

Relational Creativity in the Cosmology of Alfred North Whitehead

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Abstract:

Alfred North Whitehead (1861-1947) constructed and refined an elaborate cosmology describing the creative nature of God, reality, and the relationship between God and the world while living through the ever-changing vistas presented by science and mathematics during the second half of the nineteenth century. By examining the relational creativity in community, continuum, and dipolar relations as presented in the life and work of Whitehead, this paper illustrates the continued value of Whitehead's work. Not only the value of his ideas, but also the value of the process, of faith seeking understanding, and the ever-creative process of becoming.

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Preface

*In the beginning was creativity, and the creativity was with God, and the creativity was God. All things came into being through the mystery of creativity; apart from creativity nothing would have come into being.*¹ – Gordon D. Kaufman, a paraphrase from the Gospel of John

The following manuscript will trace three types of relationality and consider how creativity operates within these relations as presented in the cosmology of Alfred North Whitehead (1861-1947). The three types of relationality discussed in this paper, simply put, are community (many-to-one), continuum (one preceded by and followed by another), and dipolar (two-ness in relation). Whitehead's work is anything but simple, but I will trace these ideas in his writings as well as in the world of thought which he inhabited, examining selections of his work as well as pertinent writings of his colleagues, particularly the work of Samuel Alexander. I will suggest, further, that Whitehead's cosmology was not solely from Whitehead. It was not pulled from the ether; Whitehead created it, but his creative spirit was relational.

Before beginning, we need to look at two scientific concepts conceived and proven during the lifetime of Whitehead: the magnetic field and the dipole. In *Science and the Modern World*, Whitehead presents what he considers the end of one worldview, or in his words, "the patent dissolution of the comfortable scheme of scientific materialism."² Whitehead posits that the publication of James Clerk Maxwell's *Electricity and Magnetism* in 1873 ended the 200-year

¹ Gordon D. Kaufman, *In the Beginning... Creativity* (Minneapolis: Fortress, 2004), ix. John 1:1-5, "In the beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God; all things were made through him, and without him was not anything made that was made. In him was life, and the life was the light of men. The light shines in the darkness, and the darkness has not overcome it." The editors of *The New Oxford Annotated Bible with the Apocrypha* note "The *Word* (Greek 'logos') of God is more than speech; it is God in action, creating (Gen.1.3; Ps.33.6), revealing (Amos 3.7-8), redeeming (Ps.107.19-20)." Herbert May and Bruce M. Metzger, eds., *The New Oxford Annotated Bible with the Apocrypha* (New York: Oxford University Press, 1977).

² Alfred North Whitehead, *Science and the Modern World* (New York: Free Press, 1967), 157. Hereafter, SMW.

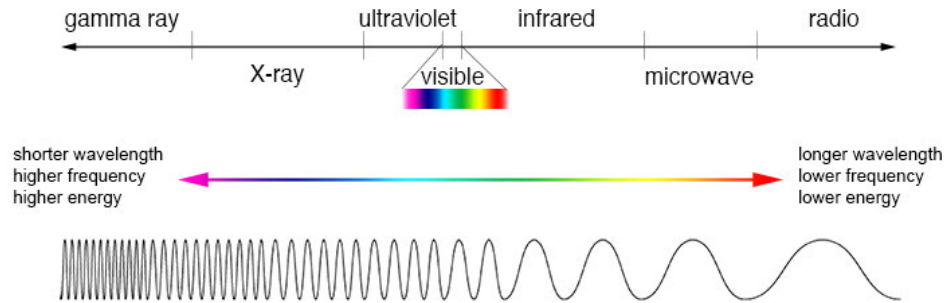
ascension of Newtonian physics.³ Maxwell, building on the work of Michael Faraday, had mathematically proved the unified theory of electromagnetism: the Maxwell Equations.⁴ Following Maxwell, scientists and mathematicians could predict the force of invisible fields in the relationship between bodies. This was a radical shift in the comprehension of existence as physical contact was no longer requisite for one body to affect another. Further, Maxwell illustrated that electricity and magnetism existed in relationship and that changes in that relationship could be measured as wavelengths. Within this vast continuum of energy, visible light exists as a tiny sliver. “Visible” here, is key, as in perceived through the senses.⁵ NASA provides a concise description of electromagnetic energy, “Electromagnetic energy travels in waves and spans a broad spectrum from very long radio waves to very short gamma rays. The human eye can detect only a small portion of this spectrum called visible light. A radio detects a different portion of the spectrum, and an x-ray machine uses yet another portion.”⁶ Below is an illustration comparing wavelength, frequency, and energy of wavelengths in the electromagnetic spectrum.

³ SMW, 60. Neil deGrasse Tyson has a more nuanced approach, writing, “The era of ‘modern physics,’ born with the quantum revolution of the early twentieth century and the relativity revolution of around the same time, did not discard Newton’s laws of motion and gravity. Instead, it described deeper realities of nature, made visible by ever-greater methods and tools in inquiry.” Tyson, *Starry Messenger: Cosmic Perspectives on Civilization* (New York: Henry Holt, 2022), 8.

⁴ Although Maxwell’s work was intellectually accessible to only a few (which would include Whitehead) and even then, not readily accepted (it would not be until 1887 that Heinrich Hertz would prove the existence of radio waves with a dipole resonator), his equations were a definite rupture. I would propose this as a Kairos moment that has, even now, yet to come to conclusion. Rupture provides a unique opportunity for God to intervene and pull on the embedded spirit within each individual so touched.

⁵ In *Process and Reality*, Whitehead will use the term “objectified” instead of “perceived,” but his definition of “objectified” is “discriminated by differences of sense-data.” Alfred North Whitehead, *Process and Reality: An Essay in Cosmology*, ed. David Ray Griffin and Donald W. Sherburne (New York: Free Press, 1978), 61. Hereafter, PR.

⁶ National Aeronautics and Space Administration, Science Mission Directorate. (2010). “Introduction to the Electromagnetic Spectrum,” accessed June 17, 2023. http://science.nasa.gov/ems/01_intro.



(Credit: NASA's Imagine the Universe)

As illustrated above, electromagnetic energy exists on a continuum and this continuum was considered and then proved during Whitehead's lifetime. Visible energy, what we call light, takes up a tiny spot in the continuum, and is divided into colors.⁷ Maxwell spent much of his scientific effort in studying colors which he surmised and then proved were simply different wavelengths of energy. Whitehead will take the electromagnetic spectrum and overlay it on existence as, what he terms, the 'extensive continuum,' to be discussed.

The discovery of the dipole was a part of the revolution in science that came through the discovery of the electromagnetic field. The idea of a magnet having two poles had been understood for centuries, but scientists in England and Germany in the nineteenth century were discovering that what happened between and around the poles was a significant event: a dipole. A

⁷ I use the word "divided," but that is a fallacy. As Neil deGrasse Tyson notes, categorizing is part of the human condition. He writes, "To require that objects, things, and ideas fit into neat categories apparently runs deep and derives from an inability to cope with ambiguity." Regarding colors, he writes, "What hardly anybody talks about, but which astrophysicists know deeply, is that the colors from red through violet fall on a continuum." Tyson, *Messenger*, 128 and 130, respectively. Although not discussed in this paper, both Whitehead and Alexander devote considerable page space to discussing colors. In the index of *Process and Reality* there are eight instances of Whitehead discussing color. Mathematicians and physicists had taken the sensual, the poetic, the inky blue of the deep sea and lushness of shimmering green leaves and distilled them into energy wavelengths. The magic of life on earth was evaporating under the lens of science. For human beings, however, the magic cannot be fully eradicated. Even for me, I still am in awe of a rainbow although I know it is sunlight refracting through the raindrops which separates the color wavelengths. Let us remember that Whitehead was balancing this as well. God, after all, is the poet of the world.

dipole is non-binary: it is a complex, continuous, and variable event consisting of two entities of equal and opposite charge, mass, etc. which produce an electromagnetic field that permeates the three-dimensional space surrounding the entities. (See figure 1.)

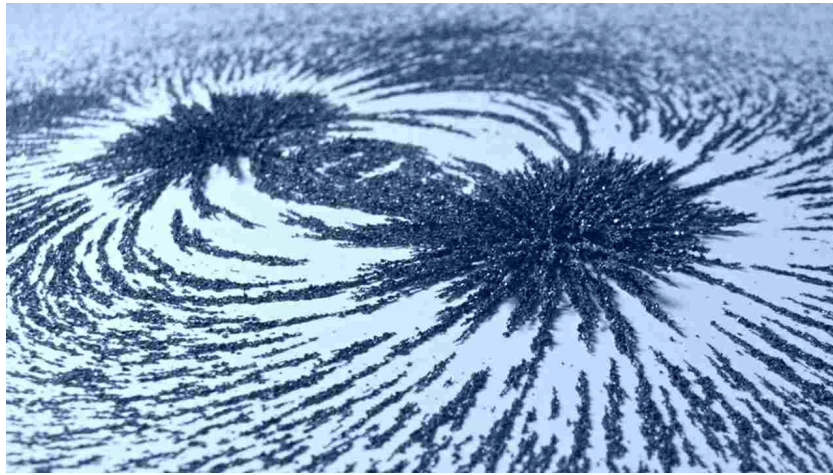


Figure 1. Image courtesy of MIT Physics.⁸

Planet Earth is a dipole for example, whose magnetic field permeates its surrounding space, protecting the planet from the Sun's harmful radiation. It is possible to reduce a dipole into a binary, as an abstraction for examination, but this effectively eliminates the dipole nature of the unity. As will be discussed, a non-binary duality taken in unity is difficult to hold in the mind. The differentiation provided by an abstracted binary world simplifies existence, and as Walter Kaufmann writes, "This is comforting because it is so tidy."⁹ Tidy, however, is antithetical to

⁸ This is a two-dimensional image illustrating how iron filings react to a dipolar magnetic field. Each individual filing reacts to the field by becoming its own dipole and then aligning with the magnetic field. Although this image is modern, Whitehead would have seen drawings depicting the same reaction. I've purposely selected an image with a perspective that favors one pole as perfect balance is not a part of the human condition.

⁹ Walter Kaufmann. "I and You: A Prologue," in *I and Thou* by Martin Buber, trans. Walter Kaufmann (New York: Charles Scribner's Sons, 1970), 9.

Whitehead's cosmology and indeed, to the lived reality of engaging with the complexities of life. Our task is to resist either/or and to reside in the often-uncomfortable world of both/and.

The nature of the dipolar unity in all its complexity, as presented through Whitehead, is integral to discussions on the nature of God and the cosmos among certain branches of theology. In §25, "Dipolarity (Panentheism and Open Monotheism)" from *God as Poet of the World*, Roland Faber does an admirable job of unpacking what the "dipolar" notion has become for process theology. As with any quest, Faber's efforts are incomplete; however, he presents ideas which should be considered as they color the process and language used to understand Whitehead's thought. Faber posits that process theology "understands God as 'God in relation,'" as "everything not standing in some relation is unknowable." Further that "God in relation" is to be understood through the following principles: (a) there is a "unitextuality of reality" in that "everything is to be taken as real and concrete in the same fashion" and this includes God. The real and concrete God is then "capable of entering into the becoming of world events." (b) "God 'becomes' what God 'is' [...] within the difference" between two poles of mental and physical existence. (c) Lastly, God, as a dipolar event in relation to the world is where "the world first attains its identity." Further, "Every event begins (to become itself) from the world and God, from the past of the world that has already become and from God's bequeathed future."¹⁰ These themes will be discussed throughout this paper, but I will be making every effort to give to Whitehead the tools he would have used, and to not retroactively push his ideas into contemporary modes of thought.¹¹

¹⁰ Roland Faber, *God as Poet of the World: Exploring Process Theologies*, trans. Douglas W. Stott (Louisville, KY: Westminster John Knox, 2008), 122.

¹¹ Over the last hundred years, Whitehead's ideas have spread and developed beyond what he presented. My approach is agonistic, in that I wish to wrestle with his ideas on my own. I will bring in the ideas of my contemporaries but hope to capture a sense of Whitehead's original elegance of thought.

Following this preface, this paper is divided into three chapters and an epilogue. These divisions illustrate the tentative nature of distinction, as the themes presented flow into and out of each other in a continuum of thought. The primary sources of both Whitehead and Alexander that I use were originally given as lectures and later edited for publication, providing a roughly linear timeline from 1916 through 1928, the years the lectures were given.

Chapter I: Community has two sections. The first, “An Ecology of Thought in Britain,” looks at the thought-world of which Whitehead was a part, including the proponents of British Idealism, and concludes with an examination of Samuel Alexander’s *Space, Time, and Deity* which had a marked influence on Whitehead’s work.¹² The second section, “Science and the Modern World,” will focus on Whitehead’s Lowell Lecture of 1925 published as *Science and the Modern World*.¹³ Chapter II: Continuum will have three sections. The first, “Religion in the Making,” examines Whitehead’s thoughts as presented in his 1926 Lowell Lecture published as *Religion in the Making*.¹⁴ The second section, “Process and Reality,” is an introduction to Whitehead’s Gifford Lectures of 1927-28, published as *Process and Reality*. The final section, “Order and Continuity,” will look at order as expressed as a continuum in *Process and Reality*. Chapter III: Dipolar will examine the notion of dipolar in metaphysics as presented in “God and the World,” the final chapter of *Process and Reality*. It will contain two sections. The first section, “God: Primordial and Consequent,” examines Whitehead’s notion of the dipolar nature of God. The second section, “Creative Unification,” looks at how Whitehead envisions the creation of the world through God’s unifying desire. This paper will conclude with an Epilogue, which

¹² Samuel Alexander, *Space, Time, and Deity* (Gloucester, MA: Peter Smith, 1979). Hereafter, STD.

¹³ Alfred North Whitehead, *Science and the Modern World* (New York: Free Press, 1967). Hereafter, SMW.

¹⁴ Alfred North Whitehead, *Religion in the Making* (New York: Fordham University Press, 1996). Hereafter, RM.

looks at God's love for the world, as presented in the final section of *Process and Reality*. This love is not only creative and free, but also salvific.

Whitehead's cosmology is not only about creativity, but also, in and of itself, it is creative. Creativity from, and within, his triplex of relationality – community (many-to-one), continuum (one preceded by and followed by another), and dipolar (two-ness in relation) – was also Whitehead's lived experience. His work is a holistic vision of faith seeking understanding within the ever-rupturing perspectives in mathematics and science. Whitehead used the new visions to describe God, incorporating God into his new understanding of the material world. All theologians live within a given thought-world, and our task is to seek God where we are. May Whitehead provide us with an example and a path to follow.

Chapter I: Community

During the last half of the nineteenth century, a community of British intellectual men worked together or in parallel in mathematics, philosophy, and science to understand how existence worked. The reason this community in this time is important is that this was the lived experience of Alfred North Whitehead. This communal life was creative and as this paper will discuss, this communal life is illustrative of Whitehead's intellectual cosmology. The participants in this community gave lectures to each other and worked on books together. They argued and haggled, pushing and pulling on each other's ideas. I view them as a world, an ecology. They were indeed privileged and, in that sense, audacious; they believed they could solve the mysteries of the cosmos. From this nest of thought, Whitehead's cosmology grew.

An Ecology of Thought in Britain

In 1880, Whitehead entered Trinity College at Cambridge University as a student of mathematics. He remained there as a student and then fellow until 1910 when he moved to London where he would write the three-volume *Principia Mathematica* with Bertrand Russell and to be named a lecturer at University College London. His 44 years in English academia with its people and thoughts built within him not only a solid foundation, but also an agonistic style of intellectual growth. This paper will not consider the massive range of thought Whitehead encountered, but here are examples illustrating that community.

The first two influences are positive, in that Whitehead built upon them. Francis Herbert Bradley, a philosopher from Oxford and leader of British Idealism, proposed a specific concept of relationality that foreshadows Whitehead's later thoughts. Bradley's notion is that for any entity to exist, each entity within a plurality must be distinct from each other entity, however such

distinction is impossible without relation to each of the other entities within the plurality.¹⁵ As Whitehead will concur, “If anything out of relationship, then complete ignorance is to it.”¹⁶ A second influence was John M. E. McTaggart who studied Kant and wrote his dissertation on Hegel’s dialectic. McTaggart was a fellow student of Whitehead at Trinity College, before being appointed as a lecturer, and he, along with Whitehead and Bertrand Russell were members of a secret discussion group: the Cambridge Apostles. McTaggart’s metaphysics is difficult to distill, but I include these concise themes as presented by Paul Guyer and Rolf-Peter Horstmann: first “Harmony between unity and diversity can be established only on the basis of an all-encompassing relation of love between all the characteristic elements of reality, which in turn presupposes thinking of ultimate reality as a community of spirits or as Spirit;” second, “Substances according to McTaggart are infinitely divisible and therefore cannot have simple parts. Between substances and their individual features there obtains a relation of determining correspondence such that each feature determines and is determined by all the others.”¹⁷ As I will illustrate, relationship defines existence for Whitehead.

