Contrasts as the Condition for Relationality

in the

Metaphysics of Alfred North Whitehead

By

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ABSTRACT

CONTRASTS AS THE CONDITION FOR RELATIONALITY IN THE METAPHYSICS OF
ALFRED NORTH WHITEHEAD

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My thesis argues that contrasts are the condition for relationality in the metaphysics of Alfred North Whitehead. A contrast is a function within an event to synthesize the content of a disjunctive plurality into a unity. The various relational determinations of actual reality that we experience are due to constant’s resultant unity, and the various conceptions of relations we may engender are abstractions from these unities and their process of unification. I must show that this is a defensible explanation for relationality and our conceptions of it, and consider the works of Hume, Bradley, Russell, and others that offer dissenting explanations. I must also show that this is a defensible interpretation of Whitehead’s relational metaphysics, and consider whether the eternal objects are already relational without contrasts. The consequences of this project include explaining how the relation conditioning nature of contrasts also conditions perception, possibility, conceptualization, and systematization.
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**Whitehead, Alfred North**

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<tr>
<td>AI</td>
<td><em>Adventures of Ideas</em></td>
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<tr>
<td>IS</td>
<td><em>The Interpretation of Science: Selected Essays</em></td>
</tr>
<tr>
<td>L</td>
<td>“Letter from Alfred North Whitehead to Charles Hartshorne, 1936”</td>
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<tr>
<td>PR</td>
<td><em>Process and Reality: An Essay in Cosmology</em></td>
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<tr>
<td>RM</td>
<td><em>Religion in the Making</em></td>
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<tr>
<td>S</td>
<td><em>Symbolism: It’s Meaning and Effect</em></td>
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<td>SMW</td>
<td><em>Science and the Modern World: Lowell Lectures, 1925</em></td>
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INTRODUCTION

1. My Argument

My thesis argues that contrasts are the condition for relationality in Whitehead’s process metaphysics. Contrasts function as part of the development of an actual event. The products of contrasts are included as determining characteristics within the facticity of that event, specifically the relationality of its features.

A contrast describes a synthetical process within the becoming of an actual event: it is a synthesis of potentials into a unity. The unity’s pattern determines a type of relation within actual fact. The pattern of that unity and its derivative relations cannot be divorced from the process of synthesis in the contrast without abstraction.

Our discernment of any type of relation – whether it is of connectivity or externality, identity or diversity, temporality or causality, intensive difference or of relative dependence – is derived from an analysis of the qualitative and quantitative features within that unity. The particular way these features are unified contributes to the characterization of actual fact, and it describes the process of the contrast that coalesced these features into that determined, relational pattern.

2. The Nature of Contrasts

My thesis is not meant to imply that relationality or relations are of secondary importance for Whitehead. Whitehead’s process philosophy is a relational ontology:
Nothing actually exists in isolation. All things *became as* determinatively connected entities. Whitehead did not regard the world as being composed of unrelated, discrete parts, or that some outside agency can just manipulate the contents of our world while remaining distinct and separate from them.

In Whitehead’s metaphysics, since all things *became as* connected entities, nothing simply exists as an independent being or even as an already determinatively connected entity. (PR, 22 – 23) This has the double consequence of:

1. raising our suspicion concerning the notion of a “thing with properties” as being a wholly satisfactory description of a concrete moment of actuality (and may require us to rethink the description of relations as *properties* that things *possess*);

2. and it develops the thesis that since nothing becomes in isolation, all becoming actualities require other entities as *potentia* for their actualization.

So, while Whitehead’s philosophy describes all of reality *as constructed by* activities of becoming, these activities *require* an integral, relational connectivity with the other conditions and constituents of reality in order to become. (PR, 148)

But the becoming of relations within actuality must be explained and must be explained through the activity of actual processes. This, as I shall explain in Chapter Three, is in keeping with the “ontological principle,” which states that the reason behind anything in actual fact is to be explained in terms of an actual process. As relations, as I shall argue, are real elements within actual fact, then they must be explained in terms of actual process, and this shall be through contrasts.

But what are these contrasts in Whitehead’s philosophy? According to Whitehead, what is “ordinarily termed ‘relations,’ are abstractions from contrasts. A
relation can be found in many contrasts; and when it is so found, it is said to relate the things contrasted.” (PR, 228 – 229) A relation “is a genus of contrasts.” This seems to suggest that relations are derivative and that contrasts may be more primary than any specific type of relation (PR, 229).

My project argues that the full meaning of these enigmatic assertions is that contrasts describe the conditions whereby the relational potential of both the already-actual and the non-actual become determinable as determinables for actuality.

Through a process of synthetical unification from disjunctive content, contrasts function as the means within the process of actualization whereby relations become determinately relational in actuality. Even the relationality of relations cannot be divorced from process, whereby relations are what become as relations through actual activity, and contrasts describe the condition for this process.

As indicated above, we may understand a “contrast” as constituting a bipartite element within actual process: it is both a constructive process of unification and it is also the particular unity this process produces. Contrasts, as a “constructive process of unification,” are described by Whitehead as “Modes of Synthesis of Entities in one Prehension.” (A “prehension” is Whitehead’s term for a constructive process of feeling) Contrasts are also a “particular unity” – the resultant aspect of a contrast – and can be referred to as “Patterned Entities.” (PR, 22)

Whitehead’s conception of a contrast is distinct from the notion of contrast as being fundamentally a Wechselbestimmung, or Fichte’s sense of contrast, in which different concepts or elements are conceived as being within a mutual opposition to each other, but also, at the same time, constituted by their internal relatedness to one
another. In this sense of contrast, each term is what is it is by virtue of – and so determined by – its opposition to its other.

In the Whiteheadian notion of contrast, any oppositional relation is strictly derivative of how objects are included in a certain contrast. An opposition-relation may be produced between entities in one contrast as just one of the types of relationality it may condition, but the same relation need not apply to the same entities within a different contrast. Furthermore, the elements that are brought together within a Whiteheadian synthesis are not conceived as being already in opposition to each other. While they obtain their function and determinacy through how they are synthesized, their singular nature is not implicated through the nature of their other.

For the most part, the meaning and function of contrasts have been ignored by Whiteheadian commentators. Some, such as Steven Shaviro, have described contrasts in terms of the mutually-determining relationship of divine and non-divine actualities in Whitehead’s system, and in terms of how certain notions or concepts once at variance (such as “subject/object” or “mind/body”) can be “harmonized” by contrasts. While indisputably vital, and excellent illustrations of specific instances of contrasts, I contend that this does not yet touch on a contrast’s fundamental nature.

One of the few authors to have written specifically on the nature and function of contrasts is John W. Lango, primarily in his excellent paper “Whitehead’s Category of Contrasts.” However, I depart from Lango’s interpretation of Whitehead on relationality and contrasts in some crucial ways: In his paper, Lango restricts the role of contrasts to

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1 Johann Fichte, *Grundlage der gesammten Wissenschaftslehre*, 131 – 135

a specific mode of synthesis in feeling and explains the nature and relationality of relations through a condition of universal relationality that precedes actualization.³

My argument is that – functioning both with and through the other conditions for actualization – contrasts are an integral component within the entirety of Whitehead’s process metaphysics. With and through other conditions, contrasts describe the means for the consistent relationality of reality as interconnected processes of actualization.

Both of these descriptions pertain to the function of contrasts within every level of the process of actualization. This process is described by Whitehead as the “concrescence” of reality as a definite, actual fact. (PR, 84 – 85)

An understanding of how contrasts operate within this process offers an effective way for interpreting Whitehead’s philosophy and offers a tool for evaluating and overcoming limitations within past conceptions of relationality and its conditions.

### 3. Chapter Breakdown

In Chapter One, I shall consider how the term contrast is to be understood in comparison to the term relation. This is intended to show that while relations are integral to Whitehead’s system, and are real entities in their own right, a relation is still the product of a contrast and should not be assumed to actually effectuate connectivity, causality, directionality, or any other type of determinacy, by themselves.

To this end, I shall examine how relations as real entities are the product of an abstractive process of perception and conception. I shall examine how relations as

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conceptions are involved in the formulation of propositions about reality, how certain forms of these propositions have influenced our understanding of reality, of experience, and the relations involved in these understandings. This shall also involve an examination of David Hume, F.H. Bradley, and Bertrand Russell’s accounts of relations and the means by which obtain relational concepts.

While positive comparisons exist between the work of these philosophers and Whitehead’s philosophy of relations, the assumptions concerning relations involved in the work of Hume, Bradley, and Russell shall engender problems in the coherence of their relational conceptions, and these incoherencies may be resolved through an understanding of contrasts as the condition for the production of relations.

In Chapter Two, I shall examine how Whitehead develops his conception of relations and their conditions through his philosophy of perception.

Whitehead divides his account of perception into three basic modes: causal efficacy, presentational immediacy, and symbolic reference. Each of these modes evinces a real relational connectivity between each other and the world as it is incorporated into perception, and also provide clues as to how we come to conceive the various relations through the way material is incorporated within and productively determines the nature of the perception they are involved within.

This also provides clues as to how all relational determinacy and conceivability is due to a constructive, synthetical process of contrast. From this, Whitehead generalizes notions that shall describe the basic types of entities involved in his system: prehension, actual entity, nexus, and eternal objects.
In Chapter Three, I shall consider the immanent conditions for actualization that are involved in every event of perception and conception, and of the development and function of Whitehead’s basic types of metaphysical entities. This shall bring Whitehead’s theory of perception, entity, relationality, the process of actualization, and their immanent conditions, all within an attempt at a metaphysical explanation.

I shall examine different types of explanation as well as the criterial desiderata that may be involved in their evaluation. I contend that Whitehead deftly brings various types of explanation together within a synthetic unity of a metaphysical hypothesis.

This means that Whitehead’s systematic explanation of reality, perception, and conception is the result of a contrast. Whitehead’s notion of an ultimate condition for any actualization, “creativity,” and its related notions of pattern and value, is a description of a contrast that brings together the different types of explanation into a unity that describes an ongoing series of connective events of actualization. From this, we may discern a connection between the notion of contrast as a description of a specific function within actualization and contrast as a general description for processuality.

In Chapter Four, I shall initiate an explanation as to why we encounter the specific types of prehension at each level of actualization, and why any new stage of prehensive activity occurs at all. This shall incorporate the immanent condition of creativity and its related notions covered in Chapter Three.

From there, I shall begin the account of a series of actual events describing the hearing of a piece of music, and the conscious generalization of relational concepts that may be derived from hearing a piece of music. I shall cover the prehensive stages that occur within the perceptive mode of causal efficacy, and shall deal with the natures and
functions of physical and conceptual feelings, positive and negative prehensions, and pure and hybrid feelings.

My account of this genesis of relational concepts shall pause after we arrive at transmuted feelings. The activity of contrasts as a productively synthetical activity of determining relationality shall be considered at each stage.

In Chapter Five, I shall resume the account regarding why any new prehensive activity occurs at all. In order to complete this explanation, I must deal with Whitehead’s notion of God, which I would not have been able to deal with coherently without first dealing with the nature of conceptual feelings and valuation in Chapter Four.

I shall explain how Whitehead conceives of God as an activity that provides the availability of potentiality for every actual event, the teleological aim towards the realization of value within every actual event, as well as the order and organization of the eternal objects as possibilities for any actualization.

The order and organization of eternal objects as possibilities is relevant to our account of hearing music (and conceptualizing relations from it) due to the way that the order and organization of eternal objects conditions the way we may derive certain types of perception and conception from experience and not others. Also, our ability to derive any perceptive or conceptual content in experience is due to the extensive connection of eternal objects, and their general unity as an extensive continuum.

It has been argued by some Whitehead commentators that the unity and order of eternal objects is already complete prior their inclusion within God’s primordial feelings and that God is only responsible for making a certain graded order of possibility
available for other actual events. This interpretation suggests that relational order can exist prior to any inclusion within an actual process.

This is consistent with Whitehead’s account of eternal objects in *Science and the Modern World*. But Whitehead reconceives eternal objects in *Process and Reality* as a bare, disjunctive multiplicity when abstracted from how they are included in prehensions. I will offer an account of how eternal objects obtain their relational essence and order through their inclusion within the contrasts of actual feeling.

In Chapter Six, I shall conclude my account of how relational concepts can be derived from contrasts. I shall proceed through the introduction of propositions, and how they may be developed to a degree of complexity that results in conscious perception, conceptualization, and judgments. At this level, I shall illustrate how conceptions of relationality, including their conditions (contrasts), can come to be through prehensions.

I shall then conclude this project with an assessment of Whitehead’s account of contrasts, relations, and actualization in terms of the criterial desiderata of metaphysical explanation. I shall consider a problem of incoherence in Whitehead’s notion of God’s consequent nature, and then suggest a possible solution to this problem. Finally, I shall consider the topics of future projects.
CHAPTER ONE

CONTRASTS AND THE PROBLEM OF RELATIONS

1. Introduction

The problem of relations concerns not just the definition of a relation and the origin of its conception. The problem also includes defining what a relation’s ontological status is along with that of the other entities or conditions. Finally, the problem must consider to what degree – if any – these relations are involved in the construction, constitution, or determination of these other entities or conditions.

This chapter shall try to further clarify Whitehead’s position regarding relations and how contrasts are meant to provide an explanation for their status and function within our experience of the world. I shall consider how Whitehead’s understanding of relations and our conceptions of them can be understood as a response to other how other philosophers have tried to tackle the problem of relations.

1. 1. Do Contrasts Presuppose Relations?

My argument is that contrasts are what relations and relationality presuppose, but it may seem that I am already presupposing relations in my description of what a contrast is. To describe a contrast as a process of unification may presuppose various materials to be unified as well as a unifying agency. This would assume that relation
exists already between the content to be unified through a contrast and the process of contrast itself, with the content being relationally antecedent to its unification.

In the perception of a forest, the perceiver perceives various trees and other elements of the forest as comprising a unity that indicates not only the relationship between the perceiver and the forest, and the unity of the trees already in the forest, but also the relative perspective that the perceiver has of the forest.

These trees, the relations that obtain amongst them, the relative distances between the perceiver and the trees, all seem antecedent to their unification as a perception of them. The contrast – as a process of unification – seems to, therefore, have a relation of dependency on this external content and its conditions of unity in perception. There is not just the temporal relation of antecedence at play here, for there also seems to be the relation of “during” in which the contrast synthesizes the diverse content to be unified, as well as the relation of “after” in regard to the produced unity.

Furthermore, there appears to be internal and external relations involved already in the notion of a contrast, as the content that is synthesized becomes internal to the contrast’s process of unification while the synthesized content prior to its inclusion – such as the trees of the forest prior to their perception – are external to the contrast in the sense that the material that is unified is independent of the new unity that is brought to it through a contrast. There is also the self-identical relationship that each element incorporated in the process of synthesis may have prior to its incorporation.

Finally, this relationship of internality and externality indicates that there may be relative dependency involved in the process of a contrast. If a contrast is a process of synthesis of various content, then this process appears to be dependent on there being
content to synthesize. One might say that a contrast must always be “with” something in order for it to synthesize anything.

To address these points, we should consider what may distinguish a relation from a contrast. I may define a relation as a description of a certain manner or mode by which various entities effect, affect, or have a position towards other entities within a fact or within a proposition.

A contrast, on the other hand, refers to a process of synthesis by which various potential for determination obtain a determinate and particular relationality through the way that they are incorporated within the synthesis itself.

When we hear two musical notes played together, we may discern that there is some relationship between them, such as the fact that one note sounds higher and other note sounds lower relative to each other. But this discernable relationship is due to the manner by which the vibrations that constitute the two notes are synthesized within an auditory perception as a unity of differing pitches. In this way, the highness or lowness of the notes are descriptions from the concrete, which is determined by a process in which the diverse sounds are brought together in a particular manner.

I shall go into the meaning and process of abstraction very soon, but the types of relations that contrasts seem to presuppose (dependency, temporality, internality, externality, etc.) are abstractions from the way diverse potentials and processes are involved within the entire process of contrast. A contrast is a term that is meant to indicate the activity by which relational determinations come to be, how they can be discerned in perception, and how they can be generalized as concepts.
The way material is included in a contrast is how we can come to both a determination and a generalized description (an abstraction) of the relations of internality and of externality, and the relations of before, during, and after, are descriptions we may obtain from abstractly considering the stages of the process of a contrast. But the process of synthesis itself is not divisible into distinct stages with a relation between them (as F. H. Bradley may ask, how are the stages and their relations then to be related?). Our thesis is that that it is the actual activity that determines the relation, not the relation that determines the stages of the activity.

Regarding the self-identical relationship that the diverse material is thought to have prior to their inclusion within a contrast, it should be explained that Whitehead does not conceive of any entity as being entirely independent. (PR, xiii, 24, 90, 137) This is not to say that a Whiteheadian entity does not have any qualitative singularity, but the way by which any entity or element obtains any kind of functionality as a real, characterizing aspect (such as a relation amongst various things), is through the manner of how that entity or element is included within a process that contributes to the realization of an actual event. Their determinacy as relations or as anything else is due to the particular ways that they synthesize with other elements. (PR, 25)

This means that the self-identical nature that some quality has (such as the intensive pitch of a sound), is due to how this quality is included in some actual activity, and when we isolate this quality as something that seems singular to itself, it is because we have performed an abstraction from an actual activity. This merely adumbrates how contrasts are to be regarded as the condition for relations in this project. The chapters
to follow shall hopefully bear out my interpretation that the contrasts within an actual activity are the fundamental means for determining and discerning relations.

1.2. Is Relationality Due to Eternal Objects?

Another objection may be that the source for relationality within Whitehead’s ontology, including the various cognizable types of relations, is not due to contrasts. They may be due to the “relational essence” and extensive connectivity of those entities that constitute a condition for all actualization by being pure, abstract potentiality.

“Pure potentiality” differs from “real potentiality.” *Real potentiality* is due to something that is already actual, such as cooked food that is being eaten constitutes the real potential for nutrients in the body. *Pure potentiality* refers to potentials that can be in excess to anything which is or has ever been actual, such as an art medium or an animal that does not yet exist, and its potentiality for existence is not presupposed or implicit in an already existing thing. (PR, 22 – 23, 65) The entities that supply the qualitative determinability for these excessive potentialities are called “eternal objects,” and they are a very controversial topic in Whitehead studies.

Eternal objects are transcendental variables for any qualitative and quantitative determination of a particular, actual event. In Whitehead’s ontology, they are somewhat akin to the usual notion of essences or universals, but *not entirely so*. (PR, 44)

In Whitehead’s theory of eternal objects:

(1) all abstraction (including types of relations) is the isolation of one or more eternal objects;
(2) eternal objects are – in terms of actualizing power – utterly indeterminate and non-causal;

(3) because of their non-causal nature, they cannot explain actual determinations. (PR, 29)

Regarding abstraction, eternal objects are important for understanding relational concepts because, according to Whitehead, every mental discernment of a relational property is the isolation of certain eternal objects within actuality (PR, 148 – 149). But the relationality amongst eternal objects themselves is a debated issue.

Each eternal object has a relational essence, but each has also an “individual essence.” (PR, 115) An eternal object’s individual essence is its singular qualitative capacities for determinability within actuality. This would be something like the way in which a quality like a specific shade of red could not be confused with or reduced to another shade of color. The singularity by which this shade operates within perception would be that color’s individual essence.

Relational essence is the way that an eternal object determinatively refers to the constitution of every other eternal object, which means that these relational essences function as internal relations to each eternal object. This would be like the way by which a shade of red, while having a singular quality, can only effectively function as a determinable shade through the way it can also potentially relate to other qualities that make up the experience of something as visually perceptible, such as other colors or the general conditions for physical light to be and operate. These other qualities contribute to the way in which the shade of red can function.
But it is not *prima facie* clear in what exact manner the relational essences of eternal objects would determine the individual essences of eternal objects, which also means that it is not clear how eternal objects relate to each other.

Elizabeth M. Kraus interpreted this relationship of relational and individual essence to mean that each individual essence is dependent on the relational essence that eternal object has towards every other eternal object, thus making the way eternal objects relate to each other a matter of total dependence.⁴ By this interpretation, relational essence would be the source of all relationality because it conditions and expresses all possible forms of relating prior to any actualization.

On the other hand, Wolfe Mays interpreted the eternal objects to be isolated by their qualitative, individual essences, but related to each other through the way they are integrated within a general scheme of extension, so the relational essences – and thus the togetherness – of eternal objects is determined by the way they are included within abstract extensive matrices that conditions any formal or physical order.⁵

This reception would express the various ways by which any mode of qualitative determinacy (an eternal object) can be related to, by, across, or through any other mode of qualitative determinacy (AI, 134 – 135, 150). Each expression of a possible relationship would be of some type of extensive connectivity, and this would be the most general type of relationship amongst these qualitative modes.

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⁵ Wolfe Mays, *The Philosophy of Whitehead*, 76 – 82.
My own position is much closer to Mays than to Kraus. But properly addressing this problem requires the introduction of other aspects and terms from Whitehead’s system, but basically the question is whether a coherent account of internal relatedness requires a further description of these entities as already integrated within general extensive connection that is prior to any actualization, or, whether this extensive connection is dependent on an activity of synthesis (contrasts).

For some, such as Chris van Haeften, the extensive connection of eternal objects (the many ways by which eternal objects are together as potentials for determinability) is not contingent but is relationally complete in a way that is independent of any contrast. This independence is due to how every eternal object’s relational essence is in reference to the possibility of inclusion within actuality, and this would necessarily include every other eternal object as included within that possibility. This would mean that extensive connection is already complete amongst eternal objects, as each eternal object would internally include its possibility for inclusion with every other eternal object.

My own position, based on an interpretation of the status of eternal objects in Whitehead’s *Process and Reality*, is that relational essences could not by themselves explain or condition relationality. This is because relational essence is determined by how eternal objects are contingently involved within actual processes that establishes any extensive connection. Without this involvement, they do not relate.

In my fifth chapter, I will suggest how the notion of contrasts may help to explain how the individual and relational essences of eternal objects function together as conditions for the rest of Whitehead’s system. But, as eternal objects are a condition for

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6 Chris van Haeften, “‘Number’ and Deity According to Alfred North Whitehead,” 48 – 49
any abstraction, we must briefly consider why Whitehead conceives his system as, in part, a means for addressing abstraction, including the abstract nature of relations.

2. Philosophy as the Criticism of Abstractions

“Philosophy,” according to Whitehead, “is the critic of abstractions.” (SMW, 126) A philosopher analyzes the concepts and arguments as they are currently employed to express or represent what is real, what is known, and how the world is structured, then the philosopher determines whether these concepts and arguments either inhibit or enhance our grasp of reality in its fullness.

Concepts, or any form of cognitive-linguistic production, are abstract in the sense that they are expressions of a narrowness of focus at the expense of other possibilities or the vast content of concrete experience.

We shall explore why Whitehead takes this to be the case below, but we may understand by this that when a philosopher discovers a conceptual hindrance to some fuller sense of reality, the philosopher does not then offer non-abstractions in its place!

But there are better or worse abstractions when considered pragmatically, which means we put our concepts to the test as to whether they can adequately, coherently, or consistently express, describe, or explain the regular features we concretely experience in ourselves and the world (such as the apparent connection of such subjective activities – like desire and purpose – with physical processes, such as the motion of bodies), or explain how or why these regularities in concrete experience may
occur. In Chapter Three, I shall examine what criteria are perhaps required to determine what makes an abstraction – more or less – workable for metaphysics.

2. 1. The Fallacy of Misplaced Concreteness

Whitehead was convinced that one of the great errors continuously perpetrated in the history of philosophy was to imagine that abstractions could, through or by themselves, explain (provide anything like a causal, necessary, or sufficient reason) anything in concrete experience; that concepts and terms that express universals were sufficient to explain how reality could present a qualitatively diverse but unified world to experience, or explain how experience could be a diverse but unified process in its conceptualization of the world. (PR, 20)

Every actual unification is, according to Whitehead, a concrete particular that has been produced through various, unique processes of actualization. (PR, 22) A central conceit of Whitehead’s philosophy I’ll argue for is that actual processes are sufficient for coherently and adequately explaining the basic aspects of reality.

As to how abstractions may explain these instances of concreteness, Whitehead stated quite definitely: “It is a complete mistake to ask how concrete particular fact can be built out of universals. The answer is, ‘In no way.’” (PR, 20)

Whitehead then elaborates on what philosophy’s role is regarding abstractions: “The true philosophic question is, How can concrete fact exhibit entities abstract from itself and yet participated in by its own nature? In other words, philosophy is explanatory of abstraction and not of concreteness.” (PR, 20) Any philosophy that reifies
insufficiently critiqued abstractions in its account of actual fact has, according to Whitehead, committed the “fallacy of misplaced concreteness.” (SMW, 74 – 75)

This, again, is not to say that Whitehead is offering a way out of abstract thinking, because abstraction is inevitable for any philosophy, but there is a crucial difference between conceiving the concrete as exhaustively describable in terms of concepts and universals, and a taking into consideration of which concepts are more appropriate to explain their own production from within the concrete and actual. In the former, the concrete can be reducible to our ideation of it, but that is not the case for the latter.

Our position is that we do not – cannot – make reality reducible to our conceptions of it. But, as abstractions obscure reality by degrees, one hypothesis about reality is not just as good – or just as bad – as any other.

2. 2. Relations and Abstraction

Abstractions may be thought as universals, in either a Platonic realist or a quasi-nominalist sense, but Whitehead’s broader meaning of the noun “abstraction” denotes anything that is a simplification of the plurality of qualities in the actual world: It is the conception of activities or qualities apart from how they are included in the processual realization of the actual world, or considered without reference to how they are a characteristic of some concrete entity. (IS, 202)

This description does not account for the various ways we may organize patterns of abstraction according to some sense of patterned order appropriate to them, such as in the case of logical, abstractive hierarchies or mathematical sets.
The above sense of “abstraction” is as a verb denoting the process of producing entities for conceptualization, or, in a broader sense, “the process of qualitative simplification for the sake of conceptual unification.” (IS, 203) This sense of “abstraction” is important for an understanding of how contrasts contribute to the nature and function of relations (to be explained below).

Let us suppose that relations, such as the relational form of transitivity, are real in a “Platonic” sense, which is to say that it would have a real essence or determinability singular to itself and to no other type of entity ontologically prior to any actual embodiment or expression of it. In Platonic realism, the relation of transitivity may be included within a contrast as an aspect of the material it contrasts, such as in the case of various sets of ordinal numbers being given in the proposition “x is ordinal if x is a transitive set totally ordered by set inclusion.”

As each ordinal is transitive, then a general form of transitivity is included as a relation derivable from this contrast of various sets. In a quasi-nominalistic sense, the relation “Pat is taller than Ian” can be a relation derived from the various ways in which the material within a contrast is unified. A contrast may include just two persons or many persons, and, in this particular case, most of these persons are shorter than Ian except for Pat. The relation “taller than” doesn’t exhaust the relations that can be derived from that contrast (we may talk of their politics, their weight, their beliefs, etc.), but this relation is now a determinate aspect of that contrast about Ian and Pat.

A nominalist such as Hume may say that this is just an abstraction from how these particulars are conjoined in experience,7 but a quasi-nominalist would hold that

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while this may be a “form” that was originated from this conjunction, it would still have determinate content in future cases after its origination: once a form is produced, it reverberates through reality as a new and intransigent aspect of it. For Whitehead, the difference between something that is *singular* (like a process or an eternal object), *particular* (like the unity of the process with its determinate product), and *universal*, is strictly a matter of *what function* an entity has within *what kind of context*. An actual process or an eternal object is singular in that their activity or their determinability (respectively) are irreducible and original to any other actual process or eternal object, and a process coupled with its product is particular in that they are the establishment of a determinate, concrete fact of existence. But these may all also function as universals when they are included as potentials for determinability within other actual processes. (PR, 48) Every eternal object and every actual process is the condition or efficient means for determining (respectively) quasi-nominalistic forms. This shall become clearer in future chapters.

Also, processes of conjunction are real and hold universally as a real condition for the particular. I argue that this is the case with Whitehead’s theory of eternal objects, despite its seeming Platonic realism. I hope to show that this may turn out to be a theory that expresses a “Contingent-Platonism” in that it assumes that actual activity is the condition for *form*. This involves “abstraction,” in the sense of the *abstract form* (or quality) included in a contrast, and in the sense of an *abstraction of content* from the particular way the contrast unifies its content.

In both cases “abstraction” means the isolation or the derivation of those individual relational qualities from the multitude of other qualities (including other

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relations) within the contrast (some particular synthesis of diverse content), and – and this is crucial Whitehead’s notion of contrast – *from* the way those contrasts those *were formed within* a process of actualization. In both cases, the relations are abstracted from this process for the sake of thinking about those relations in their singular essence or function. The question is whether this essence or function is coherent as an abstraction, apart from how they are included as an aspect of the process of actualization.

The process of abstraction in Whitehead’s philosophy, both as a process of simplification and as a process of concept formation (a specific instance of the former), is to be explained as an aspect within the whole process of the actualization of concrete fact. Abstractions are also included within this process as entities that are integral and non-transcendent aspects of it (as opposed to, say, Platonic abstractions).

Every process of actualization is a process of abstraction in the sense that it involves a simplification of the infinite multitude of diverse potential given to it for realization, and the abstractions which are produced from it are nevertheless real determinations within the actual which (as I shall explain) do not disappear from reality, but instead help constitute the unavoidable, unalterable conditions for future actualization. (IS, 202 – 203, PR, 237) This, again, is a theory of quasi-nominalism.

Relations are amongst the “real determinations” which these processes produce, both as an un-conceptualized determination of the real as well as conceptualized generalizations from the real, so that the relations of temporal transitions, as well as cause-and-effect, actually occur in reality and not just in the function of subjective unity. Thus, our conceptual generalizations from these and other aspects of actual reality are also real, not just fictive or ethereally subjective additions to the real.
Still, I hold that these rationalized or cognizable entities do not – cannot – exhaust the potentiality for rational determination. The various relational elements of actuality that are determined as cognizable aspects of reality do not imply some underlying rational completeness to reality. Consequently, these rational aspects do not function as part of a complete and rational system.

By this recourse to constructive processes, abstraction in every sense may be explained through the activity of the concrete and not the other way around. In this way, my interpretation of relations seeks to avoid the fallacy of misplaced concreteness. I shall attempt to do so by explaining how contrasts, as both a process of synthesis and as resultant entities, provides the process of actualization the means for producing relational determinations of reality (such as “Ian spoke while Pat listened”) as its products, as well as being a condition for the general relationality of the process of actualization itself. This is the Whiteheadian notion that actualization is a series of concatenated and connected processes of unification, which shall be described below.

2. 2. 1. Relations and Propositions

We may define “proposition” as a statement or expression of judgment, theory, or fact. Indeed, a proposition may be regarded as a form of contrast, in that it describes a synthetic unification of various terms as well as a determinant relationship arising from this unification, such as in the particular way that in some propositions the predicate is unified with the subject in a way which determinately qualifies the subject.
In this case, “Pat’s eyes are green” is a contrast between “Pat’s eyes” and “green,” with “green” as a predicate which may or may not qualitatively apply to the subject of Pat’s eyes, but this synthesis expresses a particular unity which is the subject (Pat’s eyes) being determinately qualified by the predicate (green).

As in our above definition of contrast, the proposition describes both the particular process of synthesizing diverse content as well as the particular, resultant synthesis: an entity expressing a certain determinate pattern of qualitative content.

In its usual sense, a proposition is often conflated with the term “judgment,” which may be described as an affirmation or denial of the truth of the predicate of the proposition’s subject. But even when the form of judgment does not apply, a proposition may be regarded as an expression of certain entities – or terms – which stand in certain determinate relationships to each other.

As in the case of the above proposition concerning ordinal numbers, this particular relational structure may be regarded as an abstraction from those contrasts that are included in the proposition (I shall explain why later). This abstraction is itself expressible in propositional form, as in: “x is ordinal if x is a transitive set totally ordered by set inclusion.” From this, we may derive relational content that provides us with the means for saying “transitivity defines the total order of an ordinal set.”

The relation of transitivity, abstracted by the latter proposition from the former, does not exhaust the relational content of the former, as “asymmetry” (the directionality of transitional relations), “order,” “totality,” etc., are included in the relational content of that former proposition. As in the examples of Pat and Ian, transitivity is just one of the many types of relations that characterize that proposition and may be discerned from it.
When we examine the content of our experience, we often frame this content in the form of propositions. Pat looks about the table before him and notes that “My glass is diagonal to Ian’s glass.” This expresses extensive, spatial relations between Pat and Ian’s glasses, and abstracts from the multitude of relational potential that exists on that table, such as the aspects of identity and difference which are at play in the distinctive qualities of the table’s contents. This proposition also ignores other qualities such as the color of the glass and the rich taste of the whisky.

But despite the abstractive nature of the proposition, they allow us to organize our thoughts for the sake of extending our knowledge of the world through a connective, associative relationality from one proposition to another proposition.

We come to understand that the relation of transitivity remains invariant from one consideration of ordinal numbers to the next and that our understanding of causal effectivity also involves transitivity in a way that is invariant no matter what causal instance we experience or think of. In each instance, the relational content carries over and is included along with the other means by which the different propositions are themselves related to each other.

This would evince a sort of persistence of at least some relational connectivity and order in the world from one propositionally structured observation of it to the next, just as we usually accept without examination the connective and associative relationality of our feelings, perceptions, and thoughts from one moment to the next as being moments within some on-going stream or series of intimately connected events.

It seems, then, at least *prima facie* that there is a shared relational connectivity and associability between ourselves (or whatever we want to call these streams of
various but connected experiences), our feelings and perceptions, our observations and propositions, our theories and knowledge, and the larger, external world that these feelings, perceptions, thoughts, etc., are concerned with or derived from.

2. 2. 2. Whitehead’s Sense of “Proposition”

Whitehead’s sense of “proposition,” in the context of his system, is ontological rather than just being subjective or linguistic. What is more, he explicitly describes his ontological propositions as a form of contrast. (PR, 24)

A proposition may be ontological in the sense that a proposition like “The behavior of bacteria develops towards self-maintenance and preservation” may indicate an actual relationship amongst concrete matters of fact as well as the potential or possibilities which may or may not qualify or characterize it. However, this is not saying that propositions in this sense are always truthful, and the ontological connection between proposition and actualities must be explained elsewhere in this project.

In any event, relations may be regarded as describing different modes of connectivity, effectivity, or affectivity between, or through, or towards various entities of differing ontological status. Regarding “towards”: a teleological relation is directed towards an entity which may be ideal but not necessarily actual, i.e. not already realized in actuality, such as self-preservation. Certain philosophers (such as Hume) may say that these relations are applicable to the contents which are conjoined in a proposition but not necessarily of the entities or world that are beyond those propositions.
In this case, the relations which may be drawn from “Pat’s words affected Ian’s feelings” do not necessarily express anything which is actually the case regarding Pat and Ian, but rather says more about how such relationships are formed in the perception and thought of the person who conceives that proposition. In this way, internal relations such as “Y creating a change in X” are not something known in Y and X themselves, but are simply a type of association which are sometimes subjectively formed through a conjunction of distinct terms.

2.2.3. Subject-Predicate Propositions

However, we have yet to address the problem of whether we can say we have *actual* knowledge of this shared relational connectivity between actual things in the world from *just* what is given in experience, or whether we can know that there is actual connective and effective ordering occurring in the world beyond the constructive and ordering processes of experience and cognition.

To address this, we should consider whether certain propositional forms have been over-extended into theories concerning relations, entities, and our access to them. The conditions for the relational determinations expressed by propositions are tied to presuppositions concerning what sort of ontological status the terms of a proposition have within the synthesis each proposition effects. As they always attend to our attempts to organize a body of knowledge, then these presuppositions have far-ranging effects as further propositions refine and extend the notions derived from earlier ones.
Of these presuppositions, the critique of the ontological extension of the “subject-predicate” form, or “S-P form” of a propositional sentence is very important for certain aspects of our project. This is the assumption that the predicate of a proposition is a qualitative extension of its subject. The structure of the proposition “Pat’s eyes are green,” describes a relational situation which may be generalized to all real objects; that all real entities are either things that possess attributes (such as “having green eyes”) or are attributes of a thing which possesses them.

By overcoming this and other presuppositions (PR, 157), Whitehead devised a means for philosophical investigation which could overcome some of the entrenched fallacies of misplaced correctness within philosophy, science, and everyday thinking.

As it has been ontologically interpreted, the S-P proposition has provided the basis for subjects as independent particulars, or substances, with the predicates as dependent qualities, attributes, or universals which qualify those substances. This, according to Whitehead, presents many problems for presenting a more or less adequate interpretation of reality (PR, 157), which would include not only our philosophical considerations but also recent scientific theories, as well as those aspects of everyday thinking and feeling that the modern tradition has the tendency to ignore, such as the relevance of emotion and value in even the non-sentient aspects of reality.

Amongst the problems which the reification of the S-P form entails includes, is the presumption that there are substances which statically persist in reality; the sometimes explicit but usually tacit “bifurcation” of the world between active subjects and passive qualities; the problem of establishing actual connectivity – including
causality – between substances; and, correlative to the last problem, the problem of discerning any efficacious process of inter-subjective communication.

The assumed adequacy of S-P form, says Whitehead, is due to a generalization of certain modes of perception into a representation. These representations become generally regarded as foundational to our description of entities in the world: we seem to perceive solid things as enduring entities that undergo modifications of some attributes, but otherwise remain constant throughout these changes. “Enduring substance” is thus regarded by Whitehead as a prejudice born from linguistic convention. (PR, 30, 51, 157)

Of course, there are other types of proposition which are not of the S-P form, such as the polyadic propositions of modern symbolic logic, and throughout careers, whether working together or independently, both Russell and Whitehead sought to overcome what they regarded as the S-P form’s residual influence in logic, epistemology, and metaphysics, and they used this new logic that they had helped develop as better models for constructing ontological and epistemological theories.

One of their targets was their older contemporary, F. H. Bradley, who tried to reduce all propositional statements to S-P form. This attempted reduction has great importance for our understanding of contrasts, for Whitehead’s enigmatic statements regarding relations as abstractions from contrasts was specifically referring to F. H. Bradley critique of relational conceptions. (PR, 229)

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8 F. H. Bradley, The Principles of Logic, Bk. 1, ch. ii, 35 – 39
3. F. H. Bradley

For Bradley, thought is inherently relational, because (as he assumed) to think is to think in terms of propositions, and propositions always express a relational determination between subjects and predicates.⁹

As Bradley assumed the S-P form to be basic, he concluded that a relation is either external or internal to its terms. The relation in the proposition is either between subject and predicate as an element external to both, or the relation is a constituent, internal element within both subject and predicate.

Bradley extended his logical analysis of propositions (along with his psychological presuppositions) to considerations of relations as they deal with existents. He concluded that the very notion of relationality is incoherent, and as this is a conscious examination of reality the S-P form would predominate, with the terms of the proposition representing particular entities and predicable qualities. So again, the relations between these entities and qualities are either separable, external components or integral, internally determinate features of each other.¹⁰

If, Bradley argued, relations can be treated as an external, separable component from what they relate, then the relations themselves seem to require further relations between them and what they relate. These additional relations require further relations, extending into an infinite regress, without any connection being finally determined.¹¹

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⁹ F. H. Bradley, Appearance and Reality, 162 – 165
¹⁰ F. H. Bradley, Appearance and Reality, 20 – 22
¹¹ F. H. Bradley, Appearance and Reality, 22
But if the relation is an aspect of the terms they relate, then this would divide the relation between its terms as component aspects of those terms. This would again fragment both terms and relations into elements, producing an infinitely regressive chain of elements to connect the terms with its relations and the relations with their terms.\textsuperscript{12}

But, Bradley continues, one might conceive relations as \textit{internal} to their terms, so that their connective operation is a constituent aspect of the terms they relate. Entities and relations would then be dependent on each other, and form an integral unity. But this makes the notion of relation redundant: the terms are now merged into a single unity, without any real “betweenness” to distinguish them as separable components.\textsuperscript{13}

### 3.1. Bradley’s Presuppositions

Finally, this makes the notion of relation not only incoherent but redundant, as this unity or total togetherness must have been already logically presupposed in order to introduce any relational distinctions. This is an extension of Bradley’s \textit{Logic}, wherein he argued that the true subject of the S-P form is actually a presupposed \textit{whole} that internalizes all predication, but this whole cannot itself be cognitively expressed because the relational form of thought cannot itself express actual unity.\textsuperscript{14}

Bradley, in both his logical and metaphysical work, has thus treated relations simply as an abstract third-term between a subject and a predicate, without any actual

\textsuperscript{12} F. H. Bradley, \textit{Appearance and Reality}, 28 – 31

\textsuperscript{13} F. H. Bradley, \textit{Appearance and Reality}, 33

\textsuperscript{14} F. H. Bradley, \textit{The Principles of Logic}, Bk. 1, ch. ii, 31 – 33
connective or determinative power of its own. As such, it requires an explanation for its operation that is not itself relational. This, in fact, is why Bradley calls relations, and all forms of relational understanding – including notions of identity (including personal identity) and difference, and spatial, temporal, or causal relations between or across the phenomena of perception – as “mere appearance”: they are partial, inconsistent, contradictory apprehensions of reality as a total unity.\textsuperscript{15}

Indeed, Bradley does hold that there is a real unity in reality, but it is not known cognitively because the propositional form of thought introduces unbridgeable discreteness between its contents. Rather it is experienced by “feeling,” which is a concrete, unmediated, and complete connection with the whole of actual reality. This whole is the transcendental condition for all differentiation in “apparent” thought and perception, as well as the condition for the pragmatic resolution of all such partiality. Bradley’s term for this whole was “the Absolute.”\textsuperscript{16}

Whitehead, following William James, contended that part of Bradley’s problem is that he is too enamored of the disjointed aspect of the S-P propositional structure and too insensitive to the conjunctive process that occurs in concrete experience, independent on how it is rationally, propositionally formulated. So, while Bradley cannot discern any real relationality connecting subjects with their predicates, Whitehead avers that immediate experience is always a synthetic connection of parts or entities.\textsuperscript{17}

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\textsuperscript{15} F. H. Bradley, \textit{Appearance and Reality}, 162 – 165
\textsuperscript{16} F. H. Bradley, \textit{Appearance and Reality}, 170 – 172, 182, 533
\textsuperscript{17} William James, \textit{Essays in Radical Empiricism}, 117
\end{flushright}
That there are distinct terms in our rationally entertained propositions may be explained in terms of the conflux of experience, in which many qualities – such as the whiteness, sweetness, shape, etc. – are already united in an experience of a lump of sugar. We have reminiscences of these conjunctions and perform on them an abstractive operation whereby the qualities are rendered as distinct (but not incorrigibly discrete) terms, but the actual unity had already occurred in experience.\textsuperscript{18}

Ironically, Whitehead attributes this problem to an excessive rationalism: Bradley assumed that connectivity should have been accomplished by an \textit{abstract relation} within a \textit{rationally entertained} S-P proposition. We cannot, says the Jamesian Whitehead, expect the derivative and abstract in thought to have the same power as that which functions within experience, so Bradley’s disappointment was inevitable.\textsuperscript{19}

If it can be persuasively explained how our understanding of relations is derived from a basically relational experience, then Bradley’s assumptions about relations, and his concomitant critique of them, would be moot. Such, in essence, was Whitehead’s project of reconceiving relations as the product of contrasts.

4. Bertrand Russell and David Hume

Bertrand Russell, like Whitehead, rejected Bradley’s relegation of relations to “appearance,” and advanced his own form of realistic pluralism in opposition to Bradley’s anti-realist monism. Russell’s pluralist answer was an extension of his logic of

\textsuperscript{18} William James, \textit{Essays in Radical Empiricism}, 120

\textsuperscript{19} William James, \textit{Essays in Radical Empiricism}, 120 – 121
relations, which refrained from assuming the reducibility of all propositions to the S-P form. The S-P form was sufficient for Bradley because, he argued, the ultimate subject for a proposition was the Absolute, which effectuated a transcendental differentiation of all the limited, particular subjects, and of all predicable qualities as appearance.

Thus, if all propositions were reducible to the S-P form, then every proposition would have such a whole as its presupposed, immanent, differentiating condition.\(^{20}\) The S-P form of a proposition has a one-place predicate that attributes a property to a thing. This structure may be extended to form a syllogistic logic, but one cannot analyze scientific or mathematical statements in the S-P form.\(^{21}\) In the case of a many-placed proposition, such as “Pat is taller than Ian,” the two terms express a relation that cannot be reduced to S-P forms. So, “x is taller than y” describes the relational concepts expressed by “Pat is taller than Ian,” while a one-place predicate like “x is tall” could not express this relation for either Pat or Ian, no more so than the thrice utterance of “x is man” could then produce “There are three men” as a fact.

Another aspect of the S-P form that Russell rejected was the “doctrines of internal relations.” In the S-P form, relations act as properties characterizing the essence of the subject. But if we extend the attribution of properties in this manner, so that every relation is within the related terms,\(^{22}\) then x’s having a relation to y is reducible to properties held by x and y, or to a property held by the whole composed of x and y.

\(^{20}\) F. H. Bradley, *Principles of Logic*, Bk. 1, ch. ii, 31 – 33

\(^{21}\) Bertrand Russell, *A Critical Exposition of the Philosophy of Leibniz*, 14

\(^{22}\) Bertrand Russell, *Philosophical Essays*, 139

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But this would be incoherent in asymmetric relations such as “x is younger than y” because a whole of x and y is the same as the whole of y and x, so both entities would function as the same composite entity with the same properties.\(^{23}\) If a whole may be extended indefinitely, as each entity seems to bear some manner of relation – and thus essential properties – to every other entity, then each entity of that whole would, by its inclusion, have the same internal complexity as that whole indefinitely extended.

In place of Bradley’s Absolutist monism, Russell advanced his “doctrine of external relations” as one of the main tenets of his logic of relations. This logic entirely discards internal relations and describes all relations as external. These relations exist as entities in their own right, not as essential properties of things. The terms that relations relate are independent of those relations and independent of the unities expressed by propositions, and asymmetric relation such as “younger than” or “taller than” remains coherent as expressions of a unique and irreversible order amongst a plurality of entities. External, often asymmetric relations such as these are essential for mathematical order (e.g. ordinal numbers) and quantitative difference.\(^{24}\)

### 4. 1. Logical and Epistemological Atomism

Russell’s logic of relations became the backbone of his metaphysically realist pluralism, that postulated a world of complex and simple objects, exhaustively describable through concepts extracted by logical analysis. If reality is analyzable into


\(^{24}\) Leemon B. McHenry, *Whitehead and Bradley*, 88
parts, those parts are either complex or they are simple. If they are complex, they are amenable to further analysis; if not, they are not, and are thus ontologically simple.

Russell’s propositions constitute a discrete expression of reality and are composed of the simple or complex elements that the proposition is about. As a discrete expression of reality, a proposition has the status of a real entity or object. In fact, it is a complex object, as it is composed of various elements unified by relations.

An analysis of these elements, it is supposed, yields the ultimate constituents of a proposition. What is given in this analysis are the data of sense – “sensa” or qualia – such as elements of color, sounds, and feelings, as well as data of memory or the logical intuition that conditions our sense of mind-independent relations as universals.

These conditions provide the means for, and the diverse content of, our propositions about reality, that, when analyzed, may provide the means to develop a catalog of precisely defined particulars (or “simples”) that indubitably express real individual characteristics and relations.\textsuperscript{25} As all the conceptions of this pluralist reality of discrete objects and concepts are derived from and warranted by logic, Russell aptly described his ontology as “logical atomism.” This logical atomism is something of an ontological extension of David Hume’s empiricism.

What Russell called “sensa” are analogous to what Hume called “impressions”; the ultimately simple constituents of experience. For Hume, the contents of our ideas are, like Russell’s propositional objects, analyzable into distinct entities,\textsuperscript{26} and, Hume continues, whatever may be separable in thought may be regarded as having an

\textsuperscript{25} Murray Code, \textit{Myths of Reason}, 39

\textsuperscript{26} David Hume, \textit{Treatise on Human Nature}, Bk. 1, pt. i, sect. vii.
independent existence. These simple entities are, like Russellian objects, conjoined to form complex concepts or complex ideas, like “the sweet music.”

But Hume’s project differs from Russell’s in that Hume restricted the scope of his inquiries to what is discernable within perception and thought, without speculatively venturing into the world beyond either. As a result, Humean relations need not be regarded as real in their own right, but rather as the result of how impressions and ideas are constantly conjoined in the processual concatenation of subjective experience.

Although we detect correlations between events in conjunction, we cannot, says Hume, infer that there is an actual determinate connection between what is correlated. For Hume, the relations between terms in a proposition are just what a mental activity has added to those elements in the proposition derived from sense perception.

### 4.2. The Subjectivist and Sensationalist Principles

However, despite their dissimilarities, one may note that both Russell and Hume assume what Whitehead called the “subjectivist principle” and the “sensationalist principle.” The former, the subjectivist principle, is the assumption that what is objectively included in experience can be adequately analyzed and explicated in terms of “universals.” (PR, 157) By “universals,” Whitehead means “sensa”; the atomic simples of Hume and Russell’s doctrine of perception.

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A corollary to the subjectivist principle is the sensationalist principle, which is the assumption that the content of experience can be analytically reduced to sensa. This phenomenalistic doctrine of “mere sensation” relegates the perceiver to a mere receiver of objective content, without any subjective or emotional contribution to how objective content is perceptively received. (PR, 157) (But Whitehead does not deny the reality of sensa, and sensa shall factor into his own theory of perception. It is that he objects to the role they play in this form of empiricism. See Chapters Two, Five and Six.)

Subjectivist-sensationalism contains an underlying rationalism, and this charge is apt even for avowed empiricists like Hume and Russell. What are fundamental in experience for both Hume and Russell, are elements that lend themselves to intellectual discrimination and clarity. The elements in experience which are utilized in their respective analyses for the sake of metaphysical and epistemological disclosure are those that seem amenable to the “exactitude of intellectual discourse.” (AI, 175)

But for Whitehead, “clearness in consciousness is no evidence for primitiveness” in experience. Indeed, “the opposite doctrine is more nearly true.” (PR, 173)

Whitehead’s term for this mode of perception is “presentational immediacy,” and Whitehead regarded it as a mode of experience derived from the activities of more basic forms of perception. These more basic forms are not exhaustively amenable to an analysis of just the revealed, perspicuous sensa, thus making Whitehead’s theory of primary experience a non-representationalist form of perception.

A representationalist theory of perception may claim that it renders the particulars in experience open for analysis, but, in fact, the data disclosed within such a theory are not actual concrete particulars. These, the sensa, are the abstracted universals of
experience and leave us only to infer that they actually do reveal representative aspects of concrete particulars. Russell, following Hume, reified those abstractions – the sensa – from conscious thought and perception as concrete actualities. In this way, both Hume and Russell have committed the “fallacy of misplaced concreteness.”

The charge is that Hume and Russell have confused the products of concrete actualities – universals – as the concrete actualities themselves. The products of processes are what function within experience as universals, and they can be further analyzed by experience as singular qualia, which are also universals when they function – as eternal objects – as the determinables for the particular character of the experience they are included within. Once again, an entity is a universal due to how it is being incorporated as a repeatable mode or quality to characterize that process.

One may object that to use the word “abstract” regarding Hume’s impressions, as Hume claimed that these were, in fact, concrete particulars. But although Hume wanted us to regard impressions as concrete particulars, they are still characterized in terms of intellectually perspicuous qualia or sensa, such as “jagged,” “red,” “hot,” etc., which are repeatable characteristics and thus qualify as a universal in Whitehead’s sense.

This makes the rationalist presumptions of both Hume and Russell clear: They have assumed the Cartesian baggage of conceiving entities by how they are “clearly and distinctly” discriminable and then conceived particulars in just this way. In Whitehead’s philosophy, these sensa (distinct qualities) masquerading as concrete particulars, are derivative entities experienced in the form of perception called presentational immediacy. They are abstractions from the vaguer, vaster background of original perception (which I shall deal with in later chapters).
While Humeans or Russellians may claim that they begin with concrete particulars, what they call particulars are Cartesian ideas disguised as actual particulars. Their “concrete particulars” are rationalized objects or descriptions that have been reverted back into an inapposite position as the original data of experience.

Regarding these “universals,” the discrete, externality of Russell’s entities (which, as the product of an analysis that assumes ultimately simple qualia, are concomitant of his subjectivist-sensationalism) renders his relational realism problematic. Russell’s propositions were meant to constitute a real unity, not simply an aggregate of parts, with real relations uniting the terms as constituents of a single, unified complex object.\(^\text{29}\)

But how could anything like an actual connecting unity occur between external, particular terms and external, abstract relations? Indeed, the externality of the terms and relations seems to invite a Bradleyan infinite regress between each term and their relation, thus making the unity of the proposition incoherent.\(^\text{30}\) The relation now seems to be a subjectively imposed, supervening conjunction.

This Humean process of conjunction has some similarity to the process of contrast, as we shall see, but, like Russell’s propositional unity, it is no more apparent how ultimately external things can be actually conjoined subjectively than they could be objectively. In each case, sheer externality resists any actual contact or connectivity.

Hume is surely right to propose that such conjunctions do in fact happen in experience, but what is lacking is a coherent explanation of how this is so. In a moment,

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we may see just how such conjunctions can occur by a metaphysical interpretation of
Russell’s own discovery: the unexploited significance of asymmetric relations.\textsuperscript{31}

5. Whitehead’s Relational Metaphysics

As this project progresses, the chapters shall become more technical, and we
shall encounter a number of Whitehead’s often obscure terms and their meanings.

But it may be helpful to provide an account of some of the basic features of
Whitehead’s relational system in terms what we have already encountered in the
philosophies of Hume, Bradley, and Russell, as preparation for the task of following the
development of the notion of a contrast through the levels of Whitehead’s system.

Whitehead is in agreement with Russell that relations are real entities, but, as
they were for Bradley, they are partial entities, insufficient in themselves to have full
reality. The way to resolve this partiality is to include relations as partial aspects of a full,
concrete unity. A relation’s reality cannot be abstracted from how it is constructed and
operates within an event of actuality.

But Whitehead, like Russell, rejects to Bradley’s designation of relations (and
terms) as “mere appearance.” (PR, 229) This is how Whitehead’s notion of contrast it
meant to overcome Bradley’s confusion about relations: contrasts describe the
determination of real connectivity and syntheses, whereas relations describe the
complex \textit{objective content} that are \textit{the products} of those syntheses.

\textsuperscript{31} Charles Hartshorne, \textit{Creative Synthesis and Philosophic Method}, 211 – 212
In this way, relations are more than mere appearance, but, in their guise as derivations (abstractions) from determinative, real processes, they are not given the task of effectuating the connectivity within actuality. In Whitehead’s conception of a contrast, there is a plurality of external, objective content, such as what is immediately given as the impressions of sense in Hume. But there is also real unity; a real synthesis of external elements in the objectively given content of a contrast, and this real synthesis is infected by the unique particularity of each component terms (relata) in this objective plurality. But this unity is nothing apart from how it is unified: a synthesis in its completeness expresses the unity of the diverse elements as a complex particularity.

However, what is being described here is an asymmetric and singular process of synthesis from disjunctive externality to singular conjunctive unity; a unity that exists as a singular element within the next disjunctive condition for unification.

5. 1. The Importance of Asymmetry

An asymmetrical process of determination is, as we shall see, is how Whitehead will characterize the Category of the Ultimate: the process by which the various conditions become congruent in the active shaping of all aspects of reality, as a process of synthesis by which the “many become one, and are increased by one.” (PR, 21)

This unity, as a complex particularity, is expressed in terms of relations, and these relations are the particular way in which the diverse content is unified. The contrast would still be incomplete without the determination of relations as the expression of that actual unity. While relations are not responsible for how that unity
was realized (for a form cannot cause a fact), they are still essential for that realization as an expression of how the diverse objective content was determined as an actual, particular unity. So, once again, relations are not just “mere appearance,” but are real – albeit partial – and immanent determinations for that unity.

What is more, relations are not just real, they must be real for an actual unity. It is just that relations are not the cause of that unity.32 In this way, we can see why Whitehead agrees with Bradley that relations are dependent on terms and vice versa. Each term, in order to express coherent unities of particular fact, require relations in order for that fact to express a determinate unity, but relations also require terms as the content to be unified in this process of unification. These terms, the real content within experience, are themselves past synthetic unifications of plurality-into-unity.

But while Bradley regards this mutual dependence as ground for a contradiction in their natures, Whitehead sees what Bradley: a fundamental, primary directionality of the process of establishing the function of a relation to terms or entities. This is the asymmetric transition established by the process of productive synthesis, (PR, 230 – 232, 238) and can help us understand how both internal and external relations may both obtain unproblematically within an actual unity.

5. 1. 1. Internal and External Relations

Like Bradley and Russell, Whitehead treats relations as generally designating either external or internal determination between or through terms, but unlike them, he

32 See William James, Essays in Radical Empiricism, 42
does not treat real unity as being a matter of internal or external relations exclusively. Whitehead conceives of the initial terms within a contrast as a plurality of realized actualities that are then synthesized as the internal constituents of a concrete unity.

This asymmetric directionality between the initial plurality and the produced unity utilizes both external and internal relations: The initial terms are external and independent, but they are internal to the becoming, active unity that synthesizes them. So, while the initial terms are independent of the unification, the unification is dependent on them. Whitehead thus conceives of terms-with-relations in a way that does not render them as either unable to affect or be affected by each other, or lost through vicious internality, as Russell supposed they would be.33

The asymmetry of the subject-object relation illustrates this unity of internal and external relations. In Whitehead’s conception of a subject-object relation, the present actual event functions in the role of subject and the past actual event role is its object.

A present perception, of, say, a yellow flower, is the incorporation of the past’s content, which means that the past has some causal determinacy on the content of the present, but the present in no way causally determines the content of past. A perception of a flower in no way changes the internal constitution of the flower itself.

Even when a perception brings a unity through contrasts to diversities within its environment (such as a complete electrical circuit), this does not make the environment more unified except within the particular unification provided by that perception.

Whitehead, as we shall see, shall universalize this directionality of determinacy to all moments of experience. Whitehead’s asymmetric process is entirely non-reflective because at no point is an event an object for itself.

5. 1. 2. Propositions as Syntheses

Through asymmetric directionality, Whitehead has rendered the S-P model of proposition as inadequate for ontological interpretation. The structure of Whitehead’s process resonates with the multi-termed relationships rather than S-P relationships.

The serially concatenated instances of synthetic processes share structural features with the many-termed *propositional function* of modern mathematical logic (those developed by Whitehead and Russell in *Principia Mathematica*), where the emphasis is not on the generic or specific nature of the terms, as was the case for Bradley, but on the relations: the operation of the function already relates the terms in a directional and transitive nature, thus making the terms already relational rather than requiring relations or predicates to qualify the terms.\(^{34}\)

The propositional functions should be understood in terms of the operator within the proposition. The function is a transitive relation: an asymmetric relation. Russell's unexploited discovery was that asymmetry is a form of relationality whose logical and ontological significance had hitherto been unrecognized. But Russell failed to see how *real unity* could be a product of asymmetric synthesis; as a process of actualization.\(^{35}\)

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\(^{34}\) Wolfe Mays, *The Philosophy of Whitehead*, 54, 101

\(^{35}\) Charles Hartshorne, *Creative Synthesis and Philosophic Method*, 212 – 213
Furthermore, the many-termed propositional description of synthesis cannot be reduced to S-P form components. This is because while Bradley’s propositions were analytic, Whitehead’s is a synthetic proposition, in that the terms are relational determinations of the particular way that its constituent terms have become unified.

So, the meaning or essence of the terms and relations of the unification cannot be divorced from the fact of their unification; from the contingent way they were brought together as elements forming patterned entities of a contrast, which is the very essence of that particular contrast. These elements can be isolated in abstraction as terms or relations, but their connectivity is due to the fact that they cannot be wholly isolated as real entities as they function together as a determination of actual reality. This condition of functioning together is also vital for the way we shall see the various conceptual elements of Whitehead’s system to cohere into a unity.

5. 2. Serially Connected Unities

Whitehead’s sense of an actual unity should be conceived of as a member of a series of connecting events that, in their functional, concatenated togetherness, constitutes the ongoing, processual nature of reality. These connecting unities become connected through the incorporation of each preceding process of unification, and these preceding unities are the other, past, completed unities that constitute the plurality of objective terms in the beginning of the process of synthesis for another particular process of unification. Each unity is included as the external, plural content of a contrast within every process of synthetic unification that occurs subsequent to them.
In each moment of actualization, there is an incorporation of every event that preceded it as an entire physical world. This is not an already *fully* unified world, as there are numerous currents of energy and determination that are not directly related to or causally conditioning every other current or determinate center of productivity.

All of these distinct elements are brought together as the plurality of heterogenous material within the synthetical formation of the present actualization, and in this way certain currents of energy or determination may, depending on the circumstances that are ingressed into the plurality of content for that moment of synthesis, become linked together as the formation of a complex center of power of determinacy – such as when resisters, transistors, and capacitors are operating in such a way that can allow for an electric current to flow in circuit, or determines yet another moment in which such formations are stymied – such as when the equipment fails to allow for the flow of electricity, or, much as in the case of synaptic connections within the brain, allows for the successful unification and flow of certain neuron transmissions while also establishing this unsuccessful transmission of others.

In each case, certain types of relational order become determined amongst the content incorporated, but there is always the establishment of some moment of synthesis that will produce this event. In this way, contrasts produce the means for the determination of each process of unification, as well as the solidarity of the universe, as each actualized entity becomes an integral part of subsequent actualizing processes. Actualized entities are integral due to how they are incorporated within a contrast as objective components for the determination of that particular unification.
6. Conclusion

While I have indicated that Hume, Bradley, and Russell perhaps failed to take into account certain presuppositions regarding their conception of relations and their conditions, I have still not shown why Whitehead’s ought to be accepted as the preferable road to interpreting the nature and conditions of relational ontology. This must wait for the succeeding chapters, as an explanation of Whitehead’s methodology and means for critically evaluating his own system would be very complex, but also, as I shall argue, entail a very involved examination of the nature and function of contrasts.

At this point, I can only say that (like Peirce’s own system) the success or failure turns on a detailed phaneroscopy: an analysis of content that is immediately given to experience, an understanding how this givenness provides the means for us generalizing theories regarding it, and an understanding of how this givenness and its generalizability also provides the means for testing its conceptual coherency and consistency and its empirical applicability and adequacy.
CHAPTER TWO

THE THREE MODES OF PERCEPTION AND GENERALIZED NOTIONS

1. Introduction

My last chapter argued that Whitehead’s notion of the condition for relationality – a contrast – assists Whitehead’s philosophy in avoiding some of the unsatisfying tendencies in the history of relational ontology. In this chapter, I shall further defend this thesis by exploring Whitehead’s analysis of perception, and his method for producing a systematic interpretation of reality. I hope to provide the reader with more justifications for my assertion in the first chapter: that reality may be profitably interpreted as asymmetrically overlapping series of productive, synthetic events.

I divide this topic into three interrelated aspects:

(1) modes of perception,

(2) imaginative and descriptively generalized notions, and

(3) metaphysical explanation.

This chapter shall cover methodological aspects (1) through (2). Chapter Three shall cover aspect (3).
2. Beginning Perception with Symbols

When we examine what is given in conscious experience, the Leibnizian micro-perceptions\(^{36}\) that Whitehead regards as the most basic form of experience may not be already apparent. But symbolic content can stand out to us in our experience when we confront our beliefs, habits, our cultural-semiotic background, and any kind of past thoughts, feelings, or memories. Symbols are often thought of as representations, such as the letters of the Latin alphabet representing the parts of sounds of words in some spoken, phonetic languages, but a symbol, in this case, is not just limited to these types.

Symbols, in our case, are any elements that – by their function as mediate indicators between a perceiver and what is original to perception and feeling – can elicit emotional reactions, beliefs, conscious thoughts, and other activities which are, in one way or another, responsive to what is there in experience. (S, 12) Both words and concepts can function as symbols (S, 8, 10), but also just about anything that we experience or feel that can draw us from an initial, impactful moment to the realization of a feeling or idea connected with it. These stand-out due to the way in which they seem to elicit some degree of responsive intensity within our perception of them.

We feel these *perceptsa* have some significance to our thought, such as an idea that stimulates the imagination, or a memory that has invited reflective feelings, or simply as some content whose relevance has been limited to how it may be singled-out from experience just for the sake of considering it in its most general, genetic nature for thought. The suggestion is that this is not some mere appropriation of passive content:

\(^{36}\) Gottfried Leibniz, *Philosophical Essays*, 295
this experiential content is not just what is there to think about, but about actually compels us to think or feel – or at least have some experiential response to them. The means for these responses are, according to Whitehead, facilitated by “symbols.”

The functioning of symbols suggests both a determinacy and creativity within conscious experience. This is because symbols may be understood as both the resultants of the content we experience and as a mediating component between that affective content in experience and our responses to them. The “eliciting” function of a symbol is something that the experience actively enjoins between the affective, perceived content and the emotional, intensive, or intellectual reaction to that content. What is elicited is an interpretation.

We should not disassociate the function of a symbol (to mediately facilitate an experiential response) from how this functionality is due to its inclusion within an experience (wherein the symbols elicit responses). This, again, is because without the experiential response, there could be no elicited connection from the symbol to what the symbol might symbolize. In this way, Whitehead’s notion of the symbol is consistent with Peirce’s notion of signs: a sign can only signify if it is interpreted, and, from this, we may draw a relation from the sign to what it may signify (i.e., its object).37

We perceive smoke and interpret it as signifying the presence of fire, or perhaps the presence of an attempt to deceive us, as when a magician might use smoke in order to misdirect the audience. Or, we may perceive the expression “X v Y” written on the pages in a book, and, depending on our background, we may single out “x” as a symbol that enjoins the other components in a way that signifies a disjunctive relation amongst

the other components, or we may respond to the perception as being just a “meaningless” concatenation of letters.

Either way, the compelling, affective content of the perceived letters, and our active, interpretive response to them cannot be easily gainsaid, due to how the perceived content determinately conditions us to interpretively respond in some way.

2. 1. Symbol and Meaning

If conscious perceptions or thoughts require symbols in order to provide both the qualitative content and stimulus for perceptual and cognitive activity, and if this stimulating, eliciting content can be regarded as in part original to the content, then symbols may suggest a ground for a metaphysical realism, as the perceived or cognized content seem to have a reality and singular qualities prior to – and so perhaps independent of – its inclusion in a perception or thought and its symbolical interpretation. This is to say that the singular way by which something effects and thus characterizes a moment of experience is due to its own nature and was not contributed to, or supplemented by, the experiencer.

The sourness of sounds from a poorly played instrument is in part due to the way the audition is physically processed and assessed by the listener, but the listener did not produce the particular vibrations that were experienced as sounds. Still, Whiteheadian realism does not preclude contributions made by the process of experience to the way things are experienced. In fact, I also propose that the full nature of an entity is never exhausted by how they are included in experience.
The symbol, as we saw, was a means of interpreting the content of experience, and, in our very complex culture of interpretation, symbols do not need to be interpretively tied down to one perceived object. Written words and other signs, such as mathematical entities and operators, may function as symbols that refer to other words and signs, without having to refer to any particular thing in experience. But any past symbolical interpretation can become the content of a present conscious thought, and so may function as the original, determinative content of that conscious thought.

In this way, we can see that any symbolical interpretation requires an effective condition for interpretation that is not original to it but becomes incorporated as an element in the symbolical synthesis between it and an interpretive response; as disjunctive elements in a contrast. We may see this in audition: There are the physical events that contributed to a moment of an audition. These events are the condition for its interpretation and contribute to the ways by which the audition may be interpreted.

To certain ears and backgrounds, the music played may be cacophonous or perhaps the “music of the future.” In both cases, we have experiences that contain a contrast between the physical event itself and the various ways it may be interpretively referred. Each become synthetically incorporated as integral features of that particular event of experiencing music. This, says Whitehead, indicates a contrast within symbolical experience: a contrast between “symbol” and “meaning.” (S, 12)

If symbols are the components in experience that elicit the feelings, thoughts, and beliefs of conscious experience, the “meanings,” says Whitehead, are those other components in experience that the symbol’s elicitations are referring to. This was the effective, determinative content within a perception of thought. In the case of the
musical experience, this was the physical sound itself. The symbols were the various qualitative possibilities that may be applied to it, and help elicit our interpretation of it as something dainty, something dull, or something dreadful.

If this referent to what is immediately given – in this case, physical sounds – is ontologically prior to its symbolical interpretation, then symbols do not create their meaning, and the existence of meaning is not dependent on how they are symbolized. (S, 57) Also, since the independent nature of meaning is always mediated through interpretation, interpretive success is never guaranteed.

The whole process of symbolical experience is within this contrast between symbol and meaning; or the “transition from the symbol to the meaning” within an experience. (S, 8) In this case, the contrast is:

(1) a synthesis between the disjunctive condition of the interpretive activity on the one hand, which includes the difference between a subject, the possibilities for reference, and the referent. “Music” and “horrendous noise” are possibilities for symbolic reference that various interpreters may have for the same, independently existing physical events of sound, just as the “morning star” and the “evening star” are possibilities for reference concerning the same series of star events seen from different times of day by different persons;

(2) The contrast also encompasses the processes of its origination from the experience of the actual world, which includes those bodily events that make the meaning and symbol available to our experience, such as the physical events of hearing sound, our bodily reactions to those sounds, and the cultural-historical background providing ways for it to be referenced, and possibilities beyond this background.
This is because a contrast describes the whole process of synthesis as well as its production, which means that it encompasses the material to be brought into synthesis, the singular way it is brought into synthesis, and the synthetical unity that results from it. In this case, the background conditions and the symbol are the plurality of content to be synthesized.

The above-mentioned originations are the processes by which the meaning of a symbol becomes a part of our experience. Just to be clear, these processes of origination only function as the meaning in symbolic reference, but they do not necessarily cause an experience to include symbolic reference. Events of origination make content available to experience, but they will function as the meaning in symbolic reference only if symbolic reference actually occurs in experience (I shall go into what is required for symbolic reference to occur). These processes may simply contribute to a vague bodily feeling without any symbolic reference ever arising.

One of the consequences of this notion of meaning is that the actual content within an experience has an affective power which will – in part – determine how the content will be included within a perceptive or cognitive activity. In this way, meaning signifies actual things that are not simply passive or discretely disconnected from some subjective process of content unification. The musical sounds have an independent reality as physical events, but they are directly connected to the experience of hearing them. Rather than being external to subjective processes, these actual things become constitutently a part of that subjective process, as the content that conditions a subjective, experiential response to its original condition. (PR, 168)
2. 2. Presentational Immediacy

In symbolic reference, we deal with perceptively or intellectually perspicuous qualia or concepts. We are dealing with a mode of perceptivity or cognition in which the differences between things like “red” and “black” or “quality” and “quantity” obtain a distinctness and prominence lacking in more primitive forms of perception and thought.

These qualia or concepts mediately function between the processes that are given as the effective, original, physical content in experience – the meaning – and an interpretive response to them which will characterize how that experience will ultimately deal with its given content.

However, I have yet to explain how the symbolical mediation between the interpretation and original content comes about within an experience. The origination of the content that can become symbols (this content is the distinctness between symbol and referent in experience, and the various ways – the symbols – by which a referent may be referred) occurs in the perceptive mode immediately preceding symbolic reference: Presentational immediacy.

Presentational immediacy is the mode of perception I mentioned in the last chapter as the experiential locus where the Humean-Russellian sense data are to be found. Symbolic reference is essentially the process of bringing this abstracted conceptual content produced within presentational immediacy into a contrast with its material origination – its meaning. In presentational immediacy, the elements that function as the meaning in perception become the perspicuous elements of perception.
Presentational immediacy is the mode of perception that is commonly understood as “sensory” perception, and the perspicuous elements that are given through this mode as a world of organized, distinct, spatially arranged objects. (S, 79 – 80) If the meaning for perception has its own, independent determinacy which cannot be avoided within experience, then perception does not need to add anything like qualities of order or unity to each element within this given content. If such unity was absent from this content, then it would be simply a disjunction of discrete elements.

For Hume, any order given to experiential content could only be known as a subjective contribution to what was immediately experienced as distinct and separate – and thus disjunctive – elements.

Immanuel Kant’s assumption was similar: that there is bare *percepta* in experience, and the only way by which we can know of its unity or order is through the way percepta obtain unity and order *via* the synthetic processes of experience, but we cannot attribute any knowable or directly experienced unity, order, or organization to the perceived elements themselves.\(^{38}\)

This is not to say that the process of experience adds nothing to the order and unity what is experienced, but Whitehead’s analysis of perception extends to the diverse content of “the meaning” its own relational unity with itself and its environment.

I shall provide reasons for this momentarily, but for now the important thing is this: that within perception in the mode of presentational immediacy the elements that function as the meaning of an experience already have their own arrangement and

order, but in this mode of perception the distinctions within this order becomes significant for experience as specified elements of sense perception: comprehensible, separable objects, located within spatial regions. (S, 80)

So, within presentational immediacy, we not only have perceptions of “this chair” and “that table,” but also “this chair standing across from that table”: perceived complexes of related entities. It is the given background (which functions as the origination and meaning in the later mode of symbolic reference) that provides the conditions for perceiving them as spatially arranged objects. This does not mean that the world is essentially spatial in the sense of distinct objects occupying distinct places.

As we will see, Whitehead rejects this sense that actual things have this “simple” locality, but we shall also later discuss the way each actual event establishes an extensive permanence that makes spatial interpretations consistent.

2. 2. 1. A Kantian Objection

I hope to make clear in this and other chapters that the nature, order, and organization of “objects” of perception and thought within experience are – to some degree, at least – determined, ordered and organized by a matrix of syntheses that construct and constitute the entire process of experience, and that it is through the complex web of such syntheses that we are able to have any capacity to think and perform judgments on these objects of perception and thought.
For this and other reasons too complex to deal with in my project, Whitehead’s theory of perception and knowledge is therefore not entirely antithetical to Kant’s. Still, it would be clear to a Kantian reader that our Whiteheadian project is prepared to make claims about the nature of the entities that are incorporated as objects in perception beyond how the syntheses of perception and experience condition, order, and organize these entities.

Whitehead is very comfortable in saying that these felt entities – external to how they are incorporated within experience – have a relational structure of their own, that this structure is given directly in perception, and that this structure has a causal influence on the nature of the perception. But how could one assert any knowledge about entities as they are in themselves?

As I mentioned above, Kant has something close to Hume’s assumption regarding the objects that are originally given in experience. Knowledge, for Kant, begins with the bare percepta as they are extracted from the sensory manifold (Anschauung) and are given a causal or determinative role in perception and thought through a synthesis of the Categories of the Understanding. In this way, causal connectivity and determinacy are saved from Humean skepticism as the inevitable, a priori features of our experience, even if, at the same time, it still confines causality to the way the world appears phenomenally to experience and thought.

The Whiteheadian contention is that there is nothing to necessarily warrant Kant’s assumption that the original contents of perception are without any felt subjective

39 George R. Lucas, Jr., *The Rehabilitation of Whitehead*, 73 – 92

determinacy within themselves. This Whiteheadian project is not an attempt to discredit Kant, but seek to an alternative explanation for the regular and constructive aspects of experience and thought based on an interrogation of experience that places causality as an immediate contribution by perception’s objects.

2. 2. 2. Presentational Immediacy and Abstraction

To reiterate, Whitehead is not saying that there is no extensive determinacy already within the content of an experience’s meaning. There is some kind of real connection between, across, or through actual events, such as those events whose serial connections and influence constitute the parts of the human body, functioning together as a complex assemblage of diverse occurrences and functions, and may be analyzed as component elements of this assemblage.

But this content obtains a focus within presentational immediacy that renders the potential for emphasizing certain extensively relational features, as well as the singular qualities of given objects, more acutely. How this operation occurs must wait for more details, but what is being said here is that it is through a specific process that occurs within some types of perception that will make those things our senses experience as distinct elements stand-out as those distinct elements; how perceived tables and chairs stand-out as those objects within sense perception.

This means that there is no essential change between the extensive determinations given within the processes of origination (which functions as the meaning in symbolic reference) and when they are analyzed as spatially arranged
objects in presentational immediacy. Against Humean empiricism, knowable order and arrangement amongst the experienced content is not an assemblage entirely due to the process of experience, but is derived from the relationships which are, so to speak, already there in – and as – the determinant content experienced.

This given extensive determination functions as the “presented locus” given in the meaning of an experience and serves as the “common ground” for both presentational immediacy and symbolic reference, (PR, 169) with the “sense data” of presentational immediacy “illustrating” its contents for symbolic reference. (PR, 168) However, this analysis is a process of abstraction.

Presentational immediacy is another level of perception; a perception of the original content given within the processes of perception (that which functions as the meaning in symbolic reference). Presentational immediacy perceives the potential for qualitative emphasis within the given, original content, and by this perception, presentational immediacy highlights given this potential.

In the case of musical audition, this would be hearing the sounds as distinct musical notes. These noises had the potential for this kind of discrimination, but not every part of our bodies is capable of this kind of perception. Our skin would only feel vague vibrations, not music, but our ears and brain are able to process the content of these events in a way that can extract pitches, tones, etc.

Still, the perception of this potential is selective: what is emphasized are those qualities we identified in the last chapter with universals – data that characterize the elements perceived as general, repeatable elements: shapes, shades of color, pitches of sound, relative distances, etc. But this process diminishes the particularity of what is
perceived to a status as being passive, “clear and distinct” (i.e., content distinguishable
due to an intensification of difference from other content. The perceived color of the
flower’s petal is a certain blue and not another color) content for the conscious perceiver
– as the phenomenalism of the “sensationalist principle” assumes.

Our ability to draw out these clear and distinct characteristics in perception is
relative to the complexity within the unified content of the meaning. The meaning
conditions the modes of perception as the determinative background for that perception.
When we attempt to discriminately perceive objects that are spatially distinct from the
human body, our powers usually become weaker as the distance of remove increases.
(S, 80). It would appear then that the nature of the original content plays a determinative
role even in processes of abstraction.

But it still seems to be the case that what is abstracted from this content,
however, it is conditioned by this original content, is still indicative of a process of
content-transformation from particular to general characteristics, as the immediate
concreteness of an audition becomes analyzable in terms of musical concepts. (S, 78)
This does not mean that the meaning changes, as it still functions as the common
ground for each mode of perception. But the perceptive objects obtained will be
irreducibly distinct from their origin. This is because their partiality will not express the
entire particularity of the presented locus. But it is this abstracted content that will
mediately function as symbols within a contrast with the original content: the meaning.
2. 3. Causal Efficacy

What elements will be elementary in our analysis of conscious experience? Is it the distinctness of what is consciously perceived, or is it the passage of momentary, *often hazy* qualities? For Whitehead, it is emphatically the latter, and this is perception in the mode of *causal efficacy*. Causal efficacy, rather than presentational immediacy, is the “primary fact of perception.” (PR, 173)

This is perception at its most immediate, visceral, brutish aspect, but also at its haziest in terms of providing anything like clearly discernable percepta. This is the perception that is familiar in those crepuscular moments of half-waking, or those vague instances of inattention when we feel contentment, discomfort, foreboding, or drunken elation, but without necessarily being aware that we are.

This mode may also be familiar to us when something has struck us in the head and we become momentarily too dazed to understand what had just transpired. But feelings of shock, of a surge of panic, of tenseness in the body (perhaps even nausea), and of pain are very intensely immediate. When we awaken in the morning to our “normal” modes of conscious discrimination, or when we eventually “come to” after a knock to the head, then presentational immediacy becomes more involved in our experience, as we are able to analyze “what exactly happened” in that very brief moment in terms of objects, qualia, and changing spatial-temporal relations.

We may also recognize (retroactively) this mode of perception in what occurred while we were asleep, such as when we feel vulnerable or frightened in our sleep.
because we are exposed to the cold night air or get agitated and dream of running water when our bladder is full.

Much as in the case of getting hit, in dreams we are influenced by our dreamer’s body being sensitively affected by an environment. Causal efficacy concerns this ongoing, responsive receptivity that does not involve, *nor even require*, conscious attention in order for its given content to have an influence on the perceiver. Indeed, causal efficacy is the *non-*conscious mode of perception.

It is here that we find those Leibnizian micro-perceptions, the "*petites perceptions,*" that Whitehead regarded as the most basic and prevalent form of experience: the "minute" and "obscure," non-conscious perceptions that occur within us but which, says Leibniz, usually go unnoticed because they are too numerous, too small, or too repetitious and unvaried, much like the constant noise that abounds inconspicuously around us.

We may hear the roar of the ocean, says Leibniz, but we are unable to discern each part of each wave within our sensation of that sound, as each part is so minute they are “known only in the confused assemblage of all the others,” these perceptions have a real effect on our experience. They, argues Leibniz, give us the world abounding in objects that are blurry around their edges, in contrast to a world rendered in terms of intellectually crystalline concepts. They “make up this I-know-not-what, those flavors, those images of the sensory qualities, clear in the aggregate but confused in their parts; they make up those impressions the surrounding bodies make on us.”

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41 Gottfried Leibniz, *Philosophical Essays*, 295 – 296
This absence of conscious discrimination or interpretation means that this is the form of perception that we have no control over: we can neither abate what is being felt nor our activity of feeling it. A vague insistence typifies both the affective power of the perceived content as well as the perception itself. (S, 73) In this, Whitehead is in accord with Hume: everything begins as a physical experience of a given impression. But, unlike Hume’s impression, the Whiteheadian “impression” is not a discrete sensum, and it is directly causal within perception. (PR, 236)

2. 3. 1. Causation

For Whitehead, causation is not fundamentally an apprehension that is “elicited” from the conjunction of sensa in presentational immediacy (PR, 173), nor from a “presupposed sequence of immediate presentations” (PR, 178).

Given what I have said about the apparent influence of independently existing content within perception (or else perception would be without content), it seems clear that this content would pre-exist the perception that was influenced by it, such as the already existing physical vibrations that were given directly within the auditory processes of the body and subsequently interpreted as musical sounds. This content would by its own affective power conditioning that perceptive moment to have the singular aspects that it has: as that perception of those moments of musical sound within it. The relational structures that determine what it is are also directly transferred.

This insistence of affective powers within a perception and their effective transference into that perception illustrates a moment of passage; a passage from what
has already been established into the present activity of its reception. Causality is this passage from the given content of the past directly into perception as the determining condition for that present perception. In this way, the Whiteheadian notion of causal efficacy grounds causality directly within the primary mode of experience. (PR, 43)

For Whitehead, causal efficacy *simply is* causality, and causal influences along with causal connectivity with other entities become directly felt in perception. This would render causality as not only a given but the reason for both the relational connectivity we experience with other entities and our conceptualizations about those connections.

In this way, direct causality, and not the Kantian Categories, are what present the immediate conditions for both perception and judgment. The conceptual categories of the understanding are not a pre-given condition for perceptive experience, but a product of causality and what is given through causality. Indeed, it is through the direct transference of relational structures from an external origin into an act of perception that will determine much of how the other aspects of that perception shall develop. As I hope to illustrate in Chapters Four through Six, it is by the felt elements within the causally given content that a perception obtains the conditions that enable it to become a moment of conscious perception.

Causal efficacy is the immediate past forcefully *asserting itself* into the present and indicates an inseparable connectivity between the present moment of experience and its past. This past is the real, perceived content that is subsequently “localized” as *that* common ground for the other levels of perception and thought but evades a definite locality within this primary mode.42 This non-localizability is due to fact that the potential

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42 Leemon B. McHenry, *Whitehead and Bradley*, 38
for extensive spatiotemporal discrimination within its common ground has not yet analyzed into those relations.

There is some similarity here to Merleau-Ponty’s distinction between “touching” and “pointing”: A person may be able to scratch a spot on their nose that was bitten by a mosquito, but they might not be able to point exactly to the spot that was bitten, or indicate where the discomfort is. Scratching is within the sphere of touching; part of the vague world of bodily space and its immediate, non-localized causal influences. But pointing is in the realm of perception that requires the coordination of points in an abstract notion of space external to the body.43

The notion of “touching” is here analogous to the notion of causal efficacy, in that bodily events are directly given within other bodily events as the immediate reason for a feeling of irritation, and directly connecting the bodily events that are responsive to it (the hand that scratches the itch), whereas “pointing” would be within the realm of presentational immediacy and symbolic reference, in that these direct connections become abstracted as spatial relations and objects.

2. 3. 2. A Humean Objection

A Humean response to causal efficacy might be to say that it confusedly imports a “habit of thought” concerning the data of perception into the data itself. (S, 39) It is a derivative idea concerning connectivity between impressions, drawn forth by the

43 Maurice Merleau-Ponty, *Phenomenology of Perception*, 102 – 106
constant conjunctions of those impressions within other ideas, has been reverted to the
originary position of those impressions; those discrete data of sense.

This would mean that Whitehead would have been guilty of exactly what he
decried in his criticism of sensationalism and subjectivism: confusing derivative ideas for
the original content of experience.

But, as we saw, the mutually independent percepta of Hume and Russell are
fundamentally external to each other. As such, they are without any clear sense of how
they can be effectively related by mental events, as well as how they relate to the event
that ostensibly unifies them.

Indeed, the sense data themselves can give no apparent account for the
transitory aspect of experience, that is assumed – or perhaps required – for their
seriality, concatenation, and conjunction. It is difficult to explain habituations of the mind
with sense data assumed as experience’s original content, and the experiences
themselves assumed as discrete.

But this negative assessment is not enough to make the Whiteheadian case. We
are here beginning with a hypothesis concerning experience that – just as Hume’s
notions have the aspect of obviousness for Humeans – may indicate for us something
very fundamental concerning any experiential activity: that such an activity directly and
determinately involves relations in the way it experiences something.

This is to say that an experience is always a matter of being “with” something
and that how it is with something both directly connects and conditions it, and so this
relationality is something that is itself directly experienced.
Whitehead noted that empiricists often presuppose this relational givenness amongst the parts of the body when they assume a direct content transference amongst the body parts that function as conduits of sensuous receptivity, such as when Hume avers that we perceive color by the eyes, and of sounds through the ears. (S, 51)

2. 3. 3. Objectification

This non-localizability in causal efficacy is not an assertion that extensive, abstractable aspects are unreal or subjective additions. The passage of content in causal efficacy conditions the immediately given aspects of that perception, so that it determines it as a feeling more intensely there in the region of the nose, and much less intensely there in the region of the shoulder. It is just that at this level of perception, these aspects remain dim but still immediately conditioning of our experience due to their singular determinate content. (PR, 176)

Memory can also be thought of in terms of a vague, compulsive, insistence within our feelings or thoughts. Indeed, as every perception is a direct connection with the past, the whole past is one vast memory. But while the past directly determines a perception via the way its content is transferred into that perception – and thus conditions what sort of perception it will be – the result of this passage from past to present perception is distinct from its origin. Thus, perception is not only a process of content transference but also of transformation: this is “objectification.”

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The vague, forceful, insistent world of causal efficacy is analyzable not just because it transfers the past content with its potential for extensive discrimination into perception, but also because it turns the past’s potential into an “object” for analysis.

Causal efficacy introduces perceptive content into experience that may be analyzable into both the content of an independent world as well as qualities, relations, and other abstract elements that express how these world’s content become the various components within our experience – including the means by which the given, independent content provides the conditions for our abstractions of them in perception and cognition by bringing that content into an analyzable unity. (S, 17) Perception is the process by which the world becomes “objectified” as an object for experience. (S 17)

As the world becomes incorporated within perception, determinatively effecting how it shall be incorporated within this same process, it is unified as a “perspective” on the world by that perception in the mode of causal efficacy: as a unity of perceptions of its given, multitudinous environment. This is the world unified as a perceptive object, but an objectified world will exemplify only some of its elements; only some of its content is available for analysis while others recede into the background. (S, 27)

In the production of an “objectified” view of the world, the perceptions involved in causal efficacy *abstracts* from the content given directly within it. This is “abstraction” in both senses outlined in the first chapter: a process producing a simplified unification, as well as the product – the “object” – of a unification of qualitative content that is also a simplification of the qualities given from actual reality. This process, as I mentioned, is crucial to understanding the nature and function of contrasts and how they are ubiquitous within Whitehead’s system.
So even causal efficacy is a process of producing a synthetic unity – an object – from a disjunctive plurality: the great multitude of complex things felt as an actual world. But if causal efficacy is the direct and determinative incorporation of the actual world into perception, how could it be also abstractive?

2.3.3.1. Objective and Formal Existence

The content that is integrated into a perception contains complexities in its actual make-up that are not always “relevant” for our experience of it. “Relevance” concerns what degree of inclusiveness or compatibility an element in the actual world may have for an experience of it. (PR, 112, 148 – 149)

When we see the cover of a book we see it as regions of colors that have some relation to the regions surrounding them. But the other sides of that book include extensive determinations that would conflict with those regions that surround the cover if they were seen in the same moment from the same angle. The settled geometry of the given world (i.e., the determinations of the past world) prevents us from seeing all angles at once. The way the angles present determinative relations with each other is relevant to our experience of them. It is only within abstraction that it is possible to conceive these parts of a book – as it were – in a vacuum, where each physical feature would not have some physiological effect on the other parts.

If I see the front of a house, and someone removed all the other sides, their removal would have some effect on the stresses and pressures operative within that remaining façade, and my perception of that façade would be of something with those
stresses and pressures. If the other sides had remained, it would be an experience of other – and sturdier – stresses and pressures.

So, this does not mean that those other regions and their qualities are not there, nor that they are in some way not contributive to how we can experience any side of that book, but the various potentials in those regions that can be experienced as other colors are not relevant view within that moment (i.e., are not compatible to the other qualities within my perception of the book from that side) to my, or the regions that make up own body may restrict my experience of them. There are innumerable potentials for olfactory enjoyment and discernment that are utterly beyond me, but the physical constitution of a dog allows them to be relevant for a dog.

In causal efficacy, the given content of the entire, past world, including all of its established dimensions and determinations, are transmitted directly, but the many minute perceptions within this mode perceive certain entities within the given content as being either adjustable to the other entities within that content or not.

This adjustability is determined largely by the content itself, which determines the perception as a perception of those particular regions with other aspects of it held in reserve. These other aspects are not in principle inaccessible and are already contributory to how some aspects are relevant and some are not. But, as it was for the perceived book cover, only those perceptions of relevant aspects have made available certain qualities (such as colors and extensive determinations) as a particular regionalized unity (so, not all such unities) for the mode of presentational immediacy.

In this way, the “objectified” world presents a simplified unity for other perceptions. This is why Whitehead distinguishes between “objective existence” and
“formal existence.” The former is the world as it is perceived as an object; a simplified unity in perception; but “formal existence” is the world as it is in excess to any simplification or abstraction by a process of objectification. This is the entire, actual world, both in its realized concreteness and in its latency for realization derived from within that concreteness. For we shall see later on, no entity – whether we are dealing with actual or potential things – can be objectified completely, to the point where its formal existence is totally exhausted.

This, again, is because within a perception only certain aspects of an entity’s formal existence can be relevant for that perception, so there will always be an excess or reserve or potentially objectifiable material in any real thing that is ignored in any objectification within any experience. (S, 22 – 26) We can then understand how an objective incorporation within an experience may provide real elements of the world for knowledge, but can never “mirror nature” in the sense of actually representing it. So, due to its objectification, even causal efficacy is transformative in that its product – the object of perception – is distinguishable from its origin.

This can be understood as a vindication of the Kantian project, for the syntheses of experience always produces a means for perceiving the given world in such a way that renders the given world as something that is amenable to the process of understanding. Objects and concepts are aspects of our understanding of the world that we cannot avoid using in our investigations and will keep the world at some remove.

But the chief difference here between Kant and Whitehead is that Whitehead attributes the conditions for our capacity to objectify and conceptualize to the way that
the world affectively contributes to the construction of our subjectivity, including to our capacities to objectify and to conceptualize that same world.

2.3.4. Feelings

The transitive and transformative aspect of Whitehead’s notion of perception, as well as the directness by which its content is involved in it, puts this notion of perception at odds with its usual conceptualization as an association between distinct, independent subjects and objects. Whitehead sought a new, generic term that may both account for the transferring and transforming processes of perception with how it directly connects various processes – the processes that produced the given world directly into the process of its perception.

For Whitehead, the notion of “feeling” would be suited for this if we understand “feeling” as a kind of direct contact with something, and also as a process where something is transferred and transformed by that contact. In this dual sense, “feelings” describe both the intensive appropriation and responsive, transformative re-incorporation of the qualitative content in the past into a new determination.

This directionality indicates an evolutionary transference, such as in the transference of modes of one observed moment of behavior to the next moment. Although each moment is distinct, they are still bound by the process of transference which is the shared flow between each – distinguishable but not separable. (PR, 238) The “flow” from feeling to feeling is an extension of the notion of passage that occurs in each moment of causal efficacy: there is a moment of transition in which the content of
one flow moves directly into the next. In this way, each moment of perception, from the basic to the complex, will flow directly into the next mode.

The model for feelings that is being presented here suggests that no matter how a feeling functions, whether we are talking about a feeling of something present, a memory of the past, or some anticipation of the future, that we are dealing with a process of transference from those conditions that provide the origin for that feeling’s becoming toward the summation of its process, which is as a realization of the potential for that feeling that was given to it in its origin.

This theory of feeling is of perceptive processes that are analyzable into those qualities in perception we may term as either subjective or scientifically pertinent qualities. These processes would describe the connectivity of basic unities of subjective and objective qualities through the way an evolutionary process indivisibly incorporates the objective environment and produces a new determination from its origin. (PR, 231)

This asymmetric process is the transitive direction every of every feeling: A feeling is a determination of a new product, not a re-determination of its origin. The product of these feelings may include things like perceived objects, which is the determined product from causal efficacy’s direct incorporation of the given content of the past, that functions as the origin in this description. It is this product; this object; that the other modes of perception may analyze into those subjective and objective qualities as the directly determined, transferred, and transformed content of perception.
2.4. Symbolic Reference

The Whiteheadian notion of experience is largely a matter of content transference-transformation via varied modes of perception. From the perceptive mode of presentational immediacy, we are able to enter a third mode, one of “conceptual analysis.” This is the mode of symbolic reference (S, 17), and the conceptual content being analyzed is the abstracted material from presentational immediacy.

This abstractable material includes extensive relationships, the qualitative characteristics that make certain objective content stand out from others, as well as the ways by which these various contents may be extended beyond their immediate, incorporated expression in the given, perceived data. The focus of at work within the conscious analysis of sense data is primarily an analysis of “the symbolic relationship” between the content of causal efficacy – the meaning, common ground or presented locus of perception – and presentational immediacy. (S, 81)

The dynamic between reality as it is conceived formally, and reality as it is incorporated through the various modes of perception and analysis, is due to the way conceptual analysis relates back to the earlier modes of perception:

(1) within causal efficacy the formal content of the past is transferred as objective content into the present moment of perception, immediately conditioning it, and providing the potential content for conceptual analysis, such as when we immediately feel the heat from a fire but without yet identifying the source of the heat as a fire;

(2) within presentational immediacy this potential content becomes the perspicuous elements in perception, such as the recognition not only of elements like
heat but also colors, effects of the light, smells, and sounds as being distinguishable aspects of an event occurring within some spatial-temporal location; and

(3) within the final mode – *symbolic reference* – the content given through modes (1) and (2) can be re-analyzed into concepts that express “actual things in the actual world,” which may include not only notions of real entities but also “abstract attributes, qualities, and relations,” and how these “contribute themselves as components to our individual experience.”

When we make a statement like, “There is a fire over there,” we are, in this case, trying to indicate something in the actual world of our experience by utilizing those abstracted and generalized aspects and concepts. (3) is thus the process of developing those abstractions that “express how other actualities are component objects for us,” (S, 17) and does do by establishing an interpretation of the abstraction analyses given in mode (2) and the objectification of the formal content that was given in mode (1), which was the material of the actual past transferred through causal efficacy.

Symbolic reference synthesizes the two more primary modes of perceptive experience for the sake of abstracting, interpreting, developing, and communicating the potential conceptual content within perceptive experience. This conceptual content consists of united patterns (or unities of various types of order) of determinables for quantitative and qualitative aspects within objectified reality that serves as the condition for our ability to discern distinctly singular elements in perception and thought – such as the scarlet and gold of a fire, or in the grossness of an unclean handkerchief. In the focus that conditions conscious perception, these elements may be isolated and obtain
greater perspicuity than other elements that were a part of the same process of unifying them into one, pattern-rich moment of experienced content.

In this development of a foreground of perception, the other, more primary perceptions that produced these unities remain in the vague background. This, again, is how we may mistakenly assume that the isolated conceptual content from within perception is actually the original content of immediate perception, as Hume and Russell did in their notion of sense data. (PR, 185)

Through symbolic reference we obtain a sense of concepts and language as having something to do with a world that is given in experience, in that symbolic reference describes the way in which conscious experience, and its systems of semiotic meaning and ordering, attempts to indicate an actual reality.

The various meanings associated with the word “fire” facilitates the indication of feelings of real passion but also of a hot, physio-chemical event that often occurs in the actual world. A real connection is drawn between our world and our conceptualization of it, even if neither are representatively reducible to the other.

Symbols are the result of a creative process, and their creation is due to the varied levels of assemblage and selection within experience. We may say that these creative capacities within the varied levels of perception are expressions of a general capacity that seems indelibly a part of every experience. This is the “imagination.”
2. 4. 1. Imagination

*Imagination* may be regarded as the measure of the power of invention, including the relatively simple power of perceptive synthesis. This, as we saw, occurs even at the level of causal efficacy, as the directly given formal content of the given past becomes the objective content for all subsequent modes of perception and analysis.

But it is only in symbolic reference that the power of creation within a mode of experience obtains the level of inventive freedom we usually associate with the term “imagination” (due to an openness amongst possibilities of description or indication one may choose from) and, because of this, it is only at this level where the two aspects of Whitehead’s speculative “method of discovery” may operate. This is due to the contrast at the level of symbolic reference between the meaning and its interpretation, which opens upon *possibilities* (see below) for developing various attempts to indicate, elucidate or, somehow harmonize with the meaning.

It is from this precarious position, which *may* fail – and fail *spectacularly* – to develop productive symbolic relationships with the given meaning of perception that we discern those two, interconnected facets of these attempts to frame such hypothetical concepts: imaginative generalization and descriptive generalization. (PR, 5)

3. Generalizing Notions from Experience

While we may regard these two aspects of method as separate, both are integral to the way we consciously navigate through the multitudinous aspects of existence. As I
said, these two types of generalization may be regarded as complementary aspects of the same process of method, in which specific notions are generated and then “applied to a restricted group of facts, for the divination of the generic notions which apply to all facts.” (PR, 5) Our general ideas about reality, it is suggested, are gained via these processes by which we imaginatively hypothesize and test the various notions we derive from experience. These tests would determine whether these hypotheses are consistent or applicable to what we can experience or imagine.

From the various facts given in experience, we generalize content from them, such as when we say that fire is both warm and useful but has the potential to be both painful and destructive based on what we have experienced from fire and glean from the experiences of others. What we want to test or confirm is a limited framework of concepts that we hope will always be empirically applicable and logically consistent to whatever facts could be given in experience, so that we may speculate that these notions describe qualities that these facts will always exemplify as necessary aspects required for their own actualization.

3. 1. Descriptive Generalization

Descriptive generalization takes particular aspects that characterize facts of particular experiences and extends them as the generic qualities of any experience. The theory is that facts given in experience offer the potentiality for the generalization of a multiplicity of characteristics that seem inherent to them – such as the dispositional qualities of fire, which we may say are expressions of aspects within the formal
existence of what is objectified in experience as “fire,” and the process of generalization is the parsing down of all these potentialities, focusing on those characteristics that seem to be of abiding importance from fact to fact.

This would be akin to the seeking of universals that each fact, no matter what its provenance may be, would in some way exemplify, as genus would be for a species. But, once again, these universals do not explain their exemplification in actuality. Rather we seek to explain the conditions for how we may describe actual processes in terms of exemplifying universals – such as in terms of relations.

Our analysis of perception into various modes, and our characterization of those modes as modes that would obtain from perception to perception, and from analysis to analysis – along with its attendant insights on formal and objective reality, on causation, and on the nature of perception and feeling – is itself the handiwork of descriptive generalization.

3. 2. Imaginative Generalization

Compounded to this speculative analysis of experience is the theory that the condition that renders the elements in experience as given, comparable, and abstractly generalizable from the facts of experience as facts of experience is yet another descriptive generalization: the synthesizing process of contrasts; contrasts as operative in the process of imaginative generalization.

“Imagination” here describes the inventive power of the process that productively unifies certain details given in experience for the formation of notions and concepts.
Imaginative generalization is the process of producing leaps of insight, as products of constructive contrasts, are new conceptual unities, not already necessarily implied by the original concept and, as such, not reducible to them. But as they are descriptively generalized to every actual unity, these insights produce a new sense of actual unity that may better explain the original concepts and also harmonize “incorrigible” metaphysical problems – such as the relation of subject to object.

Discussing perception is of great importance for my project on what I call the conditions for his relational ontology: contrasts. This is because, as we saw in the last chapter, the problem of relations often stems from how we conceive of our receptivity of the actual world and how we may cognize or conceptualize it.

We must, then, pay close attention to how our experience of the world provides the conditions for the world’s conceptualization and its communicability. As we have seen, this account includes grounds for considering relationality as a given in experience, and that processes of syntheses within experience – contrasts – are involved in rendering this world as both given (and so intimately connected with us) and conceptualizable via experience. This shall work towards a central Whiteheadian idea: actuality is responsible for conceptuality.

In terms of symbolic reference, the generalization of the imagination into descriptive notions is a contrast of certain material that may elicit a symbol for pragmatic usage with the content that lies in the experiential background of the production of these symbols. In this way, it is an attempt to reconcile the abstract productions from presentational immediacy with the broader background of reality given in experience.
This reconciliation is, again, due to a *contrast* (the production of a particular, synthetic unity from a felt plurality) between the conceptualized content of experience with processes that made it available as material for conceptualization.

Through these joint processes of generalization, we extrapolate certain aspects and patterns of qualitative and quantitative order from experience, and from these, we obtain the elements to construct descriptions, theories, arguments, and explanations about what’s there in experience and how they came to be. From this, the conceptual content drawn from experience is refined and transformed through each phase of realization, until they become the elements we are familiar with in conscious thought.

The regulative features of experience may be isolated as conceptual content through symbolic reference, and from these processes, a descriptively general notion may be formed. From the persistence of relational features in perception and in mental association we may derive concepts expressing patterns of relationality.

These relational features are there, the Whiteheadian avers, prior to any generalization, but their determinations are abstractable as concepts that may be utilized – however imperfectly – to refer to those same features that characterize the relational aspects of our experience. Or, from the perception of memory’s content, we may derive the theory of content transference, which is the basis of Whitehead’s account of actuality. Real, pre-objective, formal existence nevertheless provides the condition for objective incorporation, and thus for the real transference of determinative material for that perception or thought.

Still, while this seems to indicate that there are real, actual things being experienced, this actual world will always be beyond whatever objective role that may
be ascribed to it. But, it is still a real world of real entities whose own determinative power cannot be ignored in feeling or in thought because it is their own determinative power that provides the conditions for any process of perceiving or thinking, and so will always be incorporated as a condition for an actual experience.

3. 3. Terms for Genetic Realization

Every insight that Whitehead derived from examining of the modes of perception concerned how each mode of perception, and each aspect of those modes – including the given actual content – elicited some fact of functionality in perception, such as causal determinacy through content transference, objectification, abstractive analysis, and interpretive reference between the origin and analysis of its content.

Functional activity was also key to our understanding the formal existence of an entity, as its determinative power was the condition for a perception’s causal origin, objectification, as well as for eliciting responsive activity to that objectification. Everything seems to become what it is through the singular function of its activity, either as a perception, in a perception, or beyond a perception. (S, 26)

We also discerned that each exemplification of functional activity in perception is basically productive and connective, and each constitutes a singular element of productive and relational determination. This resonated with the theory of feelings as a description of transference and transformation as asymmetric events of process that determine a connective continuity with prior processes and the establishment of a new term in reality, irreducible to its point of origination.
This new term is itself the point of origin for those events that will succeed it, much in the same way that the actual past affectively determines the origination its successors in the perceptive mode of causal efficacy. From these insights imaginatively generalized, Whitehead offers “prehension” and “actual entity” as descriptive generalizations to account for the genetic realization of these functional determinations.

3. 3. 1. Prehension

As we saw, Whitehead’s theory of perception departs from the notion that a perception denotes a primarily external connection between a subject and an object. In place of this, Whitehead offered a notion of feelings as establishing and determining a directness of contact, connection, and transference. “Subject” and “object” in this notion are no longer opposing entities, but descriptions of mutually conditioning aspects that occur within the one process of feeling: as the given content determinately elicits an active, subjective response to its particular nature, and this response is facilitated by the way the process of feeling constitutes the given content as objective content.

Whitehead’s own term of this complex process is “prehension,” which is generalized as not just the most basic genetic condition for any perceptive activity, but also for the determination of any particular, actual reality. (PR, 18 – 20)

This generalization of prehension to account for every actualization is very controversial, but for the moment we may at least see how it is meant to bring cohesion to the theory of perception, as each perceptive mode – causal efficacy, presentational immediacy, and symbolic reference – describe the function of prehensions: causal
efficacy is the integration of many basic, primitive prehensions that transfer actual content directly into perception; presentational immediacy is constituted by prehensions that emphasize the potential for abstraction from that actual, prehended content; symbolic reference refers to those prehensions that elicit a contrast between the prehensions that directly transferred the content and the prehensions that abstracted from that content. This “prehension of prehensions” is key, for prehensions are generally prehensions of other prehensions; or, direct feelings of other feelings.

The notion of feeling is a principle of objective transference (of connectivity) but also of the creation of a unity of determinative, evolutionary process (PR, 231). In terms of the theory of perception, the feeling would be the active process by which actual past is incorporated into itself as it causally produces that particular moment of experience; a moment that constitutes that ideal limit of a unity of both subjective and scientifically pertinent features, as this unity may be analyzed into the emotional and valuative response produced within the feeling, and in terms of what extensive, quantitative elements have been transferred into the feeling or transformed by the feeling.

A prehension is integrally connected with its product so when, in presentation immediacy or symbolic reference, a prehension prehends an object (as first produced in causal efficacy) it is also prehending the prehension that produced that object. This creative incorporation of an already created unity brings cohesion to the various modes of perception and conceptual analysis, but also may serve as a model that coheres the world beyond human perception and analysis.

As a term describing active determination and the establishment of continuity, prehensions may perhaps be able to account for not just how the given world enters into
the modes of experience, but also for those processes that account for that given world, including previous mental events, but also those events that constitute the events that determine enduring and evolutionarily changing natural objects.

In this way, everything becomes through prehension, and this would also be a manner of saying that everything becomes as a contrast: Prehensions are constructive processes of unification, determining a novel unity of actuality that is singular and irreducible to the disjunctive plurality from which it originated and unified within itself, such as in the way a prehension in causal efficacy incorporates the multifarious actual world and transforms it into an analyzable object.

Every single process involved in the descriptions here used are in terms of perception and feeling. When the multifarious characteristics in vibrations of noise are brought together as first auditory data and then interpreted in terms of pitch, timbre, duration, and also characteristics that are enjoyable or unenjoyable, every single development of this process is due to prehensions.

The discernment of each possibility for interpretation when we hear the word “fire,” and compared to other elements in the physically felt environment, this, too, is a process of prehension at every level. In fact, both describe processes of prehensions in which the prehensions synthesize, via contrasts, in such a way to form propositions.

3. 3. 1. 1. Prehensions and Propositions

As I had said, the relational material that carries over from one proposition to the next provides the means for eliciting characteristics that seem to indicate some
persisting order in the world and of our experiences of it. This is partly why Whitehead conceives reality as a series of interconnected events: every experience is a carrying over of determinate content from one event to the next.

This may be interpreted as the perceptive-connective mode of causal efficacy. In the modes of presentational immediacy and symbolic reference, we saw that the analyzed and abstracted content still have their origin in what was given directly in causal efficacy. This includes particulars that effectively determine the causal origin of a perception, but also what may be in excess to them: those abstractable qualities that may be incorporated in feeling as concepts whose application may extend beyond its point of origin, such as particular color or shape, and may function as a “symbol” or means of eliciting further emotional or intellectual responses to it.

The unifying link between this given potentia, their origin in physical feeling, and their derivative conceptual extensions is Whitehead’s own notion of “proposition.”

Whitehead’s notion of a proposition is as prehension that functions as a coupling of the world’s past content given in perception with the potentialities for what could exist beyond that past content. (PR, 184) As I said in Chapter 1, this makes a proposition a kind of contrast in that it is a real, synthetic unification of various material, the product of which is not reducible to that material. It is to be remembered that our thesis is that it is through these processes of synthesis; these contrasts; that produce the various relational determinations in actual fact. In this case, these relations are resultant types of unity, in which the way the diverse content is brought together in a certain way determines relationships between each element within the diverse content. (PR, 24)

Propositional feelings are the synthesized result two kinds of prehensions:
(1) Prehensions that directly incorporate the material of the given past called “physical prehensions” or “physical feelings” (PR, 23 – 24); and

(2) those subsequent prehensions that prehend the abstractable qualitative content from the objectified, given past are “conceptual prehensions.” (PR, 26)

While those perceptions in the mode of presentational immediacy are an example of these conceptual prehensions, they are actually a more complex development of more basic conceptual prehensions. Right now, we may just say that a propositional feeling is a type of prehension that prehends various physical prehensions and a conceptual prehension of some abstractable qualities. This resultant unity – the proposition – is yet another type of conceptual feeling.

These specific feeling are the basis for conscious, conceptual thinking, that may feelingly consider qualities at some remove from their origin in physical feeling, and evaluate how these qualities can have types of associability with other qualities (apart from their relation to any particularity), including feeling them as conceptual possibilities for itself or the future. As a prehension prehends other prehensions, a proposition may be a prehension of other propositions.

Propositions that evaluate the qualities in other propositions as abstractions are “judgments.” Judgments, as I have said, are specific types of propositions but they are not the only type. These are feelings that isolate specific patterns or forms of relatedness (that are derived from types of unities produced by contrasts) from what is in experience, and establishes a comparative feeling to a originary point for a quality – as externally originating via causal efficacy, such as seeing the blue-green of the ocean
for the first time – or towards the results of other judgements, that would be more strictly in terms of the qualities alone. (PR, 191 – 193)

This brings us back to perception in the mode of symbolic reference, as the qualities become more and more refined in terms of abstract, intellectually relevant concepts. From the various perceptions that isolated particulars as individuals or groups for enumeration, we may derive a sense of numerical value that may be entertained independently of any numerable particular.

This is the process by which conceptual feelings emphasize those qualities *that may* characterize an individual or group numerically, and of propositions that contrast those abstracted qualities *with either* their origin and other abstract qualities, as, for example, when we ask, “should Tim Lincecum’s pitch be analyzed into 5 movements or 500?;” or we may ask, “should it be just *those* abstract qualities with *other those other* abstract qualities,” such as when we inquire whether some common characteristic may obtain amongst them, such when we want to know how ordinal numbers are related. That, as I said, may be regarded as an abstraction from the contrasts involved in a proposition (i.e., from the synthesized content within the contrast), and the process by which the abstracted content is contrasted as some interpretive response to a concrete origin or to some already effectuated abstraction illustrates the *elicitiation* of symbolic content in the mode of symbolic reference.

Previously conceived abstractions, such as those produced through the process of judgment on the transitivity of ordinals, may serve as the “meaning” in the mode of symbolic reference in that what was given in a proposition were prehensions of previous propositions: previous judgments on the qualities characterizing numbers. These
conceptions are given as a perception on the past, in this case, the actual world as comprising those events of past conceiving and thinking, that are brought into a present moment of experience, first as objectified content, which means first as directly prehended elements that are made objectifiable for other perceptions.

This unification which occurs as the dual unification with other processes of prehension and with its given content leads us to the other very important term in Whitehead’s systematic philosophy, equal to the status of prehension: “actual entity.”

3. 3. 2. Actual Entities

Propositions are real unities of real content, both of actuality and from abstractable potentiality, and any prehension is also such a unity, and are unified into more complex syntheses of feeling and perceiving. What is more, they are unities with other syntheses – those which produced the concrete world of the past, given as the direct, determining content of that present process of experiential unification.

From this, Whitehead generalized a notion of unification that realizes and unites all such processes as a contributive to the determination of actual fact. This is the notion of an “actual entity.” For Whitehead, everything, from humans to ants, from God to the “most trivial puff of existence,” (PR, 18) are constructions from the processes of actual entities; they are the results of the connected becoming of actual entities.

A feeling – a prehension – is a portion of determinative activity; a unity in itself, but one that is distinguishable but not separable from the entire event that they are
contributive to the realization of. Each prehension contributes to the constitution of “one subject.” This subject is the unifying principle of that event. (PR, 231)

The reader will have to wait until Chapter Three for reasons as to whyprehensions produce just the “one subject” within any actualization. But it is worth noting that this is not necessarily a conscious subject, nor is it a subject for predication. This is “subject” in the sense of a guiding principle of unity, with each prehension contributing to the determination of an actual unity based on this principle.

This contributive determination of prehensions is called the process of “concrescence” for an actual event. (PR, 21) These prehensions are “built into” an event as the self-constructing unity of that event, along with the objective content that these prehensions transfer (in an evolutionary, asymmetrical manner) into this new unity. This “one subject” and its resultant unity is “actual entity,” which are sometimes called “actual occasions” to signify their extensive nature (PR, 77).

The becoming of an actual entity is an event: it is the asymmetrically directed movement of all prehensions within one process of experiential, processual becoming towards the determination of one moment of actuality; each prehension synthesizing the prior prehensions into more and more complex and determinate unities for that final unity. As a “final unity” produced by a complex of activities towards unification, the actual entity describes both the whole process of actualization for an actual event, as well as the actualized product of that event.

The processes that contributed to the formation of judgment become as an actual entity, and as that event of judgment has a determinative power on those subsequent prehensions that prehend it, then what is prehended is that event that determined that
particular judgment; that it is that particular actual entity that included the activity of
judgment as a part of its process of realization. In this way, subjective becoming and
superjective existence cannot be divorced from each other. (PR, 87)

The determinative power of the past within causal efficacy is due to the particular
unities felt within it. It is due to how multifarious aspects are drawn together in a singular
way; a way which is felt as the whole synthesis of everything involved in it. By
themselves, each prehension is simply a partial aspect, illustrating one specific feature
of this process of unification, such as content transference or conceptual analysis; they
exemplify the various elements we may analyze within the whole unity of what is in
experience. While they illustrate how each function for the sake of this unity,
prehensions do not individually illustrate this unity.

If all actual, genetic determination may be explained in terms of prehensions, and
if all prehensions are contributory elements in the synthesis of actual entities, and if
actual entities become as a synthetic, connective unity with other actual entities then
there are three immediate consequences of this description that would be of
considerable importance for metaphysics:

(1) reality is fundamentally connective and relational;

(2) the relationality of reality may be explained in terms of synthetic processes of
feeling, which become by utilizing other feelings as their contributory and constitutive
elements;

(3) synthetic processes of feeling – along with their elements and conditions –
may be explained in terms of actual entities. This is why Whitehead called actual
entities “the final real things of which the world is made up.” (PR, 18)
Everything, from cabbages, kings, and regions of “empty” outer space is constituted through the becoming, serial connection, and repeated determinations of actual entities. Cabbages and kings are not actual entities per se but are the resultant, perceived effects of the becomings of actual entities as they serially connect with each other and pass on similar determinate characteristics from one actual entity to another.

When we perceive the past, what we perceive are blurred together images of these connections and passed along characteristics, like a strip of celluloid. It is from such qualities that have been passed along from one event to another that we obtain a sense of things as enduring. That is why Whitehead calls these things, from cabbages to kings, etc., “enduring objects.” (PR, 34 – 35) As the becoming of these events contains the conditions and elements for their own realization, then everything – including all reasons – is to be explained through them. (PR, 19)

3. 3. 2. 1. Actual Entities and Substances

In terms of their metaphysical finality, we may see that actual entities are analogous to “substances,” as usually construed in Modern metaphysics: a res vera in the Cartesian sense (PR, xiii) However, these Whiteheadian particulars are events – flashes, drops, and buds of actuality in the Jamesian sense,45 not enduring substances. These substances, individualized by their defining qualities, are generally conceived as complete in themselves, without requiring reference to anything else. (Al, 133) This concept renders the notion of interconnection unintelligible because it shrives

45 William James, Principles of Psychology, Vol. 1, 609 – 610; A Pluralistic Universe, 73 – 79
the universe “into a multitude of disconnected substantial things, each thing…”

exemplifying a private bundle of abstract characters.” (AI, 133)

The definitive quality of each substance determines its individuality from every other substance as well as their independence, rendering an internal determination by other substances seemingly impossible. But if nothing can determinatively affect these bundles, then they are entirely withdrawn from each other. But it is not impossible to conceive solutions to render the problems of withdrawnness moot.

One such solution may be found in Leibniz’s theory of pre-established harmony amongst all monads. Even if this rendered causality as simply apparent, this would not be a real problem as each monad would be synchronized with every other monad in such a way that all monadic activity would reflect how the possible outcomes for connection in one would reflect the possible outcomes for connection in the other.46

However, in order for this to work, all relational connections would have to be reduced as predicates of each substance.47 This seems to require all types of relational description to not only be pre-given to actual processes (as Platonic possibilities that become realized by monadic creation) but are also reducible to a proposition of an S-P structure, and it is not apparent that this can be accomplished.

Indeed, we can argue that substance-withdrawnness is due to a reification of certain abstract content from experience (i.e., the endurance of mentality) as the supposedly primary, exemplifying quality of the object of experience (including the experiencer). This is the result of treating of the S-P propositional structure as

46 Gottfried Leibniz, *Philosophical Essays*, 213, 223

47 Gottfried Leibniz, *Leibniz: Philosophical Papers and Letters*, 268
metaphysically ultimate, with the S enduring independently of every accidental P, and as this extension of the S-P was simply carried over from linguistic convention – an extension of speaking about things in substantivist terms to the things themselves – then this notion of enduring things may be simply a matter of linguistic convention.

3. 3. 2. Experience and Scientific Description

But one may object that it seems very strange to say that if all actual entities are constructed and constituted by prehensions, and if the basic aspects of prehensions are feelings, then all things in the actual world are feelings and the products of feelings!

Indeed, by this very universalization of prehension, Whitehead is suggesting is that experience may be universalized as a metaphysical description and explanation for all actual events. Moreover, Whitehead is suggesting that there is a self-determinative process – and so something akin to agency – in every actual event. One may ask, “What sort of feelings do photons have? What sort of agency is at work in a stone?”

Whitehead’s universalization of characteristics of experience is due to a rejection of distinguishing “subjects” from “objects” as active and passive entities respectively. Prehension is a constructive process that incorporates the dualities of subject and object as actually dual-but-inseparable aspects within one synthesizing activity.

Whitehead’s “subject” and “object,” as I said, are moments determined by their active function within a prehension, rather than as separate entities. Both the subjective and objective elements are active in a prehension, which functions as a bridge of such elements: the objective is the active, affective determinacy of past actualities for the
internal constitution of a prehension, and the subjective is the transformative incorporation of these elements by that present prehension.

If we hypothesize, as Whitehead did, that every actual event is constructed and constituted by these synthesizing activities, then we would not only preclude any problematic dualism in nature but also provide a ground for the evolution of consciousness without recourse to theories of some mysterious emergence from “dead” matter. But how would Whitehead account or all those aspects of nature that seem entirely apathic or a-subjective, like yon photons and stones?

Photons and stones are not what Whitehead would call events. Rather, these are specific products of events as they are perceived or (in the case of photons) described in terms of a certain system or experimentation and/or measurement. Concrete particulars, which each actual entity constructs and constitutes through their evental becoming and serial, societal connection, are interpreted and described in terms amenable to scientific observation and classification would be the resultant abstractions of actual, independent events as well as the events that constitute our engagement with them. The latter events constitute the interpretations of the data that is objectified from the formally concrete particulars entities. These particulars are experiential so that we have a sufficient, causal genetic notion. Whitehead’s hypothesis of universal agency provides every event both a causal and a sufficient reason for its existence: itself.

The actual events provide their own efficacious power and reason for existing, and this is accomplished by its agential activity, as it self-synthesizes all of its various components and potential into a moment of actuality, with that particular moment as its goal. This moment is the determination of reality as a unified physical environment,
determinable for future reality. In this way, actual reality may account for itself much more effectively than “dead nature” can. If this was simply a material or apathic process, then a sufficient reason for that particular synthesis would be forever obscure. But how can there be goal orientation without consciousness, and how can a thing have itself as a goal if it is not conscious? I shall explain in Chapters Three through Five.

3.3.2.3. Nexus and Nexūs

Whitehead’s theory of actual entities is an attempt to offer a workable description of basic, actual particulars. Each of these particulars becomes through the incorporation of past particulars and is then the determination of a moment of particularity within “a society” of connected particulars called a “nexus” of actual entities. (PR, 20, 22) A nexus may itself – and usually is – be a part of more complex society, called a “nexūs,” which is a nexus of other nexuses; a society of societies. (PR, 20, 22)

A nexus is a unity of actual entities with other actual entities. An actual entity unifies prehensive activity and each prehensive activity includes some kind of relationship with the actual entities that preceded them. As these prehensions become unified, so too does the particular type of determinative relationship the past actual entities have for the concrescing actual entity.

What defines these societies are the particular sorts of elements that are passed along as determining qualitative content by and for the component actual entities of that society. These characteristics are passed along a certain chain of connected events and contribute to our experience of various events as a continuous perception. (PR, 34)
A perceived tree is, roughly speaking, a nexus of a tree. But these societies do not exist in isolation from other societies: the dead leaves and the nutrients are passed along as determinative qualities into the tree-nexus.

This connection of various societies may be extended to all of actuality, rendering it a nexūs of nexūs. But given what we have said above about the transference of qualities, and the transference of qualities in prehension, we may see how experiences of “enduring substances” are actually experiences of nexūs. (PR, 34 – 35)

When we feel the force of bodies, or perceive those bodies as temporally enduring objects, we are experiencing nexūs of various nexūs of actual entities that define each moment as the experience as of that body. Causal efficacy is the way the perceived nexus is determinatively integrated into the becoming actual entity, and may become an object for presentational immediacy, which prehends the objectified nexus in such a way where the content becomes abstracted as various, independent objects and extensive relations: such as “that tree” and the “other trees.” (PR, 63)

But this experience of nexus and nexūs should put us in mind of Whitehead’s conception of serially related events as a means of remedying problematical conceptions of actual connectivity. The nexus passes along elements into the causally efficacious prehensions of its successor, thereby establishing a series of concatenated moments of a nexus, with the succeeding moments being internally determined by the prior ones through causal efficacy, and the prior moments being externally related to their successors. So, the world is not just societal; it is basically asymmetrical. Each realized event becomes the determinative condition for the subsequent expressions of a particular nexus, a new nexus, or a complex of nexūs, old and new.
3. 3. 3. Potentiality and Possibility

Whitehead, as we have seen, does not discern any full self-sufficiency or independence in the processes of experience or in what is experienced. Things are realized or actualized because there is an appropriation of what’s given within its immediate environment as the determinate, causal conditions for that event to occur. If this can be effectively generalized, then potentiality is an inseparable aspect of actuality: everything actual becomes through its potential, and actualities – as actual entities – function as the potential for further actualities.

But this felt and determinately incorporated actuality is also the condition for conceptual analysis, as the objectification of the past presents to the conceptual feelings material that may be abstracted as not just ostensibly isolated objects but also as concepts that may function independently of their particular origin, and can present alternatives for realization far beyond their origin. The reincorporation of these elements in subsequent actual entities is what gives various nexūs their singular qualitative character. It is due to this latter functionality of given potential that Whitehead strikes a difference between “potentiality” and “possibility,” with discerned “possibility” indicating the hypothetical reality of another entity: the eternal object.

Potentiality is any element that is given in feeling, and incorporated into that feeling in such a way that it will help contribute to the realization and determination of that feeling. Whitehead calls potentiality “the correlative of ‘givenness’”: what is given might not have been given, and what wasn’t given might have been. But whatever is given, has some determinative relevance to what it is given to, even if minimal. (PR, 44)
This is to say that whatever is in our given past will have some affective relationship with us, but nothing in reality could legislate *that it had to be that* particular past *and not* another one. I could have been born anywhere else except California, but having been born in California this location will have *some* kind of bearing on my development, as it was there and not elsewhere that I went to school, made the friends that I made, and developed a rapport with the landscape as I did.

*Possibility* is closely related to potentiality in that possibility pertains to what is abstracted from those given elements that function as potentiality for feeling. When feeling narrows down the potentials to just certain elements that would be *relevant* to its actualization, then this abstractive process turns the vast multitude of given potentiality into possibilities, without which the given potentials would remain ineffectual for determinacy. (PR, 220) Else, there would be no difference in the relevant incorporability between one potential element over another one. It would be as if every number would be equally appropriate to solve the equation “\(x - 7 = 3\).”

### 3. 3. 3. 1. Eternal Objects

Each possibility is an abstraction that may function as an isolated quality or concept. This isolated quality is an “eternal object” and they are discerned by conceptual prehensions. In one area of California, there is an overgrown patch of bougainvillea with maroon flowers that I see at least once a week. I can discern many qualities about the plant, such as its size, its location, the color of its petals, its spiny
vines, and so on. These are all qualities that can be conceptually isolated from the plant and conceived apart from their inclusion in that particular plant.

These also describe alternatives to what the plant could have been. Like myself, it did not have to emerge in California, it could have been a different species, it could have had different colored flowers, and so on. But these were the possibilities that were made relevant to its development and actualized as the characteristics of that plant.

Physical feelings are concerned only with the givenness of actual fact. These physical feelings are the feeling of another actual entity. But when this givenness is directly entertained as an objectification within conceptual feelings, (PR, 32, 257) this object will function in the “valuing” of an “abstract possibility”; “valuing” being the feeling of alternatives of varying relevance or preferability for the realization of that actual event from within that objectified content passed along from the physical prehensions of causal efficacy. (PR, 276) The abstracted conceptual content becomes the “food for a possibility” (PR, 276); the given potentials for what “may be definite” within an actuality, such as when we consider which possibility for analysis should be used when mapping the movements involved when Tim Lincecum throws a baseball: is the entire process best analyzed into just five movements or into five thousand movements? Both possibilities are discerned within the felt content of the objectified, given world. (PR, 32)

Because both eternal objects and actual entities are given in the objective conditions and determinations of a becoming actual entity, both may be regarded as potentia (PR, 65), but it is the eternal objects – felt within the actual entities of the past – that offer the alternatives for becoming within that present, becoming actuality.
This is because eternal objects constitute the determined, qualitative content of those past actual entities, as well as the unrealized content for determination that is in infinite excess to any given actuality. Thus, eternal objects both condition potentiality but also condition possibility. A past actual entity may be also considered a condition for possibility, but this is because it is the conduit through which realized and excessive eternal objects become available for a present event of concrescence.

Still, these possibilities do not cause the actual entity to be what it is. The way those eternal objects come to constitute the particular qualitative unity of the concresced actual entity is due to the active, productive synthesis of that concrescing actual entity. It is due to the processes of contrast that constitute the various stages of realization within the process of that event's actualization. These entities (as opposed to actual entities, of which eternal objects cannot be ontologically divorced from) are not themselves active but are what may abstractedly characterize the activities of real actual processes of evental unification.

### 3. 3. 3. 1. 1. Discerning Eternal Objects

An eternal object’s function as a “possibility for actuality” can be prehended without reference to any particular thing. (SMW, 159; PR, 44) Due to this, we may discern an empirical aspect to these very abstract, metaphysical entities, in as much as that they answer to this question: Do we, in Granville Henry’s words, have “feelings of possibilities in which there is no reference in the feelings to my actualization?”

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48 Granville C. Henry, *Forms of Concrescence*, 88
To use Henry’s example: We may comprehend the ideal object of “redness” as something that future things could potentially have as a characterizing quality, and we may understand this without any reference in this feeling of “redness” to anything with that quality in the past. That something could have been red in the past is not enough for something to have the status of being eternal. Rather, it is their potential for being a quality that can characterize a future actual event that grants them this status: as an entity that is independent of temporal ingression.49

What is more, if we take a red thing, such as a snooker ball, and consider all the untrue propositions that can, in Henry’s words, “be predicated significantly of it,” such as “This ball is black” or “this object is a pyramid,” then we find what Whitehead called a “realm of alternative suggestions, whose foothold in actuality transcends” every actual event. (SMW, 158) The snooker ball is not black and it is a non-pyramidal object, but all those negative alternatives are still potentially relatable to it, and to all other objects past, present, and future in the same way. Every alternative is a possibility that could function as a potentially relevant ingredient in actualization.

It has been argued by some that the connexity of the “realm” of eternal objects that conditions relationality. But I shall argue that these eternal elements of becoming, and their relational togetherness as an entire condition of potentiality and possibility, are – functionally speaking – entirely the result of actual processes, specifically on prehensions and the contrasts that operate within those prehensions.

49 Granville C. Henry, *Forms of Concrescence*, 88
50 Granville C. Henry, *Forms of Concrescence*, 90
4. Conclusion

I have tried to show that Whitehead presents an interpretation of perception that suggests not only that there is a real connective and relational aspect that are involved in every mode or perception, but that each of these perceptive modes are constructive, synthesizing processes involving contrasts. It is the way that the content and activity of these perceptions are synthesized that determines the connectivity and particular modes of relationality that can be experienced through each perception.

I have also tried to show that the way these perceptive modes function provides the means by which we may generalize conceptions and descriptions about experience and the world that is experienced. This, too, is due to the way that contrasts operate in the unifying of the content of the world in perception and of the unification of the many modes of perception into experiences complex enough to produce conceptualizations.

From the way that perception and generalization function together, I have tried to indicate Whitehead’s methodology in conceiving some of the basic notions of his system, including prehensions, actual entities, nexus, and the eternal objects.

In the next chapter, I shall argue for how these and other conceptions function as components within Whitehead’s method of metaphysical explanation.
1. Introduction

In this chapter, I shall discuss metaphysical explanation, the third feature of Whitehead’s method, and how this feature is related to the theory of contrasts. A metaphysical explanation is an attempt to give an account of how and why reality is the way it is, and not the way it isn’t. Metaphysical explanation seeks to offer a descriptive generalization of the basic features of reality, as well as the various reasons for, the various ways by which, these features jointly contribute to each moment of actuality. It also describes the way each feature contributes within this joint assemblage.

We may discern within a moment of actuality both extensive-relational aspects as well as causal-genetic aspects, in that the same moment becomes what it is through a subjective activity that derives some degree of valuative significance from those past moments it connects with and how it connects them.

While these extrapolated causal-genetic and extensive-relational aspects cannot be confused with each other in terms of how they contribute to realization of an event, these aspects nevertheless seem to require each other in order to effectively contribute to the realization of that event (as activity requires connectivity, but connectivity requires an activity for a connection to be made). This is how a metaphysical explanation may
describe a coordinative condition for reality, as various aspects jointly function as the elements required for the realization of a particular, actual event.

2. Metaphysical Explanation

Whitehead’s hypothesis of reality as serially related events of experience is meant to provide a way of explaining experience and reality in a manner that is more coherent and comprehensive than its rivals, like classical empiricism and logical atomism. The task of fulfilling this comprehensiveness is given to actual events.

This is the role of the actual entity, whose activity is meant to account for the becoming of various levels of order in the universe; for the production and persistence of qualitative and quantitatively determinable patterns that may be transmitted through societies of actual entities (nexus, nexūs); for how we interpret those societies by the process of symbolic reference. (PR, 81, 178 - 183)

If an explanation describes the reasons for something’s nature or existence, then Whitehead provides a very strict rule for where these reasons may be sought: it is only within the becoming and persistent actuality of actual entities that there are any reasons for anything! (PR, 24, 40) Even when Whitehead describes the immanent ontological principles for the becoming and relational integrality of his system (including contrasts), these descriptions cannot explain anything unless they pertain to the activity of an actual entity. The actual entity’s function within Whitehead’s metaphysical explanation is to describe the joint-operations of the systematic framework and account for the types of entities proposed here as the elements of any process of actualization.
2. 1. Explaining Without Explaining Away

Whitehead’s notion of the actual is not meant to reduce or equate the actual with its conception. It is a heuristic, pragmatic notion meant to facilitate the coordination of our many ways of experiencing and describing reality, as well as to provide a genetic-causal account for how such coordination may occur in experience, but without, as I said, precluding anything that is in fact within the actual world that may contribute to the confirmation or the falsification of Whitehead’s notion. This would make Whitehead’s own method of explanation distinct from rivals who often, in Whitehead’s words, indulge “in brilliant feats of explaining away.” (PR, 17)

Explanation as “explaining away” is the tendency to ignore, reductively describe, or preclude aspects of experience in order to maintain descriptive consistency with a certain metaphysical bias. (PR, 145) The “sensationalist doctrine” would be an example: the assumption that the basic elements in experience are discrete, perspicuous qualia “explains away” felt connections with things as just psychological by-products of the repetitious conjoining of such qualia within our perceptions of them.

A reductive-materialist interpretation of reality which abrogates subjective elements in toto, or relegates them to anthropogenic projections on reality, in accordance with its descriptive assumptions about reality, would be (from our point of view) another example of the tendency to “explain away” elements that seem intimately connected with how any we are generally engaged with things.

This particular trend of explaining away accepts a mathematicised description of things and events as either exhaustive of the nature of things and events or has the
potential of being so after further refinement of descriptive language and enough data having been accumulated.\textsuperscript{51} The question is whether what is observable or predicable via scientific description describes \textit{the whole of} a thing or event or \textit{just some aspect} of it, such as its morphological character. Also, this practice of reductively explaining subjective qualities results in accounts of mentality that can only be of a correlative and not a causal-genetic nature, due to the fact that these are presumed to be distinct methods of description: subjective qualities being “internal” elements of mentality.

These subjective qualities are thus unamenable to scientific observation except, perhaps, in terms of the scientifically describable events that happen concurrently with them, such as in the case of a correlation drawn between someone feeling pain as a subjective process, and a MRI scan of that same event showing the activity of certain areas of the brain. Whitehead’s conception of an actual entity describes the realization of both qualitatively intensive subjective elements as well as extensive determinations amenable to scientific discernment. In this way, Whitehead refuses to draw a final, sundering distinction between materiality and subjectivity.

Another problem with these reductive tendencies is that greater coherence is not, at last, gained by its treatment of these elements. There is the major problem of dividing up the world between descriptions that may be legitimately used by philosophy and science and those descriptions that only apply to our very intimate rapport with our feelings and the world they feel. This sunder the world between the apathic and the pathic qualities, and Whitehead’s concepts protest this “bifurcation of nature.” (PR, 289)

\textsuperscript{51} Paul Churchland, “Eliminative Materialism and the Propositional Attitude,” 67 – 90
An explanation of relations requires that we consider the conditions for relations, but the assumed condition of discreteness in the sensationalist doctrine renders even the conjoining of terms as incoherent. The notion of contrast in Whitehead seems to remedy this problem, but more must be taken into account if we are to say that Whitehead actually does offer a better, comprehensive solution to his rivals.

2. 2. Criterial Desiderata for Explanation

The basis for such a broad metaphysical explanation is due to the actual entity: the event of creative, experiential actualization that incorporates and synthetically unifies the various descriptive aspects of reality – including those amenable to both scientific and “everyday” pathic description – into a singular event of reality.

If we were to ask the question of how those aspects of reality got there in the first place, the Whiteheadian answer would be that there is nothing behind actual process: Everything that the actual entity synthesizes is derived from another actual entity, and this includes those aspects for realization that are immanent to every actual entity.

By grounding everything within the actual entity we are basically saying that actual activity, rather than something transcendent of actual activity as its eternal conditions, are from what we derive our notions of reality. Also, it is important to remember that the concept of the “actual entity” is, as we saw in the previous chapter, not a literal representation of reality. Rather, it is a coordinative and heuristic model for reality based on what we encounter within the activity of experience.
These are metaphoric notions whose appositeness as elements within a systematic, metaphysical explanation may be discerned by the way we can use them to bring our various theories, descriptions, insights, and feelings into mutually productive relationships, such as whether they can offer a coordination our various ways interpreting, engaging, and describing the world with an immanent and causal-genetic account of how such a world, and our various ways of engaging it, may come to be.\textsuperscript{52} They are pragmatic notions, whose success within a metaphysical explanation is due to how they are able to productively function within a theory that seeks to bring some cohesion to our insights about experience.

We are dealing with components within an experiment concerning a synthesis (a contrast) of our insights, our articulated concepts, and the world as it is given in experience. As our Whiteheadian hypothesis for this experiment is that active processes of unification account for both how we physically and conceptually engage with the world, then each element of Whitehead’s systematic metaphysics must be brought into some conceptual and empirical cohesion. Whitehead was aware of this himself and offered several criterial desiderata to test his system: Logical Coherence, Consistency, Applicability, Adequacy, and Necessity. (PR, 3)

\subsection{2.2.1. Logical Coherence and Consistency}

An explanation demonstrates \textit{coherence} if its concepts are interconnected in such a way that if any aspect is taken in abstraction from how they are incorporated

\footnote{\textsuperscript{52} See Murray Code, \textit{Process, Reality, and the Power of Symbols}, 51}
within the rest of the system, then that aspect and the rest of the system would fail to work. (PR, 3) For instance, contrasts are a condition for relations, contrasts must function in a relational way with other elements like prehensions in order to operate.

But the ideas within an explanation are not definable through each other. (PR, 3) The concepts are not reciprocally deducible or definable through another concept’s implicit content. Each has a function singular to itself. We may understand why if we recall that if contrasts are the condition for any relationality, including conceptual relationality, then the terms that are relationally integrated with other terms are initially disjunctively diverse of each other.

The elements for conceptualization are not already included in a relational determination but are brought into one by their inclusion in a contrast. The dependent relation they then have with each other is a result not of pre-given conceptual implication, but of the way each element found its best supplementation through the other elements. This is analogous to the condition for explanatory synthesis in a heterotypal explanation: The elements to be synthesized determine how a synthesis may be achieved through their own determinative nature.

But this does not mean that these terms could still function successfully as isolated singularities. While every term is a potentiality for making a determinate difference (including as conceptual material) as a singular or complex entity, this can only be realized through inclusion within the function of other terms in a synthetical event. Thus, every conceptual component has content unique to itself, but its uniqueness can only be realized through relational integration. It is only through the activity of integrative, actual events that there is any actual integration.
In our hearing of musical sound, qualitative aspects such as the particular pitch and timbre of a musical note are included in our experience. These sounds are physical vibrations of a certain frequency that the general aspects of our physical world require for the auditory experience of musical sound to occur.

But while the audition of music is the connection of vibrations with those qualities, the pitch is not reducible to just those vibrations, as this may be abstracted from that particular experience and entertained as memories of music or in the imagination’s creation of an original musical composition. Still, those particular qualities had to be integrated within some kind of event for them to have any kind of determinative or meaningful power, such as within physical auditions, memories, or imaginary creations.

*Logical consistency* is the other requirement for our hypothesis. This is the rule that none of the concepts of a hypothesis contradict each other, so there would no internal inconsistencies included in the speculative, conceptual scheme. This may be understood as a consequence of the principle of coherence. We seek a system in which we do not make contradictory claims about the function of our terms, or if I say that I cannot explain concreteness through abstractions, and then make a statement like “the reason why we experience sounds as music is due to the rules of harmony.” This would be an inconsistency in that it expects abstract concepts to explain the concrete.

It is to be remembered that the Whiteheadian project is not to explain the concrete but to discover the conditions by which we come to think abstractly about the concrete. Even the above example about music is not an explanation of concreteness but an attempt at a hypothesis as to how concreteness may be interpreted in terms of
processes of syntheses that allows us to think in terms of “pitch,” “timbre,” “vibration,” and how these come to be related terms.

In the case of consistency, we are suggesting that the way our terms and concepts are related are to be taken into account so that we are careful as not to confuse one type or process with another process, or make a claim about the difference between the concrete and abstract that is not carried over into other claims.

And, finally, Whitehead insisted that “the exemplification of general logical notions,” such as non-contradiction, should not be assumed but must find some explanation for its meaning and usage within the system. (PR, 3) So logic’s consistency must be founded within an actual activity.

2. 2. 2. Applicability and Adequacy

These criterial conditions of applicability and adequacy describe the interpretation of the conceptual scheme within the context of the actual world. These are the empirical desiderata of Whitehead’s project, in that its object is the “actual world,” that includes all that is there in our immediate experience – all the observable facts of the physical world, as well as the facts concerning and all that we feel, perceive, and can imaginatively conceive. (PR, 4)

Applicability is the criterion that our hypothesis must be interpretable from at least some of the facts of experience, whereas the criterion of adequacy requires that all experiential data is so interpretable in terms of the hypothesis.
We may understand these criteria as consequences of the criterion of coherence: All the concepts involved in the metaphysical scheme are involved in the structure of experience; the hypothesis must be \textit{applicable} to what we find in experience, including aspects of experience, without recourse to anything outside of this system of notions and concepts. Only when we find it will always apply could the hypothesis be \textit{adequate}.

But if reality is irreducible to its objectification and conceptualization, then we can never be sure that we have ever fulfilled this criterial condition. Reality can always present us with something that has not been already accounted for, or amenable to what has been already thought. However, adequacy can still function as a pragmatic ideal for every hypothesis. If the hypothesis can be applicable to the content of more than just one experience, then, as in the sciences, it is viable for repeated testing.

The test of applicability for an empirically informed philosophy may include the search for any possible experiential exceptions to the rules as laid out by one’s framework of ideas, such as Hume’s “missing shade of blue.” Contrary to Hume, such exceptions are never “trivial”\textsuperscript{53}, for if there is no way to coherently explain such exceptions through the content of one’s assumed concepts, then the initial presumptions are \textit{inadequate}, however successfully applicable they may seem in other cases. If a case of inadequacy is encountered, then the initial notions should be revised.

Again, Whitehead does not claim that everything will always be ultimately amenable to his conceptual framework. But notice, however, that the criterial conditions of applicability and adequacy themselves seem to require that there be some real unity or affective connectivity between actual events.

\textsuperscript{53} David Hume, \textit{An Enquiry Concerning Human Understanding}, 12 – 13.
The actual is the becoming and concreteness of experience as well as the determinative past experiences included within an experience, whereas whatever is real is something that can either be derived from an experience, is a part of an experience, or descriptively characterize an experience or one of its parts or derivations. These derivations and parts would include those *abstracta* Whitehead calls eternal objects.

Relations are within this category as real but derivative entities that become *as part of* what determinatively characterize an actual event. Whitehead’s reflections on the natural sciences convinced him that a unified nature must be a pre-requisite for scientific hypotheses and experimentation, and only through some unifying aspect of the universe could there be any justification of our scientific inferences. (SMW, 6)

This pre-requisite of order is hypothesized as being identical to the conditions involved in the formation of experiential events. We can draw probabilistic conclusions about the world because, as Peirce put it, “*experiences whose conditions are the same will have the same general characters,*” so the way we may perform predictions, judgments, and other inferences is due to the way the world provides the conditions for these operations within mentality, and this is due to the way subjective processes directly appropriate the content and conditions of previous processes and conditions.

Still, this assumes that a *necessary* connectivity holds between the conditions for these events and the events themselves so that the same conditions would return with each event, ensuring successive events and their influence. Is this warranted?

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54 Charles Sanders Peirce, *The Essential Peirce, Vol. 1*, 169
2. 2. 3. Necessity

The criterion of *necessity* requires us to examine whether Whitehead’s project succeeds at “bearing itself its own warrant,” or being demonstratively, universally legitimated through every discernable aspect from every kind of experience. (PR, 4)

This is would be the “self-explanatory” aspect of nature, but this does not mean that reality is to be deduced from its given conditions, as this method is just the linear mode of explanation that is being rejected. Rather, this is an eminently pragmatic sense of necessity: that, given the descriptive content of our hypothesis, if the conceptual coherence of our hypothesis turns on the elucidation of what sorts of conditions such an interpreted reality requires, and if any of this content proves coherent and applicable to our interpretation of the content of experience, then we might conjecture that this is so because, in order to become actual, actuality does so by realizing those *described* features and conditions that such a process may require.

In this way, the “necessity” that reality “warrants” is the internal coherence of *our concepts*, but only if what is given in immediate fact does not present data that is inapplicable to our theory. So if we say – as our Whiteheadian theory does – that the becoming of present events *necessarily requires* past events as potential for its actualization, and if we extend this further to say that every actualization must, *of necessity*, include potential for realization, and if we say that for these “necessary conditions” to be coherent then *there must be real connectivity* that occurs between actual events and between the process of actualization and its potentiality for
actualization – this is only because we have so far have found our hypothesis to be a pragmatic success at interpreting the given data of experience.

Notice that because of this inductive aspect, we must once again state there could never be any final justification for this hypothesis. So, this is not saying that as long as our theory fits a situation, then our theory must be necessary, for this would assume both some finality to the situation as an exemplification of actuality and to the way any actual situation may be reduced to some conceptual level to be theorized about. There could be no imperative – no must – for the acceptance of this as necessary on Whiteheadian grounds because no finality could ever be guaranteed based on how we are characterizing actuality as concrete events that are given pre-objectively in experience. That our interpretation of experience has discerned any regular or regulative features is entirely dependent on what is there to be experienced.

Still, if we have discerned anything in experience that may account for how we can theorize about it, then those discerned features may be regarded as necessary in the sense that it elucidates the way that experience provides its own conditions for both a theorization of itself and for its relative success or failure as theories. Experience provides those conditions that are required in order for its own investigation, or what appears to be assumed, or is exemplified, in every investigation of actuality.

So, if we recall the integral connectivity between the symbol and meaning, and between the past and the ongoing becoming of things, as not just assumed, but as required in order to give content and shape to any of our conceptions and utterances, then it is this connectivity that provides us with the criterial conditions outlined above, as the origination of experience in the mode of causal efficacy – along with the inclusion of
this mode in each iteration of reality as a social process – provides the empirical condition for testability and revision as we seek to refine our symbolic usage, or to better communicate what is there in the originary modes of perception.

While necessity is to be regarded more as an *ideal*, rather than as a condition that we may ever become entirely secure about, the supposition that reality is a process of realization which adheres to a certain, regulative pattern for the sake of actual realization, allows for us to say that those features *must include* determinative connectivity as universal conditions for every process of realization. We would thus have a connective and *ongoing* relationship with reality.

This is true for my interpretation of contrasts as well. In so far that universal conditions for the nature and becoming of events has been successfully described and applied by this theory (thus demonstrating a seeming contradictory *tentative*-necessity, but remember that our sense of necessity is pragmatic to whether we have discerned those features in experience that every investigation and generalization requires), this would be so because the notion of contrast is key *for the description* of the functionality of these universal conditions, including their amenability for both rational description and empirical application. This is because contrasts are the key for interpreting connectivity as well as relationality, as they are both the conditions and products of actualization.

We hear music through a unification, effectuated by a contrast, of a multitude of other contrasts, such as in the syntheses of both the physical and qualitative elements of vibrations, pitch, and timbre, along with the various parts of the body that feel, process, and interpret these events and their composite elements. It is by these processes of unification from a diversity of elements that an experience of music
becomes realized, and it is by the connectivity between these events and elements that contrasts provide that these may be analyzed and theorized upon as “an experience of music.” This, as we saw earlier, was the case in philosophical descriptive generalization from a diversity of given content to a system of concepts interpreting this content, so, in this way, contrasts are integral to the level of system and method.

So, if connectivity is a necessary feature of our theory of the actual as constructive process, and if connectivity is a requirement for the coherence of our concepts and their application to the actual world, then contrasts are a vital aspect to the necessity conditions we hope to describe, but only if nothing is experienced that is problematic to the coherence of this interpretation.

Granted, by saying that a unification is effectuated by a contrast, I may be running the risk of making contrast a too general term if “contrast” is equated with processes like synthesis, unification, determining connectivity, etc. However, my thesis is that contrasts describe a process that is a condition for all relationality, both as it is actually realized and as various abstractable types of connectivity or determinacy. For every kind of determination of relationality, whether by synthesis of feeling or by a unification of various syntheses into a singular pattern of unity – typified by some mode of relationality determined by that unification – must be explained by contrasts.

Also, the products of a contrast, such as various kinds of connectivity or unity, cannot be divorced from the process that produced them, even if they are also irreducible to the material they were developed from. In this sense, “contrast” is a very general term indeed, but I hope to show by my project that we may still see that it is general in a felicitous sort of way: as an element within metaphysical explanation that
has, despite its generality, a very definite sense of function within the system, and which is itself consistent with the rest of the system. As we shall see below, while contrasts are integral for creative advance, contrasts do not describe certain aspects of creativity, such as the provocation towards an intensive realization of value.

2.2.3.1. Two Necessary Principles

There are two principles that describe the necessary aspects of Whitehead’s system. If we encounter a concept or empirical element that cannot be accounted for by these principles, then these principles are a failure, or if Whitehead establishes concepts or other elements of his system that cannot be explained by these two principles, then his philosophy either partially or totally fails the criterial desiderata he has assumed. These are the “principle of relativity” and the “ontological principle.”

This is the principle of both efficient as well as final causation. (PR, 24) To quote Whitehead, the ontological principle states that the reasons behind “every condition to which the process of becoming conform in any particular instance” are to be found either within some actual entity that is included within the process of becoming, or it is within the “character of the subject which is the process of concrescence.” (PR, 24)

Every reason as to why reality is what or how it is – is discernable either within the conditioning environment for an actual becoming or within the subjective process which is within that process of actual becoming.

The ontological principle guarantees that everything that is needed for the perpetual becoming of reality is to be found within some actuality, either in the
actualized past or in a present, becoming actuality. As we saw, this would also include the principles of coherence and logical consistency. This also means that, to quote Whitehead, in so far as powers and *potentia* for determination are concerned, “there is nothing that floats into the world from nowhere.” (PR, 244) We should interpret “nowhere” to mean some ontological realm that is transcendent of actuality. For Whitehead, “somewhere” means to be within or due to some actual entity.

Everything in our experience and understanding of reality always comes back to some actual entity, and never to anything that is transcendently apart from or beyond actual entities. This, I shall argue, also includes pure potentiality: the eternal objects.

This principle renders the two modes of analysis (of reasons in reality) described by the ontological principle as dual manifestations of a rule that applies to actual things and their aspects extending to every entity of every type in Whitehead’s system. This rule is that every entity has, in Whitehead’s words, the “potentiality for being an element” in a process of actualization, so it “belongs to the nature of a ‘being’ that it is a potential for every becoming.” (PR, 22)

As potential for every becoming, every entity capable of inclusion within actuality will condition relations with becoming actual entities. As every becoming actual entity requires potentia for their actualization, and as actualized actual entities are realizations of a determinate form of relationality with its potentia, and as these realized actualities are themselves a form of “real potential” for future becomings of reality, then an integral relationality persists from within the realm of potentiality to that of actuality.

In musical audition, the vibrations of sound are a realization of conditions for the transference of potential energy into kinetic energy, and these oscillations become the
potential for the human body to receive them, process these physical events as pleasant or unpleasant noises, and finally to enjoy them as music. These bodily and subjective processes are in turn potential for possible future events such as memories of music. In each case, the given potential is what provides the means for the becoming of the next event, and establishes a connectivity between the event and its potential.

From this relational requirement and condition, we may see that in Whitehead’s system no entity may be considered in strict isolation from other entities. However, the ontological principle makes plain that the integral relationality of all the entities within the system can only be found within events of relating, which would also mean “within contrasts,” as contrasts facilitate the means for an act of relating through the way they synthesize the given content within feeling into a particular sort of unified pattern that both determines and exemplifies a type of relational determination in actuality.

Within audition, the way that contrasts synthesize physical events into a unity of sounds within a certain order of relatedness allows us to experience these events as a complex moment of musical noise, with certain tones having a certain kind of ordered unity with the other tones.

3. Applying the Hypotheses

For Whitehead, the central insight of reality as process is coupled with the pragmatic schema for greater conceptual coherence, but this insight contains the caveat that coherence is not pre-given to any type of experience because experience and only
experience is what brings unification and order. Experience brings a relationship with our meaning and symbols, as well as a connection between past and present event.

This is in accordance with the ontological principle, but this also means that there are distinct types of explanation that may come from the application of our Whiteheadian thesis regarding reality and experience. The notion of reality as a synthetical process is brought into its organized form through contrasts; through the creation of organization from a disjunctive diversity that has only the potential for organization and is not already organized within a completely organized system.

Any event of actuality, and anything that functions as a condition for actuality – whether it be another actual entity or eternal objects – are due to the synthetical processes by contrasts. For at every stage – whether in bringing into synthesis material within a perception or, by this perception, bringing together the various conditions for systematic unity, we are dealing with an active process of unification from material that obtain functionality through their inclusion within unification but are never ultimately reducible to this unification (and so remain formally diverse).

In the unity of a number of musical notes as a melody, the notes are not simply partial exemplifications of the melody, nor is the melody deducible from the notes. Rather, the melody is the creative synthesis of these notes, following tonal suggestions from how the notes factor within certain scales.

This still does not reduce the pitches that each note indicates to the scales, as the scales themselves are the creative products of implementing a pattern of ratios between pitches. Different ratios implement between pitches would produce different scales and different potentials for tonal suggestions in the construction of melody. The
pitches themselves remain independent of these constructions, which nevertheless are produced from synthesizing aspects from the formal nature of those pitches. This shall be the case, too, with eternal objects: they too shall have a formal nature that is not exhausted by how they are arranged as orders of possibility.

3. 1. Levels of Explanation

We may understand the importance of this fundamental plurality if we remember that we are asking whether Whitehead's notions can, using Rescher's terms, “best fit” coordinately with other theories and explanations. These can be theories and explanations as they pertain to science or philosophy. This is not a subordination to a more basic notion or axiom, but a coordination with other theories and explanations; not an inference from one thesis to another, but of the way there is a “mutual attunement” between the way they are explanatorily enmeshed.

3. 1. 1. Cosystemizability

Explanation A is more “cosystemizable” with B and C than alternative explanations A', A'', ... Explanation A, in this model, is not conceptually deduced from B or C, but through a retroductive inference, can be shown to function better when its descriptive features are operating along with the elements of the other models.
For physicalists, such as Alex Rosenberg or Sir Roger Penrose, all biological and mental phenomena are subsumptively reducible to the laws of physics. But John Dupré and others (such as Nancy Cartwright) are critical of this reductionism and advances a pluralistic approach in its stead. Dupré contends that a physicalist description of a genome is not obviously reducible to an embodied program because the two-way interaction a genome demonstrates between itself and its molecular environment cannot be accounted for when reduced to a program.

But biological descriptions are useful precisely in the way they provide workable descriptions that can be enmeshed with other scientific descriptions, such as those from physics, as biological phenomena still operate in a world describable in terms of movement and flows of energy. What is more, biology doesn't need of alchemy or magic to be consistent (i.e., biology does not require explanations $A', A'', \ldots$).

But while mutually attuned explanations may function without the need for total reducibility, this does not mean that axioms or principles are unnecessary. The way that these axioms, principles, and categories may coordinatively operate together in our engendering of theories, observations, and so on, provides a tentative legitimation of these axioms (and not others) and of their systemic integrity.

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55 Alex Rosenberg, *Darwinian Reductionism*, 4; Sir Roger Penrose, *Shadows of the Mind*, 373

56 John Dupré, *Darwin's Legacy*, 120 – 121; See also Nancy Cartwright, *How the Laws of Physics Lie*, 45

57 Nicholas Rescher, *Metaphysics*, 287 – 288
3. 1. 2. The Causal-Genetic

But as this describes conditions but not how these conditions create something, it is not a causal-genetic explanation. The causal-genetic concerns the sufficient reason for something actualizing. In the Whiteheadian system, this shall be the activity of the actual entity as it self-determinatively realizes itself a unified event of actuality. This is distinct from cosystemizability in the sense that the latter is concerned with the elements of a system when considered as separate conditions and thus constitute a “coordinate-systematic” explanation,\(^{58}\) whereas the causal-genetic is concerned with the describing coming-to-be of something actual. But we shall see that the coordinate type of explanation requires and is required by causal-genetic explanations.

3. 1. 3. The Homeotypal and the Heterotypal

Murray Code also provided very useful terms for our further investigation of the dynamic, productive relationships of Rescher’s two types of explanation. These terms describe the internal dynamics of the coordinate-systematic and the causal-genetic forms of explanation. These are “homeotypal” and “heterotypal” explanations.\(^{59}\)

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\(^{58}\) Nicholas Rescher, *Metaphysics*, 287

\(^{59}\) Murray Code, *Order and Organism*, 100 – 107
3. 1. 3. 1. Homeotypal Explanation

A homeotypal explanation is carried out at distinct levels of order and describes the particular way that all entities at this level are connected and share the same type of organization or organizational principle.⁶⁰

Scientific classification within a limited domain is such an example, as these are concerned with certain types of orders and entities describable in terms of similar or identical qualities or through similar systems of measurement. The classification of entities within mineralogy is concerned with identifying what can be regarded as chemically describable or analyzable entities that fall within a range of exemplifications of density, mechanical cohesion, visual, magnetic and electrical properties, radioactivity and solubility within hydrogen chloride.

In our case, the homeotypal concerns the types of entities and order that obtain within a particular process of actualization, such as prehensions. As the classification techniques of mineralogy limit the range of what sort of entities and processes can be described and explained by that science, the Whiteheadian philosophy limits the explanation of actuality to processes of feeling. While not necessarily a detriment, this limitation must be acknowledged.

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⁶⁰ Murray Code, *Order and Organism*, 104
3. 1. 3. 2. Heterotypal Explanation

A heterotypal explanation is carried out at any level of order, in the way that all entities at every level of complexity and organization are connected and contribute to the formation of a type of unification or principle of organization. It is an explanation that requires the synthetic unification of the various other explanations or various levels of complexity and organization.

In the above example of mineralogy, notice that identification of a consistent type or order of entity was done through a method derived from the combination of the principles of many branches of science, such as chemistry and physics, as well as various ways of observation and experiment. If the homeotypal aspect of our position is reductive in the sense that it seeks to describe and explain things strictly in terms of processes of feeling, the heterotypal aspect of our philosophy concerns the multitude of insights, conceptual generalizations, and other elements that might provide justification for our homeotypal reduction through their cosystemizability with it.

Although a heterotypal explanation is intra-typal, the various types of explanation and order are not reducible to each other. Rather, it is the way that these various types may, by their own natures, synthesize into a singular order of explanation that provides its intra-typal explanatory capabilities. So, these orders provide their own criterion for coordinate integration. The homeotypal is concerned with the same identifying characteristic that subsumtively designates elements within a certain type of order as types of that one order.
Thus, the heterotypal describes a principle of difference that is immanent to the process of assemblage, in that it provides a condition for order as an assemblage or synthesis. But this indicates another immanent condition: an active determinability that each element realizes in the way that it brings about such assemblages.

A heterotypal explanation, says Code, is possible through discerning the right analogies or metaphors through which the various type of entities and levels of order may synthesize,\textsuperscript{61} and we shall see whether we have the right heuristic, pragmatic notions for such an explanation through the immanent conditions for processual metaphysics, that would indicate the complex dynamic between the coordinate-systematic, the causal-genetic, the homeotypal, and the heterotypal in the actualization of a moment of reality. I shall argue that the way they relationally function with each other and with the entities of the system correlates to his notion of contrasts, which, as I have noted, is in part a description of the process of heterogeneous assemblage.

4. The Immanent Conditions for Whitehead’s Metaphysics

There are three elements to Whitehead’s system which I argue describe those features that seem to be the most general and necessary for Whitehead’s hypothesis of reality as a series of interconnecting, experiential events, and so underlay those other necessary aspects of his system, the ontological principle and the principle of relativity. These are the fundamentally immanent conditions for the becoming of an actual entity and are thus integral to the cohesiveness of Whitehead’s metaphysical explanation.

\textsuperscript{61} Murray Code, \textit{Order and Organism}, 106
These postulates are that if reality is a series of actual, connecting events, then

(1) *creativity* is the fundamental condition for the actualization of reality,

(2) that reality is actualized as realized *patterns* of potential determination, and

(3) that the realization of these patterns is goal orientated, and this goal is the
realization of a certain degree of intensive, qualitative, or aesthetical aspects, in which
lures to certain values occur.

Granted, the reality that we are generally, consciously acquainted with seems to
show as much of a paucity of real creativity and value as it does real experience or
feeling. But these terms such “value” are not used unadvisedly, and their interrelation
will bring us back to an examination of contrasts.

4. 1. Creativity

“Creativity” is Whitehead’s “Category of the Ultimate.” (PR, 20 – 22) All other
elements of his system, as well as all becomings, syntheses, and other determinations
are all realizations of creativity. All types of activity, such as relating, feeling, perceiving,
imagining, forms of rational deliberation, are functional realizations of creativity.

For many, this would be a very problematic position to take, as when we look
around at the universe of things we seem to be confronted with a brutal non-creativity,
as tables, chairs, and stones dumbly persist as long as they can before they are dumbly
worn down by yet more brutally non-creative things, until the whole world is ground
down into a stupendously dumb, non-creative absence of everything.
This grinding down can still be explained in terms of processes, but the idea is that all things are creative. So, a pocket of “empty” space is placed on a continuum with Leonardo da Vinci, is a much harder notion to swallow. Also, Whitehead’s notion of creativity involves the idea that all actualizations have a fundamentally aesthetical dimension to their process of becoming. Why would anyone want to accept this as an immanent condition for reality?

To answer that we must delve into what creativity means for Whitehead’s system. To quote Keith Robinson, creativity functions in Whitehead’s system as “the ultimate genetic factor” that is presupposed by all other aspects of actual process. Its function is to describe the active process of synthetic becoming immanent to all actuality, and, while necessary, it is not itself something that is actual. Creativity may then be described in Deleuzian terms as “real without being actual, ideal without being abstract,” and, as such, is thus not an entity, nor can it be reduced to the becoming or ontological persistence of an entity.

While the term “creativity” is used here with heuristic intent, rather than a substantive one, to indicate a universal genetic condition, its function is still analogous to Spinoza’s genetically ultimate notion of substantial activity, including this activity’s individualization through its infinite modes, in the sense that it is meant as an indication for the ultimate, immanent conditions for any actuality and activity whatsoever. (PR, 7)

Furthermore, the general notion of creativity is functionally empty apart from singular processes of creativity. Due to this mutual requirement of immanent creativity

62 Keith Robinson, “The Event and the Occasion: Deleuze, Whitehead, and Creativity,” 220

63 Gilles Deleuze, *Difference and Repetition*, 208
with its particular creatures, Whitehead’s “ultimate” avoids the “arbitrary” pluralization of the condition of the one ultimate, transcendental function into various modes of activity. (PR, 7). In this case, the modes are the actual entities (PR, 7), and as the functions of these “modes” are synthesis, unification, and connectivity with other actual entities, the function of individualization provided by creativity is also the principle that immanently conditions for both the intrinsic as well as extrinsic factors for movement and connection amongst actual entities. This point was also made by Robinson: Creativity “serves as the virtual or ‘transcendental’ principle behind the becoming and internal genesis as well as the principle of movement or extrinsic conditioning between actualities.”

As “transcendental,” creativity is immanent to reality, not transcendent of reality. This ultimate genetic condition is not an external creative agency, with ulterior purposes peculiar to it. In accordance with the principle of relativity, no aspect of reality as described in Whitehead’s system is transcendent quite in this sense. “Transcendence” for Whitehead simply describes relative moments or positions within the process of actualization. Actual entities are creative, singular feelings advancing into a novel unity. In so doing they transcend each actual entity that preceded them. (PR, 222) This is why there is a mutual requirement between creativity and its creatures: As these actual entities are the individualization of creativity, creativity is not – nor could it be – independent of any actual process, but is both the condition for the commencement and the fulfillment of every actualization as well as what is fulfilled by every actualization.

Indeed, although creativity is a primary, immanent condition for all of reality, Whitehead does not grant metaphysical ultimacy to creativity. This is strictly reserved

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64 Keith Robinson, “The Event and the Occasion: Deleuze, Whitehead, and Creativity,” 213
for actual entities, which actualize creativity and are the complete matrixes through which the fundamental postulates, principles, and conditions operate as conditions and then become conditions for further actualizations.

We may understand from this that, ironically, creativity does not itself create! Rather, it describes the ultimate genetic condition and principle of unification while not being itself the actual act of unification. In this way, creativity is not quite a causal-genetic explanation, but, as we shall see, it functions through and between both causal-genetic and coordinative-systematic explanations.

Within this mediatory position, in which every other factor contributes to the establishment of itself as the immanent, genetic condition, creativity is the ultimate in so far as it is the most comprehensive heterotypal explanation. Experience as creative process becomes the organizational principle appropriate for all types of order of reality.

This function of being a mediatory position may be illustrated by the fact that creativity’s relationship with its creatures does not make the actual entities transcendent of their conditions. Just as creativity has no meaning without its creatures, there is no meaning to the genetic becoming of actual entities without creativity. (PR, 344)

But before we delve into that, we must first examine creativity as the condition for the “advance” of reality, or, to put it another way, of temporality or temporal passage. As Whitehead put it, creativity is the formative condition “whereby the actual world has its character of temporal passage to novelty.” (RM, 90) Creativity as temporal passage includes, according to Whitehead, the elements of the “one” and “the many.” (PR, 21)

These elements are the component parts of a process of synthesis. “The many” is both the objective content (past actual entities) and the various prehensions that both
determinatively constitute and are constituted by each process of synthesis as they progressively synthesize into a unity, or a "one." This "one" is the creation of each process of actualization, and it is what the principle of creativity realizes in each event.

From the synthesis of the many feelings of the given environment, such as the many perceptions of the objects on a table, we obtain a unification of feeling as that one event of experience that operates within actuality as the unity of many entities as one temporal moment. But although, in Whitehead's famous phrase, the "many become one, and are increased by one," (PR, 21) the created "one" is here just one unity amongst many unities: it is a new moment of plurality, not of an ultimate, final, comprehensively total unity. This new moment of plurality is a new instance of "the many," and is just as much a creative accomplishment – is as much of a realization of immanent creativity – by the actual entity as the created "one."

Thus, temporal passage is the transition-moment – the singular event – from a disjunctive multiplicity to a conjunctive unity and is then itself part of a new condition of disjunctive multiplicity. As such, temporal passage is a movement of synthesis that produces an actualization of – and condition for – "novel togetherness." (PR, 21) But unification is not simply a mechanical process.

In accordance with the ontological principle, the process of unification is a function of an actual activity, and as the activity is a process with an aim, there is also an aim to this temporal passage: the synthetic production of a condition of "togetherness" from a condition of disjunctive "non-togetherness." This aim is given by a sense of pattern and value, and such aims can only function within an actual entity.
But, as I said in Chapter Two, the sufficient causation of an actual entity is itself as an end. So, an actual entity, whether conscious or not, has itself as its aim towards realization. But what does it mean to say that an actual entity’s aim is explainable in terms of both itself and an end as well as in terms of pattern and value?

4. 1. 1. Pattern and Contrasts

Generally, “pattern” may be defined as a determinable regularity amongst various elements. The regularity may be defined by the particular type of relational ordering that occurs repeatedly with, or through, those various elements. These relational types determine various degrees of order or complexity within those elements, and types and degrees of identity and diversity. All of these denote a kind of pattern, and we discern these patterns by the role they play within experience.

From an analysis of the sounds that we hear, we may discern a regularity of order of sounds whose very monotony of repetition invite us to conjecture that we are hearing a clock ticking. A realized actual entity, such as those we perceive as sounds, is a unification of various patterns of qualitative intensity and quantitative extensiveness.

From within these unifications, we discern patterns as:

(A) being those singular manners of order and complexity that can be included within a contrast as amongst its diverse elements for synthesis. These are usually both actual entities and eternal objects, but when the qualitative aspects of actual entities are isolated in objectification and conceptualization, what are isolated are eternal objects within a certain patterned, relational unity. In listening to music, the many physical
events that constitute the vibrations of sound are included within the body and are brought into a unity that makes their potential for abstracting musical elements such as tones, pitches, melodies, etc., perspicuous to thought;

(B) the unities produced by a contrast as a certain, particular type of order and complexity resulting from the process of synthesis (for the above example, this would include aspects such as melody, which is a particular sequence of qualities that were discerned from within the unification of the many bodily events of “hearing noise”).

This is relevant to the definition of contrast introduced in Chapter One: a contrast is both the “Modes of Synthesis” within a “constructive process of unification,” and the “particular unity” that is produced. (PR, 22) What is synthesized in each contrast are the materials that are transferred as the objective content of feelings within a prehension. But these “particular unities” of contrasts – the contrast as the contrast’s own product – are also described by Whitehead as “Patterned Entities.” (PR, 22) “Patterned entities” is another way of referring to “particular unities,” which are the products of contrasts.

Again, the products of a contrast cannot be divorced from the contrast, as contrasts are both the process of synthesis and what they have synthesized, as described in (B).

(B) describes the syntheses of the diverse, physical and conceptual materials of (A), that, as patterns of singular order and complexity, have become a new type of order and complexity from the abstractable elements from the physical and conceptual materials that form the content of (A)’s constitution.

(B) is the total, resultant of a transference within one prehension of the determinative content constituting its origin: (A).
From these resultant patterned entities given in our various forms of experience, we may perform abstractive analyses to discover the layers of patterns contained within, as when we recognize patterns when we combine entities together in the kitchen or a chemistry set. Every art and techne is founded on this discernment and appropriation of pattern, and it is from the gradually developed sense of patterns, discerned through presentational immediacy and symbolic reference, that we obtain a sense of pattern as what, in Whitehead’s words, “emphasizes the relevance of existence, namely, how things are connected.” (IS, 201) Creativity is, “the actualization of potentiality, and the process of actualization is an actual occasion [actual entity] of experiencing.” (AI, 179)

But the creative process, as we saw, requires that there is potentiality to realize in a limiting, definite way, as types of order and patterned entities. Creativity, as the most fundamental genetic condition, requires, as an integral element to this condition, an unlimited potentiality for determinability. Creativity requires a condition for determinability that shall always be in excess to anything that is actually determined. Eternal objects shall function in this capacity for perpetual creative advance.

What is more, creativity also requires the finite, active power for any kind of actual determination, as eternal objects cannot realize themselves. Both aspects must be connected within creativity, but the realization of this connection still requires an explanation for why and how this connection occurs. This we shall find in value.
4. 1. 2. Value and Feelings

It is through the notion of value that we begin to understand how a non-conscious process of actualization may still have a “goal.” This is, in part, through the “affective tone” that value brings to each and every prehension in a becoming actual entity. The “affective tone” is the response that is elicited in the aesthetical encounter with an object. This is an aesthetical encounter in that it is a process of feeling potentials in an immediate, bodily fashion, as when we are immediately struck by an arresting painting or captivating human face, and is unavoidably provocative for the encountering subject. Without provocation towards some determination, there is no subject. (AI, 176)

In the asymmetric relationship that constitutes a prehension, the object is the condition for the origination of the subject. As prehensions – or, to use its synonym, feelings – are both the constituent and constructing elements of an actual entity, then this aesthetical provocation from an object to a subject is the condition for originating the actual entity that it is an element of.

The object within this constructively aesthetical activity of feeling is called the “datum” of that feeling or prehension, and its content is the patterns and orders of qualitative intensity and quantitative extensiveness given from the actualized past and the realm of pure potentiality.

In musical audition, the datum would be the bodily feeling of vibrations. The qualitative intensity would be from those bodily feelings that were relevant to the auditory organs and nervous system that may be felt in terms of pleasantness or unpleasantness, interest or disinterest. The quantitative extensiveness would be the
way each feeling may be felt in terms of their connection to other feelings, and how this connectivity can determine such patterns as the order and speed of a melody (such as whether the music is moving at a tempo of adagio or allegro or allegretto… etc.).

The subject that is created from this provocation is the unifying condition of thatprehension and of the whole process of concrescence. This active, unifying response provoked by the datum is why the use of terms such as “feeling” was eminently appropriate to Whitehead as a description of the determinate processes of becoming; that feelings themselves are sufficiently capable of producing actual unities that are subjects; that feelings have the actual, sufficient power to develop and concresce, and to differentiate themselves as singular, novel, subjective unities.

What is more, the way that the subject and object are conditioned, distributed, and unified by the prehension presents a description of an integral connectiveness between the objective entity and the event of its experience. And this connective unity is, again, an achievement of feeling. From these new unities (produced by feeling and sensation) we derive new intensive and extensive aspects, as prehensions of objects produce new patterned entities, which are also novel unities.

These new unities were developed from the patterns transferred from previous actual entities as the datum within a prehension, and this shall be the fate of these newly patterned unities, too: they too shall serve as objective potential for subsequent actualities. Feelings, therefore, do not just create intra-evental unity but also inter-evental connection. This provocation by value towards activity does not mean that this provocation is always towards enjoyable feelings.
“Value” is here meant in a much wider sense than what is simply beneficial. Just as provocative for feeling are those things that are dull, ugly, terrible, painful, horrifying, and disheartening. Indeed, the term “value” in Whitehead is not necessarily meant in moral or psychological terms, but is always fundamentally ontological and is ubiquitous to all actuality as a condition for any actualization.

A value is a mode of existence, immanent to existence itself, and expresses a possible deployment of intensive, qualitative determination. A value, as experienced by every becoming actual entity, is valuated (again, not necessarily evaluated, as this is a process reserved for actual entities with intellectual feelings) by an actual entity as one of the many ways in which it may become, and gravitates (usually non-consciously) to one of these alternatives in order to surpass that phase in its urge for concrescence. Also, when it comes to non-sentient processes of activity, value is the eliciting of responses whose determinative character may be utterly alien to zoomorphical value.

4. 1. 2. 1: Value and Appetition

However, how or why such subjective unities are accomplished by feelings has not yet been made clear. Another dimension to the relationship between creativity and value called the “appetition” of an actual entity shall make this process somewhat less opaque. An actual entity is both the subject – the unity – and goal of its process of self-realization. The sufficient reason for an actual entity’s coming to be is simply itself.

If we were to ask why the events that make up the existence of a tree perform this function, we could look to environmental influences and causes and find reasons
whose origins are external to it. But the final reason must be located within each event for that tree themselves, as it is only by these events that the constructive processes for each moment produce each specific, actual instances of the tree. All objective conditions and determinations of reality are ultimately due to the self-realization of an actual entity, thereby making self-realization the “ultimate fact of facts.” (PR, 222)

The telic urge towards this realization is the meaning of an actual entity’s “appetition.” A concrescing actual entity may be characterized as an appetite for its own realization derived from its given objective potentia. Actualization is the gradual unification of determinable patterns of qualitatively intensive and quantitatively extensive content. In a microscopic fashion, this is also the creative advance from the many to the one! In each phase of actualization, there are many prehensions with many patterned contents as their datum. These many feelings of each phase are made compatible with each other due to that phase’s appetition, which is, in Whitehead’s words, “the subjective end evolved for that phase.” (PR, 244)

As I mentioned in Chapter Two, perceptive relevance eliminates aspects in the environment that are not incorporable within that perception, and these eliminations are effectuated for the sake of the one appetitive goal. Indeed, all of these appetitive goals or “ends” are aimed at one thing: the realization of those many feelings as a synthesized, unified, actual moment of reality singular to its own experiential content.

This does not mean that every actualization is committed to some universal, normative result. The end that each aspect of actualization shares is simply to carry through the process of actualization, but the actual product of this actualization will
always be singular to the event itself. This is why there is both monotonous regularity to
nature as well as incredible variety, including the freakish and inexplicable.

It is through this shared goal towards actualization that each feeling becomes
progressively compatible with each other, and this compatibility, if of sufficient
complexity, can produce a result in the creation of yet another dull instance of a chair or
of a sudden change in the landscape or of a mutation. While these processes are
autonomous, they are also automatic: the general goal was created immediately upon
the moment of aesthetical provocation in basic perception. In this way, consciousness is
not required for goals to be had or realized. It is the dumb, brutal workings-out of things
(PR, 244), as nature realizes itself as itself in all of its inexorable monstrosity.

4.1.3. Subjective Form and Satisfaction

How this goal is realized or modified for a prehension is through the prehension’s
“subjective form.” Every prehension has a “subjective form” as one of its component
features. The “subjective form” of a prehension is the singular affective tone (some
characteristic that facilitates a constructive response within feeling) that determines how
a prehension shall be effective towards the processual realization of that actual entity.
The actual entity is dependent on the complex interaction of subjective forms for the
construction and constitution of all of its phases of becoming. (AI, 176 – 177)

The affective tone of a prehension may be characterized positively, as it affirms
certain patterned content as being relevant for its own realization, or negatively, as it
rejects certain patterned content as being irrelevant to its own realization. This means that there are “positive prehensions” and “negative prehensions.” (PR, 23, 41 – 42)

In Chapters Four through Six, my account of the audition a series of musical notes will include this process of positive or negative emphasis. In the audition, various patterned content is given along with the music – other noises, other feelings – that our conscious enjoyment selectively reduces in relevance as our concentrated enjoyment selectively affirms just the series of musical notes. But for whatever is affirmed or negated, there is always a finalization of an event of actualization. An actual event is not an endless process of actualization because, as we shall see here and in the next chapters, the process of actualization is one of ever narrower unification.

Whitehead’s term for this is finalization is “satisfaction,” which is effectuated by the becoming actual entity’s “decision” to be finalized. “Decision” is here used by its root meaning, as a “cutting off.” (PR, 43) This is the final prehension of an actual entity’s process of synthetic realization, finalizing it as a completely synthesized actual entity. The processes, as we shall see, constitutes a movement towards an ever-narrowing of possibilities that shall be affirmed as relevant for the realization of that actual entity.

It is also to be noted that we could never experience events that are endlessly becoming. The reason being is that prior to the prehension that establishes the event’s “decision,” there are still alternatives to what the actual entity might become. The decision is the imposition of a limit on those alternatives, rendering the actual entity a definite something; “definite” in the sense that it shall have a particular function within concrete reality, even if this functionality has many and very complex facets.
Charles Foster Kane’s last words would be a series of events that have a definite function in reality but are also pregnant with many complex meanings to extrapolate from them. But if we could perceive the prehensions prior to the “decision” prehension for those events, we might not just perceive “Rosebud” but alternatives to “Rosebud” that these events might have been weighing at the time, without any way of discerning which of them would be the actual last words. Without the finalization of events, everything would be fragmented in this manner and without any real determining power, as there would be no way for any one fragmentation to lay claim for dominance over the others. It would be a complete, disorientating cacophony of possibilities.

This asymmetrical process diminishes in prehensive activity as it unifies the material given to it. But this narrowing of activity is also a growth in complexity. Each prehension is like a triangle in a pyramid of triangles that constitutes an entire actual entity. As the points at the base of each triangle are a connection of the apex of a pyramid below it. Each new pyramid is a growth in the complexity the actualization because it is the unification of everything below it. This process continues from prehensive stage to prehensive stage until it reaches the final prehension, the final prehensive triangle of the pyramid, encompassing everything that came before it, but also selects a possibility for its realization over others, thus bringing the process of realization to a close; cutting itself off from further becoming.

As this decision is a prehension. The completion of an actual entity is accomplished internally by that actual entity alone. Also, as a prehension, this decision was conditioned by the aesthetical lure of its realization; its realization as a subject, which is its response to the provocations towards becoming. “Satisfaction” is thus the –
usually unconscious – fulfillment of an actual entity as its own singular response to its initial, aesthetical impetus towards becoming.

Immediately upon this new condition, the “satisfied” actual entity obtains a “superjective” post-development existence as a ceaselessly persistent condition for future determinations. In this way, value returns, as each realized actual entity is a creative realization of the potential for patterned intensiveness and extensiveness, which will now persist as an aesthetical goad towards future creative advance.

But it is to be remembered that the intensive pattern is the particular unity of potentiality, which means they are patterns of eternal objects. When we analyze the pattern given through a moment of musical audition, we discern qualities of pitch, timbre, duration, and harmony that have given this moment its determinative characteristics, and are also those qualities that may appear again and again in future instances. It is these eternal objects that operate as the values obtained in the aesthetical provocation towards realization, and offer the potentiality for a certain kind of patterned unity through a contrast, and so are necessary ingredients in the perpetual return of value in creative advance, as each patterned unity becomes the material for patterning and unification in subsequent contrasts.

But in order to understand how creative advance operates as the perpetual return of value, we must understand how eternal objects establish the permanent condition of value immanent to the persistence of actualization.

It may be argued that I speak of the many prehensions as being the true loci of activity and creative determination, while at the same time I talk of the actual entity’s
“decision” or its “satisfaction,” as if an actual entity was a subject akin to a traditional conception of a substance, with its prehensions as its modifications or accidents.

This may mean that, in so far as we would regard actual entity’s as the final metaphysical entities, and that they are characterized by the becoming and unity of their own activity, it would be unavoidable to consider actual entities in terms of substances in the sense that an enduring entity would account for the unity of such activity. However, this conflates the superjective nature of actual entities with their subjective process. The processual becoming of actual entities is not a description of an already unified process but the very process of unification itself.

The guiding principle towards unification, whereby each prehension becomes for the sake of their “subject,” is not so much the activity of a subject that underlies the unification of itself, but is a goal for greater harmonization of feeling for each prehension. The subject is there already within the process which holds together every prehension as an element within one process only in the sense that every prehension has the same experiential content and the same goal of realization.

But the actual entity – as a subject – is both the creation of the various prehensions and is also the telic goal or end for those prehensions; as their response to the aesthetic provocation towards realization. The actual entity does not exist already with its prehensions as a substance exists coextensively with its modes.

In the process of concrescence, the actual entity is real only as the evolving, modifying principle of compatibility and unity for each phase of prehensive synthesis. It is only afterward, when the process of becoming has been fulfilled by a terminating decision that an actual entity obtains something like a substantivist existence: in its
superjective existence as the persistence of this particular history of processual becoming that may be felt and ingressed into another actual process as one subject.

**4. 1. 4. Eternal Objects as Values**

Each eternal object is “patient” of its realizations within feeling (PR, 165), in that it is unaffected by how it is realized, and may – as we saw with “red” qualities in Chapter Two – be realized again and again in an indefinite variety of future contexts. In this matter, each eternal object is infinite in its potential determinability.

Eternal objects are unique as real entities in Whitehead’s ontology in that they are *uncreated*. While their singular natures are *dependent* on prehensions (as I shall later argue), they are not the *product* of prehensions. They are those determinables for realization that all prehensions, and thus all actual entities, must assume for there to be any creative advance. They are a prerequisite for creativity to be realized, and for this reason, there are no “novel” eternal objects. (PR, 22) As this potentia is a condition for any actualization, it exceeds any particular type of actual reality that may realize them, and as such, they are infinite in scope and variety.

To reiterate these points: eternal objects are infinite in terms of their realizability (the red of a rose can return to actuality in an indefinite number of instances), their capacity for objectification (no process of abstraction can exhaust the depth of their singular nature for determination, both in the own qualitative nature and their capacity for relationships with other entities), and infinite in their variety (their variety of qualitative and quantitative natures, all potentials for characterizing actuality).
We may grant these speculative qualities to eternal objects because, as we saw in the last chapter, of the infinite ways we may possibly characterize any particular object – in ways which are amenable to our understanding and also ways which are nonsensical (i.e., “the softly mute but hungrily reticular number”), the fact that these possible attributions can may be projected to future instances (the return of the rose’s redness), and the rules of abstraction and objectification that applies to all entities.

This infinite panoply of eternal objects has inherent value for every actual entity as its potentia for realization, but because its own nature is independent of whatever particularity is realized from it, an eternal object’s value is not utilitarian.\(^6\) Again, value is not meant in just a beneficent sense but as any mode of realizability that can become an impetus for becoming. As it is the infinite eternal objects that provide the condition for possibility, and the means for qualitative determination within an actual entity, so that a realized actual entity may be prehended in terms of its value – in terms of the way it has realized some eternal objects – we may easily see that eternal objects are also one of the essential conditions of value. However, the eternal objects are not the sole condition for value. A value can only function as a mode for possible existence if it is within, or, at least, if it has some reference to, a process of valuation.

In the case of creativity, the infinite of potentiality is without any determinability apart from how it is involved in the determinations of finite activities: the actual entities. Although finite activity is always in reference to an infinite background of potentiality – thereby making a totally independent finite entity an impossibility – it is also the case that “infinitude in itself,” when abstracted from actuality, “is meaningless and valueless.”

\(^6\) Steven Shaviro, *Without Criteria*, 5
The infinite only acquires meaning and value when it is realized by finite actual entities. Without these finite entities, the infinite is emptied of any meaning and “cannot be distinguished from nonentity.” (IS, 196) This does not deny the infinite natures of eternal objects. The contention is that all processes of finite actuality include this element of the infinite in their makeup: every actual process is a realization of the infinite for potential determinability that is an inextricable part of their process of becoming.

But, this infinite potentiality does not exist apart from any process of actualization, but can only have a coherent function of infinite potentiality through the way it is included in processes of finite actualization. This, again, is an expression of a homeotypical explanation: the infinite realizes its nature through the way it functions with other elements in the system. While the essential relatedness amongst finite entities require an “unbounded universe” as their background, and is integral for our understanding of them, that same infinite unboundedness only acquires meaning and value through its realization through the creation of events. (IS, 196)

Much remains to be said, but it is still the case that without this functionality of objective value – value as objectified in experience – that there could be no movement towards actualization. Feelings of complex patterns – complexes of unified eternal objects – contributes to the advancement of concrescence through a “lure of feeling,” which guides the feelings constructing and constituting a becoming actual entity towards realization as the modal, qualitative aspect of how it achieves its final cause. (PR, 185) The objective aspect of this “lure” towards concrescence is the discriminatory selection of relevant eternal objects by the prehensions. (PR, 185)
This “lure” is the capacity of the eternal object – either in excess to already realized actual entities or within the unity of a prehended, realized actual entity – to be felt as an objectified entity, functioning as a stimulus towards a manner of possible realization that may be relevant as one of the qualitative elements that will characterize that event of actuality. This ultimately means a way of characterizing a relationship between past and future actual events.

When I am adding color to a drawing, the colors I may select from are a number of alternatives, but I will choose just one for that section (or for a layer of a section) of the drawing. In that choice, one of those colors presented an alternative that would allow me to satisfactorily fulfill my goal of coloring that section of the drawing, that places that colored section in both a connective and contrasting relationship with those sections either already colored or still left blank, and will have a determinative influence on what colors I shall choose to fill in those blank regions.

4. 2. Creativity, Pattern, and Value

We have seen that creativity describes the complex synchronization and synthesis of many elements, all of which contribute to the realization of definite, connected moments of actuality. And yet, for all of the aspects of creativity – such as the creative advance from the many to the one, the realization of infinite potential into finite patterned unities, and the aesthetical satisfaction of the whole process of subjective self-determinacy – none are accomplished by creativity itself! This is done only by actual, experiential events. So, while creativity is not a causal-genetic
explanation in the full sense, it nevertheless describes the immanent means by which self-actualization can occur for each actual entity.

Also, while creativity may function as a coordinative-systematic explanation, due to the way it facilitates the coalescence of the many elements into a coherent process of actualization, the coherence of this process can only occur finally due to a genetic process that may be best described as creatively determinate. In this way, as I said, creativity may be understood as falling somewhere between the causal-genetic (the process of actual determination) and the coordinative-systematic (the various conditions that we may analyze or speculatively hypothesize from the given facts of experience).

And yet, creativity seems to describe the way in which both types of explanation may contribute to the functionality of a synthetical type of explanation for the whole process of actuality. This is to say that creativity is not only a homeotypal kind of explanation but a most comprehensive one. This is also true for the elements of creativity: creative advance; the importance and function of pattern; and the impetus and final realization of actual development through realizing some value. These elements form a coherent synthesis, as their singular functions incorporate the others as an integral condition for themselves.

But it is through their singular functions that such a unity is finally achieved. In this way, creativity is a kind of heterotypal explanation. As the ultimate, transcendental condition for actualization, it seems appropriate that creativity does not occupy a single explanatory function for Whitehead’s metaphysics, but services as the point in which the coordinate-systematic and the causal-genetic converge at the point of actual realization, as a fulfillment of the immanent conditions for reality in the actual entity and the
replenishment of those conditions. In the next section, I shall explain how contrasts function even at this level of Whitehead’s system.

But even if we accept that Whitehead has presented a way of conceiving creativity and value that includes a model for self-determinate, self-actualization that may be extended to even non-conscious entities, why should we accept this as applicable to these entities, who seem perfectly dumb and without those traits that we usually associate with creative capacity and aesthetic enjoyment?

At the very least in the realm of biology, we may discern behavior that may be interpreted along these lines. Whitehead noted that jellyfish “advances and withdraws” in accordance with whether its primitive receptors discern a beneficial or harmful environment, and that a plant sends its roots down “to the damp earth” and extend its stems and branches to the sunlight.

Even for these organisms, who show no signs of having the capacity for presentational immediacy, nevertheless display a most basic kind of sensitivity and creativity, if only at the level of causal efficacy. (PR, 176 – 177) This is essentially a romantic interpretation of nature as universally saturated with self-determinate activity.

I want to stress that Whitehead is not scientifically naïve. The real naïveté lies in the confidence that sensuous perception (which does not disclose agencies) gives us an exhaustive image of the world. Indeed, from the mode of presentational immediacy, we derive only an abstract account of reality as coordinately related “things.”

But there is also the naïveté that lies in the denial of self-determinacy in organisms due to an assumption that scientifically described entities are exhaustive and basic. But, still, what about the self-determinacy in a pocket of “empty” space? Of
course, even the vast stretches of the universe that are not occupied by living organisms, or even of space junk, are nonetheless brimming with events at the particle and the quantum level. But this seems to be just to sort of realm that is entirely described in terms of mathematical description, and no pathetic qualities or self-determinative elements are required.

The thing to remember is that while sensitive qualities seem slightly more obvious in plants and jellyfish, that neither are actual entities, but are the resultant effects of a persistent nexūs of actual entities. Photons, as I mentioned in the last chapter, are not actual entities either, but are descriptions of the effects of certain nexūs of actual entities whose known activity is limited to how we may describe and measure them in terms of a scientific experiment or formula. These would be indeed the products of very primitive actual entities, whose effects are discernable to us primarily in the way they transfer or alter certain types, intensities, and flows or energy.

Still, these very basic processes would be accomplished by these events themselves, and while we may describe as laws the patterns which dominate their becoming to the point where they are little better than being the fates’ lieutenants, the law itself could not force them to become actual. The abstract has no power to effectuate regulative features, only to describe them. In Whitehead’s words, there are no “vacuous actualities,” empty of creative process. (PR, 29)

Actualization is thus not a simple mechanical but a self-determinative activity, and always includes a valuative, aesthetical element in it, in that a subjective response constructs and constitutes what manner of actual determination of reality it shall be. As each determination of reality is responsive to an aesthetical provocation, we may say
that “feeling” is an appropriate term for this process. As each actual process is self-determinative and brings something novel into existence, we may call it “creative.” And as each process begins and ends as a selective, aesthetical response to its given conditions, “value” may be the term for these conditions.

5. Contrasts and Whitehead’s System

I have said before that contrasts, as modes of synthesis and as resultant unities of a certain patterned order, are always at work within the activity of prehensions in concrescing actual entities. So, in accordance with the ontological principle, the condition for relationality is always to be found in the constructive nature of actuality, and not in anything that is either abstract or transcendent of this actuality.

As our conceptions are both a product and a contributive aspect of this actuality, then this rule would include any conceptions of relationality that may be abstracted or generalized from the experience of actuality; relations as simple as three musical notes in an audition, and as complex as a systematic metaphysical interpretation. This is to say that the conditions for any conception of relationality may, in one way or another, be explained by a theory of contrasts.

So far, we have seen that not only is Whitehead’s conception of actuality integrally relational but that these concepts are coordinately situated within a systematic interpretation of reality, wherein each concept becomes descriptively efficacious through its relation to both actual experiences as well as with the other concepts in that interpretation. These are the criterial conditions of empirical applicability and logical
coherence, both of which presume some relational connectivity between *real conditions* for the creation and the testing (retrovalidative) of these conceptions. The ultimate generic principle, creativity, must not only be relatable to all of our experiences and descriptions of the world but also cosystemizable with all the other elements that supposedly give it its content as an ultimate, coherent functionality.

But if both the empirical and logical appropriateness or functionality of any concept ultimately presumes some kind of relationality, then this too should be explainable through the function of contrasts; through the process of synthesis or unification in actuality. Furthermore, we must inquire how it is that experience may interpret, generalize, and seek validation (whether logical or empirical) from experience. Whitehead’s methodological process of generalization and validation seems to presuppose some process by which experience is already engaged in these modes of analysis and testing, and this itself must be explained.

Interestingly, the creation of concepts, their relationality within a metaphysical system, and their capacity for validation, may be explained by those contrasts operating in the process of symbolic reference. This is, as we saw in the previous chapter, the work of the propositions operating at the level of symbolic reference effectuate a contrast of contrasts – the contrasts that function within the proposition, and the contrasts that are the unified material, which is incorporated as potential to become particular realizations of unity by that proposition. This contrast of contrasts constitutes a kind of experiment between the conceptual and material elements within that proposition; an experiment that will ring true to the material, physical origin – either in
terms of the empirical and physical or in terms of the conceptual and logical – or not, and will open up the opportunity for better, future propositions.

In the proposition “There is someone playing guitar next door,” we find a contrast of the physical origin of the audition with the conceptual possibilities of how these sounds may have originated. It may be a person playing guitar or it may be a recording of someone playing guitar. This indicates that there must be a real connective relation, however tenuous or misinterpreted, that brings into unity the processes of perception and conceptualization with the world which is perceived and theorized about. In this way, contrasts become an integral condition for any type of process of explanation.

Just as in the case for the notes experienced as a unity that includes a relational determination amongst those notes that was produced by how the notes were unified in experience, this too illustrates the function of a contrast as a condition for any sort of relationality, including the various relational modes. That is because, in this instance, we have a synthesis of both the causal origin of an event – hearing the sound – and possibilities of how to interpret it or refer to it.

Both of these aspects - the cause (or meaning) and the possibilities to indicate that cause (the symbol) are unified in the feeling, and the relation between them as the components of a propositional attempt to explain the past, is produced through the way that the feeling brought them together. This is why contrasts, even though a very general term, may be effective as a component within a metaphysical explanation, in that it may be able to accomplish so much if any sort of relationality within a metaphysical theory must itself be explained.
5. 1. Contrasts and Contrasts-as-Process-in-System

The further generalization of contrasts is as “contrast-as-process-in-system.” The term “contrasts-as-process-in-system” is not Whitehead’s but my own, and is adapted from Adam C. Scarfe’s similar “contrasts-in-process.” This generalization is meant to indicate that the process of symbolic reference, which is the center of the interconnecting matrices of Whitehead’s method of metaphysical description, explanation, and criterial desideratum, has at its center the notion of an integral relationality of experience, but which is itself a resultant feature of experience, and is itself conditioned by processes of syntheses from given disjunctive content (meanings, symbols) into conjunctive constructions (communications, hypotheses, interpretations).

This, I say, is the central insight of Whitehead’s relational system, that contrasts not only describe the integral connectivity of the content and phases in the becoming of an experience but are the condition for the coherence of features in experience we seek to communicate through concepts. Contrasts, as a term for a specific component in actualization, may be thus further generalized into a description of process itself.

“Contrast” and “contrast-as-process-in-system,” while similar, are distinct terms. We may distinguish a “contrast” from a “contrast-as-process-in-system” in this way: a contrast describes a specific synthetical function within the process of actualization, such as when an objectification occurs and, in this process, specific features of perceived entities within an environment are unified in such a way where some features become more relevant than others. This is what happens when the olfactory content in

66 Adam C. Scarfe, “Negative Prehensions and the Creative Process,” 94 – 105
an environment becomes more noticeable to dogs than humans, due to how the bodies and their processes of objectification differ between dogs and human beings.

A contrast-as-process-in-system, on the other hand, describes a synthesis of functions extrapolated from the process of actualization in an attempt to explain actualization in terms of a general description of reality, such as in the way “creative advance” is conceived as the co-systemization of features such as potentiality, pattern, value, and actual experience. All of these features attain an effective function through the way they are brought together as a synthetic unity of mutually conditioning aspects of processual reality. These are descriptive generalizations from what we may extrapolate from experience as conditions for the whole process of actualization itself.

This is comprehensively described as creativity, and the given conditions – whether infinite or finite, purely potential or concretely actualized – are brought together as diverse elements in a synthetical activity: as the many become one and are increased by one; a one that is a part of the next moment of the many. Each experience is the synthesis of many perceptions, producing a “one” from this “many,” and this “one” becomes just one more amongst others to be synthesized in a new event.

Furthermore, while the terms “contrast” and “contrast-as-process-in-system” should not be confused with each other, the latter is nevertheless a generalization of the function of the former, while the former is also conditioned by the various systematic elements assumed by the latter. As I said in Chapter One: contrasts are the condition for relations, and what are described as relations are resultant abstractions from the concrete process of contrasts. However, this condition for relationality is only a concrete condition in so far as it is a part of a process of real actualization; of a becoming actual
entity. As such, it already has as its background the vast, overlapping mosaics of actualized, realized patterned orderings of potential reality, that become involved within actual process as the disjunctive material to be conjunctively unified.

While this background is itself the result of contrasts (i.e., is itself the result of a concrete process of syntheses via prehensions within a concrescing actual entity), it is nevertheless a given relational background that functions as the necessary condition for a contrast. In this way, then, we can see the contrast conditioning the functioning of contrasts-as-process-in-system and vice versa. A contrast contributes to the realization of an actual unity by synthesizing various, disjunctive given elements (whether they be sounds, colors, physical origins and their possibilities for reference) within a particular, patterned unity – a unity defined by some type of relational determination – as the product of this synthesis.

This synthesis also coordinately cosystematizes the many ontological elements that function together as conditions for a process of actualization (creativity, value, pattern, etc., as disjunctive elements to become conjunctively synthesized by contrast-as-process-in-system), and this in turn laying the groundwork for yet another actual synthesis (for yet another actual contrast). This is what provides both the ontological and the methodological matrix for the system, as both contrasts and contrast-as-process are descriptive generalizations from experience; experience which serves as the ultimate criterion for whether we have successfully crafted a hypothesis that is applicable to its origin and coherent in its descriptive content. All of our theories or descriptions of entities are ultimately abstract and irreducible to their origin, but these abstractions may nevertheless be accounted for if we explain why the difference is
inevitable, given the evental, processual nature of experience, and whether we are dealing with entities and objects that can be more convincingly located in the more primitive feelings or the complex modes of thought.

6. Conclusion

This explanation we ultimately found through the process of symbolic reference, from which we may derive an integral connection between our theories and descriptions to their origin, and this is a matter of drawing some synthetic connection between these symbolical expressions to what they are meant to express. While an ultimately irreconcilable difference remains, a system that can symbolically express this difference is not ruled out as a possibility, as the notion of productive, creative, processual synthesis allows there to be an integral connectivity between the conditioning origin for a conception while the concept would still be a real occurrence that is distinct from that origination. This would require an account of creative productivity wherein real conditions would be incorporated but whose created product – while connected to its originating material – would be an altogether novel unity.

And, the root of this synthetical activity, as well as relationality, may be found in the synthetical process of contrast, and as the process as a whole may be most broadly generalized as the synthesis of the irreducibly many elements into real unities, then the contrast may be generalized as a contrast-as-process; as an abstract notion that seeks to indicate creative synthesis as eminently coherent as well as concrete.
CHAPTER FOUR

CONTRASTS, PREHENSIONS, AND ACTUALITY – PART ONE:

PHYSICAL AND CONCEPTUAL PREHENSIONS IN AN ACTUAL ENTITY

1. Introduction

Within this chapter and its two sequels, I shall continue to make my case concerning the nature and importance of the process of contrasts in Whitehead’s system by charting the development of an actual event of experience. This actual event shall be a moment of thinking about relations derived listening to a piece of music.

In this chapter, I shall describe how contrasts function within this series of physical experiences of hearing musical notes and shall cover the development of a variety of prehensions that shall initiate the becoming of the actual entity and then describe its development up to the propositional stage of experience.

1. 1. Ground for the Becoming of Prehensions

Before we move any further, I feel that certain things must be addressed that are essential for understanding the theory of prehensions:

Why are there different prehensions, such as positive and negative prehensions, as well as physical and conceptual prehensions? Is it not just too very convenient that
there should be just the right number of prehensions needed – and just as many
different types of prehensions as well – in order to realize Whitehead’s description of an
actual event? Finally, why should any new prehensions come into existence after a prior
event, or even at all?

But prehensions do not pre-exist their encounter with a formally existing entity.
They are not all already there within a nascent actuality, awaiting activation, with its
various types of feeling arranged in their appropriate order of constructive functionality
like tools in a tool chest. As noted in Chapter Two, a perception is nothing apart from
how it is conditioned by its given content. While this content does not determine how
perception shall creatively respond to it, the content is an unavoidable situation for that
feeling to respond to. Physical and conceptual prehensions, as we shall see, are not
dualistically distinct types of feeling, but are functionally distinguishable only because of
the types of content in their unavoidably given, felt situation.

But as to why there should be positive or negative prehensions, or why there
should be any prehensions at all – let alone as many as they are – is somewhat more
complicated. If we remember the ontological principle, we’ll remember that everything
occurs within some process of feeling. There is never a moment that is not a part of
some feeling, or that there is any gap between feelings, either within the actualization of
an actual event or in trans-evental becoming.

Two reasons explain why this is the case:

(1) While creativity is the immanent condition for all becoming, it requires
singular, actual events for its realization. Each event is the unification of the conditions
that contribute to the fulfillment of creative process, but this does not exhaust the
potentiality for itself as creative advance, but instead creates yet another actual condition for itself as creative advance *via* actual process. (PR, 7)

The prehensions that initiate the next moment of creative advance occur immediately upon the completion of the immediately preceding event due to the provocative situation that obtains between realized process and the immanent potentials for realization; the various, disjunctive conditions for becoming that conspire, through productive synthesis (i.e. contrasts), to create a new unity of these conditions. This, as we shall see in the next chapter, is not enough to provide a sufficient description of the condition of actual becoming, but it will have to do for our present topic of primitive feelings.

(2) Each creative advance has an aim; an aim at its own realization as an intensive patterned unity for its own sake as some realization of value. But creativity is not quite a genetic explanation, and so does not quite explain inner and inter-causality. But the provocative encounter with realized actuality resolves this problem, for within this encounter is this same aim as it had been realized within past actual events.

“The way in which the feeling feels” within the creative realization of an event, says Whitehead, “expresses how the feeling came into being,” and this includes the “purposes” that urges it forward, as well as the formal and objective conditions that provoke or elicit a certain responsive activity. (PR, 232)

These “purposes,” as we shall see, are transferred over from the feelings of the past into that moment of heterogenous assemblage that occurs as the formation of the present event, and will provide the causal impetus needed for the fulfillment of the aim creativity. What is more, these causally efficacious transferences of the content of the
past will condition the present feelings to be either positive or negative feelings, and this is due to whether what is being transferred will be relevant or compatible with these transferred purposes or not. In this way, inter-evental becoming is consistent with the ontological principle, as any reason for becoming – as either an efficiently causal or a self-causal reason – is always found within an actual process.

Together, reasons (1) and (2) explain why there is a multitude of prehensions, including why there is a multitude of stages of prehension.

Each phase of becoming presents a new stage of provocative material for feeling that not only transfers determinable content but also purposes as well for the creative advance of each phase of concrescence until it arrives at full concrescence (Reason 2).

Each of these phases is a further stage of unifying the conditions for creative advance (Reason 1).

As each stage presents new material for unification, and as each stage presents content for feeling, then this will provoke feelings that have aims towards realizing this content as a realization of concrete actuality. Thus, the multitude of prehensions is a response determined by the given plurality of content, illustrating a creative advance from disjunctive diversity to conjunctive unity.

1. 2. Setting the Scene

Patrick is laying on his bed listening to a recording of Mussorgsky’s Boris Godunov. It is Patrick’s all-time favorite musical work, and he has listened to this recording countless times before.
Not long after the opera begins, Patrick begins to think about relationality. He had been thinking about relationality a great deal, and when he hears the first bars, Patrick asks himself how he could think of the series of notes in the prelude as objects in relation with each other, how these notes might be in relation prior to (and independent of) his thinking of them, how they may be experienced together as music, and how the unity of these notes might say something about the nature of relations generally.

Patrick remembered Whitehead’s rather cryptic remark that “relations are a genus of contrasts,” and wondered how the notion of “contrasts” might help to account for the relationality of relations, the relations of objects in experience, and how they might be thought of as relations by conscious minds.

There are many physical processes that contribute to each stage of Patrick’s experience of the music and to his moments of abstract thought. Patrick is listening to a recording, and the machinery of the recording and the phonograph player playing it replicates the vibrations produced by the musical instruments and voices.

The vibrations carry through the physical environment Patrick is in and are felt by his body. If the vibrations are between the range of 0.02 kHz and 20 kHz they can be picked-up as auditory information by Patrick’s outer and inner-ear, become sound information in the cochlea of the inner-ear, and then travel through the auditory nerve to the brainstem, then to the areas of the brain associated with processing this data as pitch, melody, rhythm, and harmony.

How these activities may be interpreted as a general nature called “music,” and the analyses of the elements of this thing called music – even as “elements or things in
relation” – are very difficult to pinpoint in the brain with any definite precession as both hemispheres evince many areas as being activated during these processes.  

A Whiteheadian interpretation of actuality does not dispute the usefulness of describing the processes of audition and cognition in the manner of physical sciences, but the contention is that analyses of – and generalizations from – experience uncovers a fuller sense of a moment of actuality, and provides material that does not simply supplement the scientific description but, rather, brings it into a more cohesive unity with the fullness of concrete fact. This is through the mutual attunement of “morphological analysis” (the analyses for the sciences) with that of another type, “genetic analysis.”

The first, morphological analysis is a discernment of the “extensive” aspects and elements of an actual entity. (PR, 219) Each experience is analyzable as a determination of a region which will define a physical environment, and are related to other actual entities as nexūs through the connectivity of these regions. From such an analysis, we obtain distinct objects at relative distances and speeds and provides the means for measurement and generalization of processes from the repetition of effects. It is from such an analysis that we obtain a scientific description of phenomena as amenable to experiment and mathematization. Again, the usefulness of such a description and method is not in dispute.

The genetic analysis of an actual entity is the discernment the various ways in which actuality constructs itself through processes of appropriation and transformation of the elements given to it in its environment. This would be an analysis of experience in

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67 James Beament, How We Hear Music: The Relationship Between Music and the Hearing Mechanism, 93
terms of its prehensive activity of becoming. (PR, 219) This would be distinct from causal explanations in science in the sense that it is concerned with subjective, self-determinative activity, that is not reductively amenable to a morphological description.

This combination of morphological and genetic analysis of actual process resolves the bifurcation of actual fact between subjective elements (such as in personal experience) and objective elements (such as those entities and processes described by the physical sciences), and it is to be kept in mind that by and from these analyses one is not attempting to conceptually represent the actual event, but provide heuristic and pragmatic concepts that may be tested – via logical and empirical desiderata – as salient features of a systematic interpretation of reality that overcomes perennially reified abstractions, and offers in their stead an amplified sense of actuality that may be applicable to our various insights.

2. Primary Feelings

My account of these auditory processes occurring through Patrick's experiences will not begin with conscious ideas about the musical notes and of the relations between them, but with the physical experience of hearing a cluster of sounds. This is perception in the mode of causal efficacy, in which the perceiver receives the formal content of the outside world directly as components of the first phase of experience: the creation of an objectified view of the world – the initial objective datum.

Every actual event begins with the formation of this objective datum. It is the objectified content that was given immediately in the concrescing actual entity during
the first stages of its becoming. This stage concerns the first prehensions, and the first prehensive stage of the actual entity’s development is the physical feelings that are unified as the objectified datum, and the formation of this datum initiates the singular subjectivity of the actual entity through the subsequent phases of conceptual feelings. Physical and conceptual feelings will be of either positive or negative prehensions.

2. 2. Physical Feelings and Objectification

The becoming of every, non-divine actuality always begins as a physical occurrence (I shall explain why God is the one exception to this case in the next chapter). (PR 237) Even the becoming of events of consciousness are inaugurated by physical processes as the integral, initial elements of that conscious event, and conscious events are connected to other conscious events by the latter conscious events feeling the earlier ones through physical processes. This is due to the way the past operates immediately within the early stages of feeling as an efficient cause, via the provocative process described as “causal efficacy” in Chapter Two. The feelings involved within this early stage of becoming are “physical feelings.”

Physical feelings are the medium of causal efficacy, and of the conformal, reproductive, repetitive aspects of reality, such as when the same pitch or tone of a musical note carrying on from one moment to the next (But always with variation, this is not re-identification). There are “pure” physical feelings and “hybrid” physical feelings.
Pure physical feelings have as their felt datum the physical feelings of a past actual entity, and the affective insistence of the productions of these past feelings pass directly into these present feelings as the initial phase of the actual entity.

Hybrid physical feelings also have an actual entity as its datum, but it is a feeling of the conceptual activity of that past actual entity. (PR, 245 – 246) When an actual entity feels the past, it feels the many actual entities as its given condition. This feeling is of the immanent conditions for actualization addressed above, such as the way the past functions as the determinative environment that includes the conformal possibilities for actualization as well as the aim towards concrescence (the latter being due to God, as I shall explain in Chapter Five).

Each actual entity that constitutes that environment would be felt by a physical feeling. But even if only one past actual entity is felt, the actual entities within the past of that felt actual entity would also be felt by the physical feelings of the present actual entity. This is because the physical feelings of other past actual entities would be included in the feelings of the felt actual entity. This is true of actual entities with complex pasts as well, so every actual entity in the past without exception is felt by the physical feelings of a present actual entity.

2. 2. 1. Negative Prehensions

But not everything within the past will be relevant for the process of objectifying the given, past world. As I said in Chapter Two, only some of this enormous content will be made relevant to the concrescing actual entity. While everything in the past is in
some degree contributory to an experience, only some of these contributions will make a positive difference within one of the three modes of perception.

The formal aspects of what is felt, along with the orders of relevance that conditions the incorporability of the eternal objects, contribute to the way they are incorporated within perception, and thus contribute to how they shall be objectified. But the physical feelings also contribute to this whole process of eliminative abstraction through negative prehensions. First, everything in the past of the present becoming event is positively prehended without exception by physical prehensions. Then the next stage is an elimination of irrelevant elements by the negative prehensions. (PR, 23)

This eliminative phase is performed by prehensions prehending those positive prehensions within the becoming of that same actual entity. The subjective form of a positive prehension is one of affirmation. Its manner of receptivity is as an acceptance of its given content as elements that may contribute to the overall characterization of that event of actuality.

In the earliest stage, this receptively is indiscriminate. But the subjective form of negative prehensions, on the other hand, feels certain content in a way that does not intensify their potential for synthesis within the becoming of the event. This rejection of certain content is due to feelings of the irrelevances or incompatibilities within the prehended content, and these feelings of irrelevance are due to the hybrid physical prehensions that prehended the subjective and conceptual content of the past.

The conceptual content of the past is eternal objects realized as repeated patterns of determinative, concrete fact. These patterns may have an enormously pervasive influence, such as when they are in the guise of the repetitive habits of
conformation that typify the general, repeating aspects of our universe, sometimes
described as the “laws of nature.” Their seeming immutability is due to the felt
subjective forms of the past, which had affirmed them again and again with a regular
intensity of feeling, and passed along these patterns as conditioning potentials for
realizability – like a genetic code – for each succeeding actual entity.

However, it is from the hybrid physical feelings prehending these subjective
forms that we obtain the determining influences for our experiences of our given
physical world, and why certain things stand out and not others. In Chapter Two, I noted
that our relationships to objects in space are such that while all spatial determinations
are influential, only a few may be perceived at once by any given angle of sight
perception. This was due to those realizations of spatial arrangements that effectively
rendered the perceptibility of certain angles incompatibly irrelevant to vision.

Patrick’s auditory system can only process vibrations within a range of 0.02 kHz
and 20 kHz. Vibrations that are at an intensity below this range are still felt by the
physical prehensions, and they still pass on as reverberations throughout the body, but
in the prehensions that constitute our auditory system they do not make a positive
contribution as data that can be processed as an audible sound.

This is due to the information passed along from the past into the hybrid
prehensions. The subjective forms of the past body are felt and determines for those
prehensions what is and what is not relevant for the reception of data in the ear. This
determines those negative prehensions to diminish the effectiveness of elements below
or above the kHz range that is composable with the information given to them.

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But another factor is the complexity of the event that is concrescing. If there is sufficient complexity within the scope of the concrescence’s incorporated environment, then there is a chance to bring elements together within a productive synthesis that were incompatible or irrelevant within those past, environmental elements themselves.

Conscious events within an animal body incorporate elements as being relevant that other parts of the body cannot. Scanning a sheet of beautiful music may quicken the pulse, but the given abstract forms are significant for the thoughts, and not directly so for the arteries themselves.

For many, the qualities that they hear from a musical sound do not have any relevance to the way they imagine colors. This is because the qualities felt through the nerves that are processable as audio data would not have any relevance to those processes that are contributory to the imagining of colors. But these qualities also have the capacity for inclusiveness in conditions with the right complexity of contrast.

While a certain pitch is exclusive in the sense that it designates a singular frequency, a tone is inclusive in that it is a complex of differing pitches, durations, and other qualities. What is more, there are those, like Rimsky-Korsakov, who claim that they experience an intense connection between sound and color. For Rimsky, the Key of C major was white, and B major was a dark blue with a steely glint.\textsuperscript{69} It may be that the processes within their nervous system are of such a complexity that those auditory qualities have not been made irrelevant by the negative prehensions within the parts of their body that can produce feelings related to colors.

\textsuperscript{69} Vasily Yastrebtsev, “On N. A. Rimsky-Korsakov’s Color-Sound Contemplation,” 842 – 845
2. 2. 2. Subjective Form – Revisited

Every prehension without exception has three basic components:

(a) the felt content that becomes the “object” of the prehension,

(b) the “subject,” or actual entity, which the prehension is a contribution to the construction of,

(c) and, as I mentioned in Chapter Three, the subjective form, which is the emotional tone or singular manner of feeling. (PR, 23)

Every experience includes this tone or manner. A subjective form is inextricably a part of a feeling’s provocative encounter with the affective power of a past actual entity and its derivative objects. The qualities that become as a response to these provocations are themselves characteristics of activity; they are characteristics that will in some way typify what that becoming actual entity shall be. Basically, they shall be either the enjoyment and affirmative continuation of something, or they shall be the repulsion and rejection of something.

A subjective form has two factors:

(1) a qualitative pattern, which is an affirmation of a singular mode of determinative connectivity amongst the various constituents felt within a prehension;

(2) A pattern of intensive quantity, which is what characterizes the graded orders and elements within that affirmation.

When we analyze sounds as musical notes, we are discerning various qualitative patterns affirmed by subjective forms, with their relative intensities rendering these
notes distinctive from – or associa
tible to – each other: the relative pitch, tone, or
harmonious relationship between them.

These two factors cannot be wholly abstracted from each other. This is because the qualitative pattern has quantitative elements, which are relative intensities, and these relative intensities are not actually effective or determinative except in the way they contribute to the singular characterizations of a qualitative pattern within a subjective form. These relative intensities are linked with the qualitative pattern as being amongst those “relational factors” that will constitute that feeling as a singular qualitative pattern. (PR, 233) As we shall see, this is how the extensive and relational character of sounds are able to pass through the extensive matrices of physical environments and be abstracted as music by a listener.

Within the qualitative pattern, the basic kinds of emotional tone or manner of a subjective form are “aversion” and “adversion,” the latter of which is Whitehead’s unusual term for a positive, affirmative subjective form. But as prehensions become more complex, so to do the complexity of their creative, responsive aspects.

However, the physical feelings (in the phase of causal efficacy) are mostly “blind.” (PR, 308) This is because they are not an activity that effectuates a self-determinative process through an independent valuation of content. This activity only properly occurs in concrescence through the subsequent conceptual feelings. This is why this is a conformal, reproductive stage: the formations of the initial feelings are dominated by the past’s content.

But even simple physical feelings have subjective forms, and a subjective form is a responsive activity singular to only that prehension. So, these prehensions still
distinguish themselves from the past, even though the subjective form of a simple physical feeling is just a “re-enactment” of the subjective form of the past actuality that it feels as its own datum. (PR, 236, 237)

In the feeling of a sound, the feelings involved in the auditory processes include feelings that carry over the patterns of the bodily structures that preceded it, and so construct a continuity of bodily processes from one moment of an ear or nerve’s function to the next moment of that ear or nerve’s function. Again, Whitehead reminds us that even this reproduction is not perfect to the point of just re-iteration of the same, identical, determinate unity. The entirety of the past is given through the actual entity that is felt as the datum, but this is through the actual entity’s perspectives of past actual entities, that can introduce new elements into that actual entity. (PR, 237)

This allows the body to be changing constantly from moment to moment, but there are enough repetitive, reproductive, and conformal activities involved for bodily processes to remain consistent long enough for an audition to make a difference in the development of our lives.

2. 2. 3. The Subjective Aim

All phases of concrescence that lead up to the last prehension – the “decision” and “satisfaction” as described in Chapter Three – are “incomplete phases”; they are not enough to finalize the concrescence, but they are still all functioning towards that finalization, and they are made compatible with each other as they become towards this
end due to the “subjective end” that is involved in each phase. (PR, 224) This is true even of the physical prehensions.

While “blind,” they are certainly not aimless. They, like all prehensions, are guided by the “subjective aim”; an aim at “further integration.” (PR, 19) This is an aim for the synthesis of all prehensions into the full, singular unity of itself as a particular, concresced actual entity. As this is an aim that unifies the feelings of an actual entity, then this is an aim towards satisfaction.

The process guided by this aim includes the unification of both physically determinative and conceptually valuative content as contributory to a singular event of actuality. Whitehead once again echoes Leibniz by calling this gradual unification of both physical and mental feelings, and all the content within the becoming of an actual entity (as a synthetical event of actuality), the expression of “pre-established harmony” within the formation of that actual entity. (PR, 27)

However, this is not a synchronization of individual res verae of differing mental and physical capacities. Our sense of pre-established harmony means this: whatever prehensions of objective data are involved, whether dominated by physical or conceptual feelings, they shall – in one way or another – contribute to the realization of a singular, unified event of experience. (PR, 27)

Because the subjective aim is what dictates the subjective forms of prehensions, then each subjective form cannot be deduced simply from the data that is felt, even though without the provocation of such data there could be no subjective form, let alone

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70 Gottfried Leibniz, *Philosophical Essays*, 220 – 225
a subjective aim. (PR, 275) The chief reason as to why is that the subjective aim does not remain the same throughout the process of concrescence.

Thanks to conceptual prehensions, independent valuations may occur that may alter the trajectory of the subjective aim. This distinguishes an “initial subjective aim” from the permutations this aim shall undergo, (PR, 224, 308) and a concrescing event is not forced to entirely conform to the initial subjective aim. If it has enough complex potential at its disposal, the becoming actuality may choose another aim for itself.

Finally, it remains to be said that the initial subjective aim of an actual entity is a “derivate” from the primordial conditions for any particular event of temporal advance. (PR, 67) This is the basic conditions for realization, as the impetus towards creative advance: an aim at partially realizing creativity through a singular realization of value via a certain intensity of feeling as a certain concrete unity of patterned material.

This given creative urge is invariant throughout the modification of the subjective aim by the concrescing actual entity, but this, along with those modifications, are what is carried over in the physical feelings from the past. This is because the content of the past is directly carried over and becomes the determinative content of the initial feelings of the becoming actual entity. The initial aim is part of the process of efficient causation – of causal efficacy – and it may be incorporated within final causation if it is simply reproduced as the subjective aim by the conceptual prehensions.
3. The Objective Datum and the Given Nexūs

The many physical feelings, each with an actual entity in the past as its datum, become integrated within process as a perspective on the past called the “objective datum.” It is objective in the sense that it is the product of the process of objectification by the physical feelings in the perceptive mode of causal efficacy, as described in Chapter Two. The objective datum is constructed from the disjunctive diversity of the past as felt by the physical prehensions as a complex multiplicity (PR, 212), and unified by those feelings through the initial subjective aim as relevant material for intensive contrasts within further feeling. (PR, 237)

This multiplicity is the perspective every actual entity has on the already realized world, and the actual entity shall “individualize” itself as a response to what is there within it. As every subsequent feeling shall refer to this datum, it is the condition for the rest of its processes of actualization. In this way, the given world is now an “object” that shall factor in some manner as the object within every subsequent prehension.

As a multiplicity, the objective datum is not a unified entity in the same way that an actual entity or event finally is. This is not to say that – like the impressions of Hume or the sense data of Kant – what is given through the objective datum are organized only within the syntheses of feeling or the joint operations of mentality.71 For Whitehead, organization, order, and relationality are already there as felt qualities in the world, and

these already realized qualities will have a direct impact on the formation of the actual entity that is immanently receiving them through prehensions.

But the objective datum is a complex of diverse realizations of organization, order, and relationality. Even though relational legacies are given directly in experience, they are themselves organized into a new, particular relational unity by the concrescing experience itself. The legacies of nexuses and nexūs are what are unified, and are passed along into the concrescing actual entity, and those that are of the most general sort for the formation of an event of our universe seem to be passed along without much elimination by negative prehensions. These would be those events from which the sciences obtain such elements that form the basis of our descriptions and rules for physical and biological behavior.

So, the events that contribute to an audition include such nexūs as the material of the instruments, the bodies of the musicians, the recording machinery, the spaces through which the reverberations of noise travels, and the body’s regions through which noise is transferred, processed, and interpreted as music – are all included within the datum of this audition, and within these events there are waves and intersection of energy, the legacies of stars and comets, and everything fundamental for our universe.

But we must not forget the symbolic legacies as well, carried over from previous experiences and persons of the past, which include the concepts and methods of interpretation that, in part, influence how Patrick is going to appreciate the sounds he hears as music. All of these and more are determinations of order, organization, relationality, and of relative qualitative intensity felt by other prehensions through the objective datum via the past subjective forms that became contributions to that datum.
As this construction of the datum was the synthesis of a plