

Research Essay

Whitehead & the Elusive Present

Process Philosophy's Creative Core

Gregory M. Nixon

Abstract

Time's arrow is necessary for progress from a past that has already happened to a future that is only potential until creatively determined in the present. But time's arrow is unnecessary in Einstein's so-called block universe, so there is no creative unfolding in an actual present. How can there be an actual present when there is no universal moment of simultaneity? Events in various places will have different presents according to the position, velocity, and nature of the perceiver. Standing against this view is traditional common sense since we normally experience time's arrow as reality and the present as our place in the stream of consciousness, but we err to imagine we are living in the actual present. The present of our daily experience is actually a *specious present*, according to E. Robert Kelly (later popularized by William James), or *duration*, according to Henri Bergson, an *habitus*, as elucidated by Kerby (1991), or, simply, the psychological present (Adams, 2010) – all terms indicating that our experienced present so consists of the past overlapping into the future that any potential for acting from the creative moment is crowded out. Yet, for philosophers of process from Herakleitos onward, it is the philosophies of change or process that treat time's arrow and the creative fire of the actual present as realities. In this essay, I examine the most well known but possibly least understood process cosmology of Alfred North Whitehead to seek out this elusive but actual present. In doing so, I will also ask if process philosophy is itself an example of the creative imagination and if this relates to doing science.

§1. Bergson. “Time is invention or it is nothing at all” (Bergson, 1983, p. 341).

“But, as regards the psychical life unfolding beneath the symbols which conceal it, we readily perceive that time is just the stuff it is made of” (Bergson, 1983, p. 4).

Though the focus of this little study is Whitehead, Bergson provided a context for the minute specificities of Whitehead's insightful speculations, and probably opened intellectual and intuitive doors that made Whitehead's process cosmology possible. In various works, Bergson has shown us that the human experience of time is mostly an illusion, and this is especially true of our sense of living in the present. For Bergson, the contents of consciousness itself are naught but memories. Memory performs the almost mystic function of uniting our inner experience with the outer experience of the world.

He claimed that “memory ... is just the intersection of mind and matter” (1912, p. xii). We project our experience from a remembered past into an anticipated future, all the while believing we are in a present in which time flows by, as though we were carried along in a swift river, hardly able to affect to its course. Without an actual present, how can time do anything but repeat itself? “Of the future, only that is foreseen which is like the past or can be made up again with elements like those of the past” (Bergson, 1983, p. 28). Without an actual present, there are no fires of creation.

However, Bergson’s duration (*la durée*) is more than just the habitual *habitus* of our illusory present. When reflected upon in great depth, *la durée* is found to have a creative core that intuition (not intellect) reveals as universal and not just personal. He expressed this most strongly in *Creative Evolution* (1983), the title of which reveals his insight and makes his case against Newton’s cosmic clockwork and Einstein’s so-called block universe in which time loses its universal status. Bergson believed that the future was not determined in advance but that a creative power underlay the processes of the world, which includes both matter and memory (thus mind), and may have its expression in language. As two later process philosophers put it:

Bergsonian intuition is a concentrated attention, an increasingly difficult attempt to penetrate deeper into the singularity of things. Of course, to communicate, intuition must have recourse to language. ... This it does with infinite patience and circumspection, at the same time accumulating images and comparisons in order to “embrace reality,” thus suggesting in an increasingly precise way what cannot be communicated by means of general terms and abstract ideas. (Prigogine & Stengers, 1984, p. 91)

Attempting to deny both idealism and realism, Bergson reasoned that matter is an “aggregate of ‘images.’ And by ‘image’ we mean a certain existence which is more than that which the idealist calls a *representation*, but less than that which the realist calls a *thing*” (1912, p. vii). Each traditional position, then, depends upon the perspective taken. If memory remains only perceptual memory, he writes in *Matter and Memory* (1912), then we may be helped to make evolution creative:

But this is not all. By allowing us to grasp in a single intuition multiple moments of duration, it frees us from the movement of the flow of things, that is to say, from the rhythm of necessity. The more of these moments memory can contract into one, the firmer is the hold which it gives to us on matter: so that the memory of a living being appears indeed to measure, above all, its powers of action upon things, and to be only the intellectual reverberation of this power. (p. 303)

Bergson is suggesting that by contracting the moments of memory into one, one may become nearer to the creative present, whence the nature of matter unfolds. It appears that if we can participate in the creative present, we can affect the nature of matter. Such pure memory has access to what he calls different planes of consciousness, or, sometimes, pure spirit. Pure memory, he indicates is a pure potential for action to

create the next creative field of order science can then convince itself it has discovered. The world, that is to say, does not come to exist with its objects, i.e., objectively, until the “intelligence” perceives it as such. Simultaneously, the intelligence gives itself mental form through the conceptualization of its actions: “Thus the same movement by which the mind is brought to form itself into intellect, that is to say, into distinct concepts, brings matter to break itself up into objects excluding one another. *The more consciousness is intellectualized, the more matter is spatialized*” (1983, p. 189).