Bertrand Russell, as noted above, had a long relationship with Whitehead. Around 1900, Russell broke from the British Idealism of Bradley and McTaggart to propose his philosophy of “logical atomism,” a notion that Whitehead would deny. Russell proposed that indeed there are distinct entities and that these entities exist in relationship with other entities, but that each distinct entity could be removed (intellectually) from its relationships and counted as existing

¹⁵ Paul Guyer and Rolf-Peter Horstmann, "Idealism," in “8. British and American Idealism.” *The Stanford Encyclopedia of Philosophy* (Spring 2023 Edition), ed. Edward N. Zalta and Uri Nodelman, <https://plato.stanford.edu/archives/spr2023/entries/idealism/>. Whitehead references Bradley throughout *Process and Reality*, always in an argumentative fashion. Faber, citing Leemon McHenry, *Whitehead and Bradley: A Comparative Analysis* (Albany: State University of New York Press, 1992), asserts that Whitehead’s title, *Process and Reality*, comes from Bradley’s title *Appearance and Reality: A Metaphysical Essay* of 1893. Faber, 295.

¹⁶ SMW, 25.

¹⁷ Guyer and Horstmann.

independently. The single distinct entity then could be used to describe conglomerations of entities. Complexity could be broken down into atomic parts, a simple logic for understanding the cosmos.¹⁸ As noted above, and to be discussed in depth later, this notion is antithetical to Whitehead's demand for relationality, as when a multi-part entity is broken down and abstracted into its parts, it is flattened out of its essence. As we are still discussing community, Whitehead's philosophy must be seen as influenced by Russell, even if that influence is oppositional.¹⁹

As a cohort, the thinkers briefly mentioned above influenced Whitehead's ideas.

Whitehead, however, cites his particular debt to the work of Samuel Alexander, and therefore, we need to look at Alexander's work more thoroughly, in particular his Gifford Lectures of 1916-1918, published as *Space, Time, and Deity*, in which he posited his notion of "Space-Time."²⁰ According to Emily Thomas, "Alexander conceives space and time as the stuff out of which all things are made: space and time are real and concrete, and out of them emerge matter, life, and so on. Space and time are unified in a four-dimensional manifold, spacetime." Further, "Alexander presents a metaphysical argument for the unity of space and time, arguing they are merely distinguishable aspects of Motion. He argues that space and time must be unified because, when abstracted away from each other, it becomes clear that they could not exist independently."²¹ I

¹⁸ See Kevin Klement, "Russell's Logical Atomism", *The Stanford Encyclopedia of Philosophy* (Spring 2020 Edition), ed. Edward N. Zalta, <https://plato.stanford.edu/archives/spr2020/entries/logical-atomism/>.

¹⁹ In *Process and Reality*, Whitehead will write, "A new idea introduces a new alternative; and we are no less indebted to a thinker when we adopt the alternative which he discarded." PR, 11.

²⁰ Alexander, an Australian-born professor at the University of Manchester, was a leader in the British emergentism movement. Whitehead references his debt to Alexander in the "Preface" of SMW, viii. For additional thoughts on emergentism, see C. Lloyd Morgan's Gifford Lectures of 1922, also referenced by Whitehead, and later published as *Emergent Evolution* (London: Williams and Norgate, 1923). The Gifford Lectures play a significant role in this paper. As described in the Giffords website, Adam Lord Gifford (1820-1887) founded the lectures "to promote and diffuse the study of Natural Theology in the widest sense of the term – in other words, the knowledge of God." Accessed March 30, 2023, <https://www.giffordlectures.org/>.

²¹ Emily A. E. Thomas, "Samuel Alexander", *The Stanford Encyclopedia of Philosophy* (Fall 2022 Edition), ed. Edward N. Zalta and Uri Nodelman, <https://plato.stanford.edu/archives/fall2022/entries/alexander/>.

read Alexander's "Motion" as the electromagnetic field and I am tempted to equate spacetime with God. Even Alexander asks his readers, "Why not identify God with Space-Time?"²² Thomas argues that Alexander has a more complex notion, "Alexander explains that we should not identify God with spacetime. Instead, the spacetime system is in the process of 'engendering' God."²³ Spacetime brings God into being.

Thomas's introduction is helpful, but Alexander's concept, his cosmology, is complex. And, as it holds foundations for Whitehead's later thinking, Alexander's thought requires unpacking. Alexander does not speak of "process" but of "nisus," a yearning or pull towards something else, something larger or higher. Alexander illustrates the effect of nisus in the human individual through his discussion of the state. "The state is not a new individual created by the union of isolated individuals. The individuals are driven by their own sociality into union, and the union alters their minds."²⁴ For Alexander, there is an innate quality or nature that "drives" the individual to union with others. This drive is also for the human toward God, a religious sentiment, or as Alexander put it, "this distinctive religious appetite."²⁵ Alexander lays out how this appetition brings the person to an understanding of God: appetite, being hungry, does not make food but it calls us to find it. Alexander contends that experience produces cognition, for it is only after we are first given food, "that we discover it to be food and capable of satisfying our hunger."²⁶ More abstractly, "We do not first learn to know the objects to which we respond, but in responding to objects we discover the properties which they possess."²⁷ Then, when we speak of our feelings for God, we may not begin with God, but begin with a nisus, a yearning for that thing of which we are yet to find. Illustrating this idea through the analogy of the thunderstorm,

²² STD, Vol. 2, 353.

²³ Thomas.

²⁴ STD, Vol. 2, 352.

²⁵ STD, Vol. 2, 374.

²⁶ STD, Vol. 2, 374.

²⁷ STD, Vol. 2, 374.

Alexander writes, first comes “the feeling that the thunder is terrible. That God is present in the thunderstorm is discovered only in the feeling which is our outgoing towards something or other which works through the thunderstorm or resides therein.”²⁸ To reiterate, “It is the feeling or emotion which images the object, not the idea which induces the emotion.”²⁹ How do we know God? “Because the world itself provides in us a specific response which makes us aware, no matter in how primitive a form, of God.”³⁰ Alexander states that “the world as a whole in its forward tendency acts upon our bodily organism and that the religious sentiment is the feeling for this whole.” The world’s “nisus forward [...] excites religion in us, and we in turn feel the need of it.”³¹

With this understanding of nisus, we now turn to Alexander’s concept of God within the cosmology of Space-Time. Alexander writes, “God is the whole world as possessing the quality of deity. Of such a being the whole world is the ‘body’ and deity is the ‘mind.’ But this possessor of deity is not actual but ideal. As an actual existent, God is the infinite world with its nisus towards deity.”³² How do we unpack this? Alexander writes, “the body of God is the whole universe and there is no body outside his.”³³ But there is a second part to God, and this dual nature is not dipolar as the parts are not equal and opposite. “God includes the whole universe, but his deity, though infinite, belongs to, or is lodged in, only a portion of the universe.”³⁴ Alexander’s concept of infinitude, where God’s deity resides, is complicated. “God’s body being the whole of Space-Time is omnipresent and eternal; but his deity, though not everywhere, is yet

²⁸ STD, Vol. 2, 375. “The glory of God thunders,” from Psalm 29 and “The Voice of God in a Great Storm,” from John 12:27-29. Thanks to Chad Bird for bringing these to my attention.

²⁹ STD, Vol. 2, 375.

³⁰ STD, Vol. 2, 375.

³¹ STD, Vol. 2, 376-7.

³² STD, Vol. 2, 353.

³³ STD, Vol. 2, 357.

³⁴ STD, Vol. 2, 357.

infinite in its extension.”³⁵ It seems that for Alexander, God’s body is more infinite than God’s deity is infinite, defying the absolutism of infinity. It is as if his infinite body started before his infinite deity; got a head-start if you will, and therefore his deity always lags behind.³⁶ Alexander doesn’t resolve this issue, but holds that this notion of one infinite realm being part of another infinite realm is important when the problem of theism arises.³⁷ However, this train of thought is overly anthropomorphic, Alexander reminds his readers, “The individual so sketched is not asserted to exist; the sketch merely gives body and shape, by a sort of anticipation, to the actual infinite God whom, on the basis of experience, speculation declares to exist.” Or “the infinite God is purely ideal or conceptual.”³⁸ To hypostatize conceptual creations is problematic and may only build a path for the beginning of an understanding.

Conflict remains, but Alexander reintroduces *nisus* to provide resolution. “As actual, God does not possess the quality of deity but is the universe as tending to that quality. This *nisus* in the universe, though not present to sense, is yet present to reflection upon experience. Only in this sense of straining towards deity can there be an infinite actual God.”³⁹ Infinitude of deity, therefore, is not a mathematical construct, but a yearning, a desire yet to be fulfilled. Alexander argues that “there is no actual infinite being with the quality of deity.” By “quality of” Alexander means *fully realized*, as an entity fully realized of deity would be without desire and would be finite, or “actual,” and no longer God. “Deity is a *nisus* and not an accomplishment.”⁴⁰ There is an actual infinite God (the whole universe) in *nisus* to deity, but as Alexander asserts our

³⁵ STD, Vol. 2, 358.

³⁶ Thomas has a slightly different take, writing, “For Alexander, God is the whole world possessing the quality of deity. However, the ‘whole world’ does not yet exist because Alexander’s universe is one of process; the universe is in progress towards becoming complete, and this is why Alexander claims the universe is in process towards deity. The whole world, which will possess the quality of deity, does not yet exist, but part of it does.”

³⁷ STD, Vol. 2, 357.

³⁸ STD, Vol. 2, 361.

³⁹ STD, Vol. 2, 361.

⁴⁰ STD, Vol. 2, 364.

religious consciousness “habitually forecasts the divinity of its object as actually realized in an individual form.”⁴¹ We tremble at the thunder, know the mystery, and create an image of God to meet us at the edge of our abilities. As Alexander reiterates, “God as an actual existent is always becoming deity but never attains it. He is the ideal God in embryo. The ideal when fulfilled ceases to be God, and yet it gives shape and character to our conception of the actual God, and always tends to usurp its place in our fancy.”⁴²

How the individual conceives God aside, there is still the notion of God in nisus toward deity which is not only a yearning but also an action, a movement, a change, or variation in his being. Or as Alexander ponders, “Since God’s deity [...] varies with the lapse of time, how can we declare him to be the whole universe?”⁴³ The first part of Alexander’s answer is “that the variation lies in the empirical development within the universe.” He claims, further, that “it is always the one universe of Space-Time which is God’s body, but it varies in its empirical constitution and its deity.”⁴⁴ Alexander provides his readers with a footnote referencing an earlier lecture which is helpful as it illuminates our issue with oneness or wholeness. “Space-Time is in no case a unity of many things; it is not a one. For that implies that it can descend into the field of number, and be merely an individual, and be compared as one with two or three. The universe is neither one in this sense, nor many. Accordingly, it can only be described not as one and still less as a one, but as *the* one.”⁴⁵ So then, our issue ensues from language or more definitely from the anthropomorphic conception of body, the analogy is a trap.⁴⁶

⁴¹ STD, Vol. 2, 362.

⁴² STD, Vol. 2, 365.

⁴³ STD, Vol. 2, 366.

⁴⁴ STD, Vol. 2, 366.

⁴⁵ STD, Vol. 1, 339, (emphasis in original).

⁴⁶ Charles Hartshorne will caution, “we must in theology beware of *anthropomorphism*, reading our own human traits into our portrait of deity.” Hartshorne, *Omnipotence and other Theological Mistakes* (Albany: State University of New York Press, 1984), 28, (emphasis in original).

Looking again at “variation lies in the empirical development within the universe,” we need to follow this thought as it pertains to the creativity integral to Whitehead’s cosmology. Alexander writes, “For we are not to think of the matrix, Space-Time, as something which grows bigger in extent with the lapse of Time; its Space is always full and it grows older through internal rearrangements, in which new orders of empirical finites are engendered.”⁴⁷ Alexander also uses the phrase, “the generation of fresh empirical qualities.”⁴⁸ Space-Time is, and is not, the universe, for the physical universe is expanding (although this scientific discovery comes later in history). The universe of Space-Time is the river not stepped in twice and more importantly, it is in *nisus*. The flow of time is happening but along with it there is a pull towards something new. There is attraction and repulsion, a building generative activity – all within *the* one.

Although Alexander does not directly confront the burgeoning scientific theories of light and sound waves, his notion of *nisus* provides a balm for the distress created by what Whitehead calls the bifurcation of nature created by the new science. In 1919, Whitehead returned to Trinity College to deliver the Turner Lectures in which he protests how science has created two distinct systems of reality, “nature apprehended in awareness and the nature which is the cause of awareness.”⁴⁹ For Whitehead, nature apprehended in awareness is romantic, “the greenness of the trees, the song of the birds, the warmth of the sun,” etc. Whereas nature as the cause of awareness, he defines as “the conjectured system of molecules and electrons which so affects the mind as to produce the awareness of apparent nature.” Although Whitehead’s tone in 1919 is testy, he does propose a liminal joining space, writing, “The meeting point of these two natures is the mind, the causal nature being influent and the apparent nature being effluent.”⁵⁰ Influent and

⁴⁷ STD, Vol. 2, 366.

⁴⁸ STD, Vol. 2, 367.

⁴⁹ Alfred North Whitehead, “The Concept of Nature” in *Alfred North Whitehead: An Anthology*, ed. F. S. C. Northrop and Mason W. Gross (New York: Macmillan, 1953), 219. Hereafter, CN.

⁵⁰ CN, 219.

effluent, incoming and outgoing flows, Whitehead even uses the term “waves” (as in “the waves as they roll on to the Cornish coast tell of a gale in the mid-Atlantic”⁵¹) to describe ingression, providing his readers with an example of his experimental thought.

In this section, “An Ecology of Thought in Britain,” I have examined some of the most pertinent people and thoughts in Whitehead’s world. From this creative community, his thoughts were born and developed. As I will illustrate, when Whitehead’s ideas (or any ideas) are taken out of context, outside of the existing thought-world, they become abstracted. This abstraction creates difficulty in comprehension and at least initially, retards growth. This is exactly what happened when Whitehead left for America.

Science and the Modern World

In 1924, Whitehead left England to take a position as professor of philosophy at Harvard, expanding his community. A year later, at the Lowell Lectures of 1925, published as *Science and the Modern World*, he would introduce the American audience his ideas formed amidst the fabric of his cohort, and as is obvious from the previous, his ideas would include God. In the United States, the meeting of philosophy and theology were off-putting to those with a dualist, either/or outlook. As Roland Faber asserts, the connection was difficult for “a Christian theology that feared an encroachment of philosophy into its proprietary sphere of revelatory theology,” as well as for a secular philosophy that feared encroachment of theology into its sphere.⁵² Faber’s

⁵¹ CN, 283.

⁵² Faber, *Poet*, 21. Faber adds that the connection was, however, “attractive to a theology that viewed dialogue with modern science and philosophy as essential to its own identity.” Whitehead and his cohort were thinkers – that was the gift they were given. Whitehead did not divulge his religious beliefs in any explicit manner, what we are left with are his thoughts on science, mathematics, and God, and as Jung notes, “People who can believe [in God] should be a little more tolerant with those of their fellows who are only capable of thinking.” C. G. Jung, “A Psychological Approach to the Dogma of the Trinity,” in *Psychology and Religion: West and East*, trans. R. F. C. Hull (Princeton, NJ: Princeton University Press,

observation illustrates an example of the American dichotomy that Whitehead would need to overcome. The pairing of ideas would be his primary tool, foreshadowing his use of the dipolar relationship.

The bulk of *Science and the Modern World* is a presentation of the sea changes to science and mathematics Whitehead and his community had been living through, changes that, unless ignored, would transform philosophy and theology.⁵³ Whitehead divides the major changes in nineteenth century thought into two sets of couples. Whitehead first pairs “continuity” with “atomicity.” Maxwell had mathematically proved that there was a vast continuum of electromagnetic wavelengths of which visible light was a tiny sliver, and as such, the problem of light waves and a requisite medium were swallowed up by Maxwell’s continuous field. English chemist, John Dalton, building on the work of others, concluded that molecules were created by smaller particles he named atoms. Dalton’s work fed into the understanding of cellular theory which would lead to the concept of “organism.” Whitehead’s second coupling is the doctrine of conservation of energy with the doctrine of evolution. This pairing will play a major role in Whitehead’s later thoughts on the dipolar nature of God as the conservation of energy abides with “the notion of quantitative permanence underlying change” and evolution abides with “the

1969), 107-200, 110. Gordon Kaufman adds, “it would be a mistake to assume that theological work and faith are irrelevant to each other, for all Christian faith is given its basic structure by the two polar symbols that it takes for granted – human being and God. Believers may regard their faith in God as that which is of central importance to their lives, even though they may never have stopped to inquire about the particular characteristics of the *idea* of God that they hold, simply take it for granted that it is indeed *God* in whom their faith is placed. Kaufman, *Creativity*, 33, (emphasis in original).

⁵³ Teilhard de Chardin, decades later, would grasp this as well, writing, “All around us the physical sciences are endlessly extending the abysses of time and space, and ceaselessly discerning new relationships between the elements of the universe. Within us a whole world of affinities and interrelated sympathies, as old as the human soul, is being awakened by the stimulus of these great discoveries, and what has hitherto been dreamed rather than experienced is at last taking shape and consistency.” Pierre Teilhard de Chardin, *The Divine Milieu* (New York: Harper & Row, 1960), 45. Later in his life, Whitehead would hold a darker view of these sea changes. He writes, “As science grew, minds shrank in width of comprehension. The nineteenth century was a period of great achievement, suggestive of an ant-hill. It failed to produce men of learning with a sensitive appreciation of varieties of interest, of varieties of potentiality. It criticized and exploded, where it should have striven to understand.” Whitehead, *Modes of Thought* (New York: Putnam Books, 1958), 61.

emergence of novel organisms as the outcome of chance.”⁵⁴ These were heady times, with “the excitement arising from the vistas disclosed by scientific theory. Both the material and the spiritual bases of social life were in process of transformation.”⁵⁵

Exciting, yes, but as discussed above in the Tarner Lecture, distressing. Whitehead names it “the general flux of events.”⁵⁶ Whitehead will use the concept of *organism* to contain or aggregate the flux, writing, “an actual event is an achievement for its own sake, a grasping of diverse entities into a value by reason of their real togetherness in that pattern, to the exclusion of other entities.”⁵⁷ But *organism* may not be utilized alone. This “value” carries with it an “intrinsic essence” that endures “amid the transitoriness of reality.” There is pattern and there is continuity imbedded in the outcome, and this continuity can be prehended in three distinct ways.⁵⁸ First is the reflection of the parts upon the whole. “Thus the event, in its own intrinsic reality, mirrors in itself, as derived from its own parts, aspects of the same patterned value as it realizes in its complete self.”⁵⁹ Second is the effect of the event on its environment, or as “mirrored in other events.”⁶⁰ The event is an “enduring individuality [...] implanted as reiteration of aspects of itself in the alien events composing the environment.”⁶¹ Lastly, the event may be recognized over time, “a memory of the antecedent life-history of its own dominant pattern.”⁶² For Whitehead, the

⁵⁴ SMW, 100-101.

⁵⁵ SMW, 101.

⁵⁶ SMW, 105. Whitehead’s use of “flux” here I see as a pedestrian definition. Later, in *Process and Reality*, Whitehead will develop a metaphysical definition of “flux.”

⁵⁷ SMW, 104. I see this as reminiscent of Bradley’s relational distinction.

⁵⁸ I am using “prehend” here whereas Whitehead uses the term “mirrors” which I read as to-catch-a-glimpse. “Prehend” will play a significant role in *Process and Reality*.

⁵⁹ SMW, 104. I see here McTaggart’s notion that each feature of an entity determines and is determined by all the other features.

⁶⁰ SMW, 104.

⁶¹ SMW, 104.

⁶² SMW, 105.

event is an enduring pattern, a pattern woven of threads which impacts life in the world and then exhibits and retains that very history.

Whitehead continues his thought exploration into how the pattern comes to be. He does not use the word “God,” instead, he uses the language of science to describe God’s role. Whitehead writes that there is “an *underlying eternal energy* in whose nature there stands an envisagement of the realm of all eternal objects.”⁶³ God is the “underlying eternal energy,” the foundational power from which physical existence is imagined. Not only is Whitehead explaining a scientific reality, but also situating God as the foundation for what is and what can be, ideas that he will fully develop in *Process and Reality*. Further, the “underlying eternal energy” holds not only the conception of objects, but also the conceived ideal life-paths of the objects, their “purpose.”

Continuing with God in the shadows, Whitehead writes, “Mathematical physics presumes in the first place an electromagnetic field of activity pervading space and time.”⁶⁴ This electromagnetic field is the origination of a pattern. Whitehead will also note that “It is the key of some particular pattern.”⁶⁵ The “key” is not only the foundation, but also a way to unlock and set the tone for the future. Within the pattern, there is “occasion,” a moment in life-history for which Whitehead holds three notions. First, the occasion is a process, or a “becomingness.” Secondly, the occasion exists in community, as he writes, “one among a multiplicity of other occasions, without which it could not be itself.”⁶⁶ And finally, the occasion is a limitation or focusing within what Whitehead terms the “unbounded realm” of all possibilities. Amidst the “unbounded realm” the occasion is created by a limitation, a differentiation from all other occasions. Whitehead now

⁶³ SMW, 105 (emphasis mine).

⁶⁴ SMW, 152.

⁶⁵ SMW, 154.

⁶⁶ SMW, 176-7.

brings God into the light, God as “the limitation for which no reason can be given: for all reason flows from it. God is the ultimate limitation, and His existence is the ultimate irrationality.”⁶⁷

Each occasion is in continual process of becoming, growing, and differentiating amidst its community, and limited by God. God who conceives the life-paths outside of the rational world.

Whitehead ends *Science and the Modern World* with a discussion of “The Requisites for Social Progress.” Thinking back to Whitehead’s lived experience in the community of scholars, we see an appreciation of that reality. He writes of two great dangers, “one, the ignorance of the true relation of each organism to its environment; and the other, the habit of ignoring the intrinsic worth of the environment which must be allowed its weight in any consideration of final ends.”⁶⁸ There is always continuity and there is always creativity, growth, or change in any ecology. We must, however, consider the organism and its environment as mutual partners in their mutual existence.⁶⁹

Whitehead writes of “the spirit of change” and “the spirit of conservation” and that both are requisite as “there can be nothing real without both.”⁷⁰ Between change and conservation there is movement. Whitehead calls it “wandering.” He writes, “When man ceases to wander, he

⁶⁷ SMW, 178. John Gardener describes in *Grendel* that the old priest responded to the Ork to spare his life thus: “The King of the Gods is the ultimate limitation, [...] and His existence is the ultimate irrationality. [...] For no reason can be given for just that limitation which it stands in His nature to impose. The King of the Gods is not concrete, but He is the ground for concrete actuality. No reason can be given for the nature of God, because that nature is the ground of rationality.” Gardener, *Grendel* (New York: Vintage Books, 1989), 131. Thanks to Isabelle Stengers for reminding me of this book.

⁶⁸ SMW, 196. Whitehead will return to this subject in *Process and Reality*, writing, “But there is no society in isolation. Every society must be considered with its background of a wider environment of actual entities, which also contribute their objectification to which the members of the society must conform.” PR, 90.

⁶⁹ In *Notes Towards the Definition of Culture*, T. S. Eliot uses *Science and the Modern World* as a foundation for his discussion of diversity and the importance of friction. Eliot, “Unity and Diversity: The Region” from *Notes Towards the Definition of Culture* (New York: Harcourt, Brace, 1949). Union is not peace. As Hannah Arendt, a giant of conflict thought, concurs, “Discord, indeed, is so important a factor in nature’s design that without it no progress can be imagined, and no final harmony could be produced without progress.” Arendt, *Lectures on Kant’s Political Philosophy*, ed. Ronald Beiner (Chicago: University of Chicago Press, 1982), 52.

⁷⁰ SWM, 201.

will cease to ascend in the scale of being. Physical wandering is still important, but greater still is the power of man's spiritual adventures – adventures of thought, adventures of passionate feeling, adventures of aesthetic experience.”⁷¹ Additionally, “Modern science has imposed on humanity the necessity for wandering. Its progressive thought and its progressive technology make the transition through time, from generation to generation, a true migration into uncharted seas of adventure.”⁷² There is continuity, differentiation, and friction within the ecology. I see Whitehead's “wandering” as an act of creativity, a changing of perspective or a consideration of an alternate viewpoint. What wandering permits is a momentary untethering at which time the organism may be pulled in a new direction, to feel and react to *nisus*.

This chapter illustrated the breadth and depth of Whitehead's thought community and how that community built within him a thought foundation from which he would construct his creative cosmology. Whitehead had wandered into a new adventure in Cambridge, Massachusetts. It is difficult to see his move as *nisus*, however it was a markedly creative time. He carried with him an order or foundation gleaned from his community in England, now transplanted into a slightly different community. What I might consider a rupture, a pulling out and replanting, really is not. Whitehead would, and must, per his philosophy, retain the relational bonds with his English counterparts. Now he would build new relations with his American counterparts, in turn connecting the thought-worlds on either side of the Atlantic Ocean, a many-to-one unity that in time would discard and retain elements of the residual entities to create a new entity.

⁷¹ SMW, 207.

⁷² SMW, 207.

Chapter II: Continuum

As discussed in the Preface and elucidated elsewhere in this paper, the electromagnetic field, the continuum, was a dramatic mathematic and scientific discovery. All of existence was energy and all energy existed as a continuum of wavelengths. Each entity and each event had a “before” entity and event and an “after” entity and event. Indeed, even the separation between paired entities or events existed on an infinitely small continuum. Within the realm of mathematics and science, the notion of “continuum” was breaking down the boundaries between events and even physical entities. Continuum not only erodes a binary view of existence, but also the very “there-ness” of physical being. Whitehead would develop ideas, notions, and schemes to enfold this new understanding into a holistic view of the universe, of existence, of the relation between God and the world: creativity.

Religion in the Making

A year after *Science and the Modern World*, at the Lowell Lectures in 1926, published as *Religion in the Making*, Whitehead would focus his examination on the God/human relation.⁷³ Whitehead’s lecture on “Body and Spirit” aptly illustrates his work as it continued its evolution. Whitehead discusses the relationship between metaphysics and religion in the first sections. Within that relationship, metaphysics plays the role of “the science which seeks to discover the general ideas which are indispensably relevant to the analysis of everything that happens,”⁷⁴ and

⁷³ There is continuity from *Science and the Modern World* into this lecture. In the “Preface” to *Religion in the Making*, Whitehead comparing the two lectures writes, “The two books are independent, but it is inevitable that to some extent they elucidate each other by showing the same way of thought in different applications.” RM.

⁷⁴ RM, footnote 1, 84.

religion plays the role of “the longing of the spirit that the facts of existence should find their justification in the nature of existence.”⁷⁵ For Whitehead then, within “existence,” facts are not inherently justified by nature, but instead, there is a longing for that justification and science seeks to fulfill that longing. Whitehead’s universe “is through and through interdependent.”⁷⁶

Whitehead illustrates the interdependence this way:

The body pollutes the mind, the mind pollutes the body. Physical energy sublimates itself into zeal; conversely, zeal stimulates the body. The biological ends pass into ideals of standards, and the formation of standards affects the biological facts. The individual is formative of the society, the society is formative of the individual. Particular evils infect the whole world, particular goods point the way of escape.⁷⁷

Of note here, the interdependent relationship is multidirectional and nonlinear. It can be flattened for illustration, but at its core, there is a notion of movement towards change, or creativity.

“Towards” may be the incorrect word, as it implies progress and it implies a linear notion of time, which could be satisfactory in the discussion of the person in their society for instance, but Whitehead is after a more universal and transcendent idea. There is pairing, a dialectic, and an ebb and flow between each. He continues,

The world is at once a passing shadow and a final fact. The shadow is passing into the fact, so as to be constitutive of it; and yet the fact is prior to the shadow. There is a kingdom of heaven prior to the actual passage of actual things, and there is the same kingdom finding its completion through the accomplishment of this passage.⁷⁸

As an idea in formation, this quotation illustrates Whitehead’s notion that *how* something comes to be shapes *what* that something is and that this passage is bi-directional – in shaping the clay (making), the potter is formed along with the pot. This work is, after all, titled *Religion in the*

⁷⁵ RM, 85.

⁷⁶ RM, 87. A reminder of Whitehead’s interdependence in contrast to Russell’s atomism.

⁷⁷ RM, 87. Although Whitehead does not examine “evil” in depth, he does return to it in *Process and Reality*, writing, “Selection [the act of concrescence] is at once the measure of evil, and the process of its evasion. It means discarding the element of obstructiveness in fact. No element in fact is ineffectual: thus the struggle with evil is a process of building up a mode of utilization by the provision of intermediate elements introducing a complex structure of harmony.” PR, 340.

⁷⁸ RM, 87.

Making. There is more to it however, for within the continuum there is a before, now, and after, but these terms are insufficient as they are linear. It is better to say that there is a before-ness, a now-ness, and an after-ness as the continuum is nonlinear and each station may only be momentarily held as a fleeting scent before the station is gone into the unbounded realm.

Whitehead will propose, again, that God is requisite for creative formation.

Focusing on the pot, the concretion, or the events of formation in the temporal world, which Whitehead writes, “constitute for us the all-inclusive universe;” Whitehead lists three elements of formation: “The creativity whereby the actual world has its character of temporal passage to novelty;” “The realm of ideal entities, or forms, which are in themselves not actual, but are such that they are exemplified in everything that is actual, according to some proportion of relevance;” and “The actual but non-temporal entity whereby the indetermination of mere creativity is transmuted into a determinate freedom. This non-temporal actual entity is what men call God.”⁷⁹ To sum, it is the nature of the world to move to novelty; there are notions of perfection, which, although they do not exist per se, are imbedded in the novel creation; there is only one permanent entity, and that is God, God who takes random change and molds it through limitation, liberating it from the unbounded realm into manifestation.⁸⁰

The universe is not only creativity, but also entities or “occasions of actualization” which Whitehead terms, “epochal occasions.” Further, “the actual world is a community of epochal occasions.”⁸¹ Whitehead’s “epochal occasions” are complex, he refers to them as “creatures,” for

⁷⁹ RM, 90.

⁸⁰ As Whitehead’s ideas mature, to be presented in *Process and Reality*, Whitehead will combine the ideal and God, positing that God holds the ideal newness, His desire, which he calls the world to become.

⁸¹ RM, 91. *The American Heritage Dictionary of the English Language* defines “epoch” as “A particular period of history; especially, one regarded as being in some way characteristic, remarkable, or memorable; an era.” And then quotes Whitehead: “‘New epochs emerge with comparative suddenness.’ (A.N. Whitehead)” There is no citation as to where this quotation comes from, but it is somewhat deceptive in that it divorces the emergence from its surrounding periods, a Whitehead mainstay. Of note is definition 4.

within the community, each “is a definite limited physical event, limited both as to space and time, but with time-duration as well as with its full spatial dimensions,” *and* each “has in its nature a reference to every other member of the community, so that each unit is a microcosm representing in itself the entire all-inclusive universe.”⁸² Whitehead has given us creativity and creature, which we might re-scribe as *create-ivity* and *create-ure*, for they are of the same nature and inseparable. Creativity brings about the creature, but there is more, as the process does not stop. Whitehead writes, “the creativity *for* a creature becomes the creativity *with* the creature...the creativity for a new creature.”⁸³ This transition defines what Whitehead calls the “routes of temporal succession” – a continuum of creativity.

Creativity and creature are inseparable, but for the purpose of examination and exploration each may be focused on individually. This is true of any complex system. In his discussion of “value” in the temporal world, of which God is the source, Whitehead pulls apart two sides of the epochal occasion. One side is “a mode of creativity bringing together the universe.”⁸⁴ Whitehead defines the epochal occasion first as a “concretion [...] a mode in which diverse elements come together into a real unity.”⁸⁵ This is the initial creative act. The second definition of the epochal occasion is the emergent actuality which Whitehead identifies as having “self-interest” and “self-valuation.” The epochal occasion is a microcosm of the universe as it is made from the universe, but it is distinct from all other epochal occasions and of the universe itself. If each epochal occasion were not distinct, there would only be one thing.

“*Astronomy*. An instant of time that is arbitrarily selected as a reference datum.” Whitehead’s “epochal occasion” is both an event in process and a snapshot (concretion) of said event.

⁸² RM, 91. This quotation recalls the work of Bradley and his notion of distinction and plurality.

⁸³ RM, 92, (emphasis mine).

⁸⁴ RM, 101.

⁸⁵ RM, 93.

As a distinct entity, the creature is differentiated from other entities and in this differentiation, the creature is a self, a self with its own inherent value. This self-interest “is the ultimate enjoyment of being actual.”⁸⁶ Whitehead has introduced a mental capacity into the creature, which he posits as a second route of creative passage. The first, the physical route as discussed above, “links together physical occasions as successive temporal incidents in the life of a body.”⁸⁷ The mental or spiritual nature of the creature is what allows for the perception of value. There is a value perceived in selfness and also a value perceived as emergent, or yet-to-be, which is the creative purpose of God.⁸⁸ The two-ness of the epochal occasion, the physical and the mental, are in process in that there is perception and even enjoyment in the nowness of existence, but there is also an emerging existence, a value yet to be attained, and this value Whitehead terms as order, writing, “It is not the case that there is an actual world which accidentally happens to exhibit an order of nature. There is an actual world because there is an order in nature.”⁸⁹ Further, “the actual world is the outcome of the aesthetic order, and the aesthetic order is derived from God.”⁹⁰

Whitehead goes on to posit that this order is creative, and “the limitations are the opportunities.”⁹¹ I see here, Whitehead’s “limitations” as more than links in a chain and more than McTaggart’s entities determining and begin determined by the other entities.⁹² The “limitation” is God, a notion that Whitehead will continue to develop – God as the holder of the

⁸⁶ RM, 100.

⁸⁷ RM, 102

⁸⁸ RM, 104.

⁸⁹ RM, 104.

⁹⁰ RM, 105. I need to note here that Whitehead was not a trained theologian. He was a mathematician. This passage implies God’s design for the material world, teleology, but Whitehead’s God is God of desires and hopes, not God of plans.

⁹¹ RM, 113.

⁹² Although it seems highly unlikely that McTaggart or Whitehead would have read Jonathan Edwards, I do see Edward’s notion of “causation” (links-in-a-chain) as presented in his *Freedom of the Will*. We are here thinking about continuum. Edwards, *Freedom of the Will* (Mineola, NY: Dover Publications, 2012).

ideal future. The universe is a complex of instances focused into a unity, and each instance, like the universe which it makes up, is composed of its own elements focused into a unity – much like the iron filings aligning with the magnet in a dipole. The universe and the instances which make it up contain *everything*. Each, as Whitehead writes, “embraces the whole, omitting nothing, whether it be ideal form or actual fact. But it brings them into its own unity of feeling under gradations of relevance and of irrelevance, and thereby by this limitation issues into that definite experience which it is.”⁹³ So there is discernment and there is maintenance as each occasion transitions to the next occasion.⁹⁴

In this way, the world conspires to bring novelty into the transition, “to produce a new creation.”⁹⁵ This new creation, borne of the prior, pulled toward the ideal, and modified by its situation in the universe, Whitehead will call “the ‘consequent.’”⁹⁶ Whitehead holds that two principles of relevance must be maintained for the novel creation to be viable: it must “preserve some identity of character” and it must “preserve some contrast.”⁹⁷ What this means, simply, is that a creation may not be so novel as to be without reference to its past but it must also be changed enough to differentiate it from its past. The reason that this is so, is a law of physics, “vibration enters into the ultimate nature of atomic organisms. Vibration is the recurrence of contrast within identity type.”⁹⁸ The identity, therefore, is the atomic structure and the vibrations alter that identity through experience.

⁹³ RM, 112.

⁹⁴ RM, 113. Whitehead adds, “There is not one simple line of transition from occasion to occasion, though there may be a dominant line.” Whitehead will return to this idea later in *Process and Reality*.

⁹⁵ RM, 113.

⁹⁶ RM, 114. I would hold with the notion of “borne of the prior” in that the prior existed and remains in existence. This is a continuum, and the prior is that, only prior. Charles Hartshorne writes, “Change is not finally analyzable as destruction, but only as creation of novelty. The old endures, the new is added.” Hartshorne, *Omnipotence*, 8.

⁹⁷ RM, 115. This notion is reminiscent of Bradley’s ideas of relationality.

⁹⁸ RM, 115-116.

To illustrate the relationship between quantities and vibrations, Whitehead uses the relationship between body and mind. Each has its own life-history, its own occasions, and occurrences, but those of the body are physical and enter the mind as already actual and then are analyzed or interpreted by the mind and judged by the mind as relevant or irrelevant – to ask the question: to what degree does the occurrence retain identity and to what degree contrast identity? “Knowledge-value” is the outcome of this back and forth between body and mind, but the limitations of each produce an incomplete picture. Foreshadowing the work of dipolar relationality in *Process and Reality* – this is continuum after all – Whitehead writes, “The most complete concrete fact is dipolar, physical and mental. But, for some specific purpose, the proportion of importance, as shared between the two poles, may vary from negligibility to dominance of either pole.”⁹⁹ As a reminder, a dipole is “a pair of electric charges or magnetic poles, of equal magnitude but of opposite sign or polarity, separated by a small distance.”¹⁰⁰

Yet to be mentioned is that this system is not static as there may be a “dipole moment” in which there is either, (i) a change in either of the electric charges or (ii) a change in the magnetic strength of either pole, which alters the distance separating them. Whitehead is here utilizing the “dipole moment,” without defining or stating such, as in this relationship the power is skewed. “For some specific purpose,” Whitehead states, the relationship is unbalanced, this is the ideal, or “consciousness of an ideal,” of which God “issues into the mental creature as moral judgement according to a perfection of ideals.”¹⁰¹ Further, “the universe exhibits a creativity with infinite freedom, and a realm of forms with infinite possibilities; but that this creativity and these forms are together impotent to achieve actuality apart from the completed ideal harmony, which is

⁹⁹ RM, 118.

¹⁰⁰ *The American Heritage Dictionary of the English Language*.

¹⁰¹ RM, 119.

God.”¹⁰² Although the material world has limitless possibilities, it is bound to the continuum and bent by God (McTaggart’s “love”) towards God’s desire. This is God’s creative act.

This section, “Religion in the Making,” as well as the actual *Religion in the Making*, has illustrated Whitehead’s continued existence within community, and shown how his ideas are part of a continuum of thoughts. For any action, there is a before and an after. There is a continuous flow, an undulation of wavelengths of energy that permeates time and space. I will more fully develop this notion in the next section, “Process and Reality.”

¹⁰² RM, 119-120.

Process and Reality

In 1927-28, Whitehead gave the Gifford Lectures at the University of Edinburgh, later published as *Process and Reality*, in which he presented a fully developed cosmology. Faber lays out four reasons why Whitehead's project was and is both attractive and repellent: "(a) *All* experience – including religious experience and theological thought – is to be accounted for in its *inner integrity*. (b) *Every* experience – one's personal veneration of God no less than scientific knowledge – is to be coherently comprehensible within the *same* context of the *one* unified world. (c) *No* experience may be understood beyond the *mutual transition* from matter to mind, subjectivity to objectivity, knowledge to reality. (d) *Nothing* isolated from experience can be real; in the larger sense, nothing isolated 'in and of itself' is to be viewed as real."¹⁰³ Faber highlights the Christian issue with Whitehead's system, "God now *appears* in a world-immanent fashion as an element of that world's totality."¹⁰⁴ In a shallow reading of Whitehead then, God seems to be part of a monistic whole, and undifferentiated from the world. Whitehead's theology is complex, however, and retains a separation. As Faber writes, "because such cosmology runs the risk of collapsing into monism, Whitehead developed the notion of *ecological unity* in revising the bifurcation of reality in a fashion resisting such undifferentiated monism."¹⁰⁵ Faber defines "ecological unity" as "an *irreducibly pluralistic differentiation* of all reality that is in fact actualized in a *dynamic rhythm of transition*."¹⁰⁶ Further, that this transition is "a perpetual creative transition from multiplicity to unity."¹⁰⁷ Whitehead's system is based on a notion of an

¹⁰³ Faber, *Poet*, 22, (emphasis in original). Faber is consistent in his use of the pairing of repellent and attractive, a system similar to the magnetic poles, to Alexander's generative push and pull, and the Hegelian dialectic.

¹⁰⁴ Faber, *Poet*, 23, (emphasis mine).

¹⁰⁵ Faber, *Poet*, 23, (emphasis in original). Elaine Pagels succinctly puts why monism is problematic, writing, "Orthodox Jews and Christians insist that a chasm separates humanity from its creator: God is wholly other." Pagels, *The Gnostic Gospels* (New York: Random House, 1979), xx.

¹⁰⁶ Faber, *Poet*, 23, (emphasis in original).

¹⁰⁷ Faber, *Poet*, 23.

ongoing process toward unity, it is however not unifying. It is attractive and yet irksome, calling for dissent, might we even say descent, a going down, down into darkness.¹⁰⁸

Process and Reality is a bold project. Whitehead introduces it as an essay in speculative philosophy which he defines as “the endeavor to frame a coherent, logical, necessary system of general ideas in terms of which *every* element of our experience can be interpreted.”¹⁰⁹ As this is Whitehead’s work, it will have two sides: the “rational” and the “empirical.” And these two sides are “bound together” by the “texture of observed experience.”¹¹⁰ Whitehead reiterates this another way; his philosophy will be based in experienced reality, but as noted earlier (following Alexander) reality is experienced from two directions.

The two directions Whitehead will mesh with philosophy are science and religion. Philosophy “attains its chief importance by fusing the two, namely, religion and science, into one rational scheme of thought.”¹¹¹ Whitehead defines religion and science so, “Religion is centered upon the harmony of rational thought with the sensitive reaction to the percepta (*sic*) from which experience originates. Science is concerned with the harmony of rational thought with the percepta themselves.”¹¹² To unscramble this, both science and religion demand a harmony of rational thought, but science looks primarily at the object of observation and religion focuses on the sensory data (the sights, sounds, smells, and feelings) evoked from observing the object. This two-part harmony ties back to Alexander’s God in the thunderstorm. Whitehead notes that his philosophy or “cosmology” will remain in process, reminding his listeners that there is no hope of attaining finality in any philosophy as, “weakness of insight and deficiencies of language stand in

¹⁰⁸ This is a reference to Catherine Keller’s project of reclaiming origins from the abyss of the deep. See Keller, *Face of the Deep: A Theology of Becoming* (New York: Routledge, 2003).

¹⁰⁹ PR, 3, (emphasis mine). Whitehead will later caution, “Philosophy may not neglect the multifariousness of the world – the fairies dance, and Christ is nailed to the cross.” PR, 338.

¹¹⁰ PR, 3-4. Whitehead approaches lived experience, but diligently works to avoid direct contact.

¹¹¹ PR, 15.

¹¹² PR, 16.

the way inexorably.”¹¹³ He holds out hope, however, that “imagination” may be kindled when language is “stretched towards a generality foreign to [its] ordinary usage.”¹¹⁴ Imagination will certainly be requisite for the attainment of a semblance of comprehension of Whitehead’s philosophy, or to use his words, “to conceive the infinite variety of specific instances which rest unrealized in the womb of nature.”¹¹⁵

Of Whitehead’s categories, “The Category of the Ultimate” is the most pertinent to our examination. In it, Whitehead writes that, “‘Creativity,’ ‘many,’ ‘one,’ [...] complete the Category of the Ultimate and are presupposed in all the more special categories.”¹¹⁶ In the beginning (and not only the beginning of the sentence) is ‘creativity,’ ‘many,’ ‘one.’ This is not a list: creativity, many, and one. Have patience reader, the Category of the Ultimate is all-encompassing. The creativity/many/one is the alpha and omega; it is presupposed and ultimate.

Intellectually setting aside ‘creativity’ for a moment to focus on many/one, ‘one’ is not an integer and ‘many’ is not multiples of an integer. The many/one represents a complex being or even the complexity of being. Building on ‘actual entity,’ ‘many’ is made of ‘one’ and ‘one’ is made of ‘many,’ there is atomization, unity, and multiplicity. Simultaneously, being is infinitely particular and infinitely expansive, and this back and forth (which may be comprehended only in

¹¹³ PR, 4.

¹¹⁴ PR, 4. Whitehead will also use the term “redesign” as in language is a tool of philosophy that must be redesigned to adequately express ideas. Paul Jones writes, “even if one believes that grace is operative in exercises of Christian intelligence [what Whitehead is doing], it does not follow that the words one uses will be perfect (or, for that matter, roughly) descriptive of God’s ways and works. [...] Nevertheless, one can at least hope that grace *might* engender a ‘twisting and turning’ of language that keeps pace with what God has done and what God is doing, and that grace *might* comprise a meaningful moment in the time-honored task of faith seeking understanding.” Paul Dafydd Jones, *Patience—A Theological Exploration: Part One, from Creation to Christ* (London: T&T Clark, 2023), 3, (emphasis in original). Later postmodern authors, Foucault and Keller for example, will work to disrupt or denaturalize language to expand meaning. David Ray Griffin sees Whitehead’s work as postmodern. Griffin, *Whitehead’s Radically Different Postmodern Philosophy: An Argument for its Contemporary Relevance* (Albany: State University of New York Press, 2007).

¹¹⁵ PR, 17. I note that Whitehead uses “womb” as the holding place for the yet-to-be and Alexander referred to “God in embryo,” both utilizing a biological reference for becoming.

¹¹⁶ PR, 21.

the imagination) happens both in time and outside of time. “In time” represents the past, present, and future of being – of being in the world. “Outside of time” represents that the many/one (its atomization, unity, and multiplicity) always was, and always will be, and all at once.

As if this were not complicated enough, Whitehead adds to ‘many’ the notion of ‘disjunctive diversity’ which he posits as “an essential element in the concept of ‘being.’”¹¹⁷ Disjunction and conjunction, or apart and together, are not overly taxing terms, however there is more going on here as they are a part of relevant logics. C. I. Lewis (1883-1964) conceived relevant logics which he built on a criticism of *Principia Mathematica*. The gist of Lewis’s early work, his *Survey of Symbolic Logic* of 1918, was to argue that Russell and Whitehead’s notion of “implication” (an “if, then” formulation for which any two entities a and b , if b follows a , a will have held an implication of b prior to b ’s existence) had a problem, and the problem resided in the abstraction of mathematics and the binary of True/False. Bruce Hunter writes that “Lewis thought that there are an unlimited number of possible systems of logic,” of which the logic from *Principia Mathematica* was but one, and that “each of these systems is valid so long as it is internally consistent.” In implication, what was important was the order and relation of the entities. So, when Whitehead is discussing disjunction and conjunction, which seem abstract, foundational to his argument is the notion that in the separating and coming together of entities, the entities are in relation. This may seem obvious, but the notion of relation is integral to the dipole and integral to Whitehead’s notion of the primordial and consequent natures of God which I will illustrate later.¹¹⁸

¹¹⁷ PR, 21. See editor’s note, 21.14, “In the margin of his Macmillan copy, Whitehead wrote: ‘Potentiality is closely allied to disjunctive diversity.’” PR, 394.

¹¹⁸ Bruce Hunter, “Clarence Irving Lewis”, *The Stanford Encyclopedia of Philosophy* (Spring 2021 Edition), ed. Edward N. Zalta, <https://plato.stanford.edu/archives/spr2021/entries/lewis-ci/>. Although Whitehead does not reference Lewis, I feel that Lewis’s work *implies* Whitehead’s work. Whitehead does acknowledge the troubles in *Principia Mathematica*, writing, “philosophy has been misled by the example

“Creativity,” the leader in creativity/many/one, is the key to the role of ‘disjunctive diversity’ in the process of being. “Creativity,” Whitehead writes, “is that ultimate principle by which the many, which are the universe disjunctively, become the one actual occasion, which is the universe conjunctively.”¹¹⁹ To help in our understanding of the creativity/many/one, let’s look at the dipole, which is not just two things, nor is it one thing, it is two things joined together in a sense of one-ness that emits a third thing: an expanse of energy that extends out from the one-ness in infinite patterns. The creativity/many/one operates in a similar fashion except creativity is not the product of the union, it is the force which creates the union, the junction. Whitehead does not use the term force, nor Alexander’s “*nisus*.” “Creativity,” Whitehead states, is the “universal of universals” and the “ultimate principle” in the act of conjunction. So, when he writes, “It lies in the nature of things that the many enter into complex unity,” ‘creativity’ is not external to the many, it is a part of them, and I perceive this notion as a calling, or an appetition (to use an Alexander term) indwelling within the nature of each thing pulling for togetherness.

The togetherness is not a simple singular thing, it is a “complex unity,” it is also a new thing. For Whitehead, “‘Creativity’ is the principle of *novelty*.”¹²⁰ In the universe of many, or of the infinite many(s), ‘creativity’ creates a new entity/occasion/event that is diverse and distinct from all the many(s) – it is a “novel togetherness” and, what Whitehead terms, a ‘concrecence.’¹²¹ Whitehead distills this concept as, “The many become one, and are increased by one.”¹²² I see this notion as markedly dipolar – simply put, one joined with one makes three.

of mathematics; and even in mathematics the statement of the ultimate logical principles is beset with difficulties, as yet insuperable.” PR, 8.

¹¹⁹ PR, 21.

¹²⁰ PR, 21, (emphasis in original).

