The destruction of a man, or of an insect, or of a tree, or of the Parthenon, may be moral or immoral. […] Whether we destroy or whether we preserve, our action is moral if we have thereby safeguarded the importance of experience so far as it depends on that concrete instance in the world’s history.¹

Morality is concerned with obtaining right relations. Currently, there is a battle being waged over which relations “count,” morally speaking. Traditionally, ethical theories have implied that the only relations that are morally significant are inter-human relations or those obtaining between human beings.² Accordingly, human beings’ relations with organisms such as insects and trees or inanimate objects like the Parthenon are not moral relations at all; they do not count in this sphere. In contradistinction to this long-held conception of ethics, Alfred North Whitehead affirms a fundamentally different model of morality:³ whether one’s actions affect a human being, an insect, a tree, or even an inanimate object, such as the Parthenon, that action is moral if, by one’s relation to such entities, one has thereby safeguarded both the value experience which in that instance is possible and all subsequent repetitions of that value.⁴

If Whitehead is right, morality as we know it must be dramatically reconstructed. No longer can it be limited exclusively to those relations obtaining between humans or even those between sentient beings. Rather, morality must concern how we, as humans, ought to conduct ourselves with each and every aspect of reality. Ethics, then, concerns how we comport ourselves with the world and
even with the universe as a whole. Another way of putting this is simply to say that ethics must be holistic. It is my intention to demonstrate not only that process philosophy does indeed have the potential to support a very robust ethic, but to actually begin the hard work of elaborating the nature of such an ethic, which I refer to as the ethics of creativity.

My development of the ethics of creativity will begin by providing an introduction into the complicated structure of Whitehead’s aesthetico-metaphysics of process. My analysis of Whitehead’s metaphysics focuses on elaborating two fundamental concepts: the nature of individuality and the role of creativity therein. In the process of doing so, the centrality of value and beauty are examined at some length. Then, building on the foundation laid by the first section, in the second section I turn my attention to the ethics of creativity proper by focusing on Whitehead’s bold characterization of morality as that species of process which aims at the maximization of importance. Particular attention will be paid to the relation between Whitehead’s aesthetico-metaphysics of creativity and the ethics of creativity as well as the importance of recognizing the situatedness of ethical decision-making and the role of aesthetic education in its success. Finally, in the third section, I succinctly examine two potential objections to the ethics of creativity’s extension of intrinsic value to everything in the universe: first, that it leads to moral paralysis and, second, that it breaches the inviolability of human worth. Taken together, these three sections seek to establish the justification for and an initial presentation of the ethics of creativity.

I: A Processive, Kalogenic\textsuperscript{5} Universe

Whitehead saw himself reacting against the view typical of many substance metaphysics that the universe is populated by unchanging subjects which require nothing other than themselves in order
to be what they are or, for some, even in order to exist. According to substance ontologies, the relationships between entities are merely external or accidental, not internal or essential. Whitehead finds that the emphasis on external, accidental relations invariably brings with it the conception of individuals as vacuous, material existents with passive endurance and accidental adventures. As we will see more fully below, in contradistinction to this tradition, Whitehead formulates what he refers to as the “philosophy of organism.” “It is,” Whitehead explains, “fundamental to the metaphysical doctrine of the philosophy of organism, that the notion of an actual entity as the unchanging subject of change is completely abandoned.” In its place, Whitehead envisions a cosmos that is pluralistically populated by individuals referred to as “actual entities” or “actual occasions.” Though not in a crudely building block way, actual occasions are the stuff of which the universe is made. Whitehead refers to the becoming of an actual occasion as “concrèscence” (from the Latin concrēscere, to grow together). In concrescence, the actual occasion brings together or “prehends” past actual occasions or its “actual world.” Past actual occasions prehended by a concrescing actual occasion are said to be functioning “objectively.” However, unlike substance ontologies, the relationships obtaining between actual occasions are primarily internal and constitutive, not external and accidental. Each actual occasion is, in this sense, its relationship to the universe. The actual occasion creates itself out of its environment by rendering its relations to the world determinate. In this limited sense, it is causa sui. Actual occasions, then, “are the final real things of which the world is made up. There is no going behind actual occasions 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.” Given such a conclusion, it is should be clear that the philosophy of organism embodies a rejection of any form of ontological dualism or bifurcation which might seek to carve reality into unrelateable pieces. Unlike the
systems of Descartes and Kant, for example, there is no bifurcation or ontologically telling gap between humans and nature, between the animate and the inanimate, or even between the universe and God. Thus, in a sense that will gradually become clear, what is being affirmed is a form of ontological democracy; everything counts to some degree.\(^{13}\)

But, one might object, if the world is composed exclusively of these microscopic events called actual occasions, how can we account for the many different kinds of occasions that we experience in every day life? First, it is important to affirm with my critic the importance of acknowledging the very real differences between the various organisms that we (humans) experience. There are very real and even morally significant differences between a stone and a wildflower or between the desk upon which I write and myself. However, what is being rejected in the affirmation of ontological democracy is that these differences are properly understood in terms of fundamentally different ontological kinds or species. Difference, I contend, may be real without the multiplication of either ontological kinds or, more importantly, of the statuses which attach to them.\(^{14}\) According to the view being advanced, the differences between the occasions that we experience are ultimately explicable in terms of the complexity of the organization of an individual’s constituent actual occasions.\(^{15}\) Differences of kind, then, are real but not ontologically ultimate.\(^{16}\) For, strictly speaking, there are no ontologically different kinds of entities. Rather, there is a continuum of actuality; there are no absolute, ontological gaps.\(^{17}\) Hence, in the ethics of creativity, the language of “kind” and “type” has real moral footing without being ontologically basic.

In our analysis of the nature of actual entities, it is all too easy to treat them as if they were enduring entities with their own adventures, that is, as an individual enduring substances. However, it is
crucial to keep in mind that an actual entity is only a drop of experience. Thus, it is Whitehead’s task to “rebuild” the world as we know it, but based on the philosophy of organism, rather than a simple substance conception of the world. According to Whitehead, actual entities involve each other through their mutual immanence or prehensions of each other. As a result, Whitehead explains, there are “real individual facts of the togetherness of actual entities, which are real, individual, and particular, in the same sense in which actual entities and the prehensions are real, individual, and particular. Any such particular fact of togetherness among actual entities is called a ‘nexus’” (PR 20). Thus, the macroscopic objects which we experience – e.g., birds, trees, rocks – are “nexūs” of actual entities. Actually, to be more precise, entities such as birds and rocks are a particular types of nexūs which Whitehead refers to as “societies.” A society is a nexus that enjoys social order. What this means is that a society is a nexus with (1) a common characteristic shared by each member of that nexus because of (2) the conditions imposed upon it by its internal relatedness with previous members of that order. Accordingly, societies of entities are not merely collections of entities to which the same class-name applies.

To constitute a society, the class-name has got to apply to each member, by reason of genetic derivation from other members of that same society. The members of the society are alike because, by reason of their common character, they impose on other members of the society the conditions which lead to that likeness (89).

Moreover, if it is to be properly understood, it is imperative that the notion of a society not be taken in isolation from its larger context. Like its constituent actual entities, a society must always be understood against its “background environment of actual entities” (PR 90). Hence, taken together, a society and its environment form a larger society: the electron is within the cell; the cell is within the body; the body is within its ecosystem; and so on, until we arrive at the universe as a whole. The whole order of nature consists of nests of social environments which are increasingly complex.18
In summary, then, Whitehead has taken substance ontology’s “notion of vacuous material existence with passive endurance, with primary individual attributes, and with accidental adventures”\textsuperscript{19} and replaced it with the notion of “atomic” yet internally related events. Thus, it is equally correct to refer to Whitehead’s philosophy as one of continuity and of atomism. But how can this be possible without contradiction? How can Whitehead affirm a thoroughgoing pluralism but also assert both the continuity and solidarity of the universe?

The answer to these questions lies in the nature of the actual occasions in question and in Whitehead’s most basic category, creativity. If it were the case that each actual occasion was a substance and was, thereby, independent of everything else, then the simultaneous affirmation of the solidarity and the atomicity of the world would indeed be a contradiction. However, insofar as a substance view of reality is repudiated, individuality “does not mean substantial independence.”\textsuperscript{20} Occasions are constituted by their relationship to their actual world; the occasion is its perspective on the whole. Hence, Whitehead’s notion of individuality itself requires essential reference to others. This enigmatic conclusion is embodied in what Whitehead refers to as the “category of the ultimate” or creativity:

‘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. […] \textit{The many become one, and are increased by one}.\textsuperscript{21}

Whitehead’s cosmos is the scene of a perpetual creative advance where the many past atomic individuals come together in the one new atomic individual, which thereby adds itself to the many. The world is a scene of internally related atomic events which, taken together, constitute a universe. Thus, Whitehead does indeed mean to assert both the unity and plurality of the universe.
However, it is not yet clear how he does this without contradiction. Let us attempt another pass at this paradox by examining more closely the locus of value in such a worldview.

It was concluded above that Whitehead’s repudiation of substance ontology brought with it the rejection of the concept of “vacuous material existence.” Indeed, it is the vacuity of substance that, more than anything else, Whitehead sought to critique: “We shall never elaborate an explanatory metaphysics unless we abolish this notion of valueless, vacuous existence. Vacuity is the character of an abstraction, and is wrongly introduced into the notion of a finally real thing, an actuality.” Whitehead defines vacuous existence in Cartesian terms as, “a res vera devoid of subjective immediacy.” Thus, the rejection of the notion of a substance which, in its independence, is devoid of subjective immediacy, suggests that Whitehead extends subjective immediacy to all of reality. But what exactly is entailed by Whitehead’s rejection of the notion of mere facts or of bodily substance? Does he then affirm that there are only mental substances? Is he an animist, a panpsychist, or an absolute idealist? From a certain perspective, it would seem that he is each of these. For, it is true that he repeatedly affirms what he calls the reformed subjectivist principle: “that apart from the experiences of subjects there is nothing, nothing, nothing, bare nothingness.” According to this principle, process is the becoming of experience. However, it is important to note what this appellation does not entail. Whitehead’s reformed subjectivist principle does not entail that everything in the universe has a soul or that everything is conscious. There is no merely passive stuff, no lifeless bits of matter, but this does not mean that the walls literally have ears or that a brook literally babbles. Rather, by imputing experience and subjectivity to even the most trivial puff of existence, what Whitehead is denying is that there is anything that is absolutely determined by external forces. Even the most simple organism renders
determinate a small window of relations that are not determined by its environment. Put in terms used above, insofar as each actual occasion is *causa sui*, that is, in the sense that every occasion to a greater or lesser degree (and this degree can make all the difference, as we will see below) renders determinate its relations to its actual world, it cannot be devoid of subjective immediacy or experience. But as Charles Hartshorne reminds us, “the difference between zero and a finite positive quantity makes *all* the difference when we are seeking the general principles of reality.”

For Hartshorne, the zero of experience is the zero of actuality. To loose sight of this is to commit what he appropriately terms the zero fallacy. In this sense, rather than being a form of panpsychism or animism, a more appropriate term for Whitehead’s metaphysics is panexperientialism, a term coined by David Ray Griffin. The extension of experience to every level of reality brings with it a very important conclusion: if everything is a subject of experience, there can be no mere facts.

As Whitehead himself states, “if we discard the notion of vacuous existence, we must conceive each actuality as attaining an end for itself. Its very existence is the presentation of its many components to itself, for the sake of its own ends.” Thus, simply put, if it is the case that nothing is devoid of experience (vacuous actuality), then *everything* that exists must have *some* intrinsic value; there are no “sheer facts.” Rather, “At the base of existence is the sense of ‘worth.’ It is the sense of existence for its own sake, of existence which is its own justification, of existence with its own character.” Thus, the true force of Whitehead’s rejection of any *ontological* bifurcation of reality actually stems from his rejection of its *axiological* bifurcation. But this affirmation introduces a further problem: If Whitehead extends subjectivity to every level of existence, and if
each subject has self-worth, isn’t he in danger of affirming an axiological egoism or even a form of solipsism?

As with his ontology, in order to properly understand Whitehead’s conception of value, we must first understand his notion of individuality. Individuality, for Whitehead, does not imply independence. Rather, according to our account above, an actual occasion creates itself out of the achieved values of the past by rendering its relationship to each of these past values determinate either by eliminating them (negative prehension) or by incorporating them into itself by repeating their felt value intensity (positive prehension). Hence, an individual is what it is because it is internally and essentially related to other achieved values. This process constitutes, for Whitehead, the ultimate fact of existence: the many become one and are increased by one. Accordingly, I suggest that the answer to the problems of egoism and solipsism is ultimately to be found in the perplexing category of creativity. But what, one may fairly ask, does this oft quoted but rarely understood category really mean? Again we are left with the same basic question: do many discrete individuals come together to form a single monistic unity in which all individuality is lost or is there a plurality of isolated individuals which lack any true solidarity?

In the following passage, Whitehead provides a potentially illuminating qualification of the still enigmatic category of creativity:

The fundamental basis of this description is that our experience is a value experience, expressing a vague sense of maintenance or discard; and that this value experience differentiates itself in the sense of many existences with value experience; and that this sense of the multiplicity of value experience again differentiates it into the totality of value experience, and the many other value experiences, and the egoistic value experience. There is the feeling of the ego, the others, the totality.30
Initially, this passage simply reiterates the conclusion above that self-worth is at the base of experience. But, Whitehead continues, this fundamental value experience differentiates itself into the recognition of the value of the diverse individuals of the world for each other. Accordingly, and this is absolutely fundamental, the value experience at the base of existence is not solipsistic; self-value essentially involves the real presence (objective functioning) of other values as themselves. Put differently, the individual’s apparently “egoistic” upholding of value intensity for itself cannot be taken apart from its sharing its value intensity with the universe. However, Whitehead does not stop here. For, this recognition of a multiplicity of values in the world is further differentiated into the sense of the value of the whole objective world which is at once a community derivative from the interrelations of its component individuals and necessary for the existence of each of these individuals. The true import of this crucial conclusion only begins to become clear in the following lengthy passage:

The basis of democracy is the common fact of value experience, as constituting the essential nature of each pulsation of actuality. 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. We have no right to deface the value experience which is the very essence of the universe. Existence, in its own nature, is the upholding of value intensity. Also no unity can separate itself from the others, and from the whole. And yet each unit exists in its own right. It upholds the value intensity for itself, and this involves sharing value intensity with the universe. Everything that in any sense exists has two sides, namely, its individual self and is signification in the universe. Also either of these aspects is a factor of the other.

In one form or another, almost every element of a Whiteheadian ethic can be found in this passage. For the immediate context, what is important to note is, first, that the very meaning of actuality is characterized by this triad of self, other, whole. Each actual occasion has self-value, is self-important, but this realization does not entail, as it all too often does in ethical theory (particularly in rights debates), that the individual is the sole locus of value which must be protected at all costs. For the ethics of creativity, what many traditional debates over moral considerability miss
is that each individual, *qua* value experience, has value not only for itself but also value for others and for the whole. In politico-ethical terms, this is to say, yes, every individual is a locus of value, but each individual also has value for its community and even for the whole cosmos. Classical liberal atomic individualism is not, on this interpretation, an option nor is simplistic communitarianism. Every occasion “exists in its own right” and “upholds value intensity for itself,” but this upholding of value intensity for oneself *necessarily* involves “sharing value intensity with the universe.”

Every occasion is self-important *and* important to the universe. To put this in more familiar terms, everything that in any sense exists has intrinsic value, which includes having instrumental, and religious value.

In conclusion, then, value and actuality are neither monistic nor solipsistic. Rather, in keeping with the organic conception of individuality being advanced, self-value is always intertwined with the value of others and with the value of the whole. Every actuality has value for itself (intrinsic value) but this necessarily involves becoming a value for others (ecological value) and for the whole (religious value). It is by reason of this axiological triad that the conception of morals arises. However, there is one final component of Whitehead’s *metaphysics* of creativity that must be treated before we can turn directly to his *ethics* of creativity. That is, we must look at what drives this inexhaustible quest for the achievement of value intensity; we must examine the very aim of process itself.

Creativity is not aimless. On the contrary, Whitehead claims, the telos of the universe, and therefore of every occasion, is the achievement of the maximum beauty possible: “The teleology of the Universe is directed to the production of Beauty. Thus any system of things which in any
wide sense is beautiful is to that extent justified in its existence.” Accordingly, the process of becoming is the achievement of beauty. In a sense, then, Whitehead’s metaphysics is an aesthetics. It is this sort of conclusion which brings Frederick Ferré to conclude that “actuality is inherently kalogenic (From the Greek kalós, “beauty,” added to the familiar “birth or coming to be” stem, genesis).” In bringing together the diverse elements in its world, “every pulse of actualizing energy represents in itself an act of kalogenesis.” Thus, it is equally correct to conclude that every occasion, no matter how small, has value for its own sake, for the sake of others, and for the sake of the whole, and that every pulsing element of our processive cosmos is beautiful to some degree in itself and for itself. Everything is beautiful to some degree; the zero of beauty is the zero of actuality. According to this interpretation, then, value and beauty are coextensive. However, this conclusion presents us with a further question: “What makes something beautiful?”

Hartshorne eloquently captures the heart of what is at stake in beauty:

Beauty is the blessed escape from the opposite evils of monotonous or mechanical repetition and an equally meaningless succession of unrelated novelties. […] It is the mean between extremes. On one side are mere disorder, confusion, chaos, unexpectedness, unintegrated diversity, on the other, mere order, regularity, predictability, unity without diversity.

Hence, to say that the aim of the universe is the production of beauty is to claim that the universe aims at the maximum degree of harmony (unity in diversity) and intensity (balanced complexity). To the extent that experience falls short of this ideal, there is ugliness or evil. Evil, then, is a relative, though very real, fact of existence. Ugliness is loss. As Ferré concisely explains, the ugliness of loss can be understood in two senses: “Ugliness is either destruction of past objective achievements of beauty or interposition of lesser achievements of greater possibilities.”

According to the first sense of ugliness, we have an obligation not to, as Whitehead said so
forcefully above, deface the value experience which is the very essence of the universe by treating anything, whether it be another person, an insect, a tree, or the Parthenon, as having purely instrumental value. Rather, given that everything has both instrumental and intrinsic value, the appropriate attitude toward all of reality ought to be one of respect and awe. The latter form of ugliness, however, is rather different because it is relative not to what has been achieved, but to what could have been achieved. An attenuated achievement is not itself evil except in comparison to what might have been achieved. Thus, as Whitehead vividly puts in *Religion in the Making*,

> A hog is not an evil beast, but when a man is degraded to the level of a hog, with the accompanying atrophy of finer elements, he is no more evil than a hog. The evil of the final degradation lies in the comparison with what is with what might have been. During the process of degradation the comparison is an evil for the man himself, and at its final stage it remains an evil for others.

44 To the extent to which an occasion falls short of achieving the richness of experience open to it, it is, to that extent, evil. Conversely, therefore, “The real world is good when it is beautiful.”

45 This analysis suggests that we need to distinguish a third dimension of beauty according to which it is possible to compare the relative intensity of the value and the beauty achieved across occasions. That is, it is possible not only to say that an individual occasion is more or less beautiful than it could have been, but also that one occasion is more or less beautiful than another. Another way of putting this is to say that the intensive degree of beauty and value of an occasion corresponds to its level of organization and complexity. Actually, to be precise, differences in organization are a product of the degree of harmony and intensity (beauty) of the occasion in question. An occasion is more complex and organized the closer it comes to achieving the golden mean of beauty. Therefore, Whitehead is affirming what Ferré aptly refers to as a “multidimensional continuum of value [and beauty] running from trivial to immense.”
Whitehead’s axiology and aesthetics are a continuum in the sense that there are no absolute gaps. Beauty and value may be more or less, but never zero. But it is not a flat continuum. Rather, it is complex and multidimensional.\(^47\) Strictly speaking, the kinds and types of beauty are as numerous as the modes of togetherness. Thus, the differences between organisms that we experience are very real; there are different “kinds” of being, beauty, and value. However, these “kinds” are not grounded in a monolithic, static hierarchy of being or beauty. With some basic elements of Whitehead’s metaphysics, axiology, and aesthetics elaborated, we are finally in a position to examine his ethics directly.

II. Morality

In *Modes of Thought*, Whitehead defines morality as “the control of process so as to maximize importance.”\(^48\) The question, then, is what is the nature of importance. Let us begin with what importance is *not*. Whitehead is absolutely clear that “importance” can only be “inadequately” defined as “interest.”\(^49\) According to Whitehead, defining it thus “is inadequate because there are two aspects to importance; one based on the unity of the Universe, the other on the individuality of the details. The word *interest* suggests the latter aspect; the word *importance* leans toward the former.”\(^50\) Accordingly, if morality is the control of process so as to maximize importance, but importance is not limited to the individual, then Whitehead’s philosophy cannot be adequately characterized as a moral interest theory, as it is often depicted. With this in mind, let us turn to the following passage which presents in plain terms the true scope of importance, for Whitehead:

Importance is a generic notion which has been obscured by the overwhelming prominence of a few of its innumerable species. The terms *morality, logic, religion, art* have each of them been claimed as exhausting the whole meaning of importance. Each of them denotes a subordinate species. But the genus stretches beyond any finite group of species.\(^51\)
Insofar as morality, logic, religion, and art are merely a handful of the “innumerable species” of importance, it is clear that we must take Whitehead’s use of the term in a much wider and more fundamental sense than mere interest. To put the sentiment of the passage above more concisely, “The generic aim of process is the attainment of importance, in that species and to that extent which in that instance is possible.” Morality, then, is but one species of the process of the universe, the whole of which aims at the attainment of importance. With this conclusion, we are finally in a position to understand the relation of aesthetics to ethics.

In my initial presentation of Whitehead’s conception of aesthetics and its relation to metaphysics, I argued that his aesthetics is his metaphysics. Accordingly, if we juxtapose the passages above with the earlier passages on aesthetics, it also becomes clear that importance and beauty are essentially equivalent. For, both importance and beauty are appealed to as the ultimate aim of world process. Therefore, beauty, value, and importance are coextensive terms. Fundamentally, then, as we can see in the following passage, Whitehead is affirming an ethical system which is metaphysically grounded in his axiology and aesthetics:

The metaphysical doctrine, here expounded, finds the foundations of the world in the aesthetic experience, rather than – as with Kant – in the cognitive and conceptive experience. All order is therefore aesthetic order, and the moral order is merely certain aspects of aesthetic order. The actual world is the outcome of the aesthetic order, and the aesthetic order is derived from the immanence of God.

It is important not to misinterpret this important passage. Whitehead’s statement that the aesthetic order is derived from the immanence of God should not be interpreted as implying that all experience is only about achieving value experience for God. Every achievement of value is for the occasion itself, for others in its community, and, ultimately, for the whole. It is also important not to make the mistake of inferring from Whitehead’s claim that the moral order is an aspect of
the aesthetic order that he is guilty of a vicious aestheticism. Given that the aim of the universe itself is at the attainment of beauty, importance, and value, morality must be a species of aesthetics, but in a non-reductive sense. For, inasmuch as morality is simply a specialized species of process, it follows that the aim of morality is the same as that of process in general. “The real world is good when it is beautiful.”

Exactly what, then, is ethics for Whitehead?

Given these conclusions, it should at this point begin to be clear that, on one level, the ethics of creativity amounts to a fundamental rejection of key foundations of modern ethical theories. For instance, Whitehead fundamentally repudiates modern philosophy’s sharp ontological dualisms as well as its hyperbolic conception of autonomy and the axiology which follows from it. However, on another level, the ethics of creativity also embodies a dramatic reconstruction of the modern ethical project. An ethical theory grounded in Whitehead’s aesthetico-metaphysics seeks to fundamentally transform the valuable insights achieved in the great modern projects by grounding them in a more adequate worldview. One of the most basic insights of the ethics of creativity is the recognition that morality can no longer be limited to merely inter-human relations. Humans are a particular type of high-grade organism that, like everything else in the universe, exemplify this general impulse in their own particular way. In Whitehead’s terms, this is to say that human action is a particular species of process. However, this qualification does not assert that humans are fundamentally other than the rest of reality. Morality arises with the introduction of humans not because there were no values prior to our existence but because the nature of our existence allows us an unprecedented degree of freedom. Hence, according to the interpretation being defended, morality is simply the term we use to describe how we, being the particular type of high-grade organisms that we are, ought to relate to the universe in such a way that we maximize the
harmony and intensity obtainable in a given situation. That is, if Whitehead’s *metaphysics* is understood as the description of the universe’s quest toward aesthetic achievement in that species and to that extent possible, then *morality* is that species of process which is the human person’s relationship with the universe which aims at “that union of harmony, intensity, and vividness which involves the perfection of importance for that occasion.”\(^{57}\) Another way of saying this is simply to say that morality is that art which directs how we ought to comport ourselves with *everything with which we have a relation*.\(^ {58}\) Thus, the general ideal of the ethics of creativity is: *always act in such a way so as to bring about the greatest possible universe of beauty, value, and importance which in each instance is possible.* A shorter way of stating this is simply to say: maximize the harmony and intensity of experience.

However, if the ethics of creativity is going to be anything more than the ideal of a genuine ethical universe, it must be able to provide us with guidance for making day-to-day decisions. What we need, then, is a criterion by which we can arbitrate conflicts between, for instance, humans, livestock, flora, fauna, species, and ecosystems. Fortunately, we have just finished elaborating such a criterion in our discussion of beauty. For, as Hartshorne states, “the only good that is intrinsically good, good in itself, is good experience, and the criteria for this are aesthetic.”\(^ {59}\) Put differently, insofar as something is only as good as it is beautiful, the conditions of beauty described above are also the conditions of morality. Thus, with Hartshorne, we conclude that ethics must “lean upon aesthetics.”\(^ {60}\) In order to get a more concrete handle on how exactly ethics must lean upon aesthetics, let us look at an actual instance of moral conflict.
Because the system being advanced affirms the intrinsic value of even the most inconsequential organism, conflicting ends are, sadly, not hard to come by. Every society requires interplay with its environment and “in the case of living societies this interplay takes the form of robbery.”61 However, this is not the whole story. For, as Whitehead continues, “It is at this point that with life morals become acute. The robber requires justification.”62 These passages are a wonderful example of the truly revolutionary nature of the ethics of creativity. For, in traditional ethical systems, the act of a human being consuming another organism would not, unless perhaps that organism were another human being, even be a moral issue. However, for Whitehead, the robber requires justification. The question, then, is what sort of justification is available to someone advocating the ethics of creativity in the case of our consumption of other organisms? How are we to decide between our own intrinsic value and the intrinsic value of the organisms which we destroy in order to sustain ourselves? For purposes of illustration, let us specifically examine whether our (humans) consumption of plants is justified.

According to the tentative principles above, the ultimate justification of any action must be in terms of whether it achieves the greatest degree of beauty possible in each situation. But how do we use this principle in order to help us decide between these particular conflicting values? In other words, in general, can we justify our consumption of plants? In his *Hartshorne and the Metaphysics of Animal Rights*, Daniel Dombrowski concisely captures the key insight involved in an ethic grounded in a process metaphysics which makes the answer to these questions clear: “A process approach would condemn the destruction (or maiming) of any society of actual occasions unless such a society clearly threatened the intensity or satisfaction of a higher-order society.”63 Insofar as it is (currently) necessary for humans to consume either animal or plant life in order to
live, it is not an option to say that the most beautiful whole is the one where humans didn’t eat either animals or plants; this is not, as James would say, a live option. There is, then, a true moral conflict here. So, what would maximize the intensity and harmony possible in this situation? What would achieve the greatest amount of beauty? I contend that, inasmuch as a human being is a very high-order society and inasmuch as it is necessary for humans to consume either plants or animals (or both) in order to survive, that, in general (that is, abstracting, \textit{per impossible}, from the context of the particular context in which such organisms are produced, harvested, etc.), the ideal of the ethics of creativity would justify our consumption of plants. However, this does not negate the intrinsic value of plants. On the contrary, Whitehead recognizes that such an action is life stealing from life. Quite simply, if plants had no intrinsic value, such an action would not be robbery at all; it would be entirely morally neutral.

Accordingly, by affirming an ethic which takes beauty as its central value, we are able to correctly emphasize the well being of wholes, while not losing sight of the importance of unique centers of value which constitute these wholes. For, beauty is the achievement of that “miraculous balance” wherein the whole provides an environment which enhances the intensity of each of the parts while these parts lead up to a whole which is at once beyond them and yet not destructive of them.\textsuperscript{64} As Ferré puts it, Whitehead affirms the intrinsic value of the “great social wholes that constitute unconscious nature” but without allowing our intuition of the value intrinsic to individual occasions to be “trampled in some ill considered rush to biocentric egalitarianism.”\textsuperscript{65} Therefore, the ideal of the ethics of creativity requires that we always affirm the greatest harmony and intensity possible in a given situation. But whether this puts the interests of humans above those of other occasions ultimately depends upon the values achievable in each particular situation.
This conclusion is important to qualify. What is not being claimed is that an entity’s value depends upon the situation. Rather, what is being claimed is that, strictly speaking, every situation is ontologically and, therefore, morally unique. Every occasion is ontologically unique in the sense that it brings together the diverse elements of its actual world in just this way, just here, and just now. Because every situation is ontologically unique, it is also morally unique in the sense that the values obtainable in a situation are, strictly speaking, never identical. Consequently, with George R. Lucas, Jr., I contend that there can be no Archimedean ethic point, there is no “transcendental” privileged moral position outside of some cultural context rooted in some common life.66 Rather, “Morality is always the aim at that union of harmony, intensity, and vividness which involves the perfection of importance for that occasion.”67 Thus, Whitehead is affirming what may be called a situated ethic. It is situated in the sense that what is morally appropriate is relative to the values obtainable in each situation and it is situated in the sense that it does not claim to be able to extricate itself from the values of a given social context. The recognition of the situatedness of ethics requires that morality remain as dynamic as reality itself. Put differently, “there can be no final truth in ethics any more than in physics.”68 Any codification of moral principles must always be viewed as tentative and fallible. However, it is important to note that this does not amount to the affirmation of a form of relativism. What constitutes a moral or beautiful relation to one’s world is not relative to one’s own interests or even a culture’s interests. Rather, what is moral will always be that action which achieves the maximum degree of harmony and intensity. What are relative are (1) the values that are potentially achievable and (2) the moral agent’s knowledge of those values. The former concerns the situatedness just discussed and the latter refers to the moral agent’s character. It is to this second point that we must now turn.
As Aldo Leopold was all too aware, the greatest impediment to the development of an ethical system which extends value beyond the narrow and shortsighted concerns of humans is “the fact that our education and economic system is headed away from, rather than toward, an intense consciousness of land.”\(^6\) This is equally true of the ethics of creativity. Our ability to successfully act in accordance with the ideal above is directly proportionate to the adequacy of our aesthetic judgment. For, if we do not know of the values achievable in a situation, then it is, of course, impossible to realize them. As Whitehead coyly put it, “Morality of outlook is inseparably conjoined with generality of outlook.”\(^7\) For instance, if the breadth of a moral agent’s (say, a child) aesthetic experience is very narrow, then the intensity and harmony achievable will be correspondingly trivial or superficial. Interestingly, then, the task of ethics is actually to overcome that characteristic which most defines humans, namely, abstraction. By abstracting from the booming, buzzing confusion of our causal base we obtain a degree of novelty and spontaneity that is unprecedented in its potential for both good and ill. However, it is also this abstraction which removes us from the values achievable in the world. Therefore, as Gregory Moses very incisively points out:

> Process ecological ethics can’t be just applying principles or balancing value. It has to do as well with character transformation, with what kinds of individuals and communities and nations we are, with ingrained changes in the way we operate. Everything is more or less creative taking into account etc., but everything depends on how and how depends on the who, the character, the style of the how, which is to say, with ecological virtue.\(^7\)

In other words, Moses continues, we must move away from a form of “ecological consequentialism with some touches of deontology […] to a process ecological virtue ethic.”\(^7\) The success of the ethics of creativity will largely depend upon the extent to which it can instill
the virtues of intellect and character necessary to recognize what values are at stake in any given situation and the strength of conviction to affirm them.

In summary, then, the ethics of creativity calls on each of us to relate to our world in such a way that we always maximize the intensity and harmony of experience achievable in every concrete situation. Implicit within this imperative is the further requirement that we resolutely commit to expanding the depth and breadth of our aesthetic horizons. For, whether by our actions we preserve or destroy, our actions are moral if we have thereby safeguarded the value of experience so far as it depends on *that concrete instance* in the world’s history. ⁷³

### III. Inviolability & Moral Paralysis

Before I conclude my presentation, it will be valuable to briefly examine two related objections which present themselves almost immediately upon the affirmation of the intrinsic value of all of reality: It is objected that either (1) Whitehead makes all values both equal and absolute, thereby putting the agent in a position of moral paralysis, or (2) that he endangers the inviolability of humanity by making value a matter of degree. I would like to suggest how I would begin to address each of these objections.

According to the first objection, in affirming that everything in the universe has intrinsic value, Whitehead extends the scope of moral considerability so wide as to include everything that exists. Everything from the most trivial occasion to God has intrinsic value. However, an objector may note, in so doing Whitehead puts the moral agent, at best, in the position of having to arbitrarily choose between equally valuable but conflicting occasions or, at worst, in a position of being
morally paralyzed, unable to choose one out of the sea of too often mutually exclusive values. For, if it is the case that everything has intrinsic value, then one must either make an arbitrary choice or do nothing at all. In that, the objector claims, each option is presumably unsatisfactory, it is necessary to limit intrinsic value to humans or, perhaps, to sentient beings.

I contend that this objection is simply a result of objectors’ inability to extricate themselves from the metaphysical presuppositions of modern ethical theories. Insofar as Whitehead rejects these presuppositions, he also avoids their axiological implications. Put more simply, Whitehead does affirm that all actual occasions are equal in the sense of having value, but he also recognizes that there are different grades of experience and, therefore, different grades of value. For Whitehead, actuality is coextensive with value but actuality itself is differentiated by degrees of complexity of organization, intensity and harmony, beauty. Thus, Whitehead affirms that everything is equal in having value, but everything does not have value equally.74

This conclusion leads directly to the second objection. Namely, that Whitehead’s notion of a multidimensional continuum of value cannot support our intuition of the inviolability of humans. Unlike the first, this objection does not arise from a misunderstanding of Whitehead’s system. Whitehead simply does not share the objector’s commitment to absolute inviolability and the conception of absolute value upon which it rests. In other words, the axiology being advanced denies that anything, including God, has infinite value. I suggest that the very notion of infinite value is itself faulty and rests not only on what Hartshorne calls “classical theism,” but on an implicit Kantian conception of autonomy. Autonomy cannot be metaphysically interpreted as substantial independence, for, in Whitehead’s system, there is no absolute independence.
Everything has two sides; everything has intrinsic value and ecological value for others and the whole. That an occasion must always be treated as an end and never merely as a means does indeed entail that every such occasion must always be respected, but it does not follow from this that the occasion is inviolable.

Every view of reality has ethical implications. Even if, one advances an anti-worldview, as it is fashionable among certain groups to do, deconstructing or eliminating the ingredients necessary for a worldview and thereby claims that such discussions are impossible, this view too has ethical implications. That is, the view that no worldview is possible, is itself a view of reality. With this in mind, it is interesting to note some of the ethical theories that are most prevalent today: utilitarianism, deontology, and virtue ethics. Each of these theories was the result of a particular view of reality: utilitarianism resulted from a particular psychology; deontology is based in a Newtonian/Kantian view of reality; and virtue ethics is grounded in a teleological substance metaphysics. What is ironic about this situation is that the number of philosophers who advocate modern ethical theories does not correspond to the number of philosophers who advocate modern views of reality. Simply put, the revolution against the modern worldview has not brought with it a corresponding abandonment (or even a substantial revision) of the ethical paradigms that were a product of those same metaphysical projects. That is, though the modern worldview has largely been abandoned, the ethical theories which developed out of that worldview have not suffered the same fate. Rather, if anything, the ranks of those who defend the ethical offspring of modern metaphysics continue to swell. It is, in part, with this incongruity in mind, that I present the present project.
In this essay, I have begun the arduous but, hopefully, rewarding work of developing some of what I believe are the ethical implications of a metaphysics of process. Like the metaphysics which grounds it, this ethic of creativity embraces at once the solidarity and plurality of the universe. It seeks to establish an ethical framework by which we can relate to every element our world without defacing the value experience which is its essence.\textsuperscript{76} William James beautifully captured the spirit of the ethics of creativity when he wrote that:

[The moral philosopher] knows that he must vote always for the richer universe, for the good which seems most organizable, most fit to enter to complex combinations, most apt to be a member of a more inclusive whole. But which particular universe this is he cannot know for certain in advance; he only knows that if he makes a bad mistake the cries of the wounded will soon inform him of the fact.\textsuperscript{77}
NOTES


2 Utilitarianism is an exception to this in its extension of moral standing to all sentient creatures. For instance, Mill calls for the extension of moral standing “to the whole sentient creation” (John Stuart Mill, *Utilitarianism*, Mary Warnock, ed. (New York: Meridian Books, 1962) 263). Of course, utilitarianism does not extend its sphere of concern to the relations beyond animals to animate entities such as plants or insects, much less inanimate entities such as rocks.

