

CREATIVITY IN WHITEHEAD'S METAPHYSICS

CREATIVITY IN THE METAPHYSICS
OF
ALFRED NORTH WHITEHEAD

By
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ABSTRACT

This is a study of the role that creativity plays in the metaphysics of Alfred North Whitehead (1861-1947). As the title generally indicates, there are two parts to this project. The first part develops an understanding of Whitehead's metaphysics through the careful analysis of two key texts, namely Religion in the Making (1926), and Process and Reality (1929). The second part examines and carefully analyses the role that creativity plays within this metaphysic. The second part focuses on two questions. The first question considers the ontological status which creativity requires to perform the role which it is given within the metaphysical system. The second question discusses implications of this status for creativity's relationship to God. This second section further discusses the implications of such an understanding of "process theology" for Christian theology in general. Specifically it comments on the various responses of theology to *creatio ex nihilo* and the problem of evil.

This thesis concludes that creativity functions as an ultimate explanatory principle in Whitehead's metaphysics. In this role, creativity is monistic, not in the sense of an ontological monism, but in the sense that it is 'one' rather than 'many'. Creativity cannot be ontologically monistic because it is not actual. However, since it is indeterminate it must be one rather than many. In addition creativity and God must be considered distinct elements in Whitehead's metaphysics. Their roles cannot be collapsed into each other, although it is possible to speak of an intimate association between them. In this sense, creativity is the ground of God and God is necessarily creative. Finally, this thesis demonstrates that there is room for further dialogue between process theology and a more orthodox version of Christian theology especially regarding the questions of the creation of the world and theodicy.

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LIST OF ABBREVIATIONS

For the sake of convenience, references to Alfred North Whitehead's works will be by standardized abbreviations.

- AI Adventures of Ideas, New York: The Free Press, 1967.
- FR The Function of Reason, Boston: Beacon Press, 1958.
- MT Modes of Thought, New York: The Free Press, 1968.
- PR Process and Reality: Corrected Edition, ed. by David Ray Griffin and Donald W. Sherburne, New York: The Free Press, 1978.
- RM Religion in the Making, New York: The MacMillan Co., 1926.
- SMW Science in the Modern World, New York: The Free Press, 1967.
- S Symbolism: Its Meaning and Effect, New York: Fordham University Press, 1985.

INTRODUCTION

This is a study of the role that creativity plays in the metaphysics of Alfred North Whitehead (1861-1947). As the title generally indicates, there are two parts to this project. The goal of the first part is to develop an understanding of Whitehead's metaphysics through the careful analysis of two key texts, namely Religion in the Making (1926), and Process and Reality (1929). The goal of the second part is to examine and carefully analyse the role that creativity plays within this metaphysic. The second part will focus on two questions. First it will consider the ontological status which creativity requires to perform the role which it is given within the metaphysical system. Secondly, it will discuss implications of this status for creativity's relationship to God. This second section will further discuss the implications of such an understanding of "process theology" for Christian theology in general. Specifically it will focus on the various responses of theology to *creatio ex nihilo* and the problem of evil.

In addition to giving a general introduction to creativity as an important concept within Whitehead's metaphysics, this introduction also seeks to acquaint the reader with reasons for the birth and development of Whitehead's process thought. In the first place, it gives a general introduction to some of the major differences between process thought and traditional substance metaphysics. Secondly it traces the development of process thought as a reaction to Newtonian mechanism and outlines some of the unique answers Whitehead gives to traditional philosophical problems.

Process is the defining concept of Whitehead's metaphysics. "The actual world is a process and ... process is the becoming of actual entities" (PR, p. 22). However, it is difficult to grasp what it means for the world to be a process. At one point, Whitehead

suggests that process is like successive pulsations of energy (MT, p. 88). This means that matter is never static but it is always in process. That is to say, all matter must be considered temporally: as welling up from the past and continuing on towards the future. Moments of the world are a culmination of "the interweaving of data, form, transition, and issue" (MT, p. 88). The data is the past universe which every new pulsation must consider. Forms are contained within this data. Some of these forms are realized in the past data, and some forms are potentials for realization. "Thus the data consist in what has been, what might have been, and what may be ... and from these data there emerges a process with a form of transition. This unit of process is the "specious present" of the actuality in question. It is a process of composition, of gradation, and of elimination" (MT, p. 89). The present composes itself from its past, grading these data for relevance according to its final purpose. Finally there is issue from the process. This issue is the completed actuality presented as data for future pulsations of process.

One possible example of this process is the music of a symphony. All manner of instruments and notes combine to produce the composition of music. Each note flows into the next and prepares the moment for the flowing notes. Abstracted from the organic whole the individual notes and instruments cease to be music. A concert of music only makes sense as a temporal advance taken as a complete whole. If this analogy were extended to the Whiteheadian world, the music would never stop. Thus the world is an unending process whereby present actualities well up from the past and prepare the way for what is to come. In this sense, the world can only be understood as an organic whole. Any attempt to understand only one part of the world, distinct from its relation to the whole, is an abstraction. This type of abstraction can be useful as long as it is not

considered to be concrete actuality. According to Whitehead, to mistake the abstract for the concrete is to commit "the fallacy of misplaced concreteness."¹

So described, process is a synonym for creativity. As such, creativity is a temporal concept regarding the flow of actuality. Creativity signifies the flow of the present out of the past, and the actualization of potentiality. Everything is always arising from the totality of its past, which gives each new actuality a unique perspective of the universe. Creativity is the act of conjunction between many different elements such as past actual entities, eternal objects, and God.² Creativity explains the manner in which process is exemplified in the world. "[Creativity] is that ultimate principle by which the many which are the universe disjunctively, become the one actual occasion, which is the universe conjunctively. It lies in the nature of things that the many enter into complexity" (PR, p. 21). Creativity is manifest in the world as both concrescence and transition. Concrescence is the internal process of each actual entity. It will be described in detail in the second chapter. Transition refers to the continual emergence of new actual entities. It will be described more fully in both the second and third chapters.

Whitehead's main argument for the existence of creativity as the ultimate principle of the universe is intuitive. Empirically the world is in flux, it is constantly changing. Whitehead accounts for this change through the principle of creativity. "The sole appeal is to intuition" (PR, p. 22).

In most metaphysical systems there is a recognition of both permanence and flux, that is to say being and becoming, as basic aspects of the world. Experience tells us that our world is constantly changing but at the same time we recognize that this change must

¹ Please see p. 13.

² Definitions of these elements of Whitehead's thoughts will appear throughout the course of this thesis.

be grounded by that which does not change. In other words, the change we experience is among particular objects but that within particular objects there are universal characteristics so that the objects retain identity over time and so that these objects can be classified according to type. These universals ground particular objects in such a way that there is consistency even in change. Change with consistency as its ground can lead to greater depths of order whereas purely chaotic change leads to ever-increasing disorder finally resulting in either destruction or utter triviality. All metaphysics must recognize both of these elements: change and permanence or in other words becoming and being. The difference between a more classical metaphysics and process metaphysics is that, while both recognize being and becoming the former emphasizes being as the inclusive category of existence whereas the latter emphasizes becoming as the inclusive category of existence. The defining characteristics of being are that it is timeless and unrelated. Whitehead argues that when timeless and unrelated being is considered the inclusive category of existence then problems emerge regarding the relationship of being to becoming. Simply stated, the problem is this,

...while [becoming] can be consistently said to include being, being cannot be consistently made to include becoming. For, if anything at all becomes, then the whole constituted by being and becoming together must itself also become, any becoming in the parts necessarily entailing a becoming of the whole.³

In other words, if being and becoming are related at all then an element of becoming must be included in being. And if becoming, which is temporal and relational, is a part of timeless and unrelated being it is questionable what, if anything, remains of being. Therefore, process philosophers argue that the relationship of being and becoming

³ Schubert M. Ogden, What is "Process Theology?", (Private Communication from Dr. John C. Robertson), p. 5.

necessitates that becoming be the inclusive category of reality, which in turn emphasizes the temporality and relatedness of the world.

This process view of the universe gradually took shape as Whitehead developed a metaphysics to match his philosophy of nature. Whitehead developed his philosophy of nature after an extensive study of mathematics. In the first decade of this century he published the three volume *Principia Mathematica* with Bertrand Russell. Following this work, a period focusing primarily on philosophical problems commenced around 1918. At first this philosophical endeavour was concerned with developing a philosophy of nature. During this time the books, An Enquiry Concerning the Principles of Natural Knowledge (1919), The Concept of Nature (1920), and The Principle of Relativity (1922) were published. "In the Preface to the second edition of The Principles of Natural Knowledge, Whitehead wrote that he hoped 'in the immediate future to embody the standpoint of these volumes in a more complete metaphysical study.'"⁴ Lewis Ford speculates that this metaphysical study is in fact Science and the Modern World, the Lowell Lectures from 1925.

At the start, this philosophy of nature was largely a polemic against modern Newtonian science. The original catalyst for its emergence was the breakdown of Newtonian thought late in the nineteenth century. Whitehead saw the impact of the breakdown of this all-encompassing world-view very clearly. Lucien Price records him saying

We supposed that nearly everything of importance about physics was known. Yes, there were a few obscure spots, strange anomalies having to do with the phenomena of radiation which physicists expected to be cleared up by 1900. There were. But in so being, the whole science blew up, and the Newtonian physics, which had been

⁴ Lewis Ford, The Emergence of Whitehead's Metaphysics 1925-1929, (Albany, New York: State University of New York Press, 1984), p. 1.

supposed to be fixed as the Everlasting Seat, were gone. Oh, they were and still are useful as a way of looking at things, but regarded as a final description of reality, no longer valid. Certitude was gone.⁵

Hereafter, Whitehead's philosophy focused on determining where Newtonian physics was mistaken and then creating a new system that avoided the same mistakes. In doing this, "His [Whitehead's] endeavour was to formulate a conception of the ultimate facts of physical science, and specifically of modern physical science, such as would be consistent with experience, and free from the inner contradictions of the older theory."⁶ A brief description of Newtonian physics, as understood by Whitehead, will help demonstrate the problems which he perceived it to have and the manner in which strove to overcome those difficulties.

The Newtonian system is a system of mechanistic dualism. For the most part it is the systematic conclusion to the manner of thinking introduced by Descartes. Mechanistic dualism is the division of reality into two independent substances: the physical (matter) and the mental (mind). Physical, material substances are defined by their independence and individuality. Thus, any object is completely describable in self-referential terms. In other words, any physical object is not dependent upon the past or the future or any other object in existence. So, for example, if everything ceased to exist apart from one stone, that stone would continue to be that which it already is. In addition, this object "can be said to be *here* in space and *here* in time, or *here* in space-time, in a perfectly definite sense which does not require for its explanation any reference to other regions of space-time." (SMW, p. 49). Whitehead calls this the "fallacy of simple location" and it leads to three important conclusions. First of all, nature is seen as

⁵ Lucien Price, Dialogues of Alfred North Whitehead, (Boston: Little, Brown and Company, 1954), pp. 6-7.

⁶ Ivor Leclerc, Whitehead's Metaphysics, (London: George Allen and Unwin Ltd., 1958), p. 8.

passive, "an individual reality is the same at an instant, or throughout a second, an hour, or a year" (MT, p. 128). Secondly, nature predicates certain qualities such as mass, shape, colour, texture, etc. Some of these qualities are persistent through time while others are mutable. And, thirdly, change in these materials is external, usually understandable as a change in motion. Thus, "the connection between such bits of matter consists purely of spatial relations" (MT, p. 128).

Whitehead sees this conception of matter as an example of the "fallacy of simple location" which itself is a special case of the "fallacy of misplaced concreteness" (SMW, p. 51). The fallacy of misplaced concreteness is to mistake the abstract for the concrete. The fallacy of simple location is an example of this because it abstracts the notion of independence from the concrete reality of relatedness.

The fallacy of simple location ultimately denies induction. As mentioned above, matter in this mechanistic conception is seen to be in a certain place and time in such a way that it does not refer to any other place or time. Thus it does not refer to the past or future. This in turn means that any general principles discovered for one moment cannot be justifiably applied to any other time. Therefore both induction and memory fail. "In other words, the order of nature cannot be justified by the mere observation of nature. For there is nothing in the present fact which inherently refers either to the past or to the future" (SMW, p. 51). This fallacy also denies real, internal relationships between actual entities. If actual entities only have external relations then it is not possible to relate any independent, individual entity to any other.

Mind is another type of substance, which in Descartes' understanding (as interpreted by Whitehead) has the essential attributes of dependence upon God and cogitations (PR, p. 144). In this understanding, minds do not interfere with matter, but minds can have knowledge of material objects. This occurs through a form of representational knowledge

which depends upon the correlation of qualities in different material and mental substances. A grave problem arises, however, because a person has sensations which are first and foremost products of the mind. These qualities are subsequently projected by the mind onto the objects in question. However, there is a gap between the perception of the mind and the material object in question. How can one know that the perception in one's mind accurately conforms to the material object? The veracity of this projection is either guaranteed by God, or the object in question is dissolved into a mental object itself. If it is argued that material objects are really mental objects, as various idealists argue, then there is a serious danger of falling into solipsism. At the very least, when the realms of mind and matter are separated in this way, there is a tendency to reduce one into the other and reductionism of this sort tends to unfairly treat either one aspect of the dualism or the other. This is an example of the difficulties in maintaining a dualistic system and showing the necessary relations between ontologically different substances.

This shows that Whitehead finds grave philosophical problems with Newtonian physics. Consequently, Whitehead develops a system which attempts to overcome these difficulties. In place of a dual mechanistic system, Whitehead proposes organic mechanism (SMW, p. 80, 107). Whitehead's organic mechanism is a one substance cosmology which abandons the substance/quality conception of reality and adopts an event ontology. In this sense, Whitehead sees the mental and physical aspects of reality to be high abstractions as opposed to the concrete realities of life. Instead, Whitehead understands the mental and physical to be dipolar aspects of one actual entity. Thus, in place of this dualism, Whitehead presents what he understands the ultimate constituents of reality to be: actual entities. These actual entities are fundamentally defined as *events* (SMW, p. 152) as opposed to independent bits of matter. "All final individual actualities have the metaphysical character of occasions of experience" (AI, p. 221). This event

provides the basis for Whitehead's organic mechanism. These occasions are really spatio-temporal volumes, or events, which display consistent characteristics over time.⁷ In other words, reality is more like a constant flow of events which coalesce into objects, rather than substantial objects which externally act.

The philosophies of substance presuppose a subject which then encounters a datum, and then reacts to the datum. The philosophy of organism presupposes a datum which is met with feeling, and progressively attains the unity of a subject (PR, p. 155).

One element of organic mechanism is that all parts are related to all others. The prior anticipates and leads into the present which forms a base for the future. These elements blend together in such a way that an undifferentiated whole is perceived although it is made of individual parts. There are real internal relations between actual entities as opposed to relations which are only defined by external change and motion.

In the midst of writing Science and the Modern World, Whitehead decided that these actual entities must be atomic.⁸ That is to say, they must be the lowest element of actuality, which cannot be subdivided any further. Ford points out that this has a number of implications. First, it denies causal determinism. Ford believes that causal determinism is the natural outcome of the idea that a cause produces an effect. In this understanding, the cause, or the past, is active, determining what the effect, which is present, will be. This means that the temporally present effect is passive. When this is considered atomically, then there is a temporal lapse between the cause and the effect. This means that the effect does not arise instantaneously out of its cause. This creates a problem because it indicates that the cause cannot be active in the effect. Ford describes

⁷ Lewis Ford, The Lure of God, (Philadelphia: Fortress Press, 1978), p. 3.

⁸ The next few pages (pp. 7-10) are largely dependent upon Lewis Ford's interpretation of the development of Whitehead's thought as presented in the first chapter "Whitehead's pilgrimage to Process Theism," in The Lure of God.

this when he writes that "the cause must precede the effect in order to be its cause, yet if it precedes the effect by any lapse of time, the cause can no longer be active or effective in producing the effect."⁹ Whitehead's solves this problem by moving the active efficacy from the cause to the effect. That is to say that the previously regarded "effect" is actually self-caused (*sui generis*) but, in creating itself it is indebted to the antecedent past to which it must, in a sense, conform.

In this sense, causation works in a manner similar to perception. In perception there are many objects which cause vision. However, there is also a subjectivity to the way in which these objects are brought together. That is to say, the computer upon which I write is present for me to perceive, I do not determine its existence, but *I* do perceive it in my way, from my perspective which is distinct from its existence. While the computer objectively exists, I apprehend it subjectively. In this sense, Whitehead takes the word "prehension," which is obviously related to "apprehension," and uses it to describe causation. "Prehension" is a little used English word, from the Latin "*prehensio*," which means a grasping or seizing. Throughout his writing, Whitehead writes of prehension as a way to feel datums in experience. Thus, for Whitehead feeling becomes a synonym for prehension. "Therefore, if A causes B, B prehends A. B is constituted by the way in which it prehends A and all its other causes."¹⁰ In this way, Whitehead takes perception as a model to explain all causation. This leads to a number of important conclusions.

Ford points out that this understanding of causation radically changes the manner in which a number of significant philosophical issues are perceived, for example subjectivity and objectivity. In this conception, objects are the past events which provide the data for prehensions. Subjectivity is simply the immediate present from which objects

⁹ Ford, p. 5.

¹⁰ Ford, p. 5.

are prehended. Therefore, subjectivity is divested of its synonymy with consciousness. Consciousness is only a very special case of subjectivity. Therefore, the difference between subject and object is a temporal distinction. All subjects arise out of past objects which are their data and become objects for future subjects.

The word 'object' thus means an entity which is a potentiality for being a component in feeling; and the word 'subject' means the entity constituted by this process of feeling, and including this process. The feeler is the unity emergent from its own feelings; and feelings are the details of the process intermediary between this unity and its many data. The data are the potentials for feeling, that is to say, they are objects" (PR, p. 88).

Thus, subjectivity is an element of all events. "Therefore the language which we should use to describe the coming into being or the emergence of individual events should be subjectivistic language, purged of its associations with human existence, with consciousness, and with mentality."¹¹

This introduces another philosophical issue, the traditional understanding of which requires revision according to Whitehead: the physical and its relation to the mental. In Whitehead's understanding the physical is the repetitive and the mental is the introduction and coordination of novelty into an event. For example, consider molecules. According to Whitehead, molecules are physical in such a way that they can repeat themselves almost indefinitely. And, in molecules which do repeat themselves in this manner, the physical is dominant while the mental is mostly suppressed. However, a molecule which shows a meaningful divergence from the reiteration of its past is displaying signs of mentality. This in turn means that all manner of entities are subjective, although in some this subjectivity is more evident than in others. However, just because subjectivity is a pervasive element of nature, this does not necessarily mean that consciousness is

¹¹ Ford, p. 6.

pervasive as well. The presence of consciousness is largely an empirical matter; where there is novelty in an event over against the simple repetition of the past, there is mentality and among some, higher forms of life this mentality may eventually form a particular expression of consciousness.

This view of nature demands that the event create itself, that is to say, that events be self-creative. The subjectivity of the present event prehends both the objects in its past, which represent the givenness of its situation, and possibilities for its future, and unifies them into a new being. Immediately this introduces value and purpose into nature. Value is introduced because choices must be made regarding the manner that the past will be carried over into the future. Choices must be made regarding the value of certain possibilities for the future of the event. These choices are based upon their relevant worth for the creature. In the same way, purpose is included because this description relies upon final causation rather than efficient causation. The present is purposeful in the manner in which it appropriates the past. However, among all the possibilities that exist for an emerging actuality, some possibilities must be better than others. This is the point at which Whitehead introduces the concept of God.

Originally, in Science and the Modern World, Whitehead introduces God as the principle of limitation. This means that God restricts the number of possibilities that are available to an emerging actuality out of the infinite possibilities that exist. However in subsequent books, Whitehead goes further, claiming that God not only limits the possibilities open to an emerging actual entity but also directs its path towards an ideal. Thus, an actual entity both prehends objects from its past and evaluates them in terms of an ideal given by God. On the other hand, an actual entity also modifies the aim which it receives from God based upon its prehensions of the past. Ultimately, it is the actual entity itself which decides how it will incorporate both the ideal from God and the past in

its becoming. Thus neither God, nor the past determine the actual entity but both act as a check and balance against the other. The past can modify God's ideal, and God's ideal can modify the imprint of the past on the actuality. But it is the actual entity itself which determines its becoming.

Herein lies Whitehead's solution to the problem of evil. The fact that there is evil in the world is never a question for Whitehead. Whitehead's younger son, Eric, was killed in the first world war as a fighter pilot in France. Bertrand Russell actually links this event with the orientation of Whitehead's philosophy. "The pain of this loss had a great deal to do with turning his thoughts to philosophy and with causing him to seek ways of escaping from belief in a merely mechanistic universe."¹² The problem of evil is that it seems evident that an omnipotent God who is perfectly good (omnibenevolent) could and would be able to prevent the occurrence of evil. In other words, the existence of a perfectly good, omnipotent God and the existence of evil would seem to be incompatible. Thus either God is not omnibenevolent, or God is not omnipotent, or evil does not exist. As noted above, the third option is hardly conceivable for Whitehead. And between the first two options, Whitehead accepts the second one. The existence of evil is possible and actual in the world because God is not able to prevent its occurrence. This means that God does not mechanically determine the existence and character of every actual entity. If God did so, then, God would have to be responsible for evil's existence. However, as noted above, every actual entity has the power to determine its own becoming. Therefore, each actual entity takes responsibility for itself because it is *causa-sui*.

One implication of this solution to the problem of evil is that God can no longer be considered the absolute Creator of the universe. Actual entities themselves share in this

¹² Ford, p. 8.

creative process by making their own decisions. Whereas according to traditional Christian theology God is the Creator because God brings everything into existence Whitehead rejects this characteristic of God. Whitehead believes that if God creates everything out of nothing then there is a causal dependence of creatures upon God. Once again, this means that God must be responsible for evil, which Whitehead cannot accept. Instead, in the process system God creatively directs actuality by presenting aims to entities which *already exist*. Whitehead accepts an understanding of creation which is much closer to Plato's *Timaeus* than traditional interpretations of the Genesis account of creation. In this sense, there is a necessary and mutual, but not symmetric relationship between God and the world.

God's role, as the director of the creative process, is essential because otherwise there is no way to maintain order in the universe. If a multitude of different actual entities are all creating themselves out their pasts, why should these events develop with any sense of order? On their own there is no reason for this to happen. Experience of the world displays both order and novelty, however, uncoordinated novelty leads to increasing disorder. Thus God is necessary as the Divine Persuader of the world. It is God who maintains the order of the universe by calling the actual entities to aim at structures of order. However, compliance to this call is left up to the decision of the actual entities.

Lewis Ford distinguishes between two different types of creators: an ontological creator and a cosmological creator. He defines an ontological creator as "one who creates out of nothing" and a cosmological creator as "one who is able to bring new order to the

world."¹³ Thus, for Whitehead "god is the cosmological creator of this world since his persuasive agency has been primarily responsible in bringing its order into being."¹⁴

Whitehead introduces God into his metaphysical system to meet a philosophical necessity rather than to explain a gap. A "God of the gaps" is used to answer a problem or question that could in principle be answered by another means, (e.g. scientific or historical research) but in fact has not yet been answered. An example of using God to cover a gap would be to say, "We have no idea where rain comes from, so, God must be causing it to rain." The problem with this type of explanation is that as science finds scientific reasons for the previously inexplicable event, God recedes into the background. On the other hand Whitehead includes God, not simply as an explanation for the explicable but not yet explained, but as the chief metaphysical principle. That is to say, God is used to answer those sorts of questions which require a metaphysical answer, for example to explain why there is order demonstrated in the world. Therefore, in Process and Reality Whitehead writes, "In the first place, God is not to be treated as an exception to all metaphysical principles, invoked to save their collapse. He is their chief exemplification" (PR, p. 343). As well, he is recorded to have said concerning his introduction of the idea of God, "I would never have included it, if it had not been strictly required for descriptive completeness. You must set all your essentials into the foundation. It's no use putting up a set of terms, and then remarking, "Oh, by the by, I believe there's a God.'"¹⁵ Thus it is for philosophical purposes that Whitehead includes God in his cosmology and not as a God of the gaps.

¹³ Lewis Ford, "An Alternative to *Creatio Ex Nihilo*," in Religious Studies 19/2 (June 1983), p. 210.

¹⁴ Ford, p. 210.

¹⁵ Ford, p. 1.

This thesis will proceed in two parts. The first part will focus on the development of Whitehead's metaphysical system as a whole. The second part will look at the role of creativity within that system. The first part will proceed with an analysis of Religion in the Making (1926) in the first chapter and an analysis of Process and Reality (1929) in the second. Whitehead's metaphysical speculation consistently developed throughout his years of philosophical inquiry. Consequently, although the metaphysics presented in Religion in the Making is in essence the same as the system presented in Process and Reality, there are a number of subtle differences. Whereas the presentation in Religion in the Making is abbreviated, Process and Reality gives a full treatment of the same issues. That is to say, while Whitehead deals with the same concepts they are much more fully developed in the latter work. However, I will argue that in one case, specifically God's relation to creativity, Whitehead is clearer in Religion in the Making than in his latter writings. The main goal of this section will be to introduce Whitehead's metaphysical system in such a way that the role of creativity can be clearly discerned.

Having explored Whitehead's metaphysics as a whole, the second part of the thesis will focus on creativity within this metaphysic. This will proceed, in the third chapter, with an inquiry into creativity's status, examining *what* creativity is, especially in relation to the ontological principle. The ontological principle will be developed in detail later on, however, briefly it states that actual entities are the finally and eminently real elements of the universe. As well, the ontological principle states that actual entities are the final reasons for the way things are. Creativity is not an actual entity but it functions as a reason for some characteristics of reality. Some suggest that this function of creativity could be reduced to actual entities, but this claim will be refuted. Therefore, the third chapter will inquire what sort of entity creativity really is. Specifically this chapter will explore creativity as concrescence, which is the self creation of actual entities, and

creativity as transition, which is the continual emergence of novel entities. Two important articles, one by William J. Garland, entitled "The Ultimacy of Creativity"¹⁶ and one by John Wilcox entitled "A Monistic Interpretation of Whitehead's Creativity"¹⁷ which seek to demonstrate the fundamental role of creativity, including how it can legitimately function in relation to God, will also be examined in detail.

Once the status of creativity within Whitehead's metaphysics has been determined, it then becomes important to define the relationship between God and creativity. This will be the subject of the fourth and final chapter. If creativity is given some sort of status as an explanatory principle in Whitehead's thought, does that in any way create a dualism between God and creativity? This is an important question because many Christian theologians have used Whitehead's metaphysics as a basis for Christian theology, spawning what has come to be called Process Theology. Traditionally in Christian theology God is the only being which is considered truly creative. In traditional Christian theology, God creates by divine fiat out of nothing. God as creator is transcendent to God's creation and God creates through omnipotence. Since Process Theology calls many of these suppositions into question, it is important to ask if Whitehead's vision of God as incorporated in Process Theology is a Christian vision of God. This will be considered with respect to *creatio ex nihilo* and the problem of evil.

¹⁶ William J. Garland, "The Ultimacy of Creativity," in Explorations in Whitehead's Philosophy, ed. Lewis S. Ford and George L. Kline, (New York: Fordham University Press, 1983), pp. 212-238.

¹⁷ John R. Wilcox, "A Monistic Interpretation of Whitehead's Creativity," in Process Studies, V20, N3 (Fall, 1991), pp. 162-174.

PART I

WHITEHEAD'S METAPHYSICAL SYSTEM

CHAPTER 1

RELIGION IN THE MAKING

Religion in the Making, published in 1926, was originally given as the Lowell Lectures in the same year. It follows Science and the Modern World which was given as the Lowell Lectures in the previous year. Both of these books work together by showing how Whitehead's metaphysics can be applied to different areas of thought: namely science and religion.

Compared to Process and Reality, Religion in the Making is a relatively short book. Whitehead himself was not satisfied with at least this aspect of Religion in the Making.

Whitehead considered his Religion in the Making a complete failure. Yet it has proved one of his most successful works. He had wanted to write a much longer book, but Dean [Williard] Sperry [of the Harvard Divinity School] had restrained him.¹

One consequence of these problems is that it is a very compact book. By this I mean that it presents some ideas in an abbreviated form. Whitehead returns to many of the same ideas in his next major work, Process and Reality, treating them in much greater detail. Likewise, some topics are merely introduced in this chapter, to be taken up later in greater detail.

Having said this, one could ask, why study Religion in the Making at all? Why not just go straight to Process and Reality? It is important to consider Religion in the Making prior to Process and Reality for two reasons. In the first place there is a chronological

¹ A.H. Johnson, "Some Conversations with Whitehead Concerning God and Creativity," in Explorations in Whitehead's Philosophy, ed. Lewis S. Ford and George L. Kline (New York: Fordham University Press, 1983), pp. 8-9.

development to Whitehead's thought. Thus, it is important to note the subtle developments in his thought from the writing of Religion in the Making in 1926, to the writing of Process and Reality in 1929. And secondly, in one important case, namely, the relationship between God and creativity, I will argue that Whitehead's presentation in Religion in the Making is clearer and more accurate than in Process and Reality.

This chapter is concerned with Whitehead's metaphysical system as it is presented in Religion in the Making. Through looking at the development of Whitehead's metaphysics we will frame the groundwork by which we can study both the role of creativity within this metaphysical system, as well as creativity's relationship to God. In order to understand Whitehead's presentation of his metaphysics within Religion in the Making, however, we also need to define his interpretation of religious dogma. This is because the development of Whitehead's metaphysics in this book is intimately connected with the empirical data from religious experience.

Whitehead uses the concept of religious dogma in a very special manner in Religion in the Making. Whereas dogma is commonly thought to be the formal and accepted teaching of the Church on a particular matter, Whitehead understands religious dogma to be a certain type of metaphysical statement. In this case, a metaphysical statement is a generalized insight from a specific experience.

The dogmas of religion are the attempts to formulate in precise terms the truths disclosed in the religious experience of mankind. In exactly the same way the dogmas of physical science are the attempts to formulate in precise terms the truths disclosed in the sense-perception of mankind (RM, p. 58).

A dogma is the precise enunciation of a general truth, divested so far as possible from particular exemplification (RM, p. 126).

The only difference from a dogma and an ordinary metaphysical statement is that a dogma arises from a religious experience whereas an ordinary metaphysical statement comes from ordinary everyday experience. Whitehead believes that humanity receives

certain insights from religious experience. These insights, in turn, can be generalized into statements which are applicable to all experience. In Whitehead's own words, "Religion starts from the generalization of final truths first perceived as exemplified in particular instances. These truths are amplified into a coherent system and applied to the interpretation of life. They stand or fall - like other truths - by their success in this interpretation" (RM, p. 124).

As such, "a metaphysics is a description" (RM, p. 88). It is a description of reality made up of statements derived from experience. Whitehead suggests that the accuracy of this description of the world can be confirmed or denied by its internal coherence, adequacy in accommodating different types of data, as well as the exemplification of its principles in the realm of experience. In Religion in the Making, Whitehead tests the ability of his metaphysical description to adequately accommodate religious experience. Elsewhere, in Science in the Modern World for example, he tests the ability of his metaphysical description to adequately accommodate other data, such as scientific experience. In Process and Reality he relates this metaphysical exercise to the flight of an airplane. "The true method of discovery is like the flight of an aeroplane. It starts from the ground of particular observation; it makes a flight in the thin air of imaginative generalization; and it again lands for renewed observation rendered acute by rational interpretation" (PR, p. 5). Therefore, Whitehead's goal in relating his metaphysics to religious insight (the ground of particular observation) is to lay the framework (the thin air of imaginative generalization) whereby the special insights of religion can find application for all situations in all time. Whitehead does not claim to have a final interpretation of the nature of reality. He does, however, claim that it is a relatively adequate one. It is adequate because of its internal coherence, its ability to accommodate different data, and its exemplification in experience.

The final paragraph of the third chapter of Religion in the Making summarizes Whitehead's insights into the association of metaphysics and dogma.

The religious insight is the grasp of this truth: That 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 (RM, pp. 119-120).

The first half of this quotation, which speaks of order, value, beauty, peace etc. being bound together, is a comment on the different aspects of the religious experience of humanity. The second half refers to the metaphysical description of this experience. Accordingly, this quotation demonstrates how the latter substantiates the former. However this point is not readily evident and requires additional interpretation to fully establish it. Thus, the remainder of this chapter regarding Religion in the Making will endeavour to draw out the different dynamics included in this quotation. We will start by examining more carefully the religious insight of humanity, and then examining the metaphysical system which substantiates this religious experience.

Whitehead points to an historical connection between the religious insight and religious dogma in the first chapter of Religion in the Making, "Religion in History." According to Whitehead religion develops in four stages: ritual, emotion, belief and rationalism. The ritual and emotional stages of religion are very ancient, simply providing the forum for development of later beliefs. Belief and rationalism concern us most because the capacity to abstract begins to emerge at the stage of belief. It is this capacity to abstract which begins to demonstrate the relationship between religion and metaphysics. At the belief stage, humanity begins to develop the ability to divorce thoughts from immediate perception and develop thoughts concerning the ordering of life

and consequent ethical implications. This type of abstraction allows for the recognition of special moments of insight into life and for general application of these learned principles to all areas of life. This type of abstraction, which arises in the stage of belief forms the basis of rational religion. "Rational religion appeals to the direct intuition of special occasions, and to the elucidatory power of its concepts for all occasions. It arises from what is special, but it extends to what is general"(RM, p. 32). As religion historically became more rational it also became universal. This universality is found in the ability to abstract that which is permanent in order to interpret and understand that which is immediate and confusing. The religious insight arises from a special moment but is universally applicable. Accordingly, the religious insight develops into religious dogma. Practically this means that the special insight of a rightness in the world partially conformed to and partially disregarded, is developed into the religious dogmas of the rational religions. Whitehead particularly refers to the two religions which he considers eminently catholic and civilized, the great religions, Buddhism and Christianity.²

Having determined the historical root of this religious insight, we now need to define it more precisely. More specifically we need to discover what this insight might be and how it relates to religious dogma. Simply put, Whitehead believes that the religious insight is "the concept of a rightness in things, partially conformed to and partially disregarded" (RM, p. 66). This is the "general character inherent in the nature of things" (RM, p. 67). Unfortunately Whitehead does not get much more specific when defining this religious insight. However, we can speculate on his meaning. A concept of rightness, partially conformed to and partially disregarded, is an appeal to an ethical sense

² See RM p. 44 and 49. In some of his comments regarding the world's religions Whitehead betrays his historical situation. In these cases his comments regarding religions other than Christianity and Buddhism show a lack of sensitivity and, perhaps, a lack of recognition of the profundity of these traditions.

of humanity. It is the recognition that, in general, there are ideals towards which one should aim. It also recognizes that some actions come closer to these ideals than other. Later, in Process and Reality, Whitehead points to the initial subjective aim as the reception from God of ideal possibility which can be conformed to or rejected. In turn, this view of the world includes value and choice. These concepts will be taken up shortly. In any case, Whitehead suggests that this type of religious experience is based on an intuition.

The rational satisfaction or dissatisfaction in respect to any particular happening depends upon an intuition which is capable of being universalized ... The intuition is not the discernment of a form of words, but of a type of character. It is characteristic of the learned mind to exalt words. Yet mothers can ponder many things in their hearts which their lips cannot express. These many things, which are thus known, constitute the ultimate religious evidence, beyond which there is no appeal (RM, p. 67).

This intuition which escapes words is best described by Whitehead as a "rightness in things, partially conformed to and partially disregarded" (RM, p. 66).

With this understanding of the religious insight in mind, let us return to the quotation given on page twenty-eight which speaks of the religious insight and its metaphysical ground. Whitehead points out that "The religious insight is the grasp of this truth: that 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" (RM, p. 119). We have already interpreted religious insight as this intuition of a rightness in the world, partially conformed to and partially disregarded. The concept of a rightness in the world partially conformed to and partially disregarded implies that morality, value, and choice are essential parts of Whitehead's metaphysics. "Rightness in the world" implies that there is an ideal towards which individuals strive. This ideal, this striving towards "rightness" is moral action

which manifests itself as individuals, which Whitehead terms occasions of experience, choose to act either in conformity with this "rightness" or disregarding it. This choice is made based on the relative value of the anticipated outcome for the individual in question. The evaluation of this choice, however, is based on beauty or aesthetics. There are two elements which constitute a beautiful decision. In the first place, this decision must have a combination of discord and harmony. Complete harmonization in any work of art, be it a painting or a piece of music, leads to repetition and triviality. However, the right combination of harmony and discord is beautiful. This means that every occasion of experience must decide how much it should conform to its past, and how much it should introduce new ideas in its becoming. The second element is the strength of beauty.

"Whitehead tells us that there are two aspects constitutive of the "strength" of beauty.

One is the breadth or complexity of the elements that are brought into unity. Whitehead calls this "massiveness." The other is "intensity proper," which is "comparative magnitude without reference to qualitative variety."³

As these moral and aesthetic evaluations are made, determining the actions of these occasions of experience, a number of different qualities emerge in the world. In the first place, order emerges as there is partial conformation to the "rightness." As order emerges, evil is overcome. Evil in this case refers to either triviality of experience or a breakdown from order into chaos. In this sense, evil is always destructive. But order, which arises from beautiful choices, is always creative. From this creative order a peace of life emerges. All of these areas, order, aesthetics, morality, value, are intimately related. Whitehead says they are "bound together" (RM, p. 119). This illustrates the interconnectedness of all life. The world, as such, is an organic whole.

³ John B. Cobb Jr., A Christian Natural Theology: Based on the Thought of Alfred North Whitehead, (Philadelphia: The Westminster Press, 1965), p. 103.

The quotation given on page twenty-eight continues by asserting that this understanding of the world is represented by the 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" (RM, pp. 119-120). This is Whitehead's metaphysical conception of the world. This metaphysical description undergirds the religious insight. Whereas the religious insight discovers that there is a rightness in the world partially conformed to and partially disregarded, this metaphysical description gives the conceptual framework for how this happens.

The metaphysical description in Religion in the Making takes place on two fronts. It describes the actual world which is passing in time and the elements which form the basis of the actual world. Since the world is both actual and passing, the formative elements must be either non-actual or non-temporal otherwise they would be a part of the world.

These formative elements are:

1. The creativity whereby the actual world has its character of temporal passage to novelty.
2. 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.
3. The actual but non-temporal entity whereby the indetermination of mere creativity is transmuted into a determinate freedom. The non-temporal actual entity is what men call God - the supreme God of rational religion (RM, p. 90).

These formative elements constitute one route of analyzing the universe. However, in order to gain a complete picture these formative elements must be correlated to the other route of analysis which is the actual world. The world that is both actual and temporal in nature is also pluralistic. That is to say, the world is comprised of multiple epochal

occasions.⁴ Each of these occasions of actualization is a limited space-time event. They arise from the past, harmonize objective data to achieve satisfaction in the present, then die subjectively in order to become objective data for the future. This means that they are routes of temporal succession. Thus, "to be an actual thing is to be limited. An actual thing is an elicited feeling-value, which is analyzable as the outcome of a graded grasping of the elements of the universe into the unity of one fact" (RM, p. 150). Each of these epochal units is a microcosm of the entire universe because they are composed of all the other units from the past which have been objectified. Sense objects are comprised of communities of these actual occasions.

Creativity and Actual Occasions

Actual occasions are the creatures of the world. As such, creativity cannot be considered apart from the occasions. In and of itself, creativity lacks determination. Determination arises through the concrescence of other creatures, the ideal forms, and God. The creative synthesis of these three elements into a new epochal occasion is a route of temporal succession. Temporal succession is the process whereby "the creativity for a creature becomes the creativity with the creature, and thereby passes into another

⁴ Whitehead was continually searching for terms that would adequately express his ideas. As a consequence, he frequently rejected traditional philosophical terms, preferring instead his own creations. One problem is that some of these terms developed over a number of years. Actual occasion is one such example. An actual occasion always refers to an event or an occasion of experience, but Whitehead uses a number of terms to refer to the same concept. In RM, Whitehead uses the synonymous term "epochal occasion." The reference to epoch is meant to convey the occasion's temporality. He also uses "creature" when discussing these occasions in context with creativity. By the time of PR, Whitehead restricts himself to using actual occasion and actual entity. There is a subtle difference between these two, but it is too technical to concern this introductory exposition. Actual entities and the ontological principle are describe in greater detail in the next chapter. Please see p. 52.

phase of itself. It is now the creativity for a new creature" (RM, p. 92). Thus, temporal succession is the movement of the objective creatures of the past being apprehended by the creatures of the present.

Creativity as a process lies at the base of actuality. In this sense creativity is the first formative element. The temporal succession of the universe intimately involves the attainment of definite instances of experience. In order for there to be this definiteness, there needs to be a synthesis of the ideal forms, past occasions of experience, and God. Each epochal occasion apprehends and embraces the whole world, i.e. all ideal forms and all antecedent actualities, and brings them into its own unity of feeling under gradations of relevance and irrelevance. Thus a new creature is entirely dependent upon its antecedent facts, both form (potentiality) and actuality. "The creative process is thus to be discerned in that transition by which one occasion already actual, enters into the birth of another instance of experienced value" (RM, pp. 112-3). There is both inclusion and exclusion in the creative process. The forms provide the ideal possibility for the emergent occasion while the antecedent occasions provide the limitations of reality. All forms (potentiality) and actuality are graded according to their relevance and irrelevance to the emergent actuality. Thus, exclusion is the relegation to irrelevance while inclusion relates to the relevance of that element to the emergent actuality.

Forms and Actual Occasions

The second formative element is "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" (RM, p. 90). These forms are the potentialities which are either realized in past occasions or potentialities which may be realized in the future. Every emergent occasion includes in itself both the other creatures,

which are the objective past, and the ideal forms, which represent the realm of pure possibility. The ideal forms are the possible ideals towards which the actual occasion can aim. The emergent occasion includes both the creatures under the aspect of, or seen through, the forms and the forms as they are a part of the other creatures. That is to say, the ideal forms both qualify and are qualified by the other, objective creatures. Thus the new emergent creature is limited with respect to the manner in which the formative elements are present to it. However, its creativity allows it to synthesize these elements in a totally unique manner, thus creating itself.

The forms and actuality play two related but distinct roles in the creation of emergent novelty. On the one hand, Whitehead refers to actuality as the *ground* in the creative process (RM, p. 113). On the other hand, he refers to the ideal forms, which bring novelty to the perception of the emergent actuality, as the *consequent* in the creative process (RM, p. 114). "The derivative [which is the emergent occasion of actuality] includes the fusion of the particular ground with the consequent, so far as the consequent is graded by its relevance to that ground" (RM, p. 114). In its self-creation, an actual occasion merges together its past (or ground) with a new possibility for the future (consequent). In this fusion of ground and consequent there needs to be a gradation of relevance, as indicated above. Not all possibilities are relevant to all states of being. Thus, "The grading of the actual ground arises from the creativity of some actual fact passing over into a new form by reason of the fact itself" (RM, p. 151). Each actuality which is creating itself aims at a certain ideal. The possible consequents for the actuality are graded both according to their relevance for that goal and according to their relevance for the already past actuality (ground). "The grading of the ideal forms arises from the grading of the actual facts. It is the union of the forms with the facts in such measure as

to elicit a renewed feeling-value, of the type possible as a novel outcome from the antecedent facts" (RM, 151-2).

In this fusion of actuality and potentiality there is both identity and contrast. This means that "the consequent must agree with the ground in general type so as to preserve definiteness, but it must contrast with it in respect to contrary instances so as to obtain vividness and quality" (RM, p. 115). Whitehead refers to this "feeling arising out of the realization of contrast under identity" (RM, p. 115, see also p. 105) as *aesthetic experience*. As indicated earlier, the choices which an occasion makes are value laden. Essentially they are aesthetic choices because they aim to increase vividness and quality. This indicates that the emergence of a novel occasion of experience is also an aesthetic event. The contrast, vividness and quality which the emergent actuality displays constitutes its value.

God and Actual Occasions

The ideal forms represent the realm of pure possibility. In relation to actuality, this realm is unlimited. However, in reality only certain possibilities are truly relevant to individual entities. "Unlimited possibility and abstract creativity [by themselves] can procure nothing" (RM, p. 152). Thus the forms need to be a graded for their relevance to the emergent occasion. As a result there must be some sort of determination of unlimited possibility, according to a common order, so that the relevant possibilities can lure the emergent occasion to experience novelty. "The definite determination which imposes ordered balance on the world requires an actual entity imposing its own unchanged consistency of character on every phase" (RM, p. 94). According to Whitehead God is this actual entity which imposes ordered balance on the world through the determination of actuality from unlimited possibility. This requires that God, as an actual entity, ground

the change in the world. In order to ground the change in the world and bring determination out of unlimited indetermination, God must "impose [God's] own unchanged consistency of character on every phase" (RM, p. 94).⁵ Consistently, God seeks the attainment of value in the world (RM, p. 100). The consistency of this quest for value means that God must, through God's vision of all possibilities for the world (RM, p. 153), seek harmony and peacefulness as the determinate end for occasions. "Thus creative indetermination attains its measure of determination" (RM, p. 94).

However Whitehead's metaphysic does not stop with this sort of simple determinism. If it did then it would be impossible not to attribute evil to God, and Whitehead clearly states that God cannot be origin of evil. In fact, rather than claim that God is evil, Whitehead is willing to claim that God is limited.

The limitation of God is his goodness. He gains his depth of actuality by his harmony of valuation. It is not true that God is in all respects infinite. If He were, He would be evil as well as good. Also this unlimited fusion of evil with good would mean mere nothingness. He is something decided and is thereby limited (RM, p. 153).

According to Whitehead, evil is exhibited in both physical and mental suffering as well as the loss of a higher experience in favour of a lower. The particularly negative aspect of evil is that where ever it arises there is "some concurrent purpose towards elimination" (RM, p. 95). In other words, that which experiences evil always tries to get rid of it. This purpose towards elimination creates discord, turbulence, and instability. As the occasion attempts to rid itself of the evil, its experience falls from a higher one to a lower experience. It is this comparison of what is to what was or even to what might

⁵ As Lewis Ford has painstakingly shown, most specifically in [The Emergence of Whitehead's Metaphysics](#), Whitehead's thought was continually developing. As such, there is some debate as to the status of Whitehead's conception of God's consequent nature at the time of writing RM. Therefore, in this paper I will reserve comment on the consequent nature of God for the discussion of PR.

have been that constitutes evil "There is evil when things are at cross purposes" (RM, p. 97). Whitehead gives the example of a human which becomes a hog. The hog is not evil in itself, but in comparison to being human, it is evil to become a hog.

God on the other hand is exempt from this type of internal inconsistency which is evil. God is exempt because although God enters into every creative phase, God is above change. By this Whitehead means that God is self-consistent in relation to all change. This is because God is the actual entity who provides the forms in graded relevance for each emergent occasion. God must be self-consistent so that this gradation remains consistent and brings forth order rather than chaos.

From this Whitehead concludes that there are two sides to the temporal world. On the one hand there is the creative passage of the temporal world, which shows both an order in the most basic elements and a self-contrast with the ideal forms (which is the introduction of possibility into the world). This order and contrast demonstrates a dependence upon an unchanging actual entity which orders the world. This unchanged actual entity is God. On the other hand the world is both incomplete and it demonstrates evil. Therefore there must be formative elements of the world which are different from God. Thus, God calls the world, by means of a presentation of graded possibility to each emergent occasion, to perfection but the world falls short, it falls into evil. God is aware of this evil and this suffering and God is not completely impotent towards it but neither is God omnipotent over it. God seeks not to isolate good from evil, but to overcome evil with good (RM, p. 155). In this respect, God's gift of relevant ideals to actuality is a call to these occasions of experience to live according to "the rightness in the world" (RM, p.66). "He [God] provides the ideal consequent, as a factor saving the world from the self-destruction of evil. The power by which God sustains the world is the power of himself as the ideal" (RM, p. 156).

This call of God is a call for the attainment of value in the world. This connects the metaphysical description of the world with the religious insight of humanity. Whitehead develops the religious insight into three concepts of value.

These concepts are:

1. That of the value of an individual for itself.
2. That of the value of the diverse individuals of the world for each other.
3. That of the value of the objective world which is a community derivative from the interrelations of its component individuals, and also necessary for the existence of each of these individuals.

The moment of religious consciousness starts from self-valuation, but it broadens into the concept of the world as a realm of adjusted values, mutually intensifying or mutually destructive" (RM, p. 59).

In the first place an individual's value is expressed in self-interest which is the enjoyment of being actual. However, at the same time, the individual is a part of the larger whole. So, the value of an individual for itself, can only find legitimacy as the individual merges its self-interest with the whole. As mentioned earlier, value arises from the choices which an individual makes with respect to its conformity to the past and its acceptance of novelty. Accordingly, these choices are of great importance to the individual, but they are made on the basis of the individual's relationship to others (conforming to the past) and in relationship to the whole. In Modes of Thought, Whitehead discusses the same point but calls it a division of reality into "The Whole," "That Other," and "This-My-Self" (MT, p. 110). He writes of value experience as "expressing a vague sense of maintenance or discard" (MT, p. 110). "Everything has some value for itself, for others, and for the whole. This characterizes the meaning of actuality. By reason of this character, constituting reality, the conception of morals arises" (MT, p. 111).

Each epochal occasion is a microcosm of the universe in the sense that it perceives or apprehends the rest of the universe. Thus, the rest of the universe becomes a part of the emergent occasion on its own terms. The value of the emergent individual arises out

of the unique manner in which it can grasp the universe. "Each actual entity is an arrangement of the whole universe, actual and ideal, whereby there is constituted that self-value which is the entity itself" (RM, p. 101). Thus, there are two sides to an actual entity. The first side is creative. The entity grasps, or prehends the world in a synthesis unique to its emergent perspective. In this sense the emergent entity is a concretion of both the ideal and actuality. This is the self-creative act of the occasion. The other side of an entity is the creature. The creature is the emergent fact from the occasion. It is the result of the self-creative act. This creature then becomes the objective past for future emerging actuality. It is in this sense that an individual has value for the whole. Every completed fact becomes objectified in the future, thereby influencing future becoming.

The value of the emergent actuality is dependent upon the concretion of the various elements, both actual and ideal, which are synthesized into it. This value is the created unit of feeling arising from this concretion. Values are comparable based upon their intensiveness. No intensiveness would mean a collapse of actuality whereas great intensiveness would mean depth of actuality. Once again, the judgment of intensiveness or depth is an aesthetic judgment, following the same criteria outlined earlier.

God's own self is the "valuation of the world" (RM, p. 159). It is God who directs actuality so that it strives after harmony among discord, which is beautiful experience. Without God the world would degenerate into either triviality or chaos, resulting in a lack of intensive values and a collapse of actuality. "Apart from God, the remaining formative elements would fail in their functions. There would be no creatures, since, apart from harmonious order, the perceptive fusion would be a confusion neutralizing achieved feeling" (RM, p. 104).

This demonstrates the dependence of the world upon God. The world exists because there is an order in nature, there is not an order in nature because of the world.

The reason for the order in nature is strictly because of God's immanence. God calls order out of chaos. Whitehead refers to this as aesthetic order. "The actual world is the outcome of the aesthetic order, and the aesthetic order is derived from the immanence of God" (RM, p. 105). Thus, the aesthetic experience is the basic experience of the world. The call of God to the world is an aesthetic call.

At the same time, God is dependent upon the world in the sense that God only exists with the world. "Apart from God, there would be no actual world; and apart from the actual world with its creativity, there would be no rational explanation of the ideal vision which constitutes God" (RM, p. 157). Therefore, in Whitehead's vision, there is a mutual relationship of dependence between God and the world. However, even though this relationship is mutual it is not symmetrical. That is to say, that while the world is dependent upon, God is not dependent upon this particular world, only that there be some world.⁶

Conclusions Regarding Creativity

Creativity is the first formative element of the world. It is the process which underlies all creatures. Creativity is evident in the temporal succession of individual entities from the objective past, to the subjective present. Whitehead claims that the formative elements are either non-actual or non-temporal. Creativity exists as temporal succession, consequently it is temporal. Therefore, as a formative element creativity is non-actual. This means that Whitehead does not conceive of creativity as having any ontological status in and of itself. It only exists through the creatures it inhabits. On its own creativity is indeterminate and unable to bring about novel entities. However, in

⁶ For further discussion of the effect of this necessity upon the nature of God see p. 107.

relation to the other formative elements, God and the forms, and their relation to actuality, creativity is the undying force which spurs on the universe.

Each actual occasion gives to the creativity which flows from it a definite character in two ways. In one way, as a fact, enjoying its complex of relationships with the rest of the world, it contributes a ground - partly good and partly bad - for the creativity to fuse with a novel consequent, which will be the outcome of its free urge. In another way, as transmuted in the nature of God, the ideal consequent as it stands in his vision is also added. Thus God in the world is the perpetual vision of the road which leads to the deeper realities (RM, p. 157-8).

Creativity is the flow of process. Creativity, in conjunction with the ground of actuality, the consequent of potentiality, and the ideal of God, constructs reality.

Looking ahead to the second part of this thesis, we can anticipate how the system of metaphysics presented in Religion in the Making lays the groundwork for future themes. Specifically, the system of metaphysics in Religion in the Making is helpful because creativity's role in the system as well as creativity's relationship to God is presented in a particularly clear and evident manner. In the first place, by making creativity one of the formative elements of the world, Whitehead is clear that the role of creativity cannot be collapsed into actual entities, as some interpreter's have tried to do. At the same time, Whitehead is clear that creativity is not actual. As a formative element it is non-actual and temporal. Therefore, it does not have ontological status, which if it did would make Whitehead's thought ontologically monistic; something that Whitehead wants to avoid.

Religion in the Making also demonstrates a clear relationship between creativity and God, something which becomes confused in Process and Reality. In Religion in the Making, both creativity and God are formative elements which contribute to the becoming of actuality. They are distinct but necessarily work together. On the one hand, without God the vagueness of creativity would never result in determinate actuality. Yet

on the other hand, without creativity there would not be the temporal flow of occasion to occasion whose process allows God to call order out of chaos.

CHAPTER 2

PROCESS AND REALITY

Introduction

The title of Whitehead's *magnum opus*, Process and Reality points towards two important elements in Whitehead's thought. The two elements of reality, which Whitehead is striving to account for, are the becoming (process) and the being (reality) of the world. Becoming is a concept reflecting the fluidity of actuality. It is exemplified by the emergence of existence from one moment to another. Essentially it is a temporal concept. Sometimes Whitehead refers to this concept as "creative advance." On the other hand, being has to do with the hardness of reality, the stubborn facts of existence. In other words, the concept that something *is*. As Whitehead's title indicates, his work encompasses the relationship between these two elements of existence. In Whitehead's own words, "in the inescapable flux, there is something that abides; in the overwhelming permanence, there is an element that escapes into flux" (PR, p. 338). Thus, Whitehead writes, as a description of his philosophy that, "this is the doctrine that the creative advance of the world is the becoming, the perishing, and the objective immortalities of those things which jointly constitute *stubborn fact*" (PR, p. xiv).

Whitehead uses a special term to account for the relationship of these two elements of reality: "concrecence." This word is primarily a biological term which means to grow together or coalesce. Whitehead accepts this definition but tries to expand it past its confinement to biology to account for the basic structure of reality. In this way, concrecence accounts for the fluidity of becoming hardening into the reality of being.

This chapter will largely be an exploration of this concept in an attempt to grasp its ramifications.

As mentioned in the previous chapter, Whitehead does not purport to have the final version of metaphysical or cosmological theory. Instead he claims to have a relatively adequate metaphysical and cosmological account. Its adequacy is demonstrated by its internal coherence and by its exemplification in experience. The internal coherence of Whitehead's theory can only be judged after it has been presented. However, it is effective and desirable to begin with his exemplification in experience. Showing how his metaphysical ideas correspond to common elements of experience performs the dual functions of helping to make his ideas more understandable and to demonstrate their accuracy. When considering Religion in the Making it was an obvious choice to test the exemplification of Whitehead's metaphysical ideas in terms of religious dogma. When considering Process and Reality the choice is not as obvious, but there is an effective example which can serve both as an introduction to his ideas and as confirmation of their efficacy. This can be found in his understanding of perception.

Whitehead's theory of perception is especially apt for this task because it introduces an important concept in Whitehead's philosophy which is a divergence from traditional metaphysical accounts. As indicated, earlier in the introduction¹ modern scientific accounts of reality depend upon a substance/accident understanding which implies only external relations between substances. However Whitehead seeks to find a way in which actual entities can demonstrate real internal relations. This means that he must be able to show how the past directly influences the present. The key to Whitehead's understanding of

¹ See p. 12.

this link is in his theory of perception, specifically a unique part of this theory, his concept of causal efficacy. Metaphysically this theory is adopted through his concept of prehension.

Whitehead's Theory of Perception

In dealing with this topic of perception, Whitehead is in dialogue with the great modern rationalists and empiricists. In part, this allows him to write in the preface, that "these lectures are based upon a recurrence to that phase of philosophic thought which began with Descartes and ended with Hume" (PR, p. xi). Whitehead has both an important agreement and disagreement with these modern philosophers in terms of the nature of perception. He is in general agreement with what he calls the subjectivist principle. "The subjectivist principle is, that the datum in the act of experience can be adequately analysed purely in terms of universals" (PR, p. 157). This understanding of perception relies on a substance-quality ontology. A substance-quality ontology posits independent substances which are known through their participation in universal qualities. For example, consider a red ball. The ball, which is the substance, is a particular instance of a number of different universal qualities, such as the quality of spherical shape and the colour red. To know the ball, therefore, is to be aware of the ball's particular instantiation of these universal qualities. In this sense, Whitehead is referring to perception as "the catching of a universal quality in the act of qualifying a particular substance" (PR, p. 158). These universals that Whitehead is referring to are, "in respect to the perceiver, *private sensations* referred to particular substances other than himself" (PR, p. 158-9, emphasis added). In short, the subjectivist principle is that subjects, rather than objects, provide the primary data for perception. In other words, rather than accepting the idea that 'This stone is grey' expresses a primary known fact, the subjectivist principle believes that the primary starting point is the subjective enjoyment of experience, in other words, 'my experience of this stone as

grey'.² However, this subjectivist principle, on its own leads to an extreme idealism which Whitehead refers to as "the solipsism of the present moment" (PR, p. 158). Therefore this subjectivist principle must be reformed through the addition of an objectivist principle. This has two important implications. The first is that with this addition the substance-quality ontology can be rejected in favour of a relational ontology. And, secondly this points towards the idea that sense experience in the form of "presentational immediacy" is not the primary form of experience.

Presentational immediacy "is our immediate perception of the contemporary external world, appearing as an element constitutive of our own experience"(S, p. 21). In other words, presentational immediacy represents what is generally understood by the subjectivist principle. Knowledge gained from presentational immediacy is vivid, precise, barren, and controllable at will (S, p.23). It is barren because the perceived qualities are not necessarily connected to the intrinsic character of the things. And it is controllable at will because one moment of experience can predetermine succeeding experiences of presentational immediacy. This type of perception is the manner in which things appear in our experience. An important element of presentational immediacy has to do with the elevation of subjectivity over objectivity in perception, such as presented above in the understanding of the subjectivist bias.

In general, Whitehead believed that there was an important example of the fallacy of misplaced concreteness in the thinking of the classical empiricists regarding perception. This means that the way that sense experience appears to be is not necessarily the way it truly is. In other words, the way it appears to be is an abstraction from the way it is. Sense experience is usually considered the most basic type of experience available to humanity.

² Ivor Leclerc, Whitehead's Metaphysics (London: George Allen and Unwin Ltd., 1958), pp. 119-120.

In this sense, it is considered the most concrete form of experience. However, Whitehead argues that in an important way, sense perception is an abstraction, but also an enhancement, from a more basic form of perceptive experience which Whitehead calls "*causal efficacy*." To illustrate this, Whitehead asks us to analyse different ways of seeing objects. Imagine that I have just come home from a long walk with a friend, who is an artist, and a dog. Upon arriving home and feeling quite tired, I, at the same time as my friend and the dog, begin to look upon a very comfortable chair in the living room. My friend, the artist, is struck by the unique shape of the chair and the arresting contrast of colour which it provides in the room. On the other hand, both I and the dog immediately move towards the chair, fully intent upon resting.³

There are a number of important points which arise from this illustration. First of all, it appears that sense perception is normally considered an act of perceiving basic qualities/accidents of substances, such as colour and shape, and then interpreting this data as an object. It would seem that in this situation, all three of the participants *saw* the same thing: namely, a coloured shape in a localized space, but interpreted it differently. The artist was able to isolate this coloured shape and contemplate its aesthetic nature. On the other hand, the dog and I went immediately from what we saw to the interpretation of this data as a chair. This seems to imply that perception involves a chain of complex inference. Whitehead, however, is sceptical about such an order of events. In this example the only one who was able to consider the chair on a level of colour and shape was the individual who had been trained to do so, namely, the artist. In fact it took a high level of abstraction to be able to see the chair in such a specific manner. On the other hand, as

³ This example originally appears in a slightly different form in S, pp. 3-4. It is also presented, along with the following analysis, in Thomas E. Hosinski, Stubborn Fact and Creative Advance (Maryland: Rowman and Littlefield Pub., Inc., 1993), pp. 47-8.

evidenced by the dog, it is common and much easier simply to perceive the chair.

Whitehead makes this same point with a different example in PR. "A young man does not initiate his experience by dancing with impressions of sensation, and then proceed to conjecture a partner. His experience takes the converse route" (PR, pp. 315-16).⁴

Therefore, Whitehead argues that perception is a highly complex act, although not an exclusively human act, which has a couple of different elements. Obviously there is a sensuous element to perception. However, isolating this purely sensuous element is an advanced abstraction which perceiving individuals do not always entertain. Therefore, there must be another element of perception, a "non-sensuous" element, which is widely shared.

Whitehead calls this basic, non-sensuous experience "perception in the mode of causal efficacy" (PR, pp. 168-9) Causal efficacy "refers to the way in which we experience *objects* as distinct from sense perceptions."⁵ Causal efficacy is the perception of conformation. It is the relationship of conformation between the immediate present and the immediate past. Whitehead writes that "the more primitive types of experience are concerned with *sense-reception*, and not with *sense-perception*" (PR, p. 113, emphasis added).

This type of experience is a fundamental part of all life. In fact, "it belongs to the ultimate texture of experience"(S, p. 46). Whitehead describes it as being insistent, vague, haunting, and unmanageable (S, p. 43). It is essentially an unconscious experience in which the past is projected onto the present.. The lower the grade of organism, the stronger the evidence of this mode.

⁴ See also Hosinski, p. 49.

⁵ Hosinski, p. 50.

Specifically, in terms of human experience, causal efficacy has to do with the inheritance of past bodily states. "This survey supports the view that the predominant basis of perception is perception of the various bodily organs, as passing on their experiences by channels of transmission and of enhancement" (PR, 119). In sense experience, the experience always comes through bodily organs: we see with our eyes, feel with our hands, hear with our ears, etc. Hence there is an intersection of sense data. The same sense data which arises through causal efficacy is used in presentational immediacy "to exhibit the contemporary world in its spatial relations"(S, p. 50). "Thus perception in the mode of causal efficacy discloses that the data in the mode of sense-perception are provided by it"(S, p. 53).

For the organic theory, the most primitive perception is 'feeling the body as functioning.' This is a feeling of the world in the past; it is the inheritance of the world as a complex of feeling; namely, it is the feeling of derived feelings. The later, sophisticated perception is 'feeling the contemporary world.' Even this presentational immediacy begins with sense-perception of the contemporary body (PR, 81).

Thus the causal efficacy *from* the past is at least one factor giving our presentational immediacy *in* the present. The *how* of our present experience must conform to the *what* of the past in us (S, p. 58).

Causal efficacy is a largely unconscious form of experience (while we see with our eyes it takes a special act of abstraction to realize this and attempt to focus on our own eyes in the act of seeing) which is fundamental and presentational immediacy is a largely conscious form of experience which is dependent upon causal efficacy. However, both have to work together in symbolic reference to achieve accurate experiential awareness.

Whitehead affirms the subjectivist bias of modern empiricism but seeks to add an objectivist principle. This objectivist principle is added through his theory of causal efficacy. Causal efficacy gives us awareness of the objectivity of the world through the inheritance of our antecedent bodily states. This means that in immediate experience there

is a conformation of feeling between the immediate past and the present. In other words the feelings of causal efficacy provide the sensation for presentational immediacy and at the beginning are felt the same way.

The key implication of the addition of this objectivist principle is that the subject is not an independent substance, but it depends upon other things to exist. This means that the most primitive aspects of experience are 'feelings of derivation'. A subject arises from its past; subjectivity is derivative from objectivity. Significantly, this also implies that the subject creates itself from its past. The initial stages of the subjective life of the actual entity is largely one of conformation with its past, however it is the present subject *taking* into itself what is immediately past and *appropriating* it.

The subject is thus to be conceived as self-creative, the product of its own "constructive functioning" but that functioning begins with the completely dependent activity of accepting into itself the legacy of particular existents in its past.⁶

Metaphysically this is describing the initial phase of concrescence, whereby an actual occasion inherits its past in the form of physical prehensions.

Actual Entities and Physical Prehensions

Before we examine the metaphysical manner in which the past is related to the present, it is necessary to examine the basis of Whitehead's system. One of Whitehead's metaphysical goals is to adopt a one-substance cosmology. Traditionally metaphysics has embraced a two-substance cosmology, the two substances referring to mind and matter. However, Whitehead finds these systems, especially Descartes' and Newton's, lacking in consistency. So, Whitehead attempts to make the physical and the mental subsets of the

⁶ Hosinski, p. 57.

truly actual, which is an event. In this way he creates a one-substance cosmology (PR, p. 19).⁷

The final constituents of reality are what Whitehead calls actual entities, or actual occasions. He is clear to point out that these actualities are not bits of stuff, i.e. substances with attributes, but occasions of experience or events (SMW, p. 152, and AI, p. 221).

Actual entities' -- also termed 'actual occasions' -- are the final real things of which the world is made up. There is no going behind actual entities to find anything more real. They differ among themselves: God is an actual entity, and so is the most trivial puff of existence in far-off empty space. But, though there are gradations of importance, and diversities of function, yet in the principles which actuality exemplifies all are on the same level. The final facts are, all alike, actual entities; and these actual entities are drops of experience, complex and interdependent (PR, 18).

When Whitehead writes that actual entities are the "final real things of which the world is made up" he is referring to what he calls the *ontological principle*. "The ontological principle can be summarized as: no actual entity, then no reason" (PR, p. 19). In other words, actual entities are the only entities in Whitehead's metaphysics that possess ontological status. Anything which claims existence must either be an actual entity or have a special relationship with an actual entity (PR, p. 73). Thus, Whitehead can write, "the ontological principle declares that every decision is referable to one or more actual entities, because in separation from actual entities there is nothing, merely nonentity - 'The rest is silence' "(PR, p. 43). And again, "According to the ontological principle there is nothing which floats into the world from nowhere. Everything in the actual world is referable to some actual entity" (PR, p. 244).

⁷ The use of substance in this passage refers to Whitehead's comparison of his thought with Aristotle's, not to a similarity in composition. While an event does not share the same characteristics as Aristotelian substance, it plays a similar role in the cosmology as a whole.

Therefore, the mental and the physical must be different elements of a single actual entity. To explain this phenomenon, which will become clearer as we progress, Whitehead refers to actual entities as "dipolar" (PR, p. 45). In essence this means that the physical and the mental constitute different poles of the same occasion of experience.

Thus 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 (PR, p. 45).

Clarification of this dipolar nature of actual entities will follow, as we attain an understanding of the genetic makeup of actual entities.⁸

As we have already seen, subjects arise from their past. The presently immediate state of an actual entity is a subject. Based upon the notion of causal efficacy, the initial stage of an actual entity is a 'feeling of derivation' in which the present subject feels the objectified past. In this first stage of concrescence the feelings of derivation are largely conformal so that the actual entity repeats the past.

Each actual entity is conceived as an act of experience arising out of data. It is a process of 'feeling' the many data, so as to absorb them into the unity of one individual 'satisfaction.' Here feeling is the term used for the basic generic operation of passing from the objectivity of the data to the subjectivity of the actual entity in question (PR, p. 40).

Another way of describing this process is through the concept of prehension. After all, "the first analysis of an actual entity, into its most concrete elements, discloses it to be a concrescence of prehensions, which have originated in its process of becoming" (PR, p. 23). Prehension is the term used to describe the manner in which an actual entity feels

⁸ As events, actual entities cannot be broken down into distinct parts. Actual entities already are the basic composites of reality. However, they can be analysed into different, genetic parts. This is an abstraction, which is fine, as long as it is recognised as an abstraction and not understood as concrete reality.

datums or objects. Thus prehension and feeling are synonyms for Whitehead. Therefore, the objectified data, which is the past, is prehended by the concreting actual entity. In this way the past is given. In other words, the present appropriates the past. In this way, the past becomes a real part of the present. This 'becoming a part of' signifies real internal relations as opposed to merely external relations. External relations are generally changes in motion between objects. Internal relations are when an object is taken over and becomes a part of its subject. Prehension is exactly this process of being taken over. Thus, "a feeling is the appropriation of some elements in the universe to be components in the real internal constitution of its subject" (PR, p. 231).

Prehensions can be both physical and conceptual and they can also be combinations of the two, what Whitehead calls hybrid prehensions. We will look at physical prehensions with respect to actual entities, conceptual prehensions with respect to eternal objects and hybrid prehensions with respect to God.

Prehensions give actual entities a bond with every other object in the universe. This can be in the form of a positive or a negative prehension. A positive prehension is the definite inclusion of the object as datum into the internal constitution of the subject. A negative prehension excludes the object from having any positive contribution to the internal constitution of the subject. Thus a negative prehension still affects, the becoming of an entity, albeit in a negative manner. That is to say, it affects what the entity can become by showing it what it cannot be. For example, my ability to attend to a conversation partner's words, or even the writing of these pages, depends, in part, upon tuning out sounds and sights that would distract me.

Whitehead describes five different way in which prehensions are involved in the concrescence of actual entities.

A feeling - i.e., a positive prehension - is essentially a transition effecting a

conrescence. Its complex constitution is analysable into five factors which express what that transition consists of, and effects. The factors are: (i) the 'subject' which feels, (ii) the 'initial data' which are to be felt, (iii) the 'elimination' in virtue of negative prehensions, (iv) the 'objective datum' which is felt, (v) the 'subjective form' which is how that subject feels that objective datum (PR, p. 221).

As we have seen, the subject is the actual entity which is becoming. The initial data is the past. That is to say, actual entities which have passed from becoming to being. These entities have satisfied their subjective aim and perished as a result. These actual entities, which were once subjective, have now become the objective data for the present subjective entities. These presently immediate subjects are defined by the manner in which they prehend these past data. They either prehend positively and thus include the data into themselves, or prehend negatively in which case they exclude that possibility from their essence. Finally, subjective form relates to *how* the present (subject) prehends the past (object). "The subjective form is the immediate novelty; it is how that subject is feeling that objective datum" (PR, p. 232). In the most basic type of actual entity this is a conformal feeling. The subject prehends the object as it is in itself. This is not always the case. As described in the introduction the division between the physical and the mental depends upon the introduction of novelty into an event. An actual entity which simply repeats the past is physical. The subjective form of such an entity would be entirely conformal. However an actual entity which displays attributes of mentality would have a novel subjective form. That is to say a subjective form which does not simply repeat the past but adds something new. This new element would enter via its conceptual prehensions.

In summary, the first stage of conrescence accounts for the internal relations of actual entities and the inheritance of the past by the present. In perception this is the same as the perceptive mode of causal efficacy. That is to say, the first stage of conrescence accounts for both the connectedness and continuity of existence.

To summarize, Whitehead hypothesizes that the initial phase of a concrescence consists of the following elements. There is something to be received from the immediate past: the objective datum. There is the act of receiving, which he refers to as inheritance, physical prehension, or physical feeling. This act of receiving has a subjective form, which is *how* the concrescing subject feels the objective datum. In the initial phase of concrescence there is conformation of feeling: the subjective form of the physical feeling is the same form of the datum.⁹

As indicated at the beginning of this chapter, Whitehead wants to account for both process and reality, permanence and flux within the world. Conformal physical prehensions account for the permanence of the reality of the world. Thus, in the next of stage of concrescence Whitehead needs to account for the introduction of novelty or flux in the world.

Eternal Objects and Conceptual Prehensions

In the Function of Reason, Whitehead writes that "the conduct of human affairs is entirely dominated by our recognition of foresight determining purpose, and purpose issuing in conduct" (FR, 13).¹⁰ This suggests that there are three distinct events in the transition from intent to action in human experience: from foresight to purpose to action. This is the same formula which Whitehead applies to the introduction of novelty in individual occasions. Hosinski draws out the four implicit steps which are supposed in foresight determining purpose, and purpose issuing in conduct.¹¹ He writes that first of all, foresight demands that there must be entertainment of real but different possibilities for the present moment. Secondly, these different possibilities must be experienced in terms of their worth or value for the present moment. Thirdly, there must be a decision in which the possibility of foresight becomes the purpose or aim for that particular moment. This

⁹ Hosinski, pp. 62-3.

¹⁰ See also Hosinski, p. 75.

¹¹ Hosinski, pp. 75-6.

decision must be based upon the relative worth of that possibility for that particular moment. And finally, in order for the purpose to issue in conduct, the subject must be free to make this evaluation and decision which results in action

This suggests that there is a drive towards novelty in humanity. That is to say, that while some conformity with the past is essential for order in nature, there must also be novelty which promotes life and which brings about increasingly satisfactory types of experience. Thus, Whitehead writes that "the art of life is *first* to be alive, *secondly* to be alive in a satisfactory way, and *thirdly* to acquire an increase in satisfaction" (FR, p. 8).¹²

Whereas in the initial phase of concrescence there is conformity with the past, the second stage of concrescence must account for the introduction of novelty. Likewise, the first stage of concrescence consists in physical prehensions, the second stage consists of conceptual prehensions.

"A conceptual prehension is a direct vision of some possibility of good or of evil - of some possibility as to how actualities *may* be *definite* (PR, p. 33). Conceptual prehensions constitute the mental pole of an actual entity. All actual entities are dipolar. This means that they have two poles of actuality: the physical and the mental. As indicated in the introduction, the "mental" in this general sense is pervasive throughout nature, although it is not equivalent to consciousness. Consciousness is a very high grade mental function which occurs in very few organisms, whereas all actual entities have a mental pole.

Whereas physical feelings prehend past actual entities as objects, conceptual feelings prehend an entirely different object which Whitehead calls an 'eternal object.' Eternal objects are transcendent from actual entities and consequently are abstract. Therefore as things, eternal objects cannot be understood apart from their relationships with actual

¹² See also Hosinski, p. 83.

occasions. Rather, each eternal object has a relationship with each occasion termed its "ingression into that occasion" (SMW, p. 159).

An eternal object can be described only in terms of its potentiality for 'ingression' into the becoming of actual entities; and that its analysis only discloses other eternal objects. It is a pure potential (PR, p. 23).

Ingression refers to the manner in which the potentiality of an eternal object is realized in the determination of an actual occasion. Through its ingression into an actual entity, eternal objects provide possibilities or potentials which the entity may become.

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

This ingression is also the limitation of the eternal object. Limitation refers to the act of qualification that occurs between the pure potentiality of the eternal objects and the absolute determination of actual entities. The ingression of an eternal object into an actual occasion is not the evocation of being from not-being; "it is the evocation of determination out of indetermination. Potentiality becomes reality; and yet retains its message of alternatives which the actual entity has avoided" (PR, p. 149). That is to say, the eternal objects are ideal in their presentation of possibility for actuality. They are pure potentials. Thus it is only their ingression into actual entities that allows them to acquire a state of actuality. This is necessary because of the ontological principle. Actual entities are the final real things of the world. While eternal objects have a state of reality, they are not actual. That is to say, that in themselves they cannot exist but only are actual in their relation to actual entities.¹³

¹³ This point is raised again in context of the Primordial Nature of God. Please see p. 69.

In addition to abstraction of potentiality, eternal objects also account for identity, permanence, and limitation. Eternal objects account for identity and permanence because there is a perpetual perishing in actual occasions once they achieve satisfaction. In order to know something actual, there must be something permanent which persists through varying experiences of events. Thus, the recognition required by knowledge can only be found in the eternal objects related to actual occasions. Thus these eternal objects give both identity and permanence to actual occasions.

Actual entities are prehended through the mediation of eternal objects. Thus eternal objects have a role in determining the constitution of actual entities because of the manner in which the entity feels, or prehends, its antecedent. As the current occasion prehends the objective data of a past occasion, this prehension is mediated by the eternal objects.

This indicates that there are two groups of eternal objects which are available to the concreting subject. There are the potentials already contained in the objects which constitute its physical prehensions, and there are potentials which are not a part of these physical prehensions, and thus not a part of the given, actual situation. For example, consider that I am outside at the beginning of a rainstorm. The potential within the situation is that I will get wet. However, an outside potential is that I will go inside and stay dry.

When the subject is feeling these different possibilities, it does so through a subjective form of valuation, as opposed to a subjective form of conformation as with initial physical prehensions. "[I]n the formation of this integrated datum there must be determination of exactly *how* this eternal object has ingress into that datum conjointly with the remaining eternal objects and actual entities derived from the other feelings. This determination is effected by the subjective forms of the component conceptual feelings" (PR, p. 240). These valuations are emotional and aesthetic reactions to the value or worth

of the possibilities which the eternal objects present for the prehending entity. In other words, the concreting entity chooses which potentials to actualize in its becoming based upon the relevance of the possibility. This relevance is judged through moral and aesthetic criteria. Thus, ideally an actual entity will actualize those possibilities which are beautiful and good.

Subjective Aim, Comparative Feelings, and Satisfaction

From conceptual prehensions, we move into the third stage of concrecence: simple comparative feelings. This is the integration of what is given (physical prehensions) with what could be (conceptual prehensions). This integration then determines the purpose of the actual entity. Often, Whitehead calls this purpose the subjective aim. The subjective aim is the *τελος* of the actual entity; it is that which directs the becoming of the subject itself.

This concept of the subjective aim is actually a little more complicated, however it is an very important concept in Whitehead's thought. There are both efficient and final causes involved in the concrecence of an actual entity. The objectified datums from the past are the efficient causes, and the superject as satisfied subject is the final cause. This final cause constitutes the aim, i.e. the purpose, which drives the actual entity to be what it in fact becomes. The objectified datums which are prehended by the concreting actual entity are integrated in a manner dictated by the subjective aim, which is the final end of the entity. That the objectified datums are felt, or are transmitted as feelings, is an important point. The subject is an emergent element from its prehensions. It is only in retrospect that there is a sense in which the subject grasps the past as feelings. It is more accurate to say that the feelings aim at the subject as superject. "The doctrine that each actual entity is *causa sui* means that there is not first a subject, which then sorts out

feelings; it means, rather, that there are first feelings, which , through integrations, acquire the unity of a subject." ¹⁴

The subject-superject is the purpose of the process originating the feelings. The feelings are inseparable from the end at which they aim; and this end is the feeler. The feelings aim at the feeler, as their final cause. The feelings are what they are in order that their subject may be what it is. ... If the subject-predicate form of statement be taken to be metaphysically ultimate, it is then impossible to express this doctrine of feelings and their superject. It is better to say that the feelings aim at their subject, than to say that they are aimed at their subject. For the latter mode of expression removes the subject from the scope of the feeling and assigns it to an external agency. Thus the feeling would be wrongly abstracted from its own final cause. This final cause is an inherent element in the feeling, constituting the unity of that feeling. An actual entity feels as it does feel in order to be the actual entity which it is. (PR, p. 222).

An essential part of this concept is the corollary that an actual entity is *causa sui*.

The subjective aim indicates this because it dictates how an object will come to be. This is a difficult point because our description of the concrescence of an actual entity has been according to its genetic components, however an actual entity is a whole unit of activity. To look at its genetic components individually is an exercise of abstraction. So, even though the subjective aim is the drive towards the superject, it is present in the initial stages of the concrescence. In this sense, the subjective aim is the final cause.

Thus process is the stage in which the creative idea works toward the definition and attainment of a determinate individuality. Process is the growth and attainment of a final end. The progressive definition of the final end is the efficacious condition for its attainment. The determinate unity of an actual entity is bound together by the final causation towards an ideal progressively defined by its progressive relation to the determinations and indeterminations of the datum. The ideal, itself felt, defines what 'self' shall arise from the datum; and the ideal is also an element in the self which thus arises.

According to this account, efficient causation expresses the transition from actual entity to actual entity; and final causation expresses the internal process whereby the

¹⁴ Donald W. Sherburne, ed. *A Key to Whitehead's Process and Reality*, (New York: The MacMillan Company, 1966), p. 244.

actual entity becomes itself. There is the becoming of the datum, which is to be found in the past of the world; and there is the becoming of the immediate self from the datum. This latter becoming is the immediate actual process. An actual entity is at once the product of the efficient past, and is also in Spinoza's phrase, *causa sui* (PR, p. 150).

There is a reference to self-causation in these quotations because it is the actual entity itself which decides how to become. The subjective aim is a drive towards satisfaction, and this satisfaction represents a particular manner of being.

In the evaluation and appropriation of different possibilities, the actual entity can choose to actualize the potentials which are already contained in the objects which are given to it, or it can choose to actualize those relevant possibilities which are not apart of the given situation but still applicable to its becoming. That is to say that in the simplest entity the conceptual and physical prehensions will be integrated in such a way that it duplicates the past. A more complex entity will evaluate and integrate distinct possibilities which will introduce novelty into the entity.

At this point the entity perishes. The integration of the physical and conceptual prehensions satisfies the concrescence of the entity and it ceases to be. However, at this stage it becomes an object for the concrescing of all future entities. Thus it becomes the givenness which defines the future. Whitehead terms this the superject. He is careful to point out that all subjects are subject/superject. This follows from Whitehead's principle of relativity. In part this principle holds that the major distinction between subjects and objects is temporal. In Whitehead's words:

This is the doctrine of the emergent unity of the superject. An actual entity is to be conceived both as a subject presiding over its own immediacy of becoming, and a superject which is the atomic creature exercising its function of objective immortality. It has become a 'being'; and it belongs to the nature of every 'being' that it is a potential for every 'becoming.' (PR, p. 45).

Objective immortality refers to the continued existence of actual entities as objects for prehension by present (or becoming) actual entities. The consequent nature of God is also implied in objective immortality. However, this will be discussed later.

In more complicated instances of concrescence, the actual entity does not reach satisfaction at the stage of simple comparative feeling. Instead of reaching satisfaction with this integration of physical and conceptual prehension, this integration provides the ground for further feelings. Whitehead calls the objects of prehensions datums. Therefore, the datums of these more complex prehensions are metaphysical propositions. "In Whitehead's analysis a metaphysical proposition is formed by deriving a "predicate" (or possible form of definiteness) from an occasion's conceptual prehensions and applying that "predicate" to the actual entity or group of actual entities grasped in the occasion's physical prehensions, which form the "subject" of the proposition."¹⁵ In essence a metaphysical proposition presents a modified lure to an actual entity. The conceptual prehension feels the ideals which are relevant to the concrescence of the actual entity. However, these ideals need to be judged and evaluated against the realities of the physical prehensions, the givenness from the immediate past of the actual entity. In the simplest occasion the becoming entity simply reiterates or repeats its immediate past. Its ideal is to remain the same. However in an entity which exhibits elements of mentality, novelty must become a real part of the event. In this case the ideals presented in the conceptual prehensions need to be evaluated against the realities of the given situation. This is what a metaphysical proposition does. In the midst of this evaluation, the metaphysical proposition acts as a lure for the entity to aspire towards. In other words, a metaphysical proposition presents a possibility in relation to a concrete situation in the world.

¹⁵ Hosinski, p. 100.

More specifically, a proposition can be either true or false. If it is true than it is in conformity with the actual world. If it is false then it does not conform to the world. The engines of novelty for actual occasions are non-conformal or false propositions. For example, the proposition that I have a Master's of Arts degree in Religious Studies is false. However, my contemplation of the desirability of this proposition acts as a lure so that I act to make this proposition true.

In a similar manner to the subjective form of a conceptual prehension, the subjective form of a proposition is a valuation. That is to say that the prehending occasion responds with an emotional reaction to the value or worth of the proposition for the givenness of the situation. The entity is either attracted or repelled by the proposition depending on its aesthetic and moral value for the actual entity. In entertaining the possibilities as lures for action, actual entities acquire greater subjective intensity which in the case of humanity results in consciousness.¹⁶

This is simply a brief overview of the complex manner in which prehensions are conceived to work in Whitehead's philosophy. While I could go into greater detail regarding the nature of these events, for lack of time and space I will save that for another project. At this point I will begin to explore the role that God plays in the concrescence of these actual entities.

God

For the sake of metaphysical coherence, Whitehead establishes a one-substance cosmology. That is to say, Whitehead seeks to find that which all entities share in common. As such, Whitehead finds only one entity which is finally real, an actual entity.

¹⁶ See Hosinski pp. 100-10 for the basis of this analysis.

Therefore, God, who is eminently real, is an actual entity. This means that in some senses God is the same as everything else, in the midst of important and enormous differences as well, of course. Some of the important similarities which exist between other actual entities and God are their dipolar structure, prehensive character, and their functioning as both subject/superject. With respect to God's dipolar nature (PR, p. 345), there are two aspects of God which perform different functions. These are his primordial and consequent natures. In addition, God also has a superjective nature although this idea is somewhat underdeveloped in Whitehead's thought.¹⁷

As Whitehead approaches the question of the nature of God, he is concerned both about how God has traditionally been conceived and the extremities which such conceptions have reached. In Religion in the Making, Whitehead considers three different traditional conceptions of God: "the Eastern Asiatic concept of an impersonal order" (extreme immanence); "the Semitic concept of a definite personal individual entity whose existence is the one ultimate metaphysical fact" (extreme transcendence); as well as, "the pantheistic concept ... [where] the actual world is a phase within the complete fact which is this ultimate individual entity" (monism) (RM, pp. 68-69). Whitehead criticizes all three of these conceptions for different reasons, but ultimately for their simplicity.

To reduce religion to a few simple notions seems an arbitrary solution of the problem before us. It may be common sense; but is it true?
 ... As a particular application, we may believe that the various doctrines about God have not suffered chiefly from their complexity. They have represented extremes of simplicity, so far as they have been formulated for the great rationalistic religions. The three extremes of simple notions should not represent in our eyes mutually exclusive concepts, from among which we are to choose one and reject the others (RM, pp. 76-77).

¹⁷ There are only two places in PR where Whitehead refers to this superjective nature of God. These passages are analysed in greater detail on p. 79.

Therefore, Whitehead believes that a number of antithetical statements regarding God require reconciliation. Examples of these antitheses are transcendence and immanence, necessity and contingency, immutability and mutability, eternality (non-temporal) and everlastingness (temporal), etc. Whitehead argues that these cannot be exclusive concepts but concepts whose relationships must be discovered.

In an essay concerning Whitehead's conception of God, Charles Hartshorne argues that Whitehead has been able to find just such a median between opposing conceptions of the deity. Hartshorne suggests that the extremes of sheer independent power (utter transcendence) and complete identity of the world and God (utter immanence) be symbolized by CC and WW respectively. Then, the median position, CW would indicate "that there is an independent factor, which is cause but not effect, and also a dependent or, as Whitehead calls it, a "consequent" factor, which itself has causes."¹⁸ Likewise, he symbolizes sheer absolute perfection with AA, and relative perfection with RR (Hartshorne defines perfection as "an excellence such that its possessor *surpasses all other conceivable beings*."¹⁹ Therefore, absolute perfection, or AA, would be to surpass all others but not self, while RR or relative perfection would be to surpass all others including self). So, "as CW is to CC and WW, so is AR to AA and RR."²⁰ In other words, God is both perfect in a sense which cannot be surpassed, not even by Godself, and perfect in a sense that God can surpass. While this may appear to render God finite in the sense that God is not perfect but seeking perfection, such an interpretation is not accurate. To the contrary, God is perfect, even in God's own relativity. That is to say, God is perfect but the content of God's

¹⁸ Charles Hartshorne, "Whitehead's Idea of God," in The Philosophy of Alfred North Whitehead, Paul A. Schilpp, ed. (Evanston and Chicago: Northwestern University, 1941), p. 518.

¹⁹ Hartshorne, p. 518.

²⁰ Hartshorne, p. 518.

perfection changes. This is because one aspect of God's nature, God's consequent nature is dependent upon the world. As the world changes it is taken up into God. So, although God is adequately related to everything, the nature of this relationship changes with temporal actuality. Omniscience presents another example of this principle. God is omniscient, that is to say, God knows everything there is to know. However, the content of what there is to know constantly changes. Therefore, while God's knowledge is perfect it also changes. Hartshorne claims that Whitehead's God is "A plus a relative aspect, and he is C plus the world as internal to his complete nature."²¹ Therefore, Whitehead's conception of God is a median between the extremes of different traditional conceptions.

The Primordial Nature of God

As stated in the introduction, Whitehead believes that he needs to account for the concept of God philosophically as part of a consistent system rather than as a theological answer to difficult questions. Therefore Whitehead needs to show how God fits into his metaphysical system and responds to key concerns. As it stands there are three important problems that exist with respect to the account of concrescence presented in this chapter. The first occurs in relation to the ontological principle. According to the ontological principle, all actuality must be accounted for by actual entities. However, eternal objects are not actual in the same sense as actual entities which are the final real things of the world. Possibilities actualized in entities obviously do have a place in the world. But, what of real possibilities not yet actualized? Where do they exist? To what actual entity are they related? A temporal entity cannot be the reservoir of eternal objects simply

²¹ Hartshorne, p. 525.

because a temporal entity perishes. Therefore there needs to be a non-temporal actual entity which can ground possibility for actuality.

The second problem arises with respect to the ground of value and order. For there to be order in the world there must be some limitation of pure possibility. Pure possibility without limitation cannot be the ground of any actuality. Therefore there needs to be an order of relevance in which the actual entitiesprehend these eternal objects. In addition, in order for actual entities to be able to evaluate the value or worth of its conceptual and propositional feelings, there must be a standard by which to judge.

The third problem associated with concrescence is the origin of the subjective aim. The subjective aim is the manner in which the actual entity decides to become. Once the subjective aim is given then it can stand as its own reason with respect to the ontological principle. However Whitehead must still account for its origin. Actual entities in the world are temporal, which means that they perish. Therefore they cannot pass on their aims to future concrescing occasion. Once again there is a need for a non-temporal actual entity in which the subjective aims of all other entities can arise.

All of these problems require a primordial ground which is an actual but non-temporal entity. Whitehead suggest that the primordial nature of God is the non-temporal actual entity which can ground the eternal objects, and provide the initial aim which directs the concrescence of actual entities, and be the factor of limitation and determination with respect to concrescence of actual entities.

The scope of the ontological principle is not exhausted by the corollary that 'decision' must be referable to an actual entity. Everything must be somewhere; and here 'somewhere' means 'some actual entity.' Accordingly the general potentiality of the universe must be somewhere; since it retains its proximate relevance to actual entities for which it is unrealized. This 'proximate relevance' reappears in subsequent concrescence as final causation regulative of the emergence of novelty. This 'somewhere' is the non-temporal actual entity. Thus 'proximate relevance' means 'relevance as in the primordial mind of God' (PR, p. 46).

Thus the primordial nature of God is the reservoir for the eternal objects. This is the solution to the first problem.

In addition however, God, in his primordial vision of the eternal objects, also evaluates them so that they appear in graded relevance to the relevant actual entities.

The primordial created fact is the unconditioned conceptual valuation of the entire multiplicity of eternal objects. This is the 'primordial nature' of God. By reason of this complete valuation, the objectification of God in each derivate actual entity results in a graduation of the relevance of eternal objects to the concrescent phases of that derivate occasion. ... Apart from God, eternal objects unrealized in the actual world would be relatively non-existent for the concrescence in question (PR, p. 31, see also p. 344).

The ideals, which are the pure potentials of the world, are found, and graded for relevance, in the mind of God. This graded relevance provides the limitation on concretion that is necessary for the pure potentiality of the eternal objects to enter into the determinateness of actuality. "From this point of view, he is the principle of concretion -the principle whereby there is initiated a definite outcome from a situation otherwise riddled with ambiguity" (PR, p. 345). This is the solution to the second problem.

God is also the ground of the subjective aim of actual entities. In a key passage, Whitehead clearly states that the subjective aim is an endowment from God.

...the initial stage of its aim is an endowment which the subject inherits from the inevitable ordering of things, conceptually realized in the nature of God. The immediacy of the concrescent subject is constituted by its living aim at its own self-constitution. Thus the initial stage of the aim is rooted in the nature of God, and its completion depends on the self-causation of the subject-superject. ..What is inexorable in God, is valuation as an aim towards 'order'; and 'order' means 'society permissive of actualities with patterned intensity of feeling arising from adjusted contrasts.' In this sense God is the principle of concretion; namely, he is that actual entity from which each temporal concrescence receives that initial aim from which its self-causation starts. That aim determines the initial gradations of relevance of eternal objects for conceptual feeling; and constitutes the autonomous subject in its primary phase of feelings with its initial conceptual valuations, and with its initial physical purposes (PR, p. 244).

Therefore, God supplies the initial aim of each new concrescence. And, as an element of receiving this initial aim, the actual entity receives a vision of the eternal objects graded, by God, in relevance to its own situation. This is a very important point. This means that each occasion begins with the same valuations of the eternal objects that God has in his primordial vision. This also means that the actual entity inherits a standard of value from God in which to judge the ideals with which it is presented.

However, there is not simply a reception of this initial subjective aim from God. As described above, prehension involves both a subjectivist and an objectivist principle. There is something presented which is real, but it must also be grasped or prehended by the subject in question. So, while God provides the initial subjective aim for each actual entity, the entity must prehend it. This poses a small problem because as we have seen each actual entity begins with a physical prehension, and yet God's primordial nature is conceptual, it is the eternal vision of the eternal objects. Therefore, Whitehead introduces a new type of prehension called a 'hybrid physical prehension' (PR, p. 344-5).

...Each temporal entity, in one sense, originates from its mental pole, analogously to God himself. It derives from God its basic conceptual aim, relevant to this actual world, yet with indeterminations awaiting its own decisions. This subjective aim, in its successive modifications, remains the unifying factor governing the successive phases of interplay between physical and conceptual feelings. These decisions are impossible for the nascent creature antecedently to the novelties in the phases of its concrescence. But this statement in its turn requires amplification. With this amplification the doctrine, that the primary phase of a temporal actual entity is physical, is recovered. A 'physical feeling' is here defined to be the feeling of another actuality. If the other actuality be objectified by its conceptual feeling, the physical feeling of the subject in question is termed 'hybrid.' Thus the primary phase is a hybrid physical feeling of God, in respect to God's conceptual feeling which is immediately relevant to the universe 'given' for that concrescence. There is then, ... a derived conceptual feeling which reproduces for the subject the data and valuation of God's conceptual feeling. This conceptual feeling is the initial conceptual aim referred to in the preceding statement (PR, p. 224-225).

This rather lengthy quotation demonstrates an important point. Hybrid prehensions are necessary to show how conceptual feelings can arise out of physical prehensions. The prehension of a subjective aim from God is a conceptual prehension, in essence it is a prehension of all the eternal objects in graded relevance to that particular occasion. However, all initial prehensions must be physical. This creates a contradiction, because a prehension of the subjective aim from God is a conceptual prehension, but being an initial prehension, it must be physical. The hybrid prehension is the solution for this problem. It solves the problem by bringing together physical and conceptual prehensions in a unique manner. A hybrid prehension is a physical feeling of a conceptual object. "In a 'hybrid physical feeling' the actual entity forming the datum is objectified by one of its own conceptual feelings" (PR, p. 246). An example of a hybrid prehension would be a conceptual prehension, such as the contemplation of common features which all birds share, arising through a physical prehension, such as the perception of a particular loon. Another example of a hybrid prehension which Hosinski gives is the study of Whitehead. Obviously Whitehead cannot be physically present in order to be physically prehended. But, through grappling with his ideas we are objectifying his mentality which is to say we are conceptually prehending him. Now, Whitehead was actual and all actualities must be physically prehended. So in a sense Whitehead is being physically prehended. "But since this physical prehension is objectifying his mentality and not his physical actuality, it is a "hybrid" physical prehension, a *conceptual* objectification of an actuality.²²

Thus the hybrid prehension of God meets the requirement of a primary physical prehension, but at the same time gives the actual entity God's conceptual vision of the eternal objects. "In these ways conceptual feelings pass into the category of physical

²² Hosinski, p. 175.

feelings. Also conversely, physical feelings give rise to conceptual feelings, and conceptual feelings give rise to other conceptual feelings..." (PR, p. 246). In addition the entity conformably adopts God's valuation of these eternal objects so that the entity adopts, at least in the initial conformal stage, the ideal for concrescence that God has for it.

Even though each actual occasion receives its initial subjective aim from God this aim does not determine the actions of the occasion. To the contrary, as we have seen, actual occasions decide for themselves how to integrate all of the influential aspects of their experience into one concrete moment of experience. Therefore, the initial aim from God is one cause among many. Thus evil can be explained as the self-decision of an actual entity to reject the aim which God has given in order to pursue some other possibility. Left to their own decisions, actual entities would degenerate into either chaos or triviality. However, God through the provision of initial aims acts as a lure which brings about an order in nature. Thus, the primordial nature of God acts as the divine lure, enticing each actual entity to meet its ideal. "He [God] is the lure for feeling, the eternal urge of desire. His particular relevance to each creative act, as it arises from its own conditioned standpoint in the world, constitutes him the initial 'object of desire' establishing the initial phase of each subjective aim" (PR, p. 344). This is one manner in which Whitehead can speak of God as the creator of the world. God does not create in such a manner as to coerce or determine the being of each individual thing, but initiates its own creative actualization by calling it to perfection.

Therefore, Whitehead introduces the primordial nature of God as the solution to a number of different philosophical problems. For the most part, however, these problems center around the origin and limitation of possibility. Possibility is not the same as actuality, but needs a special location in actuality in order to be considered 'real'. The primordial nature of God provides such a place. Because actual entities perpetually perish

they cannot pass on their subjective aims. The primordial nature of God is necessary to make sense of the continual emergence of actual entities in the creative scheme. And finally the primordial nature of God makes it possible for actuality to exist because he merges that which is actual with that which is possible. "The concept of 'God' is the way in which we understand this incredible fact - that what cannot be, yet is" (PR, p. 350).

In describing a mystical experience Pascal once wrote that he did not encounter the God the philosophers, but the God of Abraham, Isaac and Jacob. The point which Pascal sought to make was that there is something in the biblical narrative, in the manner in which God interacts and relates to God's people that transcends the immutable, transcendent God of philosophic reflection. In other words, God as the answer to philosophical problems is a truncated representation of God. In Whitehead's thought the primordial nature of God performs this philosophical function. Therefore, the primordial nature of God is not God but an abstraction from the full, concrete, living reality of God. For example, Whitehead writes that considered primordially, God is far from 'eminent reality' and is actually 'deficiently actual' in two ways. "His feelings are only conceptual and so lack the fullness of actuality. Secondly, conceptual feelings, apart from complex integration with physical feelings, are devoid of consciousness in their subjective forms" (PR, p. 343). Thus, considered primordially God has neither fullness of feeling, nor consciousness (PR, p. 344). This is not a very satisfactory manner to conceive the deity from a religious point of view.

Whitehead continues to describe the primordial nature of God by writing,

His unity of conceptual operations is a free creative act, untrammled by reference to any particular course of things. It is deflected neither by love, nor by hatred, for what in fact comes to pass. 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 (PR, p. 344).

However, in a passage just prior to this one, Whitehead writes concerning four different concepts of God. The first three conceptions, "God in the image of an imperial ruler, God in the image of a personification of moral energy, God in the image of an ultimate philosophical principle" (PR, p. 343) Whitehead finds somewhat idolatrous. By contrast he discusses one other tradition which he refers to as the "Galilean origin of Christianity." This conception of God is different. While it does not "fit very well" with the other conceptions of God, Whitehead believes it is the truthful conception of the deity.

It dwells upon the tender elements in the world, which slowly and in quietness operates by love; and it finds purpose in the present immediacy of a kingdom not of this world. Love neither rules, nor is it unmoved; also it is a little oblivious as to morals. It does not look to the future; for it finds its own reward in the immediate present (PR, p. 343).

However, this 'religious' view of God does not fit very well with the primordial nature of God. In fact, Whitehead states that God is not an ultimate philosophical principle, God is not an unmoved mover, and yet this is exactly the comparison that he draws between the primordial conception of God and Aristotle's thought. Clearly, primordially God is an ultimate philosophical principle. In addition, as we saw above, Whitehead writes that the primordial nature of God is not moved by love or by hatred. And yet we see here that the true conception of God is that God operates quietly by love. Therefore Whitehead requires another understanding of God to balance out this view. And clearly this 'other understanding' will be one dominated by love and tenderness. The primordial nature of God responds to the metaphysical necessity of concretion. However, Whitehead's empiricism requires that his metaphysics also respond to the religious and moral elements of experience. This is the role which the consequent nature of God claims to fill. It is the philosophical answer to life's religious and moral questions.

The Consequent Nature of God

According to Whitehead the consequent nature of God is the "physical" aspect of God's nature. Metaphorically, it is God as redeemer and judge of the world. It is through the introduction of the consequent nature that Whitehead is able to reconcile the immanent, contingent, temporal, and mutable aspects of the deity with the transcendent, necessary, eternal, and immutable aspects of the deity represented by God's primordial nature. The consequent nature of God is everlasting as opposed to the eternality of the primordial nature. Finally, the consequent nature of God demonstrates a special relationship which God has with the world.

Whitehead writes that primordially God is not limited by actuality and consequently is "free, complete, primordial, eternal, actually deficient, and unconscious." (PR, p. 345). However, he claims that there is another side to God which is physical. On this side, God receives the physical experiences of the temporal world and integrates them with God's primordial nature. Thus God is also "determined, incomplete, consequent, 'everlasting,' fully actual, and conscious" (PR, p. 345). This side of God is termed the 'consequent nature' of God because it is consequent upon the creative advance of the world. As the actual occasions of the world reach satisfaction and pass into objectivity, they are physically prehended by God and taken up into this consequent nature. "The consequent nature of God is the fulfillment of his experience by his reception of the multiple freedom of actuality into the harmony of his own actualization. It is God as really actual, completing the deficiency of his mere conceptual actuality" (PR, p. 349). Thus actual entities are objectively immortal in the consequent nature of God. This is in keeping with the one substance cosmology which Whitehead seeks to maintain. As an actual entity, God is dipolar. Therefore God has both conceptual and physical prehensions. While the

primordial nature of God performs conceptual prehensions, the consequent nature of God physically prehends the actual entities of the world.

Whitehead uses two metaphors in particular to describe the consequent nature of God. The first is that God is the judge of the world. God's judgment of the world is the means by which he saves the world. In taking the many completed actualities of the world into Godself, God compares the way the creatures have become with the ideal vision originally given to the creatures from the initial subjective aim. The good and evil, the sufferings and triumphs of this occasion are brought into relation of the completed whole. The evil from the entities is "dismissed into their triviality of merely individual facts"(PR, p. 346). While the good of the occasion is saved by its relation to the whole. "The consequent nature of God is his judgment on the world. He saves the world as it passes into the immediacy of his own life. It is the judgment 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" (PR, p. 346). Thus God's judgment of the world is also God's redemption of the world.

The second metaphor which Whitehead uses for the consequent nature of God is that of infinite patience. Here, Whitehead claims that sheer force belongs only to the multiplicity of actual fact in the temporal world. These self-creating entities choose how to actualize themselves; they come to be and perpetually perish. God does not force them through God's power to be what God envisions, but lures them through the vision of what they could be. "God's role is not the combat of productive force with productive force, of destructive force with destructive force; it 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" (PR, p. 346).

While the primordial nature of God is eternal, the consequent nature is everlasting. The difference is that the primordial nature envisions the *eternal* objects, while the consequent nature brings into itself the temporal elements of the world. "The property of combining creative advance with the retention of mutual immediacy is what ... is meant by the term 'everlasting' " (PR, p. 346). This means that the creative advance of the temporal world is taken up into God. However this does not mean that God becomes subject to time. Time concerns the perishing of that which is actual: the movement of the present to the past. God does not become past, although there is an element of succession in God. "...the order of succession depends upon the logical difference between retrospective and prospective relationships. The later event prehends the earlier and so contains it, but the converse is not true..."²³ So, in God the new is added to the old to complete the whole. This does not require that the past perish, and so subject God to time, but completes God and thus shows how God can be everlasting.

Time is *real* for God; God experiences the relation of time in the relation of the temporal actual entities God physically prehends. But God is not *subject* to the passage of time in God's own concrescence. God's concrescence is everlastingly present. ...Thus every temporal actual entity is prehended by God in its temporal relations to all others, but they are all together in God's everlasting experience, felt in a mutuality of living immediacy.²⁴

Therefore, Whitehead attempts to reconcile the eternal with the temporal. Primordially God is eternal, envisioning all possibilities relating to the world which are not actual. There is no duration to this vision, that is to say it does not begin or end, it simply encompasses all that could be. On the other hand, according to the consequent nature, God is everlasting in the sense that there is a succession of actual occasions, which are themselves temporal, taken up into God.

²³ Hartshorne, p. 542.

²⁴ Hosinski, p. 195.

While it is true that God is dipolar in the same manner as other actual entities, it is not in exactly the same way. Actual entities of the world originate through physical prehensions and are driven towards satisfaction by their consequent, conceptual experience. As we have seen, the necessity of maintaining the priority of physical over conceptual spurs Whitehead to invent hybrid prehensions which can explain the originating factor of the initial subjective aim. However, in the case of God the originating factor is conceptual experience in the valuation of the eternal objects in the primordial nature of God. In turn God's physical experience of adopting into Godself the temporal world motivates God's process of completion. Thus the process of concrescence is reversed in the case of God. "For God the conceptual is prior to the physical, for the World the physical poles are prior to the conceptual poles" (PR, p. 348).

Therefore, the consequent nature of God is fully actual and conscious because God allows the world to impact God's own nature. God is not isolated from the world, but in genuine relation with the world. Moreover, to be related to something requires, not only that it be taken account of, but that the relation impacts and affects that which relates to it. This, however, has important consequences for God. Since the world is contingent this contingency impacts and affects God. That is to say, that if God knows X and X is contingent then God's knowledge of X is also contingent. If God's knowledge is internal to God's life, then contingency is included in the life of God. Thus, Whitehead's claim that God is in relation with the world, knows the world and even suffers with the world requires that there is an aspect of God which is contingent, like the world. The consequent nature is this aspect of God.

Ultimately, God is both transcendent to the world and immanent in the world, but at the same time the world transcends God and the world is immanent in God.²⁵ God's consequent nature demonstrates God's character as the judge, redeemer and saviour of the world. It is the side of God for whom time is real and everlasting. This vision of God adds to the primordial nature of God the religious and moral aspect of the deity.

The Superjective Nature of God

However, Whitehead's conception of God goes one step further. All actual entities have both a subjective and superjective nature. This is true for God as well. God never reaches satisfaction in such a way that he ceases to be presently immediate, but he does have a superjective nature. This concept is very underdeveloped in Whitehead's thought. There are only two passages which deal directly with it. At the end of Process and Reality, in the second and longest passage, Whitehead writes about this superjective nature, comparing it to the other natures of God.

But the principle of universal relativity is not to be stopped at the consequent nature of God. This nature itself passes into the temporal world according to its gradation of relevance to the various concrescent occasions. There are thus four creative phases in which the universe accomplishes its actuality. There is first the phase of conceptual origination, deficient in actuality, but infinite in its adjustment of valuation. Secondly, there is the temporal phase of physical origination, with its multiplicity of actualities. In this phase full actuality is attained; but there is deficiency in the solidarity of individuals with each other. This phase derives its determinate conditions from the first phase. Thirdly there is the phase of perfected actuality, in which the many are one

²⁵ PR, p. 348. This contrast depends upon a shift of meaning in the terms. God transcends the world primordially because the primordial nature of God is the valuation of the eternal objects. Therefore in this sense, God is infinite while the world is finite. God is immanent in the world through the primordial gift of the initial subjective aim to each actual occasion. The world transcends the consequent nature of God because God is one and the world is many, continually transcending itself and God in the creative advance. The world is immanent in God because the world enters into God's consequent nature.

everlastingly, without the qualification of any loss either of individual identity or of completeness of unity. In everlastingness, immediacy is reconciled with objective immortality. This phase derives the conditions of its being from the two antecedent phases. In the fourth phase, the creative action completes itself. For the perfected actuality passes back in to 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. The action of the fourth phase is the love of God for the world. It is the particular providence for particular occasions. What is done in the world is transformed into a reality in heaven, and the reality in heaven passes back into the world. By reason of this reciprocal relation, 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 (PR, pp. 350-1).

The first phase in this passage refers to the primordial nature of God. Primordially, God grounds actuality by conceiving and limiting possibility. The second phase refers to the stages of concrescence in which an actual entity comes to be. The third stage refers to the consequent nature of God. The temporal, actual world is taken up into God, giving both a sense of temporality and actuality to God's own self. Whitehead points out that this nature of God is dependent upon the two antecedent phases. After receiving the temporal actualities of the World, the consequent nature of God compares what has become with the ideal envisioned for it, i.e. the primordial nature of God. In this, God redeems what is good and allows that which is evil to perish in its individuality. This in turn introduces the fourth stage which is the superjective nature of God. In this phase, God presents the judged, saved, and redeemed World back to itself. In a sense this gives the World hope that there is an answer to the evil in the World. It shows that God understands and suffers through evil, but that God is able to redeem. This is the consequent nature of God becoming immanent in the World.

In the first passage Whitehead writes that "The 'superjective nature' of God is the character of the pragmatic value of his specific satisfaction qualifying the transcendent creativity in the various temporal instances" (PR, p. 88). We can now see that "the character of pragmatic value of specific situations" is the consequent nature of God

compared against God's primordial nature. This is re-introduced into the world and as such 'qualifies' the becoming of the world.

Conclusions

The preceding introduces, in some detail, Whitehead's metaphysical system. As discussed at the beginning, this is an attempt, in some measure, to make sense of the contrasting notions of process and reality, creative advance and stubborn fact, fluency and permanence. This description has shown how Whitehead accounts for these notions, and the philosophical concepts that are necessary to understand the world. "There is not the mere problem of fluency *and* permanence. There is the double problem: actuality with permanence, requiring fluency as its completion; and actuality with fluency, requiring permanence as its completion. The first half of the problem concerns the completion of God's primordial nature by the derivation of his consequent nature from the temporal world. The second half of the problem concerns the completion of each fluent actual occasion by its function of objective immortality, devoid of 'perpetual perishing,' that is to say, 'everlasting' " (PR, p. 347).

PART II

**CREATIVITY IN WHITEHEAD'S
METAPHYSICAL SYSTEM**

CHAPTER 3

CREATIVITY, MANY, ONE

As we saw in the last chapter, Whitehead strives to account for both process and reality, flux and permanence through his metaphysics. As a general description of this metaphysics, Whitehead writes, "that the actual world is a process, and that process is the becoming of actual entities" (PR, p. 22). The last chapter described *how* this occurs, i.e. as prehensions resulting in concrescence, however it failed to account for *why* this happens. Therefore in this chapter we shall attempt to account for the reason behind process.

As an attempt to explain why process is at the base of actuality, Whitehead introduces the concept of creativity. In Religion in the Making, creativity is the first formative element. In the chapter concerning Religion in the Making, we concluded that creativity is the process which underlies all creatures. We saw that as a temporal, formative element, creativity is non-actual. This is because the formative elements ground actuality and consequently are either non-temporal or non-actual. Since creativity is temporal, Whitehead concludes that it must be non-actual. On its own creativity is indeterminate and unable to bring about novel entities. However, in relation to the other formative elements, namely God and the forms, and their relation to actuality, creativity is the undying force which spurs on the universe.

In Process and Reality " 'Creativity' is the universal of universals characterizing ultimate matter of fact. It is that ultimate principle by which the many, which are the universe disjunctively, become the one actual occasion, which is the universe conjunctively. It lies in the nature of things that the many enter into complex unity" (PR, p. 21). From our analysis of concrescence, we can see that Whitehead is referring to the

process whereby the objects of the world, which are subjects who have reached satisfaction and passed over into objective immortality, become one, or enter into the inner constitution of actual entities experiencing subjective immediacy. This creative principle lies at the base of actuality as the ultimate matter of fact. It is the base of time and novelty. It is the ultimate reason why novel entities emerge. "The 'creative advance' is the application of this ultimate principle of creativity to each novel situation which it originates"(PR, p. 21). The model which Whitehead presents for this process is the advance from disjunction to conjunction. Disjunction refers to the many objectified data which are conjoined together in subjective immediacy. It is in this process that a new entity is born. "The many become one, and are increased by one" (PR, p. 21). Ultimately, concrescence refers to this process of creative advance which is "the production of novel togetherness" (PR, p. 21).

Moreover, Whitehead describes two distinct manifestations of creativity in the world: concrescence and transition.

One kind is the fluency inherent in the constitution of the particular existent. This kind I have called 'concrescence.' The other kind is the fluency whereby the perishing of the process, on the completion of the particular extent, constitutes that existent as an original element in the constitutions of other particular existents elicited by repetitions of process. This kind I have call 'transition' (PR, p. 210).

Concrescence is the process whereby a particular entity comes to be. Perhaps the most important element of concrescence is the self-causation of actual entities.

Self-realization is the ultimate fact of facts. An actuality is self-realizing, and whatever is self-realizing is an actuality (PR, p. 222).

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. ...These subjective ways of feeling are not merely receptive of the data as alien facts; they clothe the dry bones with the flesh of a real being, emotional, purposive, appreciative (PR, p. 85).

This self-creation is a subjective decision which guides the becoming of the entity. First there are physical prehensions which provide the givenness of the past, that is to say, the

"historical situation" of the creature. Next there are conceptual prehensions of possibilities which exist for the entity to aspire towards. Then, these physical and conceptual prehensions are compared in such a way that the entity is given a clear view of *its* potential. Included in this process is the entities hybrid prehension of God which gives the creature its initial subjective aim which also acts as a lure towards satisfaction. However, Whitehead is clear that in the end it is the actual entity itself which decides how to bring together all of these different feelings. "To be *causa sui* means that the process of concrescence is its own reason for the decision in respect to the qualitative clothing of feelings. It is finally responsible for the decision by which any lure for feeling is admitted to efficiency. The freedom inherent in the universe is constituted by this element of self-causation" (PR, p. 88). Whitehead refers to this as microscopic process, "the conversion of conditions which are merely real into determinate actuality" (PR, p. 214).

The second manifestation of creativity is the general becoming of actual entities. Whitehead refers to this manifestation of creativity as transition. "The creativity in virtue of which any relative complete actual world is, by the nature of things, the datum for a new concrescence is termed 'transition'" (PR, p. 211). This ultimate principle indicates that there is a creative advance among the creatures of the world. It is a generalized notion of creativity. Whitehead also refers to it as macroscopic process, "the transition from attained actuality to actuality in attainment" (PR, p. 214). This type of creativity explains the ongoingness of actuality, the fact that new actual entities continually emerge.

As indicated, Whitehead refers to creativity as "the universal of universals characterizing ultimate matter of fact" (PR, p. 21). As such, it demarcates the category of the ultimate along with 'many' and 'one.' However, how is creativity to be understood as the ultimate category? Any response to this question must take into consideration the association between this category and the *ontological principle*. As we have seen, "the

ontological principle can be summarized as: no actual entity, then no reason" (PR, p. 19). In other words, actual entities are the only entities in Whitehead's metaphysics that possess ontological status. Anything which claims actual existence must either be an actual entity or have a special relationship with an actual entity (PR, p. 73). In this way the ontological principle acts as an explanatory principle. It describes what is actual. It describes what is actual through giving the reasons for actuality. Thus, Whitehead can write, "the ontological principle declares that every decision is referable to one or more actual entities, because in separation from actual entities there is nothing, merely nonentity - 'The rest is silence' "(PR, p. 43). And again, "According to the ontological principle there is nothing which floats into the world from nowhere. Everything in the actual world is referable to some actual entity" (PR, p. 244).

According to the ontological principle, it would seem that creativity can only have a pluralistic explanation. By this I mean that creativity can only be understood as actual through its association with its individualizations. Consider Whitehead's comments,

In all philosophic theory there is an ultimate which is actual in virtue of its accidents. It is only then capable of characterization through its accidental embodiments, and apart from these accidents is devoid of actuality. In the philosophy of organism this ultimate is termed 'creativity'; and God is its primordial, non-temporal accident (PR, p.7).

Creativity is without a character of its own in exactly the same sense in which the Aristotelian 'matter' is without a character of its own. It is that ultimate notion of the highest generality at the base of actuality. It cannot be characterized because all characters are more special than itself. But creativity is always found under conditions, and described as conditioned. The non-temporal act of all-inclusive unfettered valuation is at once a creature of creativity and a condition for creativity. It shares this double character with all creatures (PR, p. 31).

As Ivor Leclerc reflects on this situation he realizes that there are two sides to this problem.¹ If focus is placed upon the individual actual entities then it appears there are *only* the actual entities. If this is the case, what need is there to speak of an ultimate category, which consists of creativity, at all then? On the other hand, if the focus is placed on creativity as 'ultimate' then it begins to appear to acquire actuality and perhaps even to become more real than the actual entities themselves. Leclerc points out that this is an instance of the fallacy of misplaced concreteness: that is to say, considering an abstraction as an actuality. Therefore, there is a two fold purpose in Whitehead's writing regarding creativity, "to recognize the 'ultimate' without denying actuality to the individualizations of the ultimate."²

Leclerc's solution to this dilemma is to see creativity in two different ways.

'Creativity' is therefore 'ultimate' in the sense, first, that it constitutes the generic metaphysical character of all actualities; and secondly it is the 'ultimate' in the sense that the actualities are individualizations of it. That is to say, 'creative activity' or 'creativity' is not merely a common feature of the individual actual entities, any more than 'matter' is merely a common feature of 'material things'; creativity is an 'ultimate' instantiated in individual actualities, and of which the individual actualities are instances.³

Essentially this is a pluralistic solution to the dilemma of the status of creativity. It is pluralistic because it places creativity completely within actual entities. Creativity is both a common feature of actual entities *and* creativity is instantiated in actual entities. It is not something which has any sort of distinctiveness apart from actual entities.

William Christian also gives a pluralistic interpretation of creativity and its relation to actual entities, although his interpretation is even stronger. Christian holds that the role

¹ Ivor Leclerc, Whitehead's Metaphysics, (London: George Allen and Unwin Ltd., 1958), pp. 83-4.

² Leclerc, p. 84.

³ Leclerc, p. 86.

of creativity can be *reduced* to actual entities. In this understanding, all that can be said about creativity can be translated and reduced to actual entities, without a loss of meaning. Christian uses the example "Creativity is unending," and rewrites it as "There is an infinite and unending multiplicity of actual entities."⁴ However, as William J. Garland points out, this translation does not carry the same meaning. Specifically, it does not account for the internal relations exhibited by these actual entities and it does not express the emergence of novelty introduced through the creativity. Consequently Garland suggests that "Creativity is unending" could be translated as "There is an infinite multiplicity of actual entities such that each member of this multiplicity comes into being through a process of concrescence and then perishes so as to be superseded by and prehended by novel members."⁵ However, this translation still does not convey everything intended by Whitehead's use of creativity. For example there is both the self-creation of actual entities and the role which actual entities play as participants in the creation of others. "In short, without the concept of creativity, we cannot express Whitehead's doctrine of the *unity* of all creative action in the universe. It is also awkward, though not impossible, to express his doctrine of the ongoingness of time. Thus, we must reject Christian's claim that *all that can be said about creativity* can be expressed in statements about actual entities."⁶

This is not to say that the ontological principle should not be taken seriously, or that creativity can be given status as an actual entity itself. I believe that Leclerc is right in saying that to give creativity status as an actual entity itself would be to fall into the fallacy

⁴ This example is taken from William J. Garland's article "The Ultimacy of Creativity," found in *Explorations in Whitehead's Philosophy*, ed. Lewis S. Ford and George L. Kline, (New York: Fordham University Press, 1983), p. 215.

⁵ Garland, p. 216.

⁶ Garland, p. 217.

of misplaced concreteness and also into ontological monism.⁷ However, Garland's argument does indicate that a more comprehensive understanding of creativity is required. It cannot be reduced to an actual entity but it is unclear what else it could be.

There is a philosophical problem which lies behind this difficulty in interpreting Whitehead. Whitehead compares creativity to Aristotle's conception of matter and the modern scientific 'neutral stuff.' It is similar in that it is the base of reality that interacts with the universals to create particulars, but it is different in that both Aristotle's matter and the neutral stuff are passive in their reception of either form, in the case of matter, or external relations, in the case of the neutral stuff. On the other hand, Whitehead's understanding of creativity is that of pure activity (PR, p. 31). Therefore, rather than receiving the forms and undergoing change as matter does, creativity is the drive behind the change that occurs to actual entities. Considered pluralistically this is a problem because actual entities perish. It is only in their perishing that actual entities become objects and participate in the lives of other entities. Therefore, the creativity, intrinsic to the unique entity, which drives it, must perish along with it as it passes into objective immortality. This means that there is no way for a perished entity to pass on the drive of creativity. "Under a pluralistic interpretation creativity has absolutely no status apart from actual entities. How, then, is creativity in turn supposed to *give rise* to those actual entities? Thus, in order for creativity to drive the universe, there must be some sense in which it *precedes* the plurality."⁸

⁷ Ontological monism refers to a metaphysic in which only one substance possesses actuality while everything else is an attribute of that substance. Spinoza's philosophy is an example of monism. Whitehead rejects this because it cannot account for the plurality of experience. See PR, p. 7. See also p. 95 below.

⁸ John R. Wilcox, "A Monistic Interpretation of Whitehead's Creativity," in Process Studies, V20, N3 (Fall, 1991), p. 164.

Garland's article, entitled "The Ultimacy of Creativity," looks at this problem in a similar way. There are things which the ontological principle cannot account for. For example, "Why is it that temporal ongoingness characterizes the universe?", and "Why do new actual entities continually come into existence?"⁹ Some might suggest that these elements can be accounted for by the subjective aim which actual entities prehend from God. However, God's own self is in process. God, too, has a subjective aim at satisfaction for which account must be taken. Moreover, prehensions have both an active and passive element to them. So even the hybrid prehension of an initial subjective aim requires that creativity already be driving the entity because there needs to be an active grasping by the entity of the subjective aim provided by God. "The subjective aim of any actual entity, including God, is a particular manifestation of the creative drive in the universe toward the unification of diversity."¹⁰ In a sense, these questions are cognate with asking "why process?" But Whitehead is clear that there is no reason for process. "It [simply] lies in the nature of things to enter into complex unity" (PR, p. 21). "The sole appeal is to intuition" (PR, p. 22). Thus we are left to inquire how creativity can provide a coherent explanation for the types of process that exist.

That this philosophical issue even exists is evidence of some ambiguity in Whitehead's writing. Part of this confusion regarding Whitehead's use of 'Creativity' stems from the development of this term in his thought from his earlier metaphysical works to his later. In Science and the Modern World (1925), Whitehead writes about Creativity as a substantial activity which underlies actuality. "In the analogy with Spinoza, his one substance is for me the one underlying activity of realisation individualising itself in an interlocked plurality of modes. Thus, concrete fact is process" (SMW, p. 70). Whitehead

⁹ Garland, p. 221.

¹⁰ Garland, p. 221.

specifically draws an association with Spinoza indicating that his philosophy is monistic at this stage. Thus, actuality is a mode of this substantial, underlying activity. "It is a general metaphysical character which underlies all occasions, in a particular mode for each occasion. There is nothing with which to compare it: it is Spinoza's one infinite substance" (SMW, p. 177). Shortly after Whitehead wrote Science and the Modern World, he gave up this monism and thereafter his thought developed pluralistically.¹¹ Therefore, by the time that he wrote Religion in the Making (1926) he no longer referred to Creativity as a substantial activity, but as the first formative element. While it is clear that as a formative element, creativity is not actual, it seems that there is a sense in which it exceeds actuality as well. "For the creativity is not separable from its creatures. Thus the creatures remain with the creativity. Accordingly, the creativity for a creature becomes the creativity with the creature, and thereby passes into another phase of itself. It is now the creativity for a new creature" (RM, p. 92). This quotation indicates that creativity does not only play a role in the creatures concrescence nor is it only a generic attribute, but it accounts for emergence of a new creature from the old; creativity passes into another phase of itself. Therefore, there seems to be a 'residue' left over from Science and the Modern World of creativity as a substantial element. By the time of Process and Reality (1929), creativity is no longer referred to as a "formative element," but as the "Category of the Ultimate" along with 'many and 'one.' In this system, "Creativity is the universal of universals characterizing ultimate matter of fact" (PR, p. 21). There are two elements which are parts of creativity: concrescence and transition. As we have seen, concrescence refers to the

¹¹ Lewis Ford chronicles this development in Whitehead's thought in detail. See the third chapter of The Emergence of Whitehead's Metaphysics: 1925-1929, (Albany, New York:: State University of New York Press, 1984).

self-creation of actual entities, whereas transition is the macroscopic element of process whereby new creatures arise out of the old.

By the time of Adventure of Ideas (1933), it seems that Whitehead had begun to sense the need to give creativity a greater role. He writes, "The initial situation includes a factor of activity which is the reason for the origin of that occasion of experience. This factor of activity is what I have called 'Creativity' " (AI, p. 179). Whitehead refers to creativity as that "which drives the world" (AI, p. 179), and as "the throbbing emotion of the past hurling itself into a new transcendent act" (AI, p. 177). In these quotations creativity seems to have some existence apart from actual entities.

Consequently, there is a dualism, of sorts, at work in this conception of creativity. On the one hand, creativity, according to the ontological principle, can only be actual in virtue of its instantiation in actual entities. On the other hand, actual entities can only have the character they do have by participating in creativity, which seems to give creativity some status apart from actual entities. Ford writes that "In one sense, to be sure, creativity is more fundamental than the actual entities - it is that by which these actual entities exist - but that does not preclude creativity from existing only as ingredient in specific actualities (PR, pp. 10f)" (Ford, 182). It is not a dualism of character; there is not more than one type of actuality, but it is a dualism of function. There is more than one type of explanation.

Garland believes that there are two types of explanations for the way things are in Whitehead's thought. He refers to the ontological principle which is an example of ordinary explanation and creativity which is an example of ultimate explanation. Garland only sees this ultimate explanation as implicit in Whitehead's thought.

Garland argues that creativity is an ultimate explanation for a number of different reasons.¹² First of all there are quotations from the text which back up this point of view. For example, Whitehead writes that creativity transcends all creatures. "[I]t is to be noted that every actual entity, including God, is a creature transcended by the creativity which it qualifies" (PR, p. 88). "The real internal constitution of an actual entity progressively constitutes a decision conditioning the creativity which transcends that actuality" (PR, p. 43). As well, as shown above, creativity, as concrescence, is the ultimate reason for the self-creation of each actual entity. Furthermore, creativity, as transition, justifies that process is at the base of things.

In more familiar language, this principle can be expressed by the statement that the notion of 'passing on' is more fundamental than that of a private individual fact. In the abstract language here adopted for metaphysical statement, 'passing on' becomes 'creativity' in the dictionary sense of the verb *create*, 'to bring forth, beget, produce' (PR, p. 212-3).

Moreover, Whitehead writes that creativity "is that ultimate notion of the highest generality at the base of actuality" (PR, p. 31), and that "Both [God and the World] are in the grip of the ultimate metaphysical ground, the creative advance into novelty" (PR, p.349). Both of these quotations justify creativity as an *ultimate* explanation, because they place creativity in an *ultimate* position. Finally, it seems appropriate to refer to creativity as an ultimate explanation because it is a part of the category of the ultimate: a category which precedes and is presupposed by the other categories (PR, p. 21).

By suggesting that there is another category of explanation, Garland is not taking the ontological principle any less seriously, but he is suggesting that actual entities and creativity are inter-related. That is to say that while creativity is only actual in virtue of its accidents (the ontological principle) the converse is also true, that actual entities can only

¹² See Garland, pp. 223-5.

exist as instances of creativity.¹³ "[N]o entity can be divorced from the notion of creativity" (PR, p. 213). Therefore it is only actual entities *together* with creativity which can coherently explain process.

In offering his own interpretation of the role that creativity plays, Garland suggests that in order to explain the ongoingness of process, creativity must act as a receptacle for the products of actual entities. This is not a passive reception of actual entities because creativity is always activity. Rather, creativity receives the entities from the past and passes them on to the future.¹⁴ Garland points both to Whitehead's comment that creativity "is the pure notion of the activity conditioned by the objective immortality of the actual world" (PR, p. 31), and to creativity as transition, as references to this activity. Thus there is a balance between creativity characterizing actuality and actuality characterizing creativity.

This understanding of creativity accounts for both the ongoingness and the relatedness of actual entities. The ongoingness of time is explained by both concrescence and transition.

In concrescence, creativity moves forward from an initially indeterminate phase containing a welter of unsynthesized data to a final determinate synthesis of these data. Whitehead speaks of this final synthesis as the "satisfaction" of the creative process on that occasion. In transition, creativity receives the actual entities which have already achieved satisfaction and gives them to new actual entities as initial data which again demand unification.¹⁵

While this explains the ongoingness of time as the outcome of the interaction of both types of creativity, it also indicates the reason for the relatedness of actual entities. Creativity provides the actual entities as prehensible material for each other. Thus it is not only the

¹³ See Garland, p. 225.

¹⁴ Garland, pp. 228-9.

¹⁵ Garland, p. 229.

formal cause but also the material cause. As such, creativity provides an ultimate explanation for the way things are in the world. Beyond such an explanation, the sole appeal is to intuition.

John R. Wilcox, in his article "A Monistic Interpretation of Whitehead's Creativity," sees this explanation of creativity as implicitly monistic.¹⁶ In Garland's interpretation, as we have seen, creativity acts as a receptacle which accepts and passes on the perished entities to the present. This appears to give creativity some sort of agency which cannot be reduced into actual entities. Therefore, it is left to ask how such an agency can exist within Whitehead's philosophy which clearly rejects ontological monism.

Wilcox defines monistic creativity differently from ontological monism.¹⁷ While ontological monism relies upon a monistic substance, monistic creativity does not. Whitehead's criticism of Spinoza for employing such a monistic substance is that it is unable to account for the plurality of experience. Remember, Whitehead's main criteria for a metaphysical system are coherency and adequacy. While the introduction of a monistic substance makes Spinoza's metaphysics coherent, it is not adequate because it fails to explain our experience of contingency and multiplicity. On the other hand, a monistic creativity can do both because it is necessarily pluralistic.

A monistic creativity would be unlike a monistic substance in that it would imply the existence of process. Creativity would be something that by its very nature proceeds onward, giving rise to a process of spatial and temporal differentiations through a sequence of stages or episodes. These stages or episodes would be the multiple manifestations of the monistic creative activity. Without them, a monistic creativity just would not *be* creativity.¹⁸

¹⁶ Wilcox, p. 165.

¹⁷ Wilcox, p. 167.

¹⁸ Wilcox, p. 167.

Therefore, there is a necessary relationship between the pluralistic many and the underlying creativity.

However, there are still problems in how a monistic creativity can also be pluralistic. Is there any reason why the stages or episodes that Wilcox writes about are actual atomic entities rather than different aspects of the same thing? Whitehead claims that the individual entities in his metaphysics are self-caused. If this is so, at which point do they cease to be part of the monistic creativity and become entities themselves? In short, these questions ask "how the monistic creativity could give rise to a plurality of separate centers of individual subjectivity?"¹⁹

The solution which Wilcox proposes has to do with the subjective aim which controls the concrescence of each actuality. The individuality of each actual entity is provided by its own subjectivity. As we saw in the last chapter, subjectivity is an immediately present state which decides how to accept both the givenness of the past and the possibilities for the future. The subjective aim is the final cause, the *τελος*, which guides this process. It is through this subjective aim that the actual entity decides what it will become. This is the reason which Wilcox suggests is behind the plurality of actualities. There is a plurality of actualities because there are a plurality of subjective aims which guide the becoming of these entities. "The self-creativity of the individual actual entity is the monistic creativity of the universe as felt subjectively by the actual entity through its subjective aim."²⁰ There are a plurality of subjective aims because of God. As we saw in the last chapter, subjective aims originally derive from God. Therefore, Wilcox argues that at each stage in which the monistic creativity differentiates,

¹⁹ Wilcox, p. 169.

²⁰ Wilcox, p. 170.

God as a special, primordial, non-temporal actual entity provides subjective aims so that these differentiated episodes can become subjective and purposive individuals.²¹

In this interpretation, creativity is more than the actual entities which characterize it. It is the permanent structure of the universe. However it is not permanent in the sense of being an unchanging substance. To the contrary creativity is pure activity. So, although creativity itself does not change, it drives change. As Whitehead writes in Adventures of Ideas,

This basic situation, the actual world, this primary phase, this real potentiality - however you characterise it - as a whole is active with its inherent creativity, but in its details it provides the passive objects which derive their activity from the creativity of the whole. The creativity is the actualization of potentiality, and the process of actualization is an occasion of experiencing. Thus viewed in abstraction objects are passive, but viewed in conjunction they carry the creativity which drives the world. The process of creation is the form of unity of the Universe (AI, p. 179).

These actual entities, which are the individual characterizations of creativity, perish and consequently their creativity perishes with them. However, there is a Creativity which carries on this process of change and drives the world forward. This clearly gives Creativity a status which is separate from the actual entities.

Wilcox claims that this separate status of creativity is monistic. It is monistic in the sense of being 'one' which means that it is not ontologically many. "Creativity in itself cannot be many because it is without determination, and is found determinate only in its separate units. In its units, it is made determinate by the eternal objects and the subjective aims, but in itself it is indeterminate, and so, if there is any sense at all in which it *is*, then it can only be one."²² At the same time, Creativity is not *actual*. It is, however, an effective explanation for how and why some things can be actual. As Garland puts it, creativity is an

²¹ Wilcox, p. 170.

²² Wilcox, p. 171.

ultimate explanation. Therefore, "the only unity being attributed to creativity is that required for us to be able to refer to it in its explanatory role as *it*."²³ Therefore, the ambiguous role of creativity in Whitehead's thought can be alleviated by considering it as a monistic principle within his metaphysical system.²⁴

Conclusion

Creativity appears in Science in the Modern World (1925) as the substantial activity which underlies actuality (SMW, p. 70 and 177). In this metaphysical system, creativity is directly compared to Spinoza's one infinite substance. Actuality then is a mode of this substance. "It is a general metaphysical character which underlies all occasions, in a particular mode for each occasion. There is nothing with which to compare it: it is Spinoza's one infinite substance (SMW, p. 177). However, this vision undergoes various changes in the coming years. In Religion in the Making (1926) Creativity is not referred to as a substantial activity but as a "formative element" of actuality (RM, p.90). It is the first of three formative elements; the eternal objects and God comprising the other two. This

²³ Wilcox, p. 171.

²⁴ Both Nancy Frankenberry, in her article, "The Power of the Past," in Process Studies, 13/2 (Summer 1983), pp. 132-42, and Lewis S. Ford, in his article, "Creativity in a Future Key," in New Essays in Metaphysics, ed. Robert C. Neville, (Albany, New York: State University of New York Press, 1987), pp. 179-197, recognize the same problem with creativity and its relation to actuality. Frankenberry attempts to solve the problem by claiming that creativity is a power of the past which brings about the present. Lewis Ford is critical of this because while it may fit with some of the passages from Adventures of Ideas, it is not consistent with Process and Reality and fails to account for the perishing of actual entities. Instead, Ford considers whether creativity can be considered as an activity of the future. Ford argues that according to the order of succession for becoming the future precedes the past. Thus creativity can be considered future from which the present flows pluralized into many particular occasions. While Wilcox attempts to stay within Whitehead's thought and offer an explanation consistent with his writings, this seems to stray further afield as a revision of Whitehead's thought.

shift is the result of Whitehead's adoption of temporal atomism and pluralism as general metaphysical principles. By the time of Process and Reality (1929), creativity is no longer referred to as a "formative element," but as the "Category of the Ultimate" along with 'many' and 'one.' In this system, "Creativity is the universal of universals characterizing ultimate matter of fact" (PR, p. 21).

Consequently, there is some ambiguity in the role that creativity plays by the time of Process and Reality. This ambiguity is caused by the fact that in both Religion in the Making, and Process and Reality, creativity still underlies actuality in some sense, as it did in Science and the Modern World. However, important elements of the rest of Whitehead's system have changed. Mainly, Whitehead's thought is no longer monistic but pluralistic. Therefore the question must be asked as to what sort of role Creativity actually plays in Whitehead's metaphysics. In addition there is an interpretive problem because considered alongside the ontological principle there is an ambiguity concerning the ongoingness of reality. If creativity can only be known in terms of instantiation in actual entities and actual entities perish, what constitutes the ongoing nature of the universe? In other words, why is it that actual entities become?

The only solution to these problems is to use Creativity as an explanatory principle. However, this also requires that Creativity be considered as something more than the individualization of actuality. In this case, Creativity must be considered monistically. That is to say, creativity is a permanent activity which is ontologically one and which grounds and drives forward the ongoing change of the actual world. Therefore, Wilcox's argument for a monistic interpretation of Creativity is both consistent with Whitehead's own work, and is the most plausible explanation of the philosophical problem regarding the relationship between creativity and actuality.

CHAPTER 4

CREATIVITY AND GOD

Introduction

Given the conclusions of the last chapter, there are still a number of problems with respect to Creativity that require discussion. In particular, the relationship between creativity and God needs to be further defined. As we have seen, creativity has an ambiguous status in Whitehead's writings. Our attempt to resolve this ambiguity has resulted in a conception of creativity as a monistic principle which plays an explanatory role in Whitehead's thought. However, to claim that creativity is a monistic principle leaves its relationship to God in doubt. Moreover a number of curious quotations from Process and Reality raises further ambiguity concerning God's relation to creativity. In the first place we need to examine the reasons why God cannot fulfill the role given to creativity, that is, to explain the ongoingness of creativity. Furthermore, we need to see how other interpreters of Whitehead have solved this dilemma. These reflections will lead to the question, 'In what sense is God the creator of the world, according to Whitehead's metaphysics?' We will find through a study of Whitehead's texts that God is a partial creator as opposed to an absolute creator; that is to say, a creator who directs the process of creation. This in turn will lead to the question of the relationship between Process Theology and Christian Theology. Specifically we will ask whether Whitehead's conception of God as a persuasive creator is sufficient for a Christian understanding of Creation. This will consider both the relationship of Process Theology with *creatio ex nihilo* and the problem of evil.

I. God and Creativity

Process and Reality, provides a confusing and highly ambiguous picture of the relationship between God and creativity. A sampling of the texts which deal with this relationship follows.

In the philosophy of organism this ultimate is termed 'creativity'; and God is its primordial, non-temporal accident (PR, p. 7).

The primordial created fact is the unconditioned conceptual valuation of the entire multiplicity of eternal objects. This is the 'primordial nature' of God. ...God is the primordial creature... (PR, p. 31).

The non-temporal act of all-inclusive unfettered valuation is at once a creature of creativity and a condition for creativity (PR, p. 31).

This is the conception of God, according to which he is considered as the outcome of creativity, as the foundation of order, and as the goad towards novelty. ... It is to be noted that every actual entity, including God, is something individual for its own sake; and thereby transcends the rest of actuality. And also it is to be noted that every actual entity, including God, is a creature transcended by the creativity which it qualifies (PR, p. 88).

All actual entities share with God this characteristic of self-causation. For this reason every actual entity also shares with God the characteristic of transcending all other actual entities, including God. The universe is thus a creative advance into novelty (PR, p. 222).

If we prefer the phraseology, we can say that God and the actual world jointly constitute the character of the creativity for the initial phase of the novel concrescence. The subject, thus constituted, is the autonomous master of its own concrescence into subject-superject (PR, p. 245).

He [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. His unity of conceptual operations is a free creative act, untrammelled neither by love, nor by hatred, for what in fact comes to pass. The particularities of the actual world presuppose it; while it merely presupposes the general character of creative advance, of which it is the primordial exemplification. The primordial nature of God is the acquirement by creativity of a primordial nature (PR, p. 344).

God and the World are the contrasted opposites in terms of which Creativity achieves its supreme task of transforming disjoined multiplicity with its diversities in opposition, into concrescent unity, with its diversities in contrast (PR, p. 348).

Neither God nor the World reaches static completion. Both are in the grip of the ultimate metaphysical ground, the creative advance into novelty (PR, p.349).

Various in these quotations, God is referred to as the creature of creativity, the outcome of creativity, transcended by creativity, and ultimately in the grip of creativity. It would seem from these examples that creativity is something which at least precedes God, and furthermore grounds and enables God to be. In a sense, creativity seems to be a God behind God. This does not blend very easily with traditional Christian conceptions of God as the eternal, uncaused, creator of all that exists. So, how do we make sense of this? Is Whitehead's God a finite creature? And if so, in what sense can this God truly be God? Or, is this a misinterpretation of Whitehead's texts? Is there a way in which these two traditions, process and Christian, can be brought together?

Many people have written on this association between God and Creativity, trying to find a way through the seeming contradictions. Charles Hartshorne does not believe that this dissociation between God and Creativity implies that there is a causal factor which exists beyond God. One reason which Hartshorne provides to support his claim is that creativity is not an agent but the generic principle of all activity. He also writes that "when Whitehead says that creativity in general is wider than God, he is simply pointing out, as I take it, that not all decisions are God's self-decisions."¹ Therefore, Hartshorne is arguing that there are agents other than God which have the freedom and the power to decide and act freely. That is to say, God does not coerce others to decide in such and such a manner. Hartshorne also points out that even though God does not decide everything, God still enjoys all decisions. It is obvious that God enjoys all of God's own decisions, but not as obvious that God enjoys the decisions of others. God enjoys the decision's of others by receiving them within God's own consequent nature. Therefore,

¹ Charles Hartshorne, "Whitehead's Idea of God," in The Philosophy of Alfred North Whitehead, Paul A. Schilpp, ed. (Evanston and Chicago: Northwestern University, 1941), p. 526.

Hartshorne argues, there is a manner in which all creativity belongs to God, even though God does not control all creativity.²

In part, I disagree with this interpretation of Whitehead. I do not disagree with the accuracy but with the completeness of Hartshorne's answer. Hartshorne's answer is accurate with respect to concrescence, but it fails to account for creativity as transition. Creativity is a generic principle of all activity with respect to concrescence. All actual occasions make decisions in such a way that they create themselves. However, creativity is not only the principle of self-causation which grounds the decisions of self and others, but it is the driving force which spurs on the world. In this sense God and Creativity are distinct. While God lures the occasions of the world on to greater depths of satisfaction, Creativity is the energy which drives the world, in the first place, to enter into new occasions of experience.

John Cobb Jr., a well known interpreter of Whitehead believes that the role of creativity is overstated in Whitehead's philosophy and that God's role is understated. Therefore, he believes a correct interpretation of Whitehead will elevate God's status to include creativity. This will also help to bring process theology more in line with traditional Christian doctrine of God. In A Christian Natural Theology, Cobb argues that creativity cannot account for the ongoingness of actuality, but that God can through God's provision of the initial aim for actual entities. According to Cobb, creativity cannot account for the ongoingness of actuality because it cannot be, in relation to Aristotle's four causes, either the efficient, final, or the formal cause of any actual entity. "Therefore, if we mean by creator an efficient (or final) cause, creativity is not a

² Hartshorne, p. 528.

creator..."³ Rather, creativity plays the same role in Whitehead's metaphysics as prime matter plays in Aristotle's metaphysics; namely, the material cause. According to Cobb, Aristotle makes a distinction between *that* something is, and *what* it is. What something is, refers to the particular form of an object, that something is, is simply to ask if, or why there is anything at all.⁴ Prime matter explains *that* something is, not *what* it is. With reference to prime matter in Aristotle's philosophy, Cobb writes,

Prime matter does not explain why there is prime matter. Only if one first posits prime matter can one explain why there will always be material things. But this may mean only that the question is meaningless. The question "Why?" in this case cannot be asking for a material or a formal cause, since that would be ridiculous. Prime matter is its own material cause and it has no form. It must be asking either for an efficient cause or for a final cause.⁵

An Aristotelian would not ask the question, "why prime matter?" Prime matter functions as an explanation, it does not require explanation. To invite an explanation runs the risk of an infinite regress in that every explanation will require a further one to explain it. Since creativity is for Whitehead what prime matter is for Aristotle, to ask "why creativity?" is not a Whiteheadian question either.

Therefore, Cobb argues that creativity cannot explain why there is creative advance, or even anything at all. "My contention is that "creativity" cannot go even so far in the direction of an answer as did "prime matter." "⁶ Aristotle's metaphysics requires that something substantial ground the change or flux of particulars. Prime matter, the material cause, fulfills this function. However, Cobb argues that creativity cannot play a similar role in Whitehead's philosophy because, according to Whitehead, creativity is not

³ John B. Cobb Jr., A Christian Natural Theology: Based on the Thought of Alfred North Whitehead, (Philadelphia: The Westminster Press, 1965), p. 206.

⁴ Cobb, p. 207.

⁵ Cobb, pp. 207-8.

⁶ Cobb, p. 210.

substantial and furthermore it is a constantly changing process. Cobb argues that there is nothing in the notion of creativity itself which requires that it constantly continue, or that it take on forms in new and creative ways. Thus creativity cannot stand for the ongoingness of actuality. Instead, Cobb proposes that God play this role. "...God must be conceived as being the reason that entities occur at all as well as determining the limits within which they can achieve their own forms."⁷

Therefore, Cobb argues that God should be considered as having the "all-decisive role in the creation of each new occasion."⁸ Although this does not mean that God be considered an absolute creator in the sense that God creates *ex nihilo*, it does mean that Cobb believes God is the major impetus in creation. God has this role in Whitehead's metaphysics because God gives actual entities their initial aim and this initial aim plays a key role in the concrescence of these same actual entities. Cobb believes that "the initial aim is in reality the initiating principle in the occasion."⁹ Initial aims are the initiating principle because they form the initial phase of concrescence.

Cobb gives two reasons for attributing this position to the initial aim. In Whitehead's metaphysics both initial aims and simple physical prehensions of the past constitute the beginning phase of an actual entity. Cobb prioritizes initial aims over physical prehensions because the initial aim determines the standpoint of the actual entity, which means that the initial aim determines the position of the actual entity relative to the past and the future, thus determining the datums which will constitute the past. Secondly initial aims, in part, determine subjective form or how the actual entity prehends objective datums and eternal objects, which in turn prioritizes the initial aim once again.

⁷ Cobb, p. 211.

⁸ Cobb, p. 205.

⁹ Cobb, p. 204.

Gene Reeves in an article entitled "God and Creativity"¹⁰ criticizes Cobb's interpretation of initial aim. With respect to the Cobb's first argument, Reeves suggests that an actual entity does not acquire a standpoint, it *is* a standpoint. By this he means that the standpoint of an actual entity is simply its relation to the extensive continuum. Therefore that which determines the standpoint of an actual entity is the same thing which determines its coming to be in the first place. Therefore Cobb presupposes his conclusion by suggesting that God gives an actual entity its standpoint.¹¹

In the second case, Reeves agrees that the subjective aim of an actual entity determines its subjective evaluation of both physical and conceptual prehensions, however he does not agree that a subjective aim is identical with an initial aim. It is true that an actual entity acquires its subjective aim from God in the first place, which is why a subjective aim is originally called an initial aim. An entity requires a limitation of possibility, which the initial aim provides. However, after the prehension of an initial aim, this aim is modified by physical, conceptual, and comparative feelings; all of which require the self-creativity of the entity in question. In fact, the more complex the creature the greater the chance that the creature will not actualize the initial aim from God. Therefore God is really only one aspect among many which constitutes the creation of an actual entity and it is too much to claim that God is the decisive factor in creation.¹²

Therefore, creativity cannot be collapsed into God in Whitehead's philosophy. There is still a need for an ultimate principle of activity alongside of God to account for the ongoingness of actuality. While Cobb does not accept that creativity can play this

¹⁰ Gene Reeves, "God and Creativity," in Explorations in Whitehead's Philosophy, ed. Lewis S. Ford and George L. Kline (New York: Fordham University Press, 1983), pp. 239-253.

¹¹ Reeves, pp. 245-6.

¹² Reeves, pp. 246-7.

role, Whitehead clearly assigns this role to creativity as transition.¹³ However, we still need to find a way to explain and understand the relationship between God and creativity.

In his book, God and the Processes of Reality, David A. Pailin attempts to solve this problem of the relationship between creativity and God by arguing that God is necessarily creative. Therefore, both God and creativity are ultimate. This means that God cannot be anything but creative and that creativity is an essential quality of the character of God. In one sense this clarifies the relationship between creativity and God, but it also raises a new problem. This solution requires that some world be a part of God's existence at any given time because God must create something.¹⁴ This in turn, seems to impose some sort of necessity upon God which implies that God is not ultimate. However, Pailin argues that this necessity does not diminish God's status because "creativity is the actualization of value, and that the actualization of value is the self-justifying final goal of activity."¹⁵

In addition, this means that "what God *actually* is is the product of creativity of the divine."¹⁶ This seems to say that God is essentially self-creative, or that God, as an actual entity, is a concrescence. And because God is the primordial actual entity, God's decisions effect the manner in which the world comes to be. Therefore there is a twofold relationship between God and creativity. God is an instance of creativity and God channels creativity to other actual entities. "God has the actual character of being now the God of this world rather than the God of some other cosmic order because, through the

¹³ Please refer to the previous chapter, p. 84.

¹⁴ David A. Pailin, God and the Processes of Reality, (London: Routledge, 1989), p. 127.

¹⁵ Pailin, p. 127.

¹⁶ Pailin, p. 128.

influence of the divine creativity, it is this rather than any other world which has emerged and contributes its own novelty to the all-embracing nature of the divine (cf. PR: 349).¹⁷

Pailin then explores whether it is necessary that God determine the fundamental form of the cosmic epoch. He concludes that God conditions the fundamental forms of the present cosmic epoch through giving to creativity a primordial and determinate structure which conforms to the divine character.

What this means is that while creativity in itself is an utterly formless movement of novel syntheses in the processes of reality, the limits of the possibilities for change (and hence the fundamental structures of the cosmos) and the relative ranking of those possibilities are determined by the essential nature of the divine in which they have their reality as possibilities. They are not selected by God but are given in, as, and by the divine reality. God, that is, does not choose that the fundamental structure of the world shall be of this rather than of that order (e.g. that the relationships between the powers of the cosmic constants shall be of this rather than of that order, and the basic 'laws' of nature shall produce this rather than that pattern of statistical regularity). Rather, the nature of God is that everlastingly, without beginning and without end, the world that exists is limited by the possibilities which the being of God instantiates. In this respect God is 'that actuality ... in virtue of which there is physical "law" ' (PR: 283).¹⁸

From this quotation it becomes clear that Pailin is not collapsing creativity into God, but maintaining that both God and creativity work together in the construction of actuality. Thus creativity is both the generic attribute of all actual entities, that is to say, creativity is concrescence, as well as "the formless movement of novel syntheses in the processes of reality," that is to say, creativity is also transition. Thus, creativity and God work together in both concrescence and transition. God's own self is an example of concrescence, that is to say, God is self-creative, and God's self-creation gives order to the formless movement of novel syntheses, that is to say, God's primordial nature actualizes creativity as transition.

¹⁷ Pailin, p. 128.

¹⁸ Pailin, p. 129.

In a similar manner, Joseph A. Bracken argues, in The Divine Matrix, that God and creativity are distinct elements in Whitehead's philosophy. Bracken believes that Whitehead is clear that creativity is the Absolute of the system, and that as a consequence God is subordinated to creativity.¹⁹ However, Bracken is also quick to point out "that creativity is the metaphysical Absolute as an activity, not as an entity. Furthermore, precisely as an activity and not an entity, creativity could be the underlying nature of God, the dynamic principle or ground of the divine being, and as such likewise the ground of all finite beings."²⁰ Therefore, like Pailin, Bracken argues that God and creativity share a necessary relationship. God is necessarily creative because creativity is the ground of the divine being.

Bracken calls attention to a particular passage in Process and Reality. In the passage, Whitehead writes that "God can be termed the creator of each temporal actual entity. But the phrase is apt to be misleading by its suggestion that the ultimate creativity of the universe is to be ascribed to God's volition. The true metaphysical position is that God is the aboriginal instance of this creativity, and is therefore the aboriginal condition which qualifies its action. It is the function of actuality to characterize the creativity, and God is the eternal primordial character" (PR, p. 225). So, according to Whitehead God is both the "aboriginal instance of creativity" and the "aboriginal condition which qualifies its action." In the first place, this means that God is God's own self-creation. God is the aboriginal and primordial concrescence. And secondly, God gives a specific character to the indeterminate nature of creativity because creativity primarily operates in God and God is the conduit through which this creativity is available to other entities.²¹ Therefore,

¹⁹ Joseph A. Bracken, S.J. The Divine Matrix: Creativity as Link between East and West (Maryknoll, NY: Orbis Books, 1995), p. 54.

²⁰ Bracken, p. 55.

²¹ Bracken, p. 57.

Whitehead is able to write, "God and the World are the contrasted opposites in terms of which Creativity achieves its supreme task of transforming disjoined multiplicity with its diversities in opposition, into concrescent unity, with its diversities in contrast" (PR, p 348). This does not mean that creativity has its own existence apart from its instantiation into actual entities. It means that God is the primordial instantiation of creativity in the sense that creativity exists first and foremost in God as the ground and vital source of deity. In turn, God qualifies and structures this creativity so that it can influence actual entities thereby becoming the ground or vital source of finite actual entities.²²

Bracken relies on Jorge Luis Nobo's interpretation, in his book Whitehead's Metaphysics of Extension and Solidarity, to extend his argument for this understanding of the relationship between creativity and God. Nobo argues that both creativity and the extensive continuum are different aspects of one ultimate reality. In this sense neither is actual in the sense of an entity, but both are real in the sense of "principles of being or essential conditions for the existence of individual entities."²³ Therefore, Nobo argues that creativity and the extensive continuum together make up the "ultimate ground of the organic universe."²⁴

Bracken takes this one step further and identifies or equates this ultimate ground with the divine nature which is also the ground of the divine being.

Hence, creativity and the extensive continuum are the ontological ground of the divine being as well as the ontological ground of all finite beings. Yet, since creativity and the extensive continuum as principles or conditions of existence for entities do not exist by themselves but only in the actual entities in which they are instantiated or embodied, then, logically, they must primordially exist in their primordial instantiation, namely, God. They together constitute, accordingly, in the

²² Bracken, p. 57.

²³ Bracken, p. 58.

²⁴ Bracken, p. 59.

first place the ground of the divine being and then only in the second place the ground of finite actual entities.²⁵

In this sense, creativity and the extensive continuum constitute the *whereby* and *wherein* for the ongoingness of actuality.²⁶ In order to fulfill this role as ground of actuality, both creativity and the extensive continuum must be infinite. Creativity must be infinite to account for the ongoingness of actuality which is continually instantiated in diverse entities, and the extensive continuum must be infinite to account not only for the present extent of the space-time continuum but also for all past and future worlds as well.²⁷

Whatever is actual is also determined, but a process can be infinite in the sense that it is indeterminate, ongoing, and unfinished.

Therefore, Whitehead's notion of creativity can be reconciled with his conception of God in two ways. In the first sense, creativity is the divine nature; it is the ground of the divine being. As Pailin writes, God is necessarily creative. In this sense, God is the aboriginal instantiation of creativity. And in the second sense, creativity, through its primordial expression in God, grounds all other finite actuality. In this sense, God is the aboriginal condition which qualifies creativity.

So we can now discuss in what sense, according to Whitehead's metaphysics, God is the creator of the world. According to Whitehead God is the creator of the world in a very particular manner.

Each temporal entity, in one sense, originates from its mental pole, analogously to God himself. It derives from God its basic conceptual aim, relevant to its actual world, yet with indeterminations awaiting its own decisions. This subjective aim, in its successive modifications, remains the unifying factor governing the successive phases of interplay between physical and conceptual feelings. ... This conceptual

²⁵ Bracken, p. 59.

²⁶ Bracken, p. 65.

²⁷ Bracken, p. 65.

feeling is the initial conceptual aim referred to in the preceding statement. In this sense, God can be termed to creator of each temporal actual entity (PR, p. 225).

The initial subjective aim which God gives to each actual occasion presents a goal, a final cause, at which the entity can aim. This entity still has the choice of whether to act in such a manner as to actualize this goal. This means that it can also decide to act in a completely different manner. This subjective aim acts as a lure in the decision process of the entity. In this way, God persuades and lures each actual entity to become a certain way according to God's primordial vision of the possibilities in the universe.

It is not a simple process whereby an actual entity decides how to integrate the various influences into its existence as a harmonious whole. There are physical prehensions from the past, conceptual prehensions of possibilities, simple and complex comparative feeling which are metaphysical propositions, all of which have an influence on the becoming of an entity. Some of these influences are efficient causes, such as the past, but there are also varying degrees of final causes such as the conceptual prehensions, comparative feelings, and the initial aim from God. Consequently, the subjective aim which emerges as the entity's own lure for feeling may or may not resemble the initial aim inherited from God. The higher grade experiences of complex life forms, which entertain various metaphysical propositions, have a greater opportunity to vary their subjective aims from the initial aim given by God. This is because with greater degrees of consciousness comes greater freedom to decide how to actualize oneself. With greater awareness comes greater responsibility.

However it is still not clear exactly in what sense God is the creator of the world. God creates by providing the initial aims of each actual entity. Creativity as transition accounts for the ongoingness of actuality, that is to say, that new entities continually emerge. However, this principle that new entities emerge can only occur in conjunction

with the initial subjective aim which God gives. In this sense, God is the primordial condition which qualifies creativity.

In this sense, God can be termed the creator of each temporal actual entity. But the phrase is apt to be misleading by its suggestion that the ultimate creativity of the universe is to be ascribed to God's volition. The true metaphysical position is that God is the aboriginal instance of this creativity, and is therefore the aboriginal condition which qualifies its action. It is the function of actuality to characterize the creativity, and God is the eternal primordial character. But of course, there is no meaning to 'creativity' apart from its 'creatures,' and no meaning to 'God' apart from the 'creativity' and the 'temporal creatures,' and no meaning to the 'temporal creatures' apart from 'creativity' and 'God' (PR, p. 225).

This is, I believe, Whitehead's most accurate statement with reference to the relationship between creativity, God, and actual entities. None of these elements of the universe can stand on their own, and none can be reduced to another. In essence to do either of these things would be to commit the fallacy of misplaced concreteness in a special way.

Creativity, God and actual entities are related as an organic whole. They are interdependent upon each other. Thus to abstract one and raise it above the others is to mistakenly abstract it from its reality of relation and dependence.

In essence this concept of interdependence among the fundamental elements of the universe is very clearly expressed in Religion in the Making. In this book creativity, the eternal objects, and God are the formative elements behind, underneath, and within actuality. As formative elements they must be either non-actual or non-temporal. This is a clear example of the wholeness of relationship between the elements constituting actuality. God and creativity are distinct. Creativity is not actual but it is the first formative element. It is the ground of actuality which cannot be reduced to an actual entity. All elements must work together in the shared creation of actuality.

II. Implications for Process Theology and Classical Christian Theology

Finally, we need to ask whether this conception of God as creator is a Christian one. In particular we need to consider the issue of divine power as it is expressed by Whitehead's deity. More specifically, there are two concerns which we must address. The first matter has to do with *creatio ex nihilo*. Does the Christian notion of creation hang on this concept? Or can a different understanding of creation be adequate for Christian theology? And the second matter has to do with the problem of evil. Does the conception of God in process philosophy provide a response to the problem of evil which is acceptable within Christian theology? Either of these issues could constitute dissertations in themselves. Consequently their inclusion in this project is to demonstrate the type of reflection which can arise out of a study of this nature rather than as an exhaustive study of these issues themselves.

A. Creatio ex Nihilo

In the first place there is a point of contention between process theology and classical Christian theology regarding how to understand the biblical account of creation. Traditionally the latter has interpreted the biblical account as *creatio ex nihilo*. However, Whitehead is clear that he does not accept this doctrine. Rather, Whitehead finds inspiration from Plato's account of creation in the *Timaeus*.

There is another point in which the organic philosophy only repeats Plato. In the *Timaeus* the origin of the present cosmic epoch is traced back to an aboriginal disorder, chaotic according to our ideals. This is the evolutionary doctrine of the philosophy of organism. Plato's notion has puzzled critics who are obsessed with the Semitic theory of a wholly transcendent God creating out of nothing an accidental universe (PR, p. 95).

Years later, when writing Adventures of Ideas, Whitehead still held firmly to the conclusion that God is not a transcendent, external Creator.

There are two current doctrines as to this process. One is that of the external Creator, eliciting this final togetherness out of nothing. The other doctrine is that it is a metaphysical principle belonging to the nature of things, that there is nothing in the Universe other than instances of this passage and components of these instances. Let this latter doctrine be adopted (AI, p. 236).

This understanding should not come as a surprise after studying Whitehead's metaphysics in detail. Obviously, Whitehead emphasizes a creation which is shared among differing causes: the objectivity of the past, the concreting of each actual entity, the initial aim from God, and the creativity which accounts for the continual emergence of new occasions. Lewis Ford refers to this as "shared creation."²⁸ In this sense God is a partial creator who is best referred to as the director of the creation process. At first this may seem like a strangely limited involvement, but God, as the persuasive director of the creation process, draws order out of what would otherwise be either chaos or triviality. In light of this, Ford calls God "the cosmological creator of this world since his persuasive agency has been primarily responsible in bringing its order into being."²⁹

Traditionally there are two reasons for affirming *creatio ex nihilo*. In the first place it has been affirmed because it bestows upon God the ultimate power which is congruent with the conception of God as monotheistic and omnipotent. In the second place *creatio ex nihilo* seems to accord with the Genesis account of creation. In the Genesis account God's Word is sufficient to call into being everything which exists. In his discussion of creation in Systematic Theology, Vol. 2, Wolfhart Pannenberg rejects the process interpretation of creation in favour of a more traditional understanding. "The Genesis story gave classical expression for ages to come to this unrestricted nature of God's power

²⁸ Lewis S. Ford, "Contrasting Conceptions of Creation," in Review of Metaphysics 45 (September 1991), p. 96.

²⁹ Lewis S. Ford, "An Alternative to *Creatio ex Nihilo*," in Religious Studies 19/2 (June 1983), p. 210.

in creation. It did so by focusing on the divine Word of command as the only basis of the existence of creatures. ... The effortless nature of the simple command illustrates the unrestricted nature of the power at the disposal of the Creator."³⁰ At the same time this interpretation denies a dualistic interpretation of the origin of the world. To assume that there is another principle, apart from God, involved in the Creation of the world implies that God is not ultimate and therefore limited in some respect. This leaves the question, is there something behind God which is more ultimate, that is to say, a God behind God? Therefore, Pannenberg claims that process theology is mistaken. "In truth, however, this teaching [process theology] leads to the result that the creature does not depend on God alone but on other powers, so that it cannot rationally put full trust in God alone for the overcoming of evil in the world. The devout in Israel would rather trace back evil and misfortune to their God ... than recognize a power of evil that is independent of God."³¹

Langdon Gilkey, in his book, Reaping the Whirlwind, suggests that if we separate God and creativity in this manner, then in the first place we "reduce God to *one* metaphysical factor balanced by others, and thus to qualify his supremacy and holiness and our own monotheism. Secondly, it is to relinquish the essential sacrality of existence, of life, of being."³² Instead, Gilkey affirms that God is the source of all aspects of being. He tries to give this concept a process interpretation, but he is only able to do so by collapsing the category of creativity into God.

If the notion of God as the source of all aspects of being, the symbol of *creatio ex nihilo*, is interpreted in terms of the fundamental polarities of destiny and freedom, of achieved actuality and of future possibility - i.e. in *process* terms - then, that symbol

³⁰ Wolfhart Pannenberg, Systematic Theology, Vol. 2, (Grand Rapids: Eerdmans Publishing Co., 1994), pp. 12-13.

³¹ Pannenberg, p. 16.

³² Langdon Gilkey, Reaping the Whirlwind, (New York: The Seabury Press, 1976), p. 248.

means that it is God as the power of being that carries forward the total destiny of the past into the present where it is actualized by freedom. Creativity, the flux or élan of existence out of which, in process thought, each new occasion arises, becomes, in other words, the power of being of God, the providential creativity of God that originates and sustains our continuing existence."³³

This is a revision of Whitehead, similar to that which Cobb attempted in A Christian Natural Theology, in order to bring process theology and Christian theology closer together.

However, process theists dispute both of these reasons for affirming *creatio ex nihilo*. In the first place, the concept of creation out of *nothing* is "conceptually opaque."³⁴ It would be absurd to many ancient Greek philosophers as well as contrary to modern conservation laws of physics. With reference to the second reason for affirming creation out of nothing, that this doctrine accords with the Genesis account, Ford argues instead, that this concept is foreign to Genesis. "When God began to create the heaven and the earth - the earth being unformed and void, with darkness over the surface of the deep and a wind from God weeping over the water - God said, "Let there be light" (Gen. 1:1-3a, Jewish Publication Society translation). Thus before the first creative act of light there was the earth, the darkness, the water, and the wind, whose origins are left unexplained."³⁵ Ford argues that first biblical mention of creation out of nothing does not come until 2 Maccabees 7:28.

As well, in his reading of the Genesis creation story, Michael Welker argues that the classical interpretation of creation imposes foreign categories upon the Genesis account.³⁶ Traditionally, "the doctrine of creation has fortified and passed on a simple

³³ Gilkey, p. 249.

³⁴ Ford, "An Alternative to *Creatio ex Nihilo*," p. 206.

³⁵ Ford, p. 206.

³⁶ The inclusion of Michael Welker in this argument as a support for process theology is not arbitrary on my part. Welker has studied Whitehead extensively and is sympathetic to process thought. (Please see, M. Welker, Die Universalität Gottes und die

pattern of power. This pattern of power presents "creation" as a process of being produced by a transcendent reality. It presents "creation" as being in absolute dependence upon this transcendent reality. An ultimate process of being produced by a transcendent reality and absolute dependence, this pattern has been consciously regarded as that which alone is important and decisive in the doctrine of creation."³⁷ However, in re-reading the Genesis text, Welker finds that it describes God both acting and reacting to creation, both giving freedom and learning from the response of the created. In addition, Welker finds that the Genesis texts are not concerned about hierarchical relationships structured on power. Consequently, Welker suggests that

creation is the construction and maintenance of associations of different, interdependent realms of life. By "association," I mean an interdependent relational network, and not a mere collection. God creates by bringing different realms of life into fruitful associations of interdependent relations that promote life. That which is creaturely is drawn into and bound up into the process of creation by developing and relativizing itself, and thereby fruitfully bringing itself into these associations of interdependent realms.³⁸

Welker's interpretation of the Genesis account is at least similar to a process interpretation because it rejects the notion of God as exerting coercive power over creatures. Instead it emphasizes the organic interdependence of actuality and the persuasive power of God to create. Therefore, while some Christian theologians, relying in part upon the Genesis account, argue that to consider God as anything less than the transcendent, external, absolute creator is to tragically reduce God to less than that which

Relativität der Welt: Theologische Kosmologie im Dialog mit dem amerikanischen Prozeßdenken nach Whitehead (Neukirchen: Neukirchener Verlag, 1981). Therefore there is little doubt that Whitehead's philosophy has influenced Welker's interpretation of Genesis.

³⁷ Michael Welker, "What is Creation? Rereading Genesis 1 and 2," in *Theology Today* 48/1 (April 1991), p. 59.

³⁸ Welker, p. 64.

God is, Welker, who is also a Christian theologian, argues that this interpretation of Genesis is highly suspect and that there are different ways of interpreting the text.

With reference to the first reason for accepting *creatio ex nihilo*, Ford points out that there is a close relationship between this idea and the omnipotence of God. "Omnipotence, the doctrine that God can actualize whatever is possible, can be dramatized most effectively if a world can be brought into being out of absolutely nothing."³⁹ However, this conception of omnipotence has strong implications for the problem of evil. This problem is developed in detail below. Suffice it say at this point, that this debate between different ways of comprehending creation depends upon the interpreter's understanding of divine power. As we have seen it is possible to interpret the creation story in Genesis to support either view. While more traditional Christian theologians argue that God must be considered the transcendent, external, and absolute creator, that is to say omnipotent through the power of coercion, process theologians argue that God is more appropriately thought of as a partial creator, that is to say, omnipotent through the power to persuade. This debate between the coercive and persuasive power of God also has implications for both classical and process theodicies.

B. Evil and Theodicy

As indicated in the introduction, the problem of evil rests in the apparent incompatibility of these statements.

- A) An omnipotent being could eliminate all evil.
- B) An omnibenevolent being would eliminate all evil.
- C) God is omnipotent.
- D) God is omnibenevolent.
- E) Evil exists.

³⁹ Ford, "Contrasting Conceptions of Creation," p. 98.

Whitehead himself mentions this dilemma in one of his earliest discussions of God. In Science and the Modern World he writes,

Among medieval and modern philosophers, anxious to establish the religious significance of God, an unfortunate habit has prevailed of paying to Him metaphysical compliments. He has been conceived as the foundation of the metaphysical situation with its ultimate activity. If this conception be adhered to, there can be no alternative except to discern in Him the origin of all evil as well as of all good. He is then the supreme author of the play, and to Him must therefore be ascribed its shortcomings as well as its success (SMW, p. 179).

There are three ways to escape this apparent contradiction. Either God is not omnipotent, or God is not omnibenevolent (at least not in the manner in which these terms are defined), or evil does not exist. In order to solve this problem, process theists reject the omnipotence of God as it is defined in this problem. Omnipotence, as it is used in this syllogism, is understood in a very strong manner. In its strongest sense, God's omnipotence means that God is the *only* power and that all others are powerless. This omnipotence is "the power to compel or to force."⁴⁰ However, if God is omnipotent in this sense then God is also responsible for everything that happens because God is the efficient cause of everything. John Cobb Jr. suggests that this conception of divine power both slanders God's moral character, i.e. denies God's omnibenevolence, and ultimately denies power to God because it denies meaning to the term power. Cobb argues that power only means something in competition with other power. Instead, Cobb suggests that "the only power capable of any worthwhile result is the power of persuasion."⁴¹ Therefore, process theists argue that the definition of omnipotence needs to be altered. Rather than a "monopoly of power" which relies upon coercion, God's power should be

⁴⁰ John B. Cobb Jr., God and the World, (Philadelphia: The Westminster Press, 1969), p. 89.

⁴¹ Cobb, p. 90.

thought of as "the optimum persuasive power in relation to whatever is."⁴² As such, this power strikes a balance between "urging towards the good and maximizing the power - therefore the freedom - of the one whom God seeks to persuade."⁴³ In other words, rather than saying that God has all the power, it is more accurate to say that God has all the power that is logically possible for one agent among many agents to possess. In a discussion with one of his students, Whitehead is recorded to have said, "the proper notion of "power" is like that found in the British constitution. Neither the King, the Prime Minister, nor the electorate has absolute power. At best each can only be vividly persuasive."⁴⁴ Therefore, God is not omnipotent in the sense that God could eliminate all evil.

This conclusion arises out of Whitehead's metaphysical understanding of creativity. As we have seen, God creates actual entities through the provision of the initial subjective aim. Even so, it is the actual entity which accepts this initial aim, along with a number of other influences and decides how to admit them into its own concrescence. As such, God cannot determine the actualization of any actual entity because each actual entity is self-caused. Another way of saying this is that God is metaphysically incapable of coercing the actions of any other entity. Therefore, God should not be conceived as continually exerting absolute control over the world, but, "God's work in the world should be understood as that of persuading every entity to attain some optimum of satisfaction

⁴² Cobb, p. 90.

⁴³ Cobb, p. 90.

⁴⁴ A.H. Johnson, "Some Conversations with Whitehead Concerning God and Creativity," in Explorations in Whitehead's Philosophy, ed. Lewis S. Ford and George L. Kline (New York: Fordham University Press, 1983), p. 8.

compatible with the maintenance of an order which enables others also to attain their satisfaction."⁴⁵

In general, process thinkers believe that a process theodicy is stronger than a classical theodicy because in process thought God is metaphysically incapable of coercion. Process theists also believe that they have a stronger response to the problem of evil than a "free will" theodicy. Briefly, a "free will defence" to the problem of evil argues that while God is omnipotent and omnibenevolent in the manner originally given, God freely restricts God's own divine power in order to give freedom to human beings. In this argument, the freedom of human beings is of greater worth than any evil which might be caused by the exercise of this freedom. However, Cobb and Griffin ask

If creatures could enjoy all the same values which we human beings enjoy, except that they would not really be free, should God not have brought about such creatures instead? In other words, if God could have created beings who were like us in every way, except that (a) they always did the best thing, and (b) they only *thought* they were doing this freely, should God not have created these beings instead?⁴⁶

This argument implies that if God is capable of coercive power, then surely there are at least some situations in which it would be better for God to exercise such power than to allow particularly horrific types of evil. In other words, freedom does not always have a greater intrinsic worth than the elimination of evil. So if God can act coercively, there are situations, even if God has restricted God's own use of power, where to remain omnibenevolent God must act coercively.

Process theists argue that while this reasoning can be used against the free will defence it cannot be used against process theology. This is because according to process philosophy, freedom not only has great worth, but it is *necessary* that creatures have the

⁴⁵ Cobb, p. 94.

⁴⁶ John B. Cobb Jr. and David Ray Griffin, Process Theology: An Introductory Exposition, (Philadelphia: The Westminster Press, 1976), p. 74.

freedom to create themselves in order to be creatures at all. "Hence, God did not bring about creatures such as us, with our great capacity for discordant self-determination and destructive instrumental value, simply because freedom is in itself a great value, but because beings capable of the values we enjoy must necessarily have these other capacities."⁴⁷ Moreover, in order to maintain this level of freedom, God simply cannot coerce. Properly speaking, God's power resides in God's ability to persuade actual entities to act in a certain manner.

David Basinger, in Divine Power in Process Theism suggests that the strength of the process argument lies in the fact that the process God cannot coerce. However, he submits that this in turn rests upon a misguided understanding of coercion. Basinger writes that when process theists claim that God is not coercive they mean "that God never brings it about unilaterally that other entities must act in accordance with the divine will."⁴⁸ One reason for claiming that God cannot act in this way is that all entities reserve some form of self-causation in the form of deciding how to admit various causes into its own actuality. Therefore, no entity can be completely determined. However, Basinger submits that this is a strong understanding of coercion which is not normally implied by the term. That is to say, people can still be coercive without removing all aspects of another's self-decision. Consider for example the case of the parent who puts their child to bed even when they do not wish to go. Clearly the parent can be coercive and take the child to bed even if the child never decides to go. Or consider the case of psychological manipulation. There are many situations in which a person can be coerced to do something and yet retain their ability to make their own decisions.

⁴⁷ Cobb and Griffin, p. 75.

⁴⁸ David Basinger, Divine Power in Process Theism: A Philosophical Critique, (New York: State University of New York Press, 1988), p. 29.

Basinger also states this argument in a logical format.

The question under discussion is whether the following claim is true:

(1) God will never unilaterally control the actions of other entities.

Griffin argues that (1) is true because a being can be controlled unilaterally only if it is devoid of all power of self-determination and not even God can bring about this state of affairs. But to say that God cannot cause a being to be devoid of all power of self-determination can be interpreted in two ways:

(1a) God cannot bring it about that other entities are totally devoid of the power to act independently in *any* sense - that is, are devoid not only of the power to act out their desires but even of the power to determine their own desires or in other ways control their thoughts.

(1b) God cannot bring it about that other entities are devoid of the power to act out their desires - that is, are devoid of the power to behave in accordance with their (possibly self-determined) wishes.

If Griffin is affirming (1a), then his argument is trivial because coercion is normally defined in terms of (1b) and, as we have seen, it does not necessarily follow from the fact that God cannot coerce in the manner described in (1a) that God cannot coerce in the manner described in (1b). And if Griffin is affirming (1b), then his argument seems unsound. For, as I have argued, it appears that the God of process theism could coerce in this sense.⁴⁹

The point of going into so much detail regarding this issue is that much of process theology's claim to superiority regarding theodicy is based upon God's inability to coerce. Yet, as Basinger has shown coercion is an ambiguous term, especially as it is used by process theists. This is not to say that process theology does not have an effective theodicy. Given the assumptions of process philosophy, it does provide an adequate response to the problem of evil. However, it is not clear that this response is superior to other theodicies such as the free will defense. Consequently, it is not clear that Christian

⁴⁹ Basinger, p. 36.

theology should rely upon a process theodicy, although as Welker's interpretation of Genesis indicates this is a legitimate possibility.

Conclusions

While there is some ambiguity in Whitehead's texts regarding the status of the relationship between God and creativity, this ambiguity cannot be effectively resolved by collapsing one element into the other. Both God and creativity play distinct roles in the creation of the world. That is not to say that there is a dualism of agency however. On the contrary, while God is fully actual, creativity is not. Creativity is a principle of activity which grounds the divine nature. Whitehead's metaphysical system from Religion in the Making is perhaps the best formulation of this relationship. Both God and creativity are formative elements behind, underneath, and within actuality. Creativity is temporal but not actual, while God, at least in God's primordial nature, is actual but not temporal.

With respect to the discussion between process theology and classical Christian theology, it is not readily apparent that process theology is Christian. There are important differences in many areas. To be sure, process theology certainly can be and has been used for Christian theology. However, with respect to the problem of evil for example, there is still debate as to whether this use is superior to other theodicies, such as the free will defense, which maintain some of the more orthodox doctrines regarding God. Even so, as this section has demonstrated, there is much room for future dialogue.

BIBLIOGRAPHY

- Basinger, David. Divine Power in Process Theism, Albany: State University of New York Press, 1988.
- Bracken, Joseph A., S.J. The Divine Matrix: Creativity as Link between East and West, Maryknoll, NY: Orbis Books, 1995.
- Cobb, John B. Jr. A Christian Natural Theology, Philadelphia: The Westminster Press, 1965.
- . God and the World, Philadelphia: The Westminster Press, 1969.
- Cobb, John B. Jr. and Griffen, David Ray. Process Theology: An Introductory Exposition, Belfast: Christian Journals Ltd., 1977.
- Ford, Lewis S. "An Alternative to *Creatio ex Nihilo*," in Religious Studies 19/2, June 1983.
- . "Contrasting Conceptions of Creation," in Review of Metaphysics 45, September 1991.
- . The Emergence of Whitehead's Metaphysics: 1925-1929, New York: State University of New York Press, 1984.
- . The Lure of God, Philadelphia: Fortress Press, 1978.
- Ford, Lewis S. and George L. Kline, Explorations in Whitehead's Philosophy, New York: Fordham University Press, 1983.
- Gilkey, Langdon. Reaping the Whirlwind: A Christian Interpretation of History, New York: The Seabury Press, 1976.
- Hosinski, Thomas E. Stubborn Fact and Creative Advance: An Introduction to the Metaphysics of Alfred North Whitehead, Maryland: Rowman and Littlefield Pub., Inc., 1993.

- Leclerc, Ivor. Whitehead's Metaphysics, London: George Allen and Unwin Ltd., 1958.
- Neville, Robert C., ed. New Essays in Metaphysics, Albany, NY: State University of New York Press, 1987.
- Ogden, Schubert M. What is "Process Theology"?, "Private Communication from Dr. John C. Robertson."
- Pailin, David A. God and the Processes of Reality, London: Routledge, 1989.
- Pannenberg, Wolfhart. Systematic Theology, Vol. 2, Grand Rapids: Eerdmans Publishing Co. 1994.
- Price, Lucien. Dialogues of Alfred North Whitehead, Boston: Little, Brown, and Company, 1954.
- Schilpp, Paul A., ed. The Philosophy of Alfred North Whitehead, Evanston and Chicago: Northwestern University, 1941.
- Sherburne, Donald W., ed. A Key to Whitehead's Process and Reality, New York: The MacMillan Co., 1966.
- Welker, Michael. "What is Creation? Rereading Genesis 1 and 2," in Theology Today 48/1, April 1991.
- Whitehead, A.N. Adventures of Ideas, New York: The Free Press, 1967.
- . The Function of Reason, Boston: Beacon Press, 1962.
- . Modes of Thought, New York: The Free Press, 1968.
- . Process and Reality: Corrected Edition, ed. by David Ray Griffin and Donald W. Sherburne, New York: The Free Press, 1978.
- . Religion in the Making, New York: The MacMillan Co., 1926.
- . Science in the Modern World, New York: The Free Press, 1967.
- . Symbolism: Its Meaning and Effect, New York: Fordham University Press, 1985.
- Wilcox, John R. "A Monistic Interpretation of Whitehead's Creativity," in Process Studies, V20, N3, Fall, 1991.