¹²¹ Mason W. Gross’s definition: “The word Concrecence is a derivative from the familiar Latin verb, meaning ‘growing together.’ It also has the advantage that the participle ‘concrete’ is familiarly used for the notion of complete physical reality. Thus Concrecence is useful to convey the notion of many things acquiring complete unity.” Gross, “A Note on Whitehead’s Terminology” in *Alfred North Whitehead: An Anthology*, selected by F. S. C. Northrop and Mason W. Gross (New York: MacMillan, 1953), 927.

¹²² PR, 21.

One joined with one, in the abstract and only in the abstract, make two. Metaphysically, when two are joined, both still exist and yet their joining creates a third. Whitehead writes, “the ultimate metaphysical principle is the advance from disjunction to conjunction, creating a novel entity other than the entities given in disjunction.”¹²³ Whitehead makes an interesting choice in using the term “advance.” He does not use “process.” It is as though ‘creativity’ has a subjective aim or a directional goal. If he had used “process” then the act of ‘conrescence’ could be benign or even negative, but he does not. By using “advance” he is introducing *value* – ‘creativity’ is good.

Change is integral to Whitehead’s cosmology. “‘Becoming’ is a creative advance into novelty” in which “the notion of an actual entity as the unchanging subject of change is completely abandoned.”¹²⁴ To restate, the idea that change happens to an unchanging subject must be discarded, change-ness is inherent to the subject. Whitehead, citing Alexander’s lecture “Artistic Creation and Cosmic Creation,” writes, “that every ultimate actuality embodies in its own essence what Alexander terms ‘a principle of unrest,’ namely, its becoming.”¹²⁵ In “Artistic Creation and Cosmic Creation” Alexander uses artistic creation as an analogy for cosmic creation, opening with “Pictorial imagination is a wondrous blessing not only for the lunatic, the lover, and the poet, but for the philosopher as well.”¹²⁶ Alexander notes that this analogy is fraught, “for pictures are of the finite and the developed and of that which is distinct in its limited

¹²³ PR, 21. I have just posited that $1 + 1 = 3$, which is outside of logic. Accepting or even accessing this position requires an alternative prehension. As Whitehead ends this section, “The sole appeal is to intuition.” PR, 22. If viewed in a trinitarian fashion, the illogic is fitting. Richard Rohr writes, “The Trinity can only be understood with the contemplative mind. It is only God in you that understands; your small mind cannot.” *Richard Rohr’s Daily Meditation*, week twenty-three: Trinity, “Living in the Flow,” June 7, 2023.

¹²⁴ PR, 28-29. Whitehead adds, “An actual entity is at once the subject experiencing and the superject of its experiences.”

¹²⁵ PR, 28. See Samuel Alexander, “Artistic Creation and Cosmic Creation,” in *Proceedings of the British Academy* (London: Oxford University Press, 1927), 247-270. Hereafter, ACCC.

¹²⁶ ACCC, 247.

outlines. But they fail us when we touch the infinite or undeveloped and that which has no outlines but is the source of everything which has.”¹²⁷ Alexander’s examination of artistic creation is lengthy, but may be summed up as, “The essence of the work of art is that in it creative mind and the material are indissolubly fused. That this fusion is the meeting of two separate beings, the man who creates and the material which receives from him its form, is indeed vital to the artistic situation, but arises from the finitude both of the creator and his material.”¹²⁸ The concrete maker and the concrete made, the create-or and the create-ed, form the infinite creativity.

In his discussion of purpose, tying back to Lewis’s “implication,” Alexander notes that it “is nothing more than the pre-arrangement by which one step in a complex movement prepares, and flows continuously into, the next.”¹²⁹ But where does this purpose or “pre-arrangement” come from? The unformed or yet-to-be-created manifest in their growth principle and character, “its creativeness comes to fruition in certain finites which possess true purpose.”¹³⁰ Motion is a key to Alexander’s thesis. He writes, “as a river preserves its form while in reality it is a stream of changing matter, so the material and other things which crystallize within the matrix of space-time are but groups of motions which preserve their form.”¹³¹ But there remains a pull toward creativity, novelty, or change. Alexander writes, “the universe is boundless; but a ceaseless impulse to produce parts and alter the grouping of events into things [...], the world’s *nisus* sustains some of these clusters and produces others new by fresh combinations which it strikes

¹²⁷ ACCC, 247.

¹²⁸ ACCC, 259.

¹²⁹ ACCC, 261.

¹³⁰ ACCC, 261, paraphrase and quote.

¹³¹ ACCC, 264.

out in the heat of its desire.”¹³² Alexander’s “nisus” is now an active agent or actor with “heat of desire.”

Alexander contends that there is no creator distinct from the created, as the infinite comes from the finite, which implies that there is no Creator, but that does not mean that there is no God or work of God:

But to say that the world has no Creator is not to say that it has no God. On the contrary the whole hierarchy of things cries out for a form of created existence beyond what is hitherto created, and the whole universe regarded as engaged in producing this higher form of existence is God. God’s deity then is created; but the whole world is divine as being big with this created quality, and God, therefore, though not the creator of the Universe, is, so far as he is identical with the universe, creator of all the beings within it.¹³³

This, though, is only a beginning and space-time does not stop. There is unrest. Alexander presents what he calls an “alternative theism.” There is no “theistic creator which works from behind with intelligence and purpose.” Instead, there is God who “draws them on from in front.”¹³⁴ Relying on the notion of nisus, God, then, does not push – God pulls. Whitehead has a more nuanced approach, “God’s immanence in the world in respect to his primordial nature is an urge towards the future based upon an appetite in the present. Appetition is at once the conceptual valuation of an immediate physical feeling combined with the urge towards realization of the datum conceptually prehended.”¹³⁵

We have flowed from community into continuum (with a smattering of dipolar relationality) as an introduction to *Process and Reality*. Whitehead’s notion of creativity/many/one is an apt illustration of how union and disunion fold into each other in a Hegelian dialectic fashion to form novel creations, to be creative. Whitehead differs from Hegel

¹³² ACCC, 265.

¹³³ ACCC, 261.

¹³⁴ ACCC, 270.

¹³⁵ PR, 32. This notion will emerge later in the text as God as “the poet of the world.” PR, 346.

however, in that Whitehead is positive. Moving forward into *Process and Reality*, we will now turn our attention to Whitehead's notion of Order.

Order and Continuity

As Whitehead wrote in *Religion in the Making*, "There is an actual world because there is an order of nature."¹³⁶ The continuum of existence exhibits an order. This order presents a before-ness, a prior existence from which creativity builds a new existence, a novel entity or event. As noted earlier, the notion of continuum is related to the electromagnetic field and wavelengths of energy. Whitehead introduces the concept of "extensive continuum" thus,

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 sense. This mode of perception is here termed 'presentational immediacy.' In this 'mode' the contemporary world is consciously prehended as a continuum of extensive relations.¹³⁷

First some definitions. By "extensive" and "extensiveness" Whitehead does not mean big or long per se, but a beyond-ness – events and creatures and objects have a beyond, which is also a behind, in both space and time. Their being *extends* in infinite directions. In a "presentational immediacy" or to use a more common, and photographic, term, in a snapshot, the event is arrested or "prehended" in time and space and perceived through the senses. The viewer or even the being itself may be conscious of or aware of continuity as a notion of "next," but the continuum may not be perceived as it is yet to be.

Whitehead posits that there are two metaphysical assumptions which I consider in grasping a moment within the continuum. He writes, first, "That the actual world, in so far as it is

¹³⁶ RM, 104.

¹³⁷ PR, 61.

a community of entities which are settled, actual, and already become, conditions and limits the potentiality for creativeness beyond itself.”¹³⁸ An entity may be intellectually plucked from the continuum at which point it will be atomized/objectified/perceived, but regardless, its standing place within the continuum dictates or modifies creative movement into the next moment. There is always a community of entities in relation and in movement and this community sets up the structure of a new becoming.¹³⁹ The second assumption, which builds on the first, is that “the real potentialities relative to all standpoints are coordinated as diverse determinations of one extensive continuum. This extensive continuum is one relational complex in which all potential objectifications find their niche. It underlies the whole world, past, present, and future.”¹⁴⁰ The continuum, which is foundational to the creation of the world across time, is an infinite string of manifest potentialities. Whitehead reminds us that infinitude contains both “indefinite divisibility and “unbound extension.” Infinite particularity combined with infinite expansion brings about the necessity for the continuum to make up each entity and conversely for each entity to make up the continuum: everything is everywhere/all at once. Each stitch in the fabric is part of the fabric and yet is the fabric. From here, Whitehead defines his notion of “order.”

Within “The Order of Nature,” which Whitehead also calls the “organic doctrine,” he states that “the problem of order assumes primary importance.” Up to this point, I have stressed Whitehead’s notion that the world is without bounds and it is God’s limitations which allow for creation. Now Whitehead looks at the other side of the coin and posits that “No actual entity can rise beyond what the actual world as a datum from its standpoint – *its* actual world – allows it to be.”¹⁴¹ So, from this perspective, the environment, the ecology, the universe of an entity is

¹³⁸ PR, 65.

¹³⁹ Whitehead further contends that, “The actual world must always mean the community of all actual entities, including the primordial actual entity called ‘God’ and the temporal actual entities.” PR, 65.

¹⁴⁰ PR, 66.

¹⁴¹ PR, 83, (emphasis in original).

restrictive – the entity is bound to its world. There is a flatness to existence, and it is God who pulls existence into another dimensionality.¹⁴² In Whitehead’s “order” there is movement or evolution.¹⁴³ Although the entity is bound to the world, this “order” is mediated by the “introduction of adaptation for the attainment of an end.”¹⁴⁴ Whitehead does not use the term God here but leaves open the threshold for that pull towards satisfaction – the “appetition.” Whitehead introduces or reminds us that with order there is also disorder. “Order” is dominant but “enfeebled” and thus never complete. He writes, “The attainment is partial, and thus there is ‘disorder’; but there is some attainment, and thus there is some ‘order.’”¹⁴⁵

The notion of “order” just discussed fits well into the philosophy or cosmology I have presented to now, but Whitehead is not finished with it; what I have just presented is, in fact, too tidy. Whitehead resists the temptation to simplify the “order” but making it universal, for each entity is distinct from every other entity and its world is therefore distinct from every other world. He writes, “There is not just one ideal ‘order’ which all actual entities should attain and fail to attain. In each case there is an ideal *peculiar* to each particular actual entity, and arising from the dominant components in its phase of ‘givenness.’”¹⁴⁶ If we consider “order” as plan or more

¹⁴² Flatness and order suggest Edwin Abbott’s *Flatland*. Although there is no reason to believe that Whitehead would have read *Flatland*. Whitehead was the son of an Anglican clergyman and Abbott (1838-1926) was an Anglican clergyman as well as a school master (and amateur mathematician), and their lifetimes matched so it is possible. Abbott, *Flatland: A Romance of Many Dimensions* (London: Seeley, 1884).

¹⁴³ Whitehead uses the term “evolution” but not in direct relation to the work of Charles Darwin. His thoughts are more in relation to Locke and Hume. Whitehead will also use the term “species” but again not in relation to Darwin or biology, but as in the differentiation of ideas.

¹⁴⁴ PR, 83.

¹⁴⁵ PR, 83-84.

¹⁴⁶ PR, 84, (emphasis of “peculiar” mine). Dietrich Bonhoeffer also uses the term “peculiar” but in the context of love. He uses the Greek term *περισσόον* which when transliterated is “perisson.” Bonhoeffer writes, “What is the precise nature of the *περισσόον*? It is the life described in the beatitudes, the life of the followers of Jesus, the light which illuminates, the city set on the hill, the way of self-renunciation, of absolute purity, truthfulness and meekness. It is unreserved love for our enemies for the unloving and the unloved, love for our religious, political, and person adversaries. In every case it is the love which was fulfilled in the cross of Christ.” *The Cost of Discipleship*, 132. R. H. Fuller translates Bonhoeffer’s German translation of *περισσόον* with the following words, “peculiar,” “extraordinary,” “unusual,” “not a matter-of-course,” “the more,” and “beyond-all-that.” Bonhoeffer is taking “peculiar” and going large whereas I see

explicitly, God's desire for their child, not only is each child different and each child living in a different world, but also each child's life in their specific world sits on a continuum, its "phase of givenness."¹⁴⁷ And God's desire travels on that continuum, with regard to space and time, constantly pulling via appetite *towards* satisfaction of an end.

I see two things going on here. One is that thinking "the continuum" is almost impossible. My mind wants snapshots or links in the chain, but each link is infinitely small, which again is incomprehensible – except in the abstract. Life, to be comprehensible, is divided into moments.¹⁴⁸ The other notion that I'm sensing is that Whitehead's continuum of relationship illustrates God's relation to the human as one of love not one of rule. In addition to aligning with McTaggart's notion of harmony created by love, if God's relation were of rule, then one appetite would cover multiple moments, any rule or law could apply for a lifetime.¹⁴⁹ No, says Whitehead, "There is not just one ideal 'order' which all actual entities should attain and fail to

Whitehead taking "peculiar" and going small, as in "special" or "particular." Bonhoeffer, of course, was training disciples to resist the Nazification of the church which is markedly different than Whitehead building a universal cosmology. In the Whiteheadian description of the cosmos however, both views must be true, and/or combined into a truth. Bonhoeffer, *The Cost of Discipleship*, trans. R. H. Fuller (New York: Macmillan, 1948).

¹⁴⁷ John Cobb describes the process this way, "First, the initial aim is the aim that is ideal for that occasion *given its situation*. It is not God's ideal for the situation in some abstract sense. It is the adaptation of God's purposes to the actual world. Second, the initial aim does not determine the outcome, although it profoundly influences it." Cobb, *A Christian Natural Theology: Based on the Thought of Alfred North Whitehead* (Philadelphia: Westminster Press, 1965), 205, (emphasis in original).

¹⁴⁸ Right now, I'm sitting outside at a table, typing words and thoughts, and in the near future I'll go inside and get another cup of coffee – all fine and good, but there are infinite moments between each of these moments and at each of these infinite moments God's desire for me will adjust to fit that infinitely small moment. In his discussion of "actual occasions," Griffin writes, "These events or occasions can be more or less brief. Whereas there may be over a billion such events occurring in each second at the subatomic level, events at the level of the human mind may occur at a rate of about a dozen a second." Griffin, *Postmodern*, 133.

¹⁴⁹ Whitehead writes, "the Galilean origin of Christianity [...] does not emphasize the ruling Caesar, or the ruthless moralist, or the unmoved mover. It swells upon the tender elements in the world, which slowly and in quietness operate by love; and it finds purpose in the present immediacy of a kingdom not of this world. Love neither rules, nor is it unmoved." PR, 343.

attain. In each case there is an ideal peculiar to each particular actual entity, and arising from the dominant components in its phase of ‘givenness.’”¹⁵⁰

God’s desire for the actual entity and for each moment in the entity’s existence resides outside the consciousness of the entity. Or more simply put, we cannot know God’s plan.¹⁵¹

Whitehead argues, “No actual entity can be conscious of its own satisfaction [its attainment of God’s desire]; for such knowledge would be a component in the process, and would thereby alter the satisfaction.”¹⁵² The level of satisfaction attained is known only to God and elicits a feeling in God. From here, God reacts or adjusts his desire for the next moment.¹⁵³ Whitehead writes, “The world is self-creative; and the actual entity as self-creating creature passes into its immortal function of part-creator of the transcendent world.”¹⁵⁴ The entity, however, is lured by God through feelings in the entity. These feelings, these senses of satisfaction, Whitehead will call “a breath of feeling,” for they are not wholly conscious. They exist as a scent, luring the entity from one event to the next. But Whitehead cautions that the scent is far more than a reaction to “mere

¹⁵⁰ PR, 84. I am tempted to minimize this second notion as a projection on my behalf, as not part of Whitehead’s thought, but Whitehead will cite the work of the man of Galilee and note Caesar’s abduction of Christianity for a new set of laws. Later in *Process and Reality*, Whitehead writes, “When the Western world accepted Christianity, Caesar conquered; and the received text of Western theology was edited by his lawyers. [...] The Church gave unto God the attributes which belonged exclusively to Caesar.” PR, 342. Jones states that he finds Whitehead’s argument “sweeping (and questionable).” Jones, *Patience*, 242. It certainly is (and was) easy to find fault in organized religion of all sorts, however, I do believe that there is a baby (Jesus) in that bathwater. Isabelle Stengers posits, “And if the Whiteheadian God is not to be worshiped, and is thus separated from the power of worship that religious Gods inspire, it may be because the point is to restore to the world what it had been stripped of at the onset.” Stengers, *Thinking with Whitehead: A Free and Wild Creation of Concepts*, trans. Michael Chase (Cambridge, MA: Harvard University Press, 2011), 484.

¹⁵¹ It is difficult to simplify Whitehead’s language, and here I have inserted a teleological frame which was not part of Whitehead’s argument.

¹⁵² PR, 85.

¹⁵³ Whitehead will later flesh out this idea in his notion of the consequent nature of God.

¹⁵⁴ PR, 85.

data.” Whitehead will describe this process as “the miracle of creation.” They “clothe the dry bones with the flesh of a real being, emotional, purposeful, appreciative.”¹⁵⁵

The emotional relationship between God and the entity flows both ways, creating and building all participants. Whitehead sees this relationship as generative, yes, but further, God seeks “intensity.” “His aim for [his desire] is *depth of satisfaction* as an intermediate step towards the *fulfilment* of his own being.”¹⁵⁶ This almost greedy portrait of God, Whitehead complicates further positing that “God is indifferent alike to preservation and to novelty.”¹⁵⁷ Here Whitehead is describing God in his “*primordial* nature.” As his desires are primordial, “there is nothing to preserve,” and further God “is unmoved by love for this particular, or that particular,” of “whether an immediate occasion be old or new.” It is as though life begins anew with each occasion. Whitehead writes, God’s “tenderness is directed towards each actual occasion as it arises.”¹⁵⁸ This leads us to Whitehead’s notion of “becoming.”

Whitehead asserts that “each actual entity is a locus for the universe.”¹⁵⁹ “Locus” in a general, pedestrian definition is simply “a point,” and I would read this (in a cursory way) as the universe emanates from the point. “Locus,” however, is also a mathematical term, “the set or configuration of all points satisfying specified geometric conditions.”¹⁶⁰ If “each actual entity is a locus for the universe,” then, from the mathematical view, the perspective is flipped – *the*

¹⁵⁵ PR, 85. Whitehead quotes Ezekiel, “So I prophesied as he commanded me, and the breath came into them, and they lived, and stood up upon their feet, an exceedingly great army.” Ezekiel 37:10.

¹⁵⁶ PR, 105, (emphasis mine).

¹⁵⁷ Ibid., PR, 105. Please note, reader, that Whitehead is building a path forward and we are not yet halfway there. Our perspective of God’s nature is skewed at this point, which feels unsatisfactory. God’s primordial nature is not the fullness of God. God, the full God, is not selfish or greedy, as Hartshorne writes, “God cannot possibly miss the enjoyment of any beauty divinely given to others, the final harvest from every seed sown is reaped by God, And this is the meaning of divine cognitive-perceptive perfection.” Harsthorne, *Omnipotence*, 120.

¹⁵⁸ PR, 105.

¹⁵⁹ PR, 80.

¹⁶⁰ *The American Heritage Dictionary of the English Language*.

universe creates the conditions, and it is the actual entity which satisfies those conditions.

Further, the entity may be the locus for any corresponding conditions created by the universe, which Whitehead iterates as “it belongs to the nature of a ‘being’ that it is a potential for every ‘becoming.’”¹⁶¹ Importantly for Whitehead, “*how* an actual entity becomes constitutes *what* that actual entity is.”¹⁶² And lastly, “The way in which one actual entity is qualified by other actual entities is the ‘experience’ of the actual world enjoyed by that actual entity, as subject.”¹⁶³ So, we have the organism, the actual entity which is part of the universe, both creator and created, within which all potentials exist, and how those potentials become constitute what they will be, and that it is through experiencing interaction with other organisms that the actual entity becomes.

Whitehead writes, “Process is the becoming of experience.”¹⁶⁴

Now we will look at Whitehead’s process in further detail, at flow and flux. Whitehead begins, “all things flow,” then adds, “the flux of things is one ultimate generalization around which we must weave our philosophical system.”¹⁶⁵ Whitehead posits that he has “transformed the phrase, ‘all things flow,’ into the alternative phrase, ‘the flux of things.’” Then he proposes a series of questions, a close reading if you will. “But in the sentence ‘all things flow,’ there are three words – and we have started by isolating the last word of the three. We move backward to the next word ‘things’ and ask, what sort of things flow? Finally we reach the first word ‘all’ and ask, What is the meaning of the ‘many’ things engaged in this common flux and what sense, if any, can the word ‘all’ refer to a definitely indicated set of these many things?”¹⁶⁶ Unpacking this

¹⁶¹ PR, 166.

¹⁶² PR, 166, (emphasis in original).

¹⁶³ PR, 166.

¹⁶⁴ PR, 166.

¹⁶⁵ PR, 208. “All things flow, nothing abides,” is from Heraclitus. Faber, citing Ernest Wolf-Gazo, *Whitehead: Einführung in seine Kosmologie* (Freiburg: Alber, 1980), notes Heraclitus as a builder of process theology from “a more distant intellectual-historical context” – “the world as an eternal creative process of becoming (*panta rhei*), guided by self-creative, living reason.” Faber, *Poet*, 8.

¹⁶⁶ PR, 208.

introduction will be challenging, but requisite. As Whitehead writes, “The elucidation of meaning involved in the phrase ‘all things flow’ is one chief task of metaphysics.”¹⁶⁷

How things come to be or what the flow looks like is our next task. For Whitehead, there are three phases: “objectification,” “concrescence,” and “satisfaction.” Whitehead defines his “theory of objectification” as “how the actual particular occasions become original elements for a new creation.”¹⁶⁸ The act of objectification for the community of occasions “is an operation of mutually adjusted abstractions, or elimination, whereby the many occasions of the actual world become one complex datum.”¹⁶⁹ So, it is from a foundation of a community of individual unities, each adding only their requisite natures, that the new unity is born. “The universe of many things acquires an individual unity in a determinate relegation of each item of the ‘many’ to its subordination in the constitution of the novel ‘one.’”¹⁷⁰ The process which creates the novel “one,” Whitehead terms “concrescence,” and the novel “one” he terms an “actual entity” or an “actual occasion.” This ties back to locus, and the notion that the universe creates the conditions, and it is the actual entity which satisfies those conditions. “Satisfaction” is indeed the term Whitehead provides for the completion of the actual entity or actual occasion. Prior to “satisfaction,” “the concrescence exhibits sheer indetermination as to the nexus between its many components.”¹⁷¹ Further, “The ‘satisfaction’ is the culmination of the concrescence into a

¹⁶⁷ PR, 208. Thinking of this in reference to the continuum or dipole, might alternative statements be, “all things are in the flow,” or “all things react to the flow.” It depends on how one thinks of flow – water, for instance, flows as in a river flows, each piece of water moving along as a combined entity. We may also consider a boat flowing along with the river, but it is not part of the river. Once “flux” is introduced, the boat may no longer be considered, as the boat is still just the boat, whereas the water, if thought of as the river, is in flux – ever changing to match the shores and the riverbed. I am thinking of Janie’s words from *Their Eyes Were Watching God*, “Then you must tell ‘em dat love ain’t somethin’ lak uh grindstone dat’s de same thing everywhere and do de same thing tuh everything it touch. Love is lak de sea. It’s uh movin’ thing, but still and all, it takes its shape from de shore it meets, and it’s different with every shore.” Zora Neal Hurston, *Their Eyes Were Watching God* (New York: Harper & Row, 1990), 182.

¹⁶⁸ PR, 210.

¹⁶⁹ PR, 210.

¹⁷⁰ PR, 211.

¹⁷¹ PR, 212.

completely determinate matter of fact.”¹⁷² How, then, is the “satisfaction” noted or realized? Whitehead calls it “feeling.” “Feeling” describes the “operations transforming entities which are individually alien into components of a complex which is concretely one” or “an actual occasion is a concrescence effected by a process of feelings.”¹⁷³ “Feeling,” for Whitehead, “is a complex of feelings, including their specific elements of identity and contrast.”¹⁷⁴ The concrescence process is actually a “process of the integration of feeling,” and this operation, “proceeds until the concrete unity of feeling is obtained.” Further, “The many entities of the universe, including those originating in the concrescence itself, find their respective roles in this final unity.”¹⁷⁵ The complex unity of the nexus produces feelings of satisfaction, of an approach towards God’s ideal future.

All things flow, and within the limitations of God’s desire there is creativity. There is a *novel creation*. This novelty is a concrescence within the continuum of existence. From the prior, a new entity or event is created, carrying with it its past existence but with a building up or shedding off substantial enough for distinction.¹⁷⁶ The old is not destroyed or subsumed, the novelty is born. And within the continuum of existence the creative flow continues.¹⁷⁷ As Whitehead wrote in *Religion in the Making*, “There is a kingdom of heaven prior to the actual passage of actual things, and there is the same kingdom finding its completion through the

¹⁷² PR, 212.

¹⁷³ PR, 211.

¹⁷⁴ PR, 211. See note 75 on Eliot, Arendt, and the notions of distinction and conflict.

¹⁷⁵ PR, 211-212.

¹⁷⁶ Later in his thought process, Whitehead will add the term “appropriation,” and writes, “these occasions of experience, are the really real things which in their collective unity compose the evolving universe, ever plunging in the creative advance.” Whitehead, *Modes of Thought*, 206.

¹⁷⁷ There is an unspoken theme of freedom folded within the notion of creativity. It’s only hinted at, but I do sense it. Hartshorne puts it nicely, writing, “the ultimate freedom is not in ‘behavior’ but in experience, just *how* that particular experience prehends its past, including in that past God’s decision, already made, for the particular occasion.” Hartshorne, *Omnipotence*, 22, (emphasis in original).

accomplishment of this passage.”¹⁷⁸ Within the continuum, the kingdom of God was, is, and forever shall be manifesting itself here, there, and everywhere; and all at once.

¹⁷⁸ RM, 87.

Chapter III: Dipolar

*The nature of God is dipolar.*¹⁷⁹ A.N. Whitehead

The notion of dipolar has come up repeatedly, and in the closing chapter of *Process and Reality*, Whitehead focuses intently on this concept.¹⁸⁰ The dipolar relationship is markedly valuable in understanding God and God's work in the material world. To reiterate, a dipole is non-binary: it is a complex, continuous, and variable event consisting of two entities of equal and opposite charge, mass, etc. which produce an electromagnetic field that permeates the three-dimensional space surrounding the entities. When discussing his categories earlier in *Process and Reality*, Whitehead posited that experience and becoming are dipolar in nature, writing, "Any instance of experience is dipolar, whether that instance be God or an actual occasion of the world. The origination of God is from the mental pole, the origination of an actual occasion is from the physical pole."¹⁸¹ In discussing the satisfaction of becoming, he wrote, "The process of becoming is dipolar, (i) by reason of its qualification by the determinateness of the actual world, and (ii) by its conceptual prehensions of the indeterminateness of eternal objects. The process is constituted by the influx of eternal objects into a novel determinateness of feeling which absorbs the actual world into a novel actuality."¹⁸² And later, returning to the ideas of mental and physical, he reiterates, "an actual entity is essentially dipolar with its physical and mental poles; and even the

¹⁷⁹ PR, 345.

¹⁸⁰ Portions of this chapter consist of reworked material presented as "God and the World: A Whitehead Reading" written for Paul Jones and his class *Freedom*, Fall 2022.

¹⁸¹ PR, 36.

¹⁸² PR, 45. Whitehead's notion of dipolar holds similarities to Hegel's dialectic. Hegel writes of the twofold nature of self-consciousness, "self-consciousness is *in* and *for itself* while and as a result of its being *in* and *for itself* for another." G. W. F. Hegel, *The Phenomenology of Spirit*, trans. and ed. Terry Pinkard (New York: Cambridge University Press, 2018), 108, (emphasis in original). Further that the entity which sees its reflection in the other forms a unity, "a multi-sided and multi-meaning intertwining, such that, on the one hand, the moments within this intertwining must be strictly kept apart from each other, and on the other hand, they must also be taken and cognized at the same time as not distinguished." Hegel, *Spirit*, 108. I note that Hegel misses the dipolar creativity, the energy which binds and separates.

physical world cannot be properly understood without reference to its other side, which is the complex of mental operations.”¹⁸³ Incomprehension, not “properly understood,” and out of relation, Whitehead will later describe by writing that the physical and mental are “indissoluble.”¹⁸⁴

Building on these precursors, Whitehead will use the mathematic and scientific notion of dipolar within a description of God and of the God/world relationship. It is important to state that for Whitehead, God is still God, the world is still the world, and how God loves the world also remains. What has occurred for Whitehead (and his cohort) is that their perspective has changed. Whitehead is not *seeing*, but prehending God, the world, and love from an unfamiliar perspective and describing to his readers “the view” from there.¹⁸⁵ Indeed, as Whitehead contends, “God is not to be treated as an exception to all metaphysical principles, invoked to save their collapse. He is their chief exemplification.”¹⁸⁶

God: Primordial and Consequent

Before we look at Whitehead’s notion of God’s nature as being “primordial” and “consequent,” we need to highlight the difficulties inherent to abstraction: in this case *two* natures – one *and* another. Whitehead himself will note the difficulties of conjunction, writing, “the little

¹⁸³ PR, 239.

¹⁸⁴ PR, 244.

¹⁸⁵ It is up to us to stretch our imagination, to go visiting with Whitehead, to join with him in catching a glimpse from this new perspective. One of the more frustrating things about studying Whitehead is that I hold a desire for clarity, and I hold expectations (completely unfounded) that a view from above (as described by one who has such a view) will provide that clarity – an overview. Whitehead does not provide such clarity, there will always be a wrestling, an agonistic unsettled process. An overview after all, may be disorienting. For a full discussion of the “overview effect” see, Kendrick Oliver, *To Touch the Face of God: The Sacred, the Profane, and the American Space Program, 1957-1975* (Baltimore: Johns Hopkins University Press, 2013.)

¹⁸⁶ PR, 343.

word ‘and’ is a nest of ambiguity.”¹⁸⁷ John Cobb cautions that Whitehead’s “separate and contrasting treatment of the two natures is misleading,” and further that Whitehead “was himself misled into exaggerating their separability.”¹⁸⁸ Cobb posits, “It is always the actual entity [the complete synthesis] that acts, not one of its poles as such, although in many of its functions one pole or another may be primarily relevant.”¹⁸⁹ The following examination will aptly illustrate these difficulties.

Whitehead begins his work by describing God as “primordial.” While it is tempting to latch on to Whitehead’s term and claim that God *is* primordial – that He is first, that He is the alpha and omega – Whitehead’s notion is more complex. For Whitehead, God is “the unlimited conceptual realization of the absolute wealth of potentiality.”¹⁹⁰ God then holds, not everything that can happen, but the best of what can happen.¹⁹¹ What seems urgent for Whitehead is that God “is not *before* all creation, but *with* all creation.”¹⁹² God and creation are interwoven with God luring creativity in the direction of His satisfaction. In God’s primordial state, Whitehead posits that God, God’s-self, the Godself is, “deficiently actual,” in that “His feelings are only conceptual and so lack the fullness of actuality.”¹⁹³ And because God’s feelings are conceptual, they “are devoid of consciousness in their subjective forms.”¹⁹⁴

¹⁸⁷ Whitehead, *Modes of Thought*, 75.

¹⁸⁸ Cobb, *Natural Theology*, 178.

¹⁸⁹ Cobb, *Natural Theology*, 178.

¹⁹⁰ PR, 343. Whitehead foreshadowed this notion earlier in the text, writing, “The things which are temporal arise by their participation in the things which are eternal. The two sets are mediated by a thing which combines the actuality of what is temporal with the timelessness of what is potential.” PR, 40.

¹⁹¹ This notion is intriguing as it brings up omnipotence. In my thinking of omnipotence in Whitehead, a term he does not use, I have adjusted my perspective to consider omnipotence as more like “omnivore.” Omnivores may eat anything, but they do not eat everything.

¹⁹² PR, 343, (emphasis in original).

¹⁹³ PR, 343.

¹⁹⁴ PR, 343.

Again, it is tempting to jump to conclusions, this time the opposite of the last, and believe that Whitehead is using “primordial” as unformed, as the primordial ooze. But this is not so. Whitehead writes, God “is the unconditioned actuality of conceptual feeling at the base of things; so that, by reason of this primordial actuality, there is an order in the relevance of eternal objects to the process of creation.”¹⁹⁵ God then provides the foundation which orders all subsequent activities, but as Whitehead points out, God is not constrained by his foundational nature, “His unity of conceptual operations is a free creative act, untrammelled by reference to any particular course of things.”¹⁹⁶ God is not unformed, God is primordial in that They are the foundation for the yet-to-be (also primordial) world – the co-creator of existence. Whitehead illustrates how God creates, writing, “He is the lure for feeling, the eternal urge of desire,” and that God then is “the initial ‘object of desire’ establishing the initial phase of each subjective aim.”¹⁹⁷ For Whitehead then, God not only pulls from in front, but also is the initiation from which the creation springs.¹⁹⁸

¹⁹⁵ PR, 344. John Cobb refers to “primordial” as “eternally unchanging.” Cobb, *Natural Theology*, 155.

¹⁹⁶ PR, 344.

¹⁹⁷ PR, 344. Jones refers to Whitehead’s notion of the consequent nature of God as “a bold reconceptualization of divine power.” Jones, *Patience*, 242. And further, “Divine power is always and only the power of *suggestion*, articulated in light of God’s sensitivity to a range of creaturely happenings – an array of ideational ‘nudges,’ distributed across time and space, whose realization grows the world in the direction of greater intensities of truth, goodness, and beauty.” Jones, *Patience*, 243, (emphasis in original). Hartshorne writes, “The only livable doctrine of divine power is that it influences all that happens but determines nothing in its concrete particularity.” Hartshorne, *Omnipotence*, 25.

¹⁹⁸ Whitehead cites Aristotle and ed. W. D. Ross, *Aristotle's Metaphysics* (Oxford: Clarendon Press, 1912.) Although Whitehead attempts to reconcile an Aristotle passage with his own ideas, Aristotle remains problematic. Whitehead notes that “the notion of God as the ‘unmoved mover’ is derived from Aristotle.” PR, 342. And as Faber expands on this idea, citing R. L. Fetz, *Whitehead: Prozessdenken und Substanzmetaphysik* (Freiburg: Symposion, 1981.), Aristotle’s most lasting notion was “the determination of the essence of a thing as that which abides amid all change, that is, that which remains the *same* amid all change.” Faber, *Poet*, 50, (emphasis in original). Aristotle, I see as markedly conservative, as in a hoping for retention instead of a celebration of the novel. Aristotle’s conservatism carried forward in Christian thought. Paul Fiddes sums it up, “Theological statements throughout the history of the Church have tended to support [the] view of God as a self-protecting monarch, unmoving, unchanging, unsuffering. We need recall only the warning pronounced by the Council of Chalcedon in AD 451: ‘The synod deposes from the priesthood those who dare to say that the Godhead of the only-begotten is passible.’” Fiddes, *The Creative Suffering of God* (New York: Oxford University Press, 1988.), 1. Fiddes quotes from *Creeeds, Councils and Controversies*, ed. J. Stevenson (London: SPCK, 1966), 336.

Returning to the idea of initiation, the world is not only constrained by the foundation, but also requires the foundation for its possibility. Whitehead writes, “The *particularities* of the actual world presuppose *it*; while *it* merely presupposes the *general* metaphysical character of creative advance, of which it is the primordial exemplification.”¹⁹⁹ God “exemplifies and establishes the categoreal (*sic*) conditions.”²⁰⁰ God then is the model for creation, *and* the Creator of creation. Whitehead’s “categoreal” revolves around “*how* an actual entity *becomes* constitutes *what* that actual entity *is*.”²⁰¹ The creation is thoroughly colored by the Creator – the clay pot may not *be* any other way than the potter forms it – for the created, actuality and creation are utterly dependent. As Whitehead writes, the entity’s “‘being’ is constituted by its ‘becoming.’ This is the ‘principle of process.’”²⁰²

For a moment, I’ll gloss over Whitehead’s notion and posit that the Creator’s desires guide the creation of the created.²⁰³ The Godself’s “conceptual feelings” that constitute Their “primordial nature” are in a sense “subjective” in that they are from God. And as such, they exemplify and conspire to achieve creation, a creation that is desired, valued by God. The life of the beloved creation, or as Whitehead dryly terms the “subjective aim,” has its start as God’s “object of desire.”²⁰⁴ Not only is the creation desired, but it is also built on the foundation of the primordial nature of God, and as such it is whole. As Whitehead writes, God is “the principle of concretion – the principle whereby there is initiated a definite outcome from a situation otherwise riddled with ambiguity.”²⁰⁵

¹⁹⁹ PR, 344, (emphasis in original).

²⁰⁰ PR, 344.

²⁰¹ PR, 23, (emphasis in original).

²⁰² PR, 23.

²⁰³ Whitehead’s God is not the “Creator.” I use this oversimplification to illustrate a point. For Whitehead, existence is co-created. As John Cobb, reiterates, Whitehead “prefers to speak of God and the temporal world as jointly qualifying or conditioning creativity.” Cobb, *Natural Theology*, 204.

²⁰⁴ PR, 344.

²⁰⁵ PR, 345.

God's primordial nature is only half of God's description.²⁰⁶ Whitehead writes, "But God, as well as being primordial, is also consequent. He is the beginning and the end." Further, that, "the nature of God is dipolar."²⁰⁷ I see Whitehead's notion of the "primordial nature" of God, as the unmoved mover, as rational and comprehensible, but as noted above, the "unmoved mover" is a trap, and must be avoided.²⁰⁸ Whitehead introduces us to a second or "consequent" nature of God, leading us down an as yet unclear path away from the snare. Does the creation of the pot change the potter, the "artisan"?²⁰⁹ First of all, Whitehead wants us to understand that "beginning" is not of the past, or more accurately, not *only* of the past. God is also now.

Whitehead writes, "He is the presupposed actuality of conceptual operation, in unison of becoming with every other creative act."²¹⁰ God then is the requisite being of foundational work that intertwines in the creation of being. To put it another way (with a nod to Barth), God is, and They love the world into being. Whitehead continues, "Thus, by reason of the relativity of all things, there is a reaction of the world on God. The completion of God's nature into a fulness of physical feeling is derived from the objectification of the world in God."²¹¹ God's primordial and

²⁰⁶ "Half" is a misleading abstraction, as much as "two" is a misleading abstraction. God is simply one, the one, and as noted in our examination of the continuum, Godself is everywhere all at once.

²⁰⁷ PR, 345. Whitehead states that the reason God's nature is dipolar is that He may not be considered as other than an "actual entity," and "analogously" must be treated as all the others.

²⁰⁸ Whitehead writes, "So long as the temporal world is conceived as a self-sufficient completion of the creative act" from God who "is at once eminently real and the unmoved mover, from this conclusion there is no escape." PR, 342. Paul Jones notes that this "self-sufficient completion" is "ascribing maximal power to a deity who exists in splendid isolation." Jones, *Patience*, 241. God does not exist in isolation.

²⁰⁹ Hegel uses the terms "artisan" in creation, "Spirit therefore here appears as the *artisan*, and his doing, whereby he brings forth himself as object, although not yet having taken hold of the thought himself, is an instinctive kind of working, much like bees building their cells." Hegel, *Spirit*, 401, (emphasis in original).

²¹⁰ PR, 345.

²¹¹ PR, 345. Hegel writes of the two aspects of spirit which I see as aligning or parallel to Whitehead's two sides of God: "One is this, that *substance* relinquishes itself of its own self and becomes self-consciousness; the other, conversely, is that *self-consciousness* empties itself of itself and makes itself into thinghood, or into the universal self." Hegel, *Spirit*, 433, (emphasis in original). Faber, ever defending process theology, cautions us against over-alignment with Hegel as it may lead to a dispossession of the notion of the "mystery of God," which Faber counters by writing, "Whitehead nowhere presents this sort of rationalistic resolution of the mystery of the world and God (or of the world *in* God)." Faber, *Poet*, 254, (emphasis in original).

consequent natures are dipolar and God's relation with the world is also dipolar – they are indissoluble. As God loves the world into being, He is fulfilled, and He grows with the world.²¹² As Whitehead continues, God “shares with every new creation its actual world.”²¹³ Sharing is living with and growing with another in union. Whitehead reminds his readers that “God's conceptual nature is unchanged, by reason of its final completeness. But his derivative nature is consequent upon the creative advance of the world.”²¹⁴ Whitehead summarizes, “the nature of God is dipolar. He has a primordial nature and a consequent nature. The consequent nature of God is conscious; and it is the realization of the actual world in the unity of his nature [...], is the weaving of God's physical feelings upon his primordial concepts.”²¹⁵ God's consequent nature is in a process of completion initiated through experience with the physical world.

Returning to our definition of a dipole, “a pair of electric charges or magnetic poles, of equal magnitude but of opposite sign or polarity, separated by a small distance;” when Whitehead wrote, “the nature of God is dipolar,” and highlighted God's two natures: “primordial” and “consequent,” he was positing not two natures, but a far more complex notion – two natures combined but separated by a gap, a space created by the tension between the natures.²¹⁶ So now, when Whitehead describes the relation between God and the World, he is using the term “Creativity” to illuminate the gap.²¹⁷ Creativity is the vibrant space between, the tension of repulsion and attraction, holding God and the World together and apart.²¹⁸ For Whitehead the

²¹² Charles Hartshorne labels the ever-enlarging God “the self-surpassing surpasser of all.” Hartshorne, *The Divine Relativity: A Social Conception of God* (New Haven: Yale University Press, 1948), 20.

²¹³ PR, 345.

²¹⁴ PR, 345.

²¹⁵ PR, 345.

²¹⁶ PR, 345.

²¹⁷ Stengers will term this interstitial energy “divine induction,” as in a flow of power existing in the in-between. Stengers, *Thinking*, 477.

²¹⁸ Although Whitehead does not discuss a triune God, I don't think it too much of a stretch to consider Creativity as the Holy Spirit – that energy which holds the two figures (Father and Son) as well as God and World, together. I don't see Creativity as coming before or after God, I see Creativity as being of God.

poles are enjoyment/physical and appetite/conceptual; and Creativity is both that interstitial space between the states as well as the ongoing process of satisfaction.

God's love is perfect and born of "the completeness of his primordial nature" which flows "into the character of his consequent nature."²¹⁹ Whitehead shifts now to the "wisdom" or action of God's love. God's love seizes every life "for what it can be in such a perfected system – its sufferings, its sorrows, its failures, its triumphs, its immediacies of joy – woven by rightness of feeling into the harmony of the universal feeling, which is always immediate, always many, always one, always with novel advance, moving onward and never perishing."²²⁰ God's love then holds all of life.²²¹

What is urgent for Whitehead, is that all aspects of existence are held by God, "prehended," seized – yes, saved. God "saves the world as it passes into the immediacy of his own life. It is the judgement of a tenderness which loses nothing that can be saved. It is also the judgment of a wisdom which uses what in the temporal world is mere wreckage."²²² Additionally, Whitehead wants us to understand that God is patient, and Their patience is infinite. Whitehead

James Bradley adheres to Trinitarian thought in Whitehead, positing "process theology is essentially an elaboration of various Trinitarian themes." Faber, *Poet*, 1.

²¹⁹ PR, 345.

²²⁰ PR, 346.

²²¹ Barth writes of a similar view, but from a different perspective, "What God according to His Word wills with men and from men is that they should and must hear, believe, know and reckon with this; in great things and small, in whole and in part, in the totality of their existence as men, they should and must live with the fact that not only sheds new light on, but materially changes, all things and everything in all things—the fact that God is." Karl Barth, *Doctrine of God, Vol. 1 (25-31): 1. the being of God in Act*, eds. Geoffrey William Bromiley and Thomas Forsyth Torrance. (Edinburgh, Scotland: T & T Clark, 1957). https://search.alexanderstreet.com/view/work/bibliographic_entity%7Cdocument%7C5057013. As I have introduced Barth, a quick note: Michael Welker considers the Barth/Whitehead "connection" in depth. There was no communication between them, either as individuals or as thought projects. They operated at separate times, with different views on existence that, depending on the perspective of their readers, are compatible or not. By holding their writings as primary texts, a manufactured pairing, there is a creative energy between them. Might we call this energy dipolar? Welker, "Barth's Theology and Process Theology." *Theology Today*, 43, no. 3, (1 Jan. 1986), 383 - 397.

²²² PR, 346. In reference to "loses nothing that can be saved," see Dietrich Bonhoeffer's discussion of "The Last Things and the Things Before the Last," particularly, his discussion of the "Penultimate." Bonhoeffer, *Ethics*, trans. Neville Horton Smith (New York: Macmillan, 1955), 125-133.

writes, “The universe includes a threefold creative act composed of (i) the one infinite conceptual realization, (ii) the multiple solidarity of free physical realizations in the temporal world, (iii) the ultimate unity of the multiplicity of actual fact with the primordial conceptual fact.”²²³ I read this as God loves the world into being, the multiplicity of the physical world is ever changing, God folds that change back into Their perfect self.²²⁴ The first and the last (the alpha and the omega) allows us, as Whitehead writes, “to conceive of the patience of god, tenderly saving the turmoil of the intermediate world by the completion of his own nature.”²²⁵ Further, “God’s role [...] lies in the patient operation of the overpowering rationality of his conceptual harmonization. He does not create the world, he saves it; or, more accurately, he is the poet of the world, with tender patience leading it by his vision of truth, beauty, and goodness.”²²⁶

This section, “God: Primordial and Consequent” has wrestled with Whitehead’s possibly most contentious idea. Not only the two-ness of God, but also a changing God. It is not possible to remove his ideas from two thousand (or even ten thousand) years of human history with God as community and continuum exist. It is, however, possible to note the scientific rupture or energy surge that Whitehead was living in and hold in our minds the creativity he utilized to hold the world and God together.

²²³ PR, 346.

²²⁴ Jones presents a similar notion, writing, “In God’s consequent nature, God subjects Godself to – or perhaps, is subjected to – the relational, processual, and ever-changing nexus of the cosmos, and God continuously folds that nexus into the time and space of God’s own life.” Jones, *Patience*, 242.

²²⁵ PR, 346.

²²⁶ PR, 346. God remains busy. As Jones writes, God is “empowering, supporting, waiting on, and delightedly approving the creaturely processes God sets in motion.” Jones, *Patience*, 317. Faber utilizes this passage to illustrate how God creates from the perspective of process theology. “Whitehead concurs with many process theologians that classical creation theology is formulated within a *context of coercive (or impositional) power*, whereas the theo-poetic difference of God and creativity inhering as countermetaphor in the threefold creative act is an attempt to reestablish the *original biblical context* for understanding God’s creative power from the perspective of God’s *relational love* and *alterity*. Faber, *Poet*, 203, (emphasis in original). Faber cites, Lewis S. Ford, “An Alternative to Creatio ex Nihilo,” *Religious Studies*, 19/2:205-13.

Creative Unification

Whitehead is attempting to find “everlastingness” or “completion” or atonement for God and the World – a way to prehend “the ‘many’ absorbed everlastingly in the final unity.”²²⁷

Whitehead defines the at-one-ment this way, “God is completed by the individual, fluent satisfactions of finite fact, and the temporal occasions are completed by their everlasting union with their transformed selves, purged into conformation with the eternal order which is the final absolute ‘wisdom.’”²²⁸ God’s love then, always and everywhere, pulls the world into itself and this always-event completes God Himself.

To continue our investigation of this section, let us look at Whitehead’s last sentence of the section. He uses it to wrap up his thoughts, but I see it better as an introduction to where he is taking his readers. “The theme of Cosmology, which is the basis of religions, is the story of the dynamic effort of the World passing into everlasting unity, and of the static majesty of God’s vision, accomplishing its purpose of completion by absorption of the World’s multiplicity of effort.”²²⁹ Whitehead’s project is to think our way into this event. Here, Whitehead gives us the crux of the problem, “God and the World are the contrasted opposites in terms of which Creativity achieves its supreme task of transforming disjointed multiplicity, with its diversities in opposition, into concrescent (*sic*) unity, with its diversities in contrast. In each actuality there are two concrescent poles of realization – ‘enjoyment’ and ‘appetition,’ that is, the ‘physical’ and the ‘conceptual.’ For God the conceptual is prior to the physical, for the World the physical poles are prior to the conceptual poles.”²³⁰

²²⁷ PR, 347.

²²⁸ PR, 347. “At-one-ment” is a term coined by Nancy Duff for the act of reconciliation. Nancy J. Duff, “Atonement and the Christian Life: Reformed Doctrine from a Feminist Perspective,” *Interpretation*, 53, no. 1, (January 1999): 21-33, 26.

²²⁹ PR, 349.

²³⁰ PR, 348.

To expand upon the “poles of realization,” Whitehead provides us with a series of antitheses:

It is as true to say that God is permanent and the World fluent, as that the World is permanent and God is fluent. It is as true to say that God is one and the world many, as that the World is one and God many. It is as true to say that, in comparison with the World, God is actual eminently, as that, in comparison with God, the World is actual eminently. It is as true to say that the World is immanent in God, as that God is immanent in the World. It is as true to say that God transcends the World, as that the World transcends God. It is as true to say that God creates the World, as that the World creates God.²³¹

How do we unravel this? For Whitehead, “In each antithesis there is a shift of meaning which converts the opposition into a contrast.”²³² I would like to begin our thought process with McTaggart’s description of Hegel’s dialectic. He writes,

If we examine the [dialectic] process in more detail, we shall find that it advances, not directly, but by moving from side to side, like a ship tacking against an unfavorable wind. The simplest and best known form of this advance, as it is to be found in the earlier transition of the logic, is as follows. The examination of a certain category leads us to the conclusion that, if we predicate it of any subject, we are compelled by consistency to predicate of the same subject the logical contrary of that category. This brings us to an absurdity, since the predication of two contrary attributes of the same thing at the same time violates the law of contradiction. On examining the two contrary predicates further, they are seen to be capable of reconciliation in a higher category, which combines the contents of both of them, not merely placed side by side, but absorbed into a wider idea, as moments or aspect of which they can exist without contradiction.²³³

Whitehead, then, is using the Hegelian dialectic, in a dipolar fashion, to creatively build new ideas. The contrast is creative. McTaggart adds that, “the lower categories are partly altered and partly preserved in the higher one, so that while their opposition vanishes, the significance of both

²³¹ PR, 348. While Whitehead calls these pairings “antitheses” I see them more as paradoxical as the pairings hold a larger truth in combination, a dipolar union. Stengers adds an additional antithesis, “It is as true to say that God is perpetually satisfied as to say that he is perpetually unsatisfied, and in this respect he constitutes a unique concrescence, without a past, in perpetual becoming, in unison with a world that transcends him as much as he transcends it.” Stengers, *Thinking*, 477.

²³² PR, 348.

²³³ John M. E. McTaggart, *Studies in the Hegelian Dialectic* (Cambridge: Cambridge University Press, 1896), 1.

is nevertheless to be found in the unity which follows.”²³⁴ The “significance” of each is maintained in the new creation, there is preservation and well as novelty, a continuum. So, when, for example, Whitehead provides the seemingly mutually exclusive phrases, “It is as true to say that God creates the World, as that the World creates God,” he is placing us intellectually in a place to let go of the dichotomy and behold the greater existence of the creative whole. Paul Jones has posited, “creativity as a metaphysical term can encompass diverse forms of dialectic, and thus serves as a valuable meta-concept, one that enables Whitehead to affirm (but not absolutize) various kinds of creaturely agonism and antagonism.”²³⁵ If I am reading Jones correctly, creativity may be viewed not only as the activation or catalyst in the interaction, but also as the product – creativity is grand enough to hold the dialectic. The struggle is real, but it is not the whole picture by far.

Whitehead continues his discussion of the “antitheses” this way, “God and the World stand over against each other, expressing the final metaphysical truth that appetitive vision and physical enjoyment have equal claim to priority in creation.” But in a dipolar system, “no two actualities can be torn apart: each is all in all.” Permanence and flux exist in both God and the World but come from opposite places. “In God’s nature, permanence is primordial and flux is derivative from the World: in the World’s nature, flux is primordial and permanence is derivative

²³⁴ McTaggart, *Dialectic*, 2. The Hegelian dialectic is markedly dipolar although Hegel wrote before that scientific discovery. Jung, without citing Hegel holds a similar position. He writes, “one is not a number at all; the first number is two. Two is the first number because, with it, separation and multiplication begin, which alone make counting possible. With the appearance of the number two, *another* appears alongside the one, a happening which is so striking that in many languages ‘the other’ and ‘the second’ are expressed by the same word.” Jung, *Dogma*, 118, (emphasis in original). Further, “The ‘One’ and the ‘Other’ form an opposition, but there is no opposition between one and two, for these are simple numbers which are distinguished only by their arithmetical value and nothing else. The ‘One,’ however, seeks to hold to its one-and-alone existence, while the ‘Other’ ever strives to be another opposed to the One. The One will not let go of the Other because if it did, it would lose its character; and the Other pushes itself away from the One in order to exist at all. Thus there arises a tension of opposites between the One and the Other. But every tension of opposites culminates in a release, of which comes the ‘third.’ In the third, the tension is resolved and the lost unity is restored.” Jung, *Dogma*, 118-119.

²³⁵ Jones, personal notes to the author related to “God and the World.”

from God.”²³⁶ God and the World, as two poles in the dipolar system, “stand to each other in mutual requirement. In their unity, they inhibit or contrast. God and the World stand to each other in this opposed requirement.”²³⁷ God and the World may not be torn apart, but their individual oppositional natures are requisite for their unity.

God and the World exist in contrast; however, each is drawn to the other as there is seeking. Whitehead writes, “God is the infinite ground of all mentality, the unity of vision seeking physical multiplicity. The World is the multiplicities of finites, actualities seeking a perfected unity.”²³⁸ The contrast then is mutually complimentary. Although Whitehead writes, “Creation achieves the reconciliation of permanence and flux when it has reached its final term with its everlastingness – the Apotheosis of the World,” that apotheosis, that divine exaltation, is never achieved, for the seeking never stops. Whitehead also writes, “Neither God, nor the World, reaches static completion. Both are in the grip of the ultimate metaphysical ground, the creative advance into novelty. Either of them, God and the World, is the instrument of novelty for the other.”²³⁹ “Instruments of novelty,” yes, but also “creative advance into novelty,” or movement. “In every respect God and the World move conversely to each other in respect to their process. In the process, the one-ness of God gains multiplicity, and the multiple-ness of the World gains unity, an at-one-ness. Whitehead posits the resolution of his antitheses through this contrasting process, “Thus God is to be conceived as one and as many in the converse sense in which the World is to be conceived as many and as one.”²⁴⁰ In the dipolar system, there will always be many but united by the surrounding energy field. The at-one-ness is at once created by the energy and is the energy.

²³⁶ PR, 348.

²³⁷ PR, 348.

²³⁸ PR, 348-349.

²³⁹ PR, 349.

²⁴⁰ PR, 349.

The dipolar relationship is ever expanding. What makes God whole is Their absorption of the multiplicity of the actual world into Their conceptual nature. And conversely, the world, or more specifically, the objects residing in the multiplicity of existence, lack wholeness until they are folded into God's conceptualization of them. This is Whitehead's notion of redemption. The physical world remains a clanging cymbal, unless/until God lovingly folds that multiplicity into Their oneness.²⁴¹ Whitehead calls this folding, "an *enlargement* of the understanding to the comprehension of another phase in the nature of things."²⁴² Again, the dipolar relationship is ever expanding. Finally, this co-reception produces a novelty, a birth, into something new. The novel entity is not a passage of death but a rebirth into an enlarging existence. God and the world grow. Redemption or growth is difficult but the reborn experience joy. As Whitehead states, "The sense of worth beyond itself is immediately enjoyed as an overpowering element in the individual self-attainment. This is the notion of redemption through suffering which haunts the world."²⁴³ Within the dipolar relationship, we must be reminded, the original entities remain. God is still God, and the world is still the world. The "antitheses" remain, "All the 'opposites' are elements in the nature of things, and are incorrigibly there. The concept of 'God' is the way in which we understand this incredible fact – that what cannot be, yet is."²⁴⁴ God then, for Whitehead, is not only God, but also the name of the event of redemption, of the folding of God and the world into the enlarging cosmos.

The consequent nature of God is a continuous realization, "an unrelenting advance beyond itself," and "a multiplicity of actual components in process of creation."²⁴⁵ To help us understand

²⁴¹ See Paul's description of "love," 1 Corinthians 13.

²⁴² PR, 349, (emphasis mine).

²⁴³ PR, 350.

²⁴⁴ PR, 350.

²⁴⁵ PR, 350. Kant writes, "That law of all laws (*love God above all, and your neighbor as yourself*), therefore, like all the moral precepts of the Gospel, presents the moral disposition in its complete perfection, in such a way that as an ideal of holiness it is not attainable by any creature but is yet the archetype which we should strive to approach and resemble in an uninterrupted but endless progress."

this “chain of elements,” Whitehead throws us a bone; God’s action in the physical world behaves “according to the same principle as in the temporal world the future inherits from the past. Thus, in the sense in which the present occasion is the person *now*, and yet with his own past, so the counterpart in God is that person in God.”²⁴⁶ With this explanation, we catch a glimpse of Whitehead’s redemption, in the way that our present selves are an outgrowth of our previous selves. There is no end to the redemption or to the consequent nature of God. There is constant refinement. As Whitehead posits, the “principle of universal relativity” requires that this “nature itself passes into the temporal world according to its gradation of relevance to the various concrescent occasions.”²⁴⁷ Within the dipolar relationship, as there was with the relationship in community, there is a shedding of the irrelevant natures of the entities. The rebirth is continual.

Whitehead’s God has a dipolar nature, and God and the world also exist as a dipole – God does *not* only have two natures and God and the world are *not* completely separated. Creativity holds God’s natures and holds Godself from the world as distinctions and as unified wholes – God is distinct and the world is distinct, but neither may be separated from the other. Creativity also binds. And as this force is creativity, the action is generative. There is a perpetual process and growth into novelty. Might we call this grace?²⁴⁸

Immanuel Kant, *Critique of Practical Reason*, in *Immanuel Kant: Practical Philosophy*, trans. Mary J. Gregor (New York: Cambridge University Press, 1996), 207. In the original German text, the phrase Kant used was “*aber unendlichen Progrefflus*.” “Progrefflus” or “Progressus” does not seem to be, at least a modern, German word, it is Latin. Google translates this phrase as “but infinite progression.” Gregor (with obviously more knowledge than I) translates it as “but endless progress.” I was wondering if the phrase could be translated more as “process” and less as “progress.” Is there a difference between “progression” and “progress”? It’s subtle, but I think so.

²⁴⁶ PR, 350, (emphasis in original).

²⁴⁷ PR, 350.

²⁴⁸ With thanks to Dave Zahl for his description of grace as generative in discussing John M. G. Barclay, *Paul and the Gift* (Grand Rapids, MI: Eerdmans, 2015.)

Epilogue: The Love of God for the World

*In Jesus, God's nature is manifested as love, and God's actions are determined by precisely that love.*²⁴⁹ – Roland Faber

As I previously examined, for Whitehead, God's role "lies in the patient operation of the overpowering rationality of his conceptual harmonization. He does not create the world, he saves it; or, more accurately, he is the poet of the world, with tender patience leading it by his vision of truth, beauty, and goodness."²⁵⁰ The notion of God saving the world is vital in a world of constant change, of growth, of evolution – the entities and events acting as foundations for the next novel concrescence. The world, Whitehead writes, "craves for novelty, and yet is haunted by terror at the loss of the past, with its familiarities and its loved ones."²⁵¹ He then notes, "In the temporal world, it is the empirical fact that process entails loss: the past is present under an abstraction. But there is no reason, of any ultimate metaphysical generality, why this should be the whole story."²⁵² And it is not the whole story, as we will see. Whitehead adds,

In our cosmological construction we are, therefore, left with the final opposites, joy and sorrow, good and evil, disjunctions and conjunctions – that is to say, the many in one – flux and permanence, greatness and triviality, freedom and necessity, God and the World. In this list, the pairs of opposites are in experience with a certain ultimate directness of intuition, except in the case of the last pair. God and the World introduce the note of interpretation. They embody the interpretation of the cosmological problem in terms of a fundamental metaphysical doctrine as to the quality of creative origination, namely conceptual appetite and physical realization.²⁵³

"Intuition" versus "interpretation" is a key to unlocking the everlastingness of that which is past.

²⁴⁹ Faber, *Poet*, 205. Faber is stating this to argue against a God of domination and a God who creates from nothing. Faber's statement, however, brings us to the cross and to God who lost so that the future would be gained.

²⁵⁰ PR, 346.

²⁵¹ PR, 340.

²⁵² PR, 240.

²⁵³ PR, 341.

There are, for Whitehead, “four creative phases in which the universe accomplishes its actuality.” These phases reinforce what I have examined above. The first phase is God’s ideation of the ideal future, or as Whitehead writes, “of conceptual origination, deficient in actuality, but infinite in its adjustment of valuation.” In the second phase, the entity begins its concrescence; “the temporal phase of physical origination, with its multiplicity of actualities.” In the third phase the entity becomes “really real.” It attains “perfected actuality, in which the many are one everlastingly.” It is everlasting in that its realness exists as a foundation for a subsequent novel entity. Lastly, “The action of the fourth phase is the love of God for the world.”²⁵⁴

How does this work? Once perfected, “the actuality passes back into the temporal world, and qualifies this world so that each temporal actuality includes it as an immediate fact of relevant experience. For the kingdom of heaven is with us today.”²⁵⁵ This event is a providential happening. “What is done in the world,” God transforms, “into a reality in heaven, and the reality in heaven passes back in the world.” Whitehead uses “love,” “the love in the world passes into the love in heaven, and floods back again into the world. In this sense, God is the great companion – the fellow-sufferer who understands.”²⁵⁶ God is a “fellow-sufferer” because of love. True love is life altering, and if God loves us, really loves us, God must change and grow through that loving relationship.

²⁵⁴ PR, 350-351. Stengers describes Whitehead’s notion of “the love of God for the world” as “brutal.” Further, “As a mathematician, Whitehead was able to make all the words used when it comes to God – judgement, tender patience, inexorable fatality, impartiality, the aim at new, intense contrasts, and finally, ‘love’ – converge toward so many descriptions of the divine appetite for the world, without fear of falling back into a Christian theology of a personal God, because he knew that the question that engages the hand-to-hand confrontation with a problem finally raised in a promising way is not addressed to a person. Instead, it is what will transform a person into that through which a problem will be defined.” I believe that Stengers is saying that creativity is more important than comfort. Stengers, *Thinking*, 489.

²⁵⁵ PR, 351.

²⁵⁶ PR, 351. In thinking of love, Whitehead’s personal life is hidden, although in 1947, the year of his death, he wrote of his wife, Evelyn Wade (1865-1961), “The effect of my wife upon my outlook on the world has been so fundamental, [...] her vivid life has taught me that beauty, moral and aesthetic, is the aim of existence; and that kindness, and love, and artistic satisfaction are among its modes of attainment.” Whitehead, “Personal” in *Essays in Science and Philosophy* (New York: Greenwood Press, 1968), 8.

“And God said, ‘Let the earth put forth vegetation, plants yielding seed, and fruit trees bearing fruit in which is their seed, each according to its kind, upon the earth.’ And it was so.” (Genesis 1:11) We are following the spirit of Barth by beginning with God’s acts – at the beginning, with water, earth, and growing things – a putting forth, yielding seed, and bearing fruit – a grounding in foundational growth. For as Gary Dorrien writes, “Process thought is defined by its metaphysical claim that *becoming* is more elemental than being because reality is fundamentally temporal and creative.”²⁵⁷ “The wind blows where it chooses,” so there is freedom, movement, growth, diversity, unity, and order. The indwelling of God in the world provides the order of existence. As Whitehead writes, “the order of the world, the depth of reality of the world, the value of the world in its whole and in its parts, the beauty of the world, the zest of life, the peace of life, and the mastery of evil, are all bound together – not accidentally, but by reason of this truth: that the universe exhibits a creativity with infinite freedom, and a realm of forms with infinite possibilities; but that this creativity and these forms are together impotent to achieve actuality apart from the completed ideal harmony, which is God.”²⁵⁸

What is important in the end, is that God, for Whitehead, exists only as one with the World. God is not a “who.” God is not even singular, They are of two parts, the primordial and consequent, bound and separated by creativity. They primordially loved the World into being, and in their consequent nature, They love the World forward in the nowness of existence. In that loving relationship, They (and we) grow. The actors in this play, be they divine or creaturely (or even molecular), remain as entities but in constant relationship. They grow and multiply always retaining their individuality, but always pulled into unity with God and each other. The cosmos grows ever larger, and that includes God. To be alive is to grow, in which I include thought and

²⁵⁷ Gary Dorrien, “The Lure and Necessity of Process Theology,” *Cross Currents*, 58, no. 2 (1 Jan. 2008): 316-336, 316, (emphasis mine).

²⁵⁸ RM, 119-120.

imagination. Hannah Arendt notes, “To think with an enlarged mentality means that one trains one’s imagination to go visiting.”²⁵⁹ Whitehead imagined a never-ending process of relationship between God and the World. We, as his readers and fellow theologians, use our imagination to visit with him, retaining our own thoughts and ideas, but being drawn into relationship with his thoughts and ideas – creating a new metaphysics. A new metaphysics and a new reality, created through community with Whitehead; created within the continuum of thought of which we and Whitehead are aligned; and created through our dipolar relationship with him – Hunter and Alfred, our thoughts apart but united – creating something more.

The wind, Spirit, power, Creativity flows where it chooses, for “the next day Jesus decided to go to Galilee.” God and people have freedom. And/But that freedom is held through relationship in time, and space, and history. God lovingly birthed the world and to be born again is to be immersed in that flow. In our dipolar relationship with God, we are always alone and always together, and with our imagination we can turn around, re-pent, and perpetually seek the many-into-one, that from this side of the system we crave – the kingdom of God.

²⁵⁹ Arendt, *Lectures*, 43. Regarding the failure of imagination, see Willie James Jennings, *The Christian Imagination: Theology and the Origins of Race* (New Haven: Yale University Press, 2010).

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