Whitehead's alternatives, at the time of their inception, were met with both applause and skeptical resistance. Yet when Whitehead ventured on, they lost some friends and enemies, transformed some friends into enemies and vice versa, and found the company of some new friends and enemies. The logical reconstruction of mathematics in the *Principia*, the alternative relativity theory, the dissolution of matter in an event-theory, the metaphysical turn, the theological turn, the turn to civilization—all of these were alternatives in themselves, hurting prevalent paradigms; but they were also *altered*, either by critique in respective fields or by an abandonment and/or sublation in Whitehead's own development. A certain air of surprise remains in all of his moves irrespective of the subtle continuity found from a later standpoint.

The harvest remains ambivalent. Was the *Principia*, arguably one of the most impressive works of 20<sup>th</sup> century mathematics and logics, dethroned by Gödel's incompleteness theorem or was its logocentrism abandoned by Whitehead's own metaphysics? Is Whitehead's alternative relativity theory, although it had some currency at the time of its inception, dead in light of the predictive power of Einstein's version or is Whitehead's underlying mereological approach to extension still a future project? Is Whitehead's metaphysical turn the last rearing of a dinosaur, helplessly out of sync with the pulse of postmodern times, or is it a subversive spark we have yet to fully grasp? The last judgment has not yet arrived.

Whitehead's *philosophy* remains an enigma. It is steeped in paradox—due partly to its untimely arrival and partly to Whitehead's own contrasting and inversive reasoning. This leaves us with a fascinating picture. Husserl and Heidegger taught at the same time that Whitehead was leaving for Harvard. Existentialism and phenomenology attacked metaphysics and logical positivists like Carnap disavowed Whitehead when he *turned* to metaphysics. Wittgenstein, himself a student of Whitehead's colleague Russell, changed the philosophical outlook yet again right when Whitehead had found his cosmological voice. All sides of the philosophical empire took turns in directions *counter* to Whitehead's intuitions, which, in turn, diminished a perceptive framework for his reception for decades.

Alternatives with credibility—such as American pragmatism—were marked by James, Dewey, and Bergson, rather than Whitehead. Why? Because of the *paradoxical* nature of Whitehead's contrasts. Although denigrated as a realm of rationalism or, alternately, unbridled fantasy,

Whitehead's metaphysics emphasizes *empirical* endeavor (like the pragmatists), interpretation (like hermeneutics), decision (like existentialism), experience (like phenomenology), coherence (like the analytic tradition), and symbolism (like language philosophy). Yet Whitehead subversively *counters* them with equally disturbing contraries: while empirical, his metaphysics remains stubbornly speculative (a horror for pragmatists); while hermeneutical, it remains stubbornly systematic (a horror for Continental thinkers); while close to phenomena, it resists the primacy of consciousness (a horror for followers of Kant and Husserl); while coherent, it prioritizes life's chaotic character over the limited instrumental usefulness of logics (a horror for analytic philosophers); while deeply engaged with matters of language, it insists on pre-symbolic reality (a horror for almost every philosopher since the 1960s). How peculiar Whitehead's philosophy is!

Nevertheless, these paradoxes may prove vital. Embedding the symbolisms of mathematics and logics in the actual life of the cosmos may add an interesting voice to the current discussion of their foundations. Emphasizing topology, mereology, and extension-theory may hold hidden treasures given the mutual inconsistencies of current physical theories that still await a revolution of understanding. Including aesthetic purposes in an organic theory of evolution and complexity might prove quite visionary given the current research within life sciences and the ecological sensitivities of our time. Envisioning a cosmos of infinite, rhythmic cycles, pulsating through the subjectivity of their chaotic lives, fits well with current concepts of "eternal inflation," and remains attractive because of its retained impulse toward novelty. Finally, including the sacred in a universal scheme of contrasts may prove superior to both religious fanaticism and irreligious indifference for a future civilization that neglects its spiritual dimension only at its own risk.