Bergson never develops a complete system or cosmology or states imperatives, but he does indicate that if we wish to find the real, to participate in the ongoing emergence of creation, we must cease projecting a future from a “present” which seems to exist only because we are always in the process of remembering it:

We should no longer be asking where a moving body will be, what shape a system will take, through what state a change will pass at a given moment: the moments of time, which are only arrests of our attention, would no longer exist; it is the flow of time, it is the very flux of the real that we should be trying to follow. (1983, p. 342)

La durée refers to time as the *becoming* of a reality that is never become, though the intellect perceives it so. The rational intellect is an important survival mechanism that evolution has made manifest, Bergson says, but it seems only able to carry us along into a future we have determined shall be as identical as possible with the past. If there is no *real* present, an interesting implication is that we have created our sense of the present with the immediate memories of the past, *but the only creative position is always the slightly extended futurity of becoming*. The “present” may be created from the duration already moving into the future — with the materials of the past — from which “present” we project the “future,” and so on.

We cannot perceive beyond our senses that are limited by our intellect’s “use” of memory to perceive. And we cannot creatively *act* with intellect alone, which works only within the flow of time:

For, as soon as we are confronted with true duration, we see that it means creation, and that if that which is being unmade endures, it can only be because it is inseparably bound to what is making itself. Thus will appear the necessity of a continual growth of the universe, I should say of a life of the real. And thus will be seen in a new light the life which we find on the surface of our planet, a life directed the same way as that of the universe, and inverse of materiality. To intellect, in short, there will be added intuition. (p. 343)

It is intuition, according to Bergson, that guides us into “true duration,” a union with the power of creativity found there (the immediacy of *élan vital*). Bergson’s position seems to be that an intuitional memory can seek the symbols beyond the perceived circle of self — the habitus — in the creative imagination that emerges from the timeless.

In what fashion can we imagine time unfolding or our infolding into time? Lifting my head, I hear my fan circulate the summer heat. I look beyond my iMac and see Rasputin, our Siberian husky, asleep on the cool linoleum, and I feel the solidity of this body relentlessly tapping away at these keys (apologies to Descartes!). How can creative duration be conceived as happening amidst these realistic events? Whitehead is often considered to have taken Bergson's suggestions about time and memory and to have completed them in a systematic fashion. I ask myself: Is there a place for creative imagination or an actual present in Whitehead's intricate cosmology?

§2. **Becoming as Process: A. N. Whitehead.**

[W]e experience the universe, and we analyze in our consciousness a minute selection of its details. (Whitehead, 1968, p. 121)

My initial response to the latter question would be to simply reply in the affirmative. Since any human construction of a cosmology cannot ultimately be verified experimentally and since, by definition, any human is *within* its own ideas of a cosmos, a cosmology is a work of speculative philosophy, which Whitehead has extensively defined. Speculative philosophy in our rationalizing world is related to the creative imagination. A cosmology is, itself, a work of imagination that endeavours to divest itself of the cosmetics of imagery, drama, and allusion to specific culture-heroes or divinities (Whitehead, 1978).

This is insufficient, however, so I will proceed to dissect the terms of the question. Following this, I will attempt a brief outline of Whitehead's cosmology, as "ultimate" then as "immediate," especially as portrayed in *Process and Reality: An Essay in Cosmology* (1978) realizing that this statement and my limitations could not possibly do Whitehead's *magnum opus* its deserved justice. I shall then speculate whether or not Whitehead intended the creative present to have a background or central place in his cosmic scheme, or if such *place* can be found.

§3. Whitehead's Ultimates. Influenced by Einstein's theory of relativity, Whitehead developed his theory based on spacetime, rather than understanding space and time as separate dimensions of the same unfolding reality. We perceive extension in space-time and understand reality to be present and solid:

We must first consider the perceptive mode in which there is clear, distinct consciousness of the "extensive" relations of the world. These relations include the "extensiveness" of space and the "extensiveness" of time. Undoubtedly, this clarity, at least in regard to space, is obtained only in ordinary perception through the senses. This mode of perception is here termed "presentational immediacy." In this "mode" the contemporary world is consciously prehended as a continuum of extensive relations. (Whitehead, 1978, p. 61)

The senses, however, are later developments upon a deeper, less conscious mode of awareness called *prehension*. This accepted, experience need not be restricted to entities with sensory organs:

On this basis, it is not absurd to attribute a vague kind of emotional-purposive perceptivity to those lower organisms that are devoid of sensory organs. ... To say that all individual events *prehend* the things in their environments is to say that they take influences from them into themselves and have some sort of emotional-appetitive response to them. (Griffin, 1988, p. 153)

In this statement, David Ray Griffin, prominent Whitehead interpreter and promoter¹, does not pursue the matter beyond “lower organisms” to its smaller and more momentary limit: the actual *entity* (for the space oriented), or the actual *event* (for the time oriented), or, simply, the *occasion*, defined by Whitehead as “a momentary experiential event which occupies (or constitutes) a region that is spatial as well as temporal” (in Griffin, p. 151).

So instead of semi-permanent “things” changing through a continuous flow of time, we have experiencing occasions which appear, *prehend* their environments, perhaps adapt to some “extent,” and disappear as *experiencing* occasions to become completed objective occasions. These occasions include events at the subatomic level and those of macrocosmic stature. The occasion is the act of *becoming*, like Bergson’s duration, the process of which is going on “all the time.” These are the existential realities, according to Whitehead — experiential occasions becoming, achieving satisfaction, and perishing. Their *prehension* guides them to satisfaction and alters them through the environmental influence of other, past occasions. In their “perishing” they become fixed as objective occasions which will now influence the becoming of subjects of new actual events. As Griffin (1988) explains:

[A]n object is an event that had been, in itself, a subject. Accordingly, it *has the kind of stuff a subject can receive, i.e., feelings*, whether conscious or unconscious — feelings of derivation, feelings of desire, feelings of attraction and repulsion. ... By conceiving of each event as *having been* a subject of feeling prior to being a felt object, we can understand how an object can influence a subject. (p. 155)

Thus the world according to Whitehead. But we must look deeper into Whitehead’s speculations to discover the alpha point of his cosmology.

In the beginning — metaphorically speaking since “non-temporal” does not constitute linearity — was pure *creativity* and *God* in his primordial nature. Unlike Bergson and others, Whitehead does not identify *God* pantheistically with the primal impetus of creativity but as a non-temporal actual entity on his own. Creighton Peden (1981) concludes that Whitehead’s creativity “is without character or individuality of its own. It is the active, creative force of the universe, being conditioned by the objective

¹ currently better known as a 9/11 conspiracy theorist

immortality of the actual world and by God” (p. 35). Bergson would likely accept condition one.

Studying Whitehead seems often a matter of learning a new terminology, but, as in all self-referential language systems, each term has meaning only in reference to other terms and the assumed meta-meaning of the entire language. Some terms never emerge, it seems, as actual entities — just as in Whitehead’s system actual entities are really processes. Here at the beginning of Whitehead’s cosmogony, it seems important to understand the difference between the conceptions of “creativity” and “God,” since specifically human creativity will be the subject of the next section.

Creativity as a first principle allows Whitehead to avoid the mechanistic view of straightforward cause and effect determination and to account for the *dendritic* nature of evolution. Further, his conjectures about eternal objects, aims, and even God’s primordial nature, which — combined with the also primordial creativity — allow him to explain the unpredictable outcome of each “conrescence” of occasions that results in “novelty” in the universe. As Whitehead (1978) explains in more detail:

“Creativity” is the universal of universals characterizing ultimate matter of fact. It is that ultimate principle by which the many, which are the universe disjunctively, become the one actual occasion, which is the universe conjunctively.

“Creativity” is the principle of *novelty*. An actual occasion is a novel entity diverse from any entity in the “many” which it unifies. Thus “creativity” introduces novelty into the content of the many, which are the universe disjunctively. The “creative advance” is the application of this ultimate principle of creativity to each novel situation which it originates.