3 It is important to preface my remarks by noting that Whitehead did not dedicate any one work to the ethical implications of his metaphysics of process. This is not to say, however, that he was unconcerned with ethics. On the contrary, as I hope the analysis to follow will demonstrate, Whitehead was deeply concerned with the good. Although I am not in a position to fully defend the claim here, it is my sense that Whitehead was a moral philosopher in the tradition of Plato rather than Kant or Mill. And this is just what we would expect, given the nature of his system. For, like Plato, Whitehead does not limit discussions of the good simply to relations between human agents. For both Plato and Whitehead, morality and the good trade in a metaphysical currency. It will be important to keep this in mind when we return to the question as to the relation between Whitehead’s metaphysics and ethics.

4 Regarding the latter, see Judith A. Jones, *Intensity: An Essay in Whiteheadian Ontology*, (Nashville: Vanderbilt University Press, 1998) “An actual entity is noticed and analyzed, and its individuality of existence is stipulated, in virtue of its complex repetition (to whatever extent it occurs) in entities in its transcendent future. This sheds light on why intensity in the relevant future is posited as an interest of the actuality as an immediate subject. This is not merely the hope of immortality (though it is that to a degree) but an ontological recognition that the intensive character of an immediate entity is revealed in (because it resides in) its transcendent effects” (52).

5 Coined by Frederick Ferré, *Being and Value: Toward a Constructive Postmodern Metaphysics*, (Albany: State University of New York Press, 1996) 340, “kalogenesis” is from the Greek kalós meaning “birth or coming to be.”

6 I make this qualification because the latter would probably not apply to a substance ontology such as Aristotle’s. The notion of existential independence is introduced by Descartes and has since become the predominant notion of substance. However, even Aristotle’s teleological substance metaphysics is ultimately objectionable for Whitehead because it affirms what might be called essential independence. An entity is essentially what it is independently of its relations to other things.


9 Throughout this paper I privilege the latter over the former. I do this because “entity” still connotes properties like static, enduring, and independent, which properties Whitehead explicitly rejects, whereas “occasion” emphasizes temporality, relation, and dynamism.

10 As Whitehead explains in *Science and the Modern World* (New York: Free Press, 1925), “the relations of an event are internal, so far as concerns the event itself; that is to say that they are constitutive of what the event is in itself” (104).

11 The over exaggeration of the *causa sui* nature of actual occasions by Whitehead scholars has led many critics to accuse Whitehead of making homuncular entities out of his actual occasions. I think that this problem is of the traditional interpretation’s own making. Whitehead is quite clear that entities’ “freedom” is often exceedingly narrow, but it is never zero – though for the vast majority of entities it is closer to zero than not. See Hartshorne’s zero fallacy below.


13 Judith Jones has very aptly referred to this principle as the ethical correlate of Whitehead’s ontological principle.

14 The importance of the latter has often been missed due to commentators’ overemphasis on the latter. It is, as I go on to argue, the vacuousness of existence that Whitehead was primarily critical of, not merely its bifurcation.

15 It is important to note that the actual divisions that we perceive are also a function of our own knowledge and interests. In addition, it is important to note that these distinctions are functional or what Whitehead calls “rough divisions” (*Modes of Thought* 157).

16 John Dewey, in “Time and Individuality,” *John Dewey, The Later Works*, v. 14, JoAnn Boydston, ed. (Carbondale: Southern Illinois University Press, 1991) very astutely anticipates a further objection to this conclusion when he astutely notes what the affirmation of a continuity of actuality does not entail: “This statement does not mean that physical and human individuality are identical, nor that the things which appear to us to be nonliving have
the distinguishing characteristics of organisms. The difference between the inanimate and the animate is not so easily wiped out. But it does show that there is no fixed gap between them” (108).

17 Any absolute ontological gap would violate Whitehead’s “ontological principle,” which states that all reasons must ultimately make an appeal to an actual occasion (see Process and Reality 19, 24, 32, 40, 41, 43, 46, 244, 256).

18 Societies are to be understood in terms of “layers of social order” where “the defining characteristics [are] becoming wider and more general as we widen the background” (Process and Reality 90).

19 Whitehead, Process and Reality 309.

20 Whitehead, Science and the Modern World 70.

21 Whitehead, Process and Reality 21, emphasis added.

22 Whitehead, Process and Reality 309. See also, “The term ‘vacuous actuality’ here means the notion of a res vera devoid of subjective immediacy. This repudiation is fundamental for the organic philosophy (cf. Part II, ch. VII, ‘The Subjectivist Principle’). The notion of ‘vacuous actuality’ is very closely allied to the notion of the ‘inherence of quality in substance’” (Process and Reality 29).

23 Alfred North Whitehead. The Function of Reason (Princeton: Princeton University Press, 1920) 30. See also, “If we follow Descartes and express this duality [between mind and body] in terms of the concept of substance, we obtain the notion of bodily substances and of mental substances. The bodily have, on this theory a vacuous existence. They are sheer facts, devoid of intrinsic values. It is intrinsically impossible to give any reason why they should come into existence, or should endure, or should cease to exist. […] This conception of vacuous substantial existence lacks all explanatory insight” (ibid).


27 See “A logical requirement of any value system is that it should clarify the idea of no value, or the value zero. I hold that, as value diminishes, its limit of zero is not in a form of existence without value, but in total nonexistence. The zero of feeling, or of intrinsic value, and of actuality are one and the same” (Hartshorne, “Rights of the Subhuman” 54).


29 Whitehead, Modes of Thought 109.

30 Whitehead, Modes of Thought 110.

31 Hence, when an actual occasion functions objectively it still has intrinsic value – it is yet itself; what else might it be? Accordingly, “[t]here must be value beyond ourselves. Otherwise every thing experienced would be merely barren detail in our own solipsist mode of existence” (Whitehead, Modes of Thought 102). As I will more fully argue below, the attention to and recognition of this fact is the essence of morality.

32 Interestingly, as we see in the following passage, Whitehead characterizes this sense of the value of the whole as a religious intuition. “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. The intuition into the actual world gives a particular definite content to the bare notion of a principle of determining the grading of values” (Religion in the Making 59-60). According to Whitehead, then, the religious intuition is this recognition of the value of the whole which includes but does not devour the value of others and of the individual.

33 Whitehead, Modes of Thought 111.

34 This conclusion will be important to keep in mind when, in section three, I examine the objection that Whitehead does not sufficiently protect the inviolability of humans.

35 Whitehead, Modes of Thought 109.

36 Whitehead, Modes of Thought 111.

37 Alfred North Whitehead, Adventures of Ideas, (New York: Free Press, 1933) 265. See also, “The essence of power is the drive towards aesthetic worth for its own sake. All power is a derivative from this fact of composition attaining worth for itself. There is no other fact. […] It constitutes the drive of the universe” (Whitehead Modes of Thought 119).

38 Ferré 340.

39 Ferré 358.

40 Ferré 359.

Ferré 360. Importantly, Ferré also notes that this loss due to ugliness can only occur against “some assumed field of subjective harmony with some degree of beauty” (ibid).

See Whitehead, Modes of Thought 111.

Whitehead, Religion in the Making 97. Note that this bears a resemblance to J. S. Mill’s statement that “It is better to be a human being dissatisfied than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied” (260). However, this is different than Whitehead’s claim. For Whitehead is claiming that a human acting as a hog is evil relative to what could have been achieved, whereas this statement is suggesting that it is normatively better to be a human than a hog because of the qualitatively better experiences available to a human, even an ignorant one. Though Whitehead could, in a qualified sense, agree with this statement (the experience of a human is qualitatively richer than that of a pig), this is not what is primarily at stake in this passage.

Whitehead, Adventures of Ideas 268. With this conclusion, it should be clear that I am advocating a return to a conception of ethics as an inherently imprecise endeavor. With Aristotle, I contend that we must not ask more precision of a topic than it allows: “Our discussion will be adequate if its degree of clarity fits the subject-matter; for we should not seek the same degree of exactness in all sorts of arguments alike, any more than in the products of different crafts” (Nicomachean Ethics, Terence Irwin, trans. (Indianapolis: Hackett, 1985) 1094b15). This will be important to keep in mind when the further claim regarding the situatedness of moral action is presented.

Ferré 374.

Ferré characterizes the continuum in the following manner: “The continuum is complex, made up both of intrinsic and instrumental value. What may be relatively low-grade intrinsic value, such as grass, may be of extremely high instrumental (ecological) value in the interdependent community of things. And what may be of low instrumental value, such as the appreciation of a magnificent sunrise, may be of high intrinsic value. […] Neither the temptations of ecofascism nor the arrogance of anthropocentrism can be warranted on this theory of reality” (374).

Whitehead, Modes of Thought 13.

Whitehead, Modes of Thought 8.

Whitehead, Modes of Thought 8. Given critics’ claims to the contrary it is ironic that Whitehead intentionally chose the term importance because it emphasized the unity of the universe over the interest of the individual details. (For instance, see Paul Arthur Schilpp, “Whitehead’s Moral Philosophy,” The Philosophy of Alfred North Whitehead, 2nd ed. (LaSalle: Open Court, 1951) 561-618.) Hence, as Whitehead indicates in Process and Reality, “Morality of outlook is inseparably conjoined with generality of outlook” (15). Moreover, it is crucial to note that Whitehead defines importance by reference to both the “unity of the Universe” and “the individuality of the details.”

Whitehead, Modes of Thought 11. See also, “Of course the word importance, as in common use, has been reduced to suggest a silly little pomposity which is the extreme trivialization of its meaning here. This is a permanent difficulty of philosophic discussion; namely, that words must be stretched beyond their common meanings in the marketplace” (12, author’s emphasis).

Whitehead, Modes of Thought 12, emphasis added.

Specifically, recall that in our discussion of Whitehead’s aesthetics we quoted him as saying that the teleology of the universe is directed toward the production of beauty. Now we have him making the claim that the general aim of process is the attainment of importance in that species and to that extent which in that instance is possible. Hence, both importance and beauty are at different times described as the ultimate aim of the universe. It is no surprise, then, that importance, value, and beauty have the same structure. For, just as beauty and value aim at the ideal maximization of intensity and harmony, importance aims at the maximization of diversity and unity.

Whitehead, Religion in the Making 105.

Whitehead, Adventures of Ideas 268.

Hartshorne put this point well when he stated, “Man is the freest creature, hence the most dangerous to himself and others. This is what it is to be human. The great opportunities of the human kind or degree of freedom mean also great risks” (Charles Hartshorne, “The Environmental Results of Technology,” Philosophy and Environmental Crisis, William. T. Blackstone, ed. (Athens, GA: University of Georgia Press, 1974) 78).

Whitehead, Modes of Thought 14.

Put in more familiar modern ethical terms we might say: never act in such that we treat any occasion merely as a means but also always as an end in itself. Or, to put this in the words of William James “The Moral Philosopher and the Moral Life,” The Will to Believe and Other Popular Essays, (New York: Dover, 1956) 195 rather than Immanuel Kant, “Take any demand, however slight, which any creature, however weak, may make. Ought it not, for its own sake, to be satisfied?” The similarity of this exhortation with some Buddhist thought is striking. Refer below to my response to the objection of moral paralysis, which often accompanies this conclusion.
60 Ibid.
62 Ibid.
64 Whitehead, *Modes of Thought* 62.
65 Ferré 374.
66 Lucas points out that, “Any attempt to get ‘outside of’ or ‘beyond’ this situation is simply a fake – a covert smuggling of our particular cultural prejudices and dispositions into a theory of calculative rationality or ‘pure reason’” (300).
67 Whitehead, *Modes of Thought* 13-14, emphasis added.
68 James 184.
72 Moses 14.
74 I am indebted to Jones for making this crucial distinction clear.
75 To put this point another way, the failure and subsequent abandonment of the modern worldview has not led to a corresponding abandonment of the modern ethical project. It is increasingly difficult to find someone who would defend a Cartesian view of matter as static and lifeless in the face of the developments in biology, ecology, and quantum mechanics. Few philosophers see the natural world as being absolutely determined by inexorable laws which, in theory, grant absolute predictability and certainty. Fewer still are advancing the Cartesian view that the screams of a tortured animal are simply the grinding of gears and are, consequently, of no import whatever.
76 Whitehead, *Modes of Thought* 11.
77 James 210.