Regarding Whitehead's legacy, it is hard to estimate the depth and breadth of its true influence because it always reaches far beyond any limited boundaries imposed by disconnected disciplines. The vastly diverse contributions of his students and the students of his students in their diverse fields are worth thorough research.

Time forbids name dropping. So I will summarize Whitehead's presence with a flavor of the unexpected: Who else would enjoy long walks with him than Gertrude Stein? Who would write poems on him other than Charles Olson? Who else could appear in an essay on creativity by Arthur Koestler? Who else could be "spoken" through the dialogue of both

a dragon and a blind priest, as in John Gardner's *Grendel*? Who else could Aldous Huxley have quoted in support of his hopes for a more liberated society? And in what other context would we expect Whitehead to appear than in the science fiction vision of a future universe of interconnected organisms from Van Voght's pen?

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Let me, in my final section, risk a look into the future. What could or should we project for the next 150 years? Based on the present, we can say that Whitehead's voice is alive and is being heard. His work is being taken up by many fellow travelers, who themselves are often visionaries, creatively transforming it in their own fields or using it to establish connections beyond classical boundaries. In virtually every discipline of the sciences and humanities, philosophy and education, theology and literature, we find kindred sojourners engaged in Whitehead's universal vision, or at least utilizing its insights for their own projects.

While never imprisoned in any area of thought, over the decades Whitehead's legacy has persistently been held up by adherents of process philosophy and process theology. Yet it was never removed from innovative movements in education, psychology, sociology, economics, ecology, physics, and interreligious thought. Its current proliferation in China was foreseen by Joseph Needham in the 1950s and intuited by Whitehead's suggestion that his philosophy might be more congenial to Indian and Chinese thought. The East-West and North-South dialogues are engraved in its very outlook: the overcoming of inorganic thought and dehumanizing economics. Its influence on emancipatory movements on all continents is increasingly recognized. And the fundamental *eco*-logical, instead of a mere logical, character of his cosmology has inspired environmental movements.

Several institutions facilitated these developments. *The Center for Process Studies* at Claremont, the *International Whitehead Conferences* held in many parts of the world, and the *International Process Network*—to name only a few—have inspired many initiatives. The relentless work of some European Whitehead scholars has produced new lines of research, as has the inception of the *Whitehead Research Project*, with its conferences and books, its *Contemporary Whitehead Series* and, most recently, by gaining the permission of the Whitehead Estate to create the first *Critical Edition of Whitehead's Works*, published or unpublished. These initiatives have again inspired interest in the "New Whitehead" beyond the sphere of insiders.

Probably the most important event in this newer history of the Whitehead-reception was the untimely and rather unexpected influence of Whitehead's work on the now famous French philosopher Gilles Deleuze, who names Whitehead's *Process and Reality* one of the most important works in philosophy in the 20<sup>th</sup> century. Not only did he reframe Whitehead's universe by knighting it with a name from James Joyce ("Chaosmos"), but he was instrumental in developing a fresh access to Whitehead via a tradition that had labeled and filed him away too early. As Michel Foucault once proclaimed the 21<sup>st</sup> century a Deleuzian one, maybe something also rings quite true when David Griffin imagined it to become Whiteheadian.

Certain of new philosophies—such as Bruno Latour's philosophy of cosmic community, the new Object Oriented Realism of Graham Harman, or Judith Butler's more recent ecological work—no longer overlook the profound paradigm shift Whitehead initiated; rather they recognize him as part of the heritage from which they depart. This is a new situation, indeed, and it can be expected to continue to unfold.

What is it then that makes Whitehead's cosmology attractive today, catalyzing a new vision of the future of humanity and the planet, for new thought and lines of action? I will hint at just three reasons.

First of all, like physical cosmology today, it embraces the very small, the grain of reality, and the very large, the infinite universe with an organic and evolutionary organization. In many overlapping layers, contingent unifications of multiplicities of processes initiate all kinds of ecological rhythms at large. Becoming and fading—pulsating, really—on all levels between infinitesimal events and vast cosmic epochs of organization, this chaosmos comes forth from unimaginable pasts and ventures into unimaginable futures, relentlessly striving through its complexities, building and releasing infinitely varied forms of social organization and the dissolutions of life. Gathered from its depth, we are no strangers to it.

Second, *pervading* the simplest puff in empty space and the physical and biological organisms that build up planets or are harbored on their crust like fragile foam, as well as the astounded human beings who wonder over their existence, Whitehead finds an inherent Eros of adventure. This world will never be the same, never become again what it was; it will never concede to eternal return. This made Whitehead's universe distinctly interesting for Deleuze, because it can always be reformed or reinvent itself and create new worlds of unforeseen intensities and harmonies. Every creature is in its

peculiar way responsible for this enactment. What if the majestic laws of nature, and their beauty, are neither mere mechanical devices nor decrees of an external Deity, but the communal effect of the myriads of creatures, a matrix of their passionate *feeling* of causality, creativity, and novelty? For Whitehead, this passion also expresses the presence of an eternal depth of their potentials that always incarnates itself anew in all events and cosmic epochs. This is a vision that makes us meaningful in a meaningful All. Its ecological depth makes us earth-bound, cosmos-bound, and its spirit seduces us to contribute to its never-ceasing production of life through all tragedies of its perpetual passage.

Third, Whitehead's metaphysics presents us with a model of experience in which all abstract opposites meet to assist us in becoming creative. It does not seek a world-formula, *à la* Stephen Hawking, but presents us with living sculptures, breathing through the poetry of their pulsation. Hence, Whitehead's thought balances polarities on the pivot of poetics—sharing “patterning” with mathematics, but also inviting intuitions of depth alongside philosophy. Where both mathematics and philosophy may cling to the wonders that only their abstractions make possible, discovering order upon order, poetics reminds them of the rugged beauty of the multiplicity of experiences upon experiences in which those structures are steeped. It is in their very *reciprocity* that we escape the sterile binaries of the oppositions to which we have become accustomed. For Whitehead, this poetics is divine. And it is through its *contrasting* embrace that a social process may begin to vivify “the good sense which we term civilization” (*MT* 174).

Herein lies the reason for Whitehead's juxtaposition of positivism and speculative metaphysics. When, in his letter to Leonard, he seems distressed, even annoyed by the tenets and even the very inception of positivism, it is so because of the missing imagination and the muted sense of depth and unprecedented future. If reason becomes reduced to that which *is*, and the “is” becomes reduced to that which only a method of exploitation through narrow concepts *imitates* as a purely material reality, one perpetuates not only a reductive primacy of being over becoming, but moreover a reality of merely external particles of matter and a lifeless logic of their mapping—virtually everything Whitehead endeavors to overcome.

Like a testament, Whitehead ends his last book *Modes of Thought* with the imperative that only a philosophy that is sensitive to “depths as yet unspoken,” will allow us “to maintain an active novelty of fundamental

ideas illuminating the social system" (*MT* 174). No wonder, then, that "trust in metaphysics," however "slight, superficial, incomplete" its insights may be, is the *one* "presupposition" without which "there can be no civilization" because it harbors that which "guides [its] imagination and justifies [its] purpose" (*AI* 128).

The "evil of the future," Whitehead says, is the "suppression of aesthetic creativeness" (*SMW* 204). He once confessed that he owed this insight to the "vivid life" of his wife, Evelyn. This insight must be considered the very motive of Whitehead's work and the impulses it hopes to release. In Whitehead's words, "aesthetics is the aim of existence" and "kindness and love, and artistic satisfaction are among its modes of attainment" (*AN* 8). As in the more poetic passages of *Process and Reality* and *Adventures of Ideas*, Whitehead confirms in his conversation with Charles Lindbergh, in the midst of the most devastating war that humanity had ever witnessed, that the very force that alone is meant to withstand the violence of destruction and the decline of the civilized world is the very force that at the heart of the universe operates "slowly, and in quietness" (*PR* 343). May we nourish it!

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