... The ultimate metaphysical principle is the advance from disjunction to conjunction, creating a novel entity other than the entity. ... The novel entity is at once the togetherness of the “many” which it finds, and also it is one among the disjunctive “many” which it leaves; it is a novel entity, disjunctively among the many entities which it synthesizes. The many become one and are increased by one. (p. 26)

Creativity is both the ultimate reality and the active principle in the conrescence of the many to produce a novel actual occasion, as in Whitehead’s expressive phrase: “The many become one and are increased by one.” The novel actual occasion then embodies its novel creativity as one of the many to be used in the conrescence of the next actual occasion, an increase of one. In this way, creativity may be understood as *inhering* as self-creativity in each event. As Peden (1981) interprets:

Because of creativity, every actual entity, temporal or non-temporal, is to some degree self-creative. Every actual entity, being to some degree self-creative, is a novel being. On the basis of novelty ... an actual entity is a new form in the universe. The doctrine of creativity points to the fact that constantly new forms are being created and are perishing in the universe. (p. 35)

If reality were understood as purely creative, however, then literally anything could happen. Reality would be a chaos of novelty in which even dendritic patterns could turn back upon themselves in disarray. To explain the seeming form of the onflow of reality, Whitehead invokes an ultimate actuality to guide his ultimate reality. Griffin (1989) theologizes:

God, who is the source of all physical, aesthetic, and ethical principles, is the *ultimate actuality*. ... The ultimate reality and the ultimate actuality are equally primordial. God does not create creativity, but neither does creativity generate God. Each equally presupposes the other. Creativity that is uninfluenced by God's persuasion toward ordered beauty therefore never occurs. (p. 31)

God is present "at the beginning" as a hidden persuader, so to speak. This is what Whitehead calls *God's primordial nature*. In this idea, God is understood as an actual entity like all other actual entities (which are also occasions), except that God "is non-temporal. This means that God does not perish and become objectively immortal as temporal actual entities" (Peden, p. 34).

This suggests all sorts of difficulties in Whitehead's previous definition of actual entities as becoming from a previous many, but this is not the place to consider them. Suffice to say that God, in his primordial nature, influences the process of occasions by sustaining within him "eternal objects" that contain the *potential subjective aims* for the becoming of temporal actual entities. Eternal objects are conceptions which have no reference to any definite entity in the temporal world, but, as Whitehead (1978) declares:

An eternal object is always a potentiality for actual entities; but in itself, as conceptually felt, it is neutral as to the fact of its physical ingression in any particular actual entity of the temporal world. "Potentiality" is the correlative of "givenness." The meaning of "givenness" is that what is "given" might not have been "given"; and what is *not* "given" *might have been* "given."² (p. 44)

As indicated, it is the eternal objects that provide the subjective aim in the concrescence of the many into an actual occasion of experience. There will be more on this event later, but for now it should be noted that in Whitehead's view the eternal objects are *present* as potentials "in the beginning" sustained by God's primordial nature, and they are also *present* "at the end" as future possibilities toward which the creativity of each actual event aims. These everpresent potentialities for experience, that approach randomness in their sense of being "given" or "not given," are the reason for *beginning* and *end* being understood as metaphors (disguising circularity?).

God is also understood as having a "consequent nature." This is the physical prehension by God of the actual events/entities of the evolving universe. Whitehead indicates this is how temporal entities achieve "objective immortality" after attaining satisfaction of their subjective aims and perishing as an actual experience. These objective entities are no

² Compare quantum wave (or state vector) superposition, in which "givens" are undetermined.

longer capable of change or experience, but they never cease to exist, apparently, in the mind of God. In this way, all objective entities have a potential influence upon the present experience of an actual event (Whitehead, 1978).

Finally, God has a “superjective nature.” It is in this manner that God influences the creativity of each actual event toward noble or harmonious ends, but does not determine those ends. An important question arising here is the creation of dissonance or evil. In the self-creation of each actual entity, is it possible to create destruction, that is, to coalesce into an experiencing event without the superjective influence of God? Whitehead’s theologian interpreter, Griffin, indicates above that such things may occur. As I have shown, Whitehead understands all possible aims — the eternal objects — to be sustained by God in his primordial nature. Griffin (1989) interprets Whitehead as implying that higher order self-creations — human beings — are capable of evil aims:

From the point of view of a theology of universal creativity, the existence of chaos and evil is no surprise. They are to be expected, given a multiplicity of centers of creative power. The surprise is the existence of order and goodness. They beg for explanation in terms of an all-inclusive creative influence. (p. 43)

Chaotic, evil, or mischievous creations can only be explained by having aims not within God. But what else was there “in the beginning”? Only a non-differentiated creativity, according to Whitehead. Anything non-differentiated is usually conceived as being in the primordial state known to many mythologies as chaos³. Perhaps creativity, especially human creativity that has such expanded memory capacity, partakes simultaneously of chaotic and divine essences. Divinely “underinfluenced” creativity may not be creative but destructive, according to Whitehead. Yet it must be understood as creative if it is a novel concrescence of the many into a one to increase the many by one. Every novel concrescence is the result of both “past” occasions and an aim toward eternal objects, even those novel occasions conjured by human minds. It is at least conceivable that Whitehead left room for eternal objects not sustained by his harmonious, ordered, and morally correct God. If so, such eternal objects need not be understood as evil/chaotic/satanic. Where would one place the potential of an eternal object that inspires a mischievous but innocuous aim for an actual event?

God, even his three natures, should not be understood as being omnipotent. His superjective nature potentially affects the creativity of events only through the multiplicity of eternal objects. Whitehead (1978):

This doctrine applies also to the primordial nature of God, which is his complete envisagement of eternal objects; he is not thereby directly related to the given course of history. The given course of history presupposes his primordial nature, but his primordial nature does not presuppose it. (p. 44)

³ Creative chaos is a description that has been applied to the everpresent quantum flux or vacuum.

God and his natures are possibly unnecessary abstractions for seeking archetypal memory or creative imagination. However, Whitehead's cosmology is built within such abstractions and it seems necessary to touch upon them. Hartshorne (1981) has commented how Whitehead's three-natured God and the seemingly infinite potentials for concrescence found in the eternal objects seem to be a multiplying of abstractions that have no need of, or logical relationship to, each other.

For my purposes, it seems worth observing that Whitehead's metaphysics implies a process of becoming within a divine order that ultimately is without beginning or end. This may even apply to microcosmic elaborations, since the three natures of God are closely mirrored in the subjectivity of becoming and perishing during each actual occasion. One major difference is that each occasion looks to past occasions for some of its aims in concrescence, but God, at least in his primordial nature, has no past.

The question of Whitehead's strict ethical dualism within the non-temporal God-influenced cosmic process cannot be resolved here. The related question of the freedom and purpose of the human imagination within such a cosmology must be addressed by examining the unfolding occasion, itself, for evidence of a moment — the actual present — of spontaneous (progressive or regressive) vision.

§4. Process: The Elusive Present. The quest for a purely spontaneous present in Whitehead's system may well be in vain. Every actual event occurs through a concrescence of past or objective actual events. The creativity, the novelty, the aim of each occurring actual event is always unique to itself, but it is brought about by *the creative potential still contained within those past actual events*.

The influence of the multitude of past actual events, i.e., objective occasions, upon the many becoming a novel one is called by Whitehead efficient causation. The influence of the eternal objects, the aim of the concrescence, is called final causation. We usually imagine the latter as lying in the future or as teleological causation. This may be metaphorically valid, but Whitehead also emphasizes the creative potential-as-memory that inheres within each objective occasion but is no longer a potential for experience for that occasion. The creative potential within each objective occasion is a potential only for the unfolding of a present occasion of experience. It is in the combining, i.e., the concrescence, of past potentials that the creative potential of the present event is realized. The aim, itself, *can only exist as potential within the influence of an eternal object*, which may be understood teleologically (category of explanation vii). The realization of such an aim, however, can only come through the utilization of objective occasions of the past: The many become one and are increased by one.

Though God is present at all stages in the process of becoming and though the eternal objects are potentials for experience that may be understood in the past in terms of their inherence in all objective occasions and their paradigms for relating objective occasions into *nexus* (pl.) and though these same eternal objects seem to be potentials without form or substance on their own that lie in the future as aims, it is our experience of temporal process in the imagined present which gives us clues to all other

cosmic events. We experience the passage of time from past into future with all the attendant changes in space-time and have a difficult time, as Whitehead has indicated through his central thesis, trying to locate this present.

As narrowly as we can define *the moment*, upon examination we find that moment to be in reality a process in which past and future are always implicated. Even our sensory perceptions only allow experience of the “presented locus” (Whitehead, 1978, p. 168) of actual events that are themselves in process. The prehensions supporting these sensory perceptions are what bring them into “presentational immediacy” (pp. 61-65), but the prehensions are of the causal efficacy behind the sense response. The prehensions are “a direct perception of those antecedent actual occasions which are causally efficacious both for the percipient and for the relevant events in the presented locus” (p. 169).

An event at the quark level may be an actual entity (or actual occasion or actual event) and so, apparently, may God. Most things that we perceive, it seems, are objective actual entities in some combination. Something such as a rock is not an actual entity; it has no experience and is not in process. Its constituent parts (molecules, atoms, or whatever), however, may be actual entities in the nexus of rockness and they do have experience. Their process is temporally unhurried (relatively speaking) and their memories and aims are limited to the most basic prehensions and appetitive responses.

Our animal body has extended prehension through the sense organs and our mind has enlarged memory capacity and, it would seem, a wider range of potential responses to efficient and final causality. Despite this, we are not actual entities, either, but compounds of various subjective experiences. Wallack (1980) puts it this way:

Similarly for other cases of sense-perception: a viewer is subject of a sight; a sniffer is subject of a smell; a taster is subject of a flavor; a sentient body is subject of a texture or an ache; and as such all are actual entities. The experiences of sense-perceptions, seeing, hearing, touching, tasting, and smelling, are naturally very important actual entities for people. ... In fact, Whitehead allows that an animal body is constructed so as to provide percipient experience of this sort for the animal. (p. 19)

Memory, itself, is “a human percipient experience, although in different mode, just as are the sense perceptions” (Wallack, p. 19)⁴. Whitehead, as noted, has also referred to this as the prehension of efficient causality. The point of this for my purpose is that even in the mode of so-called “presentational immediacy” it is *not* the immediate present that we are perceiving, according to Whitehead, but the perceptions are separate subjective entities which our minds perceive (i.e., *prehend*) in their causal efficacy, their effect, and unify into the experience we call consciousness. To perceive anything, we must perceive through the *immediate* past.

⁴ For Bergson, memory so underlies all other experienced phenomena that it is beyond being a *faculty*.

Another way of conceiving it is to simply recall that all actual entities are diverse until creatively brought together into a concrescence of experience. It is only when the aim of the experience is subjectively satisfied that a novel entity ceases to experience and becomes objectified as a past occasion which can now be remembered (prehended or memorially perceived) to influence the next becoming event. Complicated as this may sound, it seems clear Whitehead means that nothing can be perceived until it is a perceivable object — and nothing is an object until it has ceased to exist as an experiencing subject in process (i.e., an occasion of experience) and has become an objective entity. *All that we perceive are objects that have already entered the past.*

It must be remembered that, for Whitehead, all matter is itself creative. These objective entities are not inert but continue to actively influence experiencing subjects. “The past does not remain past; anything past is presently effecting a present subject, and anything present is in process” (Wallack, p. 142).

Prehension also provides for us an intuition of possibilities that inhere in the past creative possibilities of causal efficacy and in the pure potential of the eternal objects. Being eternal, such potentials lie neither in the past nor in the future but as pure potential they can only be envisioned as being *before* or *around* the process of becoming. They are already *within* the process by being contained in each objective entity and its relationships but then they are no longer imperceptibly pure; as pure potential they are intuitively apprehended only as final causes towards which we in the elusive present can aim our becoming. Toprehend a pure potency in and of itself without the causal efficacy of objective occasions is inconceivable. But perhaps it is such non-conceptual prehension of pure potency that brings some artists their creative inspiration or leads some mystics to withdraw into silence.

Where or when in Whitehead's system is actual creative present? It would seem that as causal efficacy meets final causation there must be an instant when the aim is chosen — a *flashpoint* of inspiration or decision to move the process of becoming toward a particular type of concrescence and subsequent satisfaction. There must be moment of balance when negative causation is excluded, positive causation included, and teleological (final) causation accepted as purpose. This could be the moment when imaginative spontaneity actually becomes an ultimate necessity of process — and the only real experience of the actual present we can possibly have.

Griffin (1988) implies that there is such a moment when the decision is made or when the aim is chosen: “The momentary subject then makes a self-determining response to these causal influences; this is the moment of final causation, as the event aims at achieving a synthesis for itself and for influencing the future” (p. 24). It sounds like the *moment* has been found, until Griffin goes on to explain that final causation is but a response to efficient causation in Whitehead's system:

This final causation is in no way unrelated to efficient causation; it is a purposive response to the efficient causes on the event. When this moment of subjective final causation is over, the event becomes an object which exerts efficient

causation on future events. Exactly what efficient causation it exerts is a function both of the efficient causes upon it *and* of its own final causation. Hence, the efficient causes of the world do not run along as if there were no mentality with its final causation. An event does not simply transmit to others what it received; it may do this, but it also may deflect and transform the energy it receives to some degree or another, before passing it on. (p. 24)

This indicates that the “final causation” inspired by the eternal objects does not just imply teleological or primordial potential, but also implies that such archetypal potential *inheres* in each actual occasion. It does so through the causal efficacy of the objective occasions that had their own ingression of final causation during their concrescence. Though objective occasions are no longer in process, the ingressed final causation — or eternal potential — continues to be active through them. Past, present, and future are simultaneously implicated in process. *Teleological inspiration may be activated through remembering.*

Perhaps some of Whitehead’s own “Categories of Explanation” (1978) may summarize what I have been trying to elucidate:

(i) That the actual world is a process, and that the process is the becoming of actual entities. Thus actual entities are creatures; they are also termed ‘actual occasions.’

(ii) That in the becoming of an actual entity, the *potential* unity of many entities in disjunctive diversity — actual and non-actual — acquires the *real* unity of the one actual entity; so that the actual entity is the real concrescence of many potentials.

(iii) That in the becoming of an actual entity, novel prehensions, nexus, subjective forms, propositions, multiplicities, and contrasts, also become; but there are no novel eternal objects.

(vii) That an eternal object can be described only in terms of its potentiality for “ingression” into the becoming of actual entities; and that its analysis only discloses other eternal objects. It is a pure potential.

(x) That the first analysis of an actual entity, into its most concrete elements, discloses it to be a concrescence of prehensions, which have originated in its process of becoming.

(xix) That the fundamental types of entities are actual entities, and eternal objects; and that the other types of entities only express how all entities of the two fundamental types are in community with each other, in the actual world.

(xxiv) The functioning of one actual entity in the self-creation of another actual entity is the “objectification” of the former for the latter actual entity. The

functioning of an eternal object in the self-creation of an actual entity is the “ingression” of the eternal object in the actual entity.

(xxv) The final phase in the process of concrescence, constituting an actual entity, is one complex, fully determinate feeling. This final phase is ... the “satisfaction.” (pp. 23-25)

From this, I feel I can safely conclude that there is no “given” present moment for the human subject or for any experiencing entity whatsoever in Whitehead’s cosmology, unless it is the non-sensory instant (Bergson’s intuitional duration) of *apprehension* of an aim toward an eternal object. As one actual entity is objectified in influencing another, the ingression of an eternal object is taking place. All actual entities in the process of becoming are made of a great array of other actual entities and their concrescence and influence by final causes is happening at different rates in different regions. The satisfaction that occurs upon the attainment of “one complex fully determinate feeling” (Griffin, 1988, p. 154) is a *temporal movement* from outer to inner. As compound entities, we have feeling and consciousness, but according to Whitehead the image of consciousness as an ongoing stream of actual durations may be appropriate after all.

§5. Spacetime of the Creative Source. Does an ongoing stream of consciousness negate any chance for the creative imagination? If the creative imagination can only exist in a spontaneous present then it must. But a spontaneous present could have no substance, no consciousness as we know it, if all perceivable entities have already become temporally objective. A spontaneous present could only be absolute awareness of potentials for concrescence, the pure potentials of the eternal objects. That is to say, *substantially* conscious of nothing, or of everything (same thing) so its conscious content could only be null and void.

This is what Whitehead implies about the primordially natured God, creativity, and the eternal objects: that nothing can be said about them in themselves. He does use the adjectives “non-temporal” and “eternal,” however, and, as Wittgenstein pointed out, eternity is found neither at the beginning nor at the end of time: “Proposition 6.431 I: If we take eternity to mean not infinite temporal duration but timelessness, then eternal life belongs to those who live in the present” (in Campbell, 1968, p. 676).

In this way, the present must contain all extra-temporal potentiality and all timelessness, including the silent eternal objects. Similarly, silence is the only “response” to such being-in-itself. Silence, however, is not creativity. Could it be that our sensory *and self-perceptions* take place an “instant” into the past, just as matter appears to ultimately consist of energy “particles” travelling slower than the speed of light? If so, then the objective referents of memory and speech can refer only to themselves in a (vicious?) circle of repetition.

Most language forms are built as a response to other language forms whose referents may be actual entities. The realistic, *actual* language Whitehead employs is just such a self-referential theoretic code. Even though he constructs a new terminology, his words

all refer to actual entities within his system. Every term refers to actual entities in their objective form: as efficient causation, as past occasions, as objectively immortal in the mind of God.

Poetry, however, is sometimes perceived as turning away from the possibilities of causal efficacy and attempting to allow language to speak. Bachelard (1987) sees the poet as attaining a non-objective awareness, similar to that of the mystic, but the poet, instead of remaining silent, becomes herself the “objective” occasion for the speaking of such silence: “Poetry then is truly the first manifestation of silence. It lets the attentive silence, beneath the images, remain alive” (p. 25).

This sounds extreme, perhaps, but I am trying to map the source of creative inspiration in an assumed actual present; many writers, visionaries, and mythmakers seem to feel this inspiration is an important part of their art. Many also admit to a feeling of dismay at the impossibility of attaining the full depth of vision hinted at by the first possession of inspiration. The actual occasion may achieve satisfaction but the eternal object, or the archetype, or the Muse cannot because its pure potential becomes “impure” when ingressed into actual occasions. It is similar to the inevitable fall from the sacred time of creation into the profane time of history (or the shrinking of personal awareness within the habitus of the specious present).

This does not seem strange when it is considered that, from our point of view, eternal objects must use as tools for the expression of their dynamism only individual human actual occasions that can act only from the causal efficacy of past (objective) occasions. Objective occasions are nearly infinite; at least they have achieved immortality in the mind of God. An electron may have a memory for the efficient causation of objective occasions that had achieved satisfaction and become objective only microseconds ago. A human being, as a compound actual occasion capable of both physical and mental prehension, may *memorially delve well beyond its own lifetime*. Because of the extent of awareness of the becoming actual occasion of experience (i.e., the present as process) we humans possess a relatively vast capacity for memory. This leads to the seeming contradiction that creative inspiration, though derived from an unattainable present, expresses itself only through the depths of imaginative memory. It seems free flights of imagination can be found through memory.

Such memory increases human freedom and that, apparently, worried Whitehead in his ethical dualism. It seems this enlarged capacity for reception and present self-determination in terms of desired ends makes the human creature more valuable in Whitehead's scheme of things. This value must be because of the human ability to imagine unique possibilities. Since possibilities are unimaginable without eternal objects, the human being must be able to imagine possibilities by prehending/remembering the primordial influence of creativity, in itself, without the mollifying influence of God in his primordial nature or by apprehending, as “aim,” toward the teleological draw of creative inspiration (since eternal objects are “eternal,” they must be in the eternal *now*, which we can only imagine as *alpha* or *omega*). To an ethical dualist, such “present self-determination” can be understood as dangerous:

A world with more valuable creatures is therefore *necessarily* a more dangerous world, both because higher creatures can more radically deviate from the divine persuasion for them and because this deviation can create more havoc than the deviations of lesser creatures. (Griffin, 1989, p. 43)

To a poet, storyteller, or mythmaker, however, this is the place/time of human creation: By employing memorial antecedents as far, as deep, as wide as the human mind can conceive, we are bringing to the present unfolding actuality qualities not found within any language system in itself. The creative imagination may make images, music, poems, or narratives without necessary reference to concrete objective actual referents.

As pointed out at the beginning of this survey, a cosmology is, itself, an aesthetic rendering of universal reality. Whitehead even indicates that process begins with imagination “like the flight of an aeroplane,” and that any metaphysical system requires “a leap of the imagination to understand its meaning” (Whitehead, p. 4). Though thoughts and perception — our usual selves — can never exist in the elusive present, imagination, inspiration, and archetypal memory, by Whitehead’s own suggestions, just may. And it is from these dynamic potentials that time, our world and ourselves emerge.

References

- Bachelard, Gaston (1987). *On Poetic Imagination and Reverie* (C. Gaudin, trans.). Dallas: Spring Publications.
- Bergson, Henri (1912). *Matter and Memory* (N. M. Paul & W. S. Palmer [pseud.], trans.). London: Allen, New York: MacMillan. Original in French 1896.
- Bergson, Henri (1983). *Creative Evolution* (A. Mitchell, trans.). Lanham, MO: Holt. Original in French 1911.
- Campbell, Joseph (1968). *Creative Mythology: The Masks of God*. New York: Penguin.
- Griffin, David Ray (ed.) (1988). *The Reenchantment of Science: Postmodern Proposals*. Albany: State University of New York Press.
- Griffin, David Ray (1989). *God and Religion in the Postmodern World*. Albany: State University of New York Press.
- Hartshorne, Charles (1981). “Some unresolved problems in Whitehead’s theism.” In C. Hartshorne & C. Peden, *Whitehead’s view of reality* (pp. 27-32). New York: Pilgrim Press.
- Peden, Creighton (1981). “Whitehead’s philosophy: An exposition.” In C. Hartshorne & C. Peden, *Whitehead’s View of Reality* (pp. 33-90). New York: Pilgrim Press.
- Prigogine, Ilya, & Stengers, Isabelle (1984). *Order Out of Chaos*. New York: Bantam.

Wallack, F. B. (1980). *The Epochal Nature of Process in Whitehead's Metaphysics*. Albany: State University of New York Press.

Whitehead, Alfred North (1968). *Modes of Thought*. Cambridge, UK: Cambridge University Press. Original 1938.

Whitehead, Alfred North (1978). *Process and Reality: An essay in cosmology*. Corrected edition. D. R. Griffin & D. W. Sherburne (eds.). New York: Free Press. Original 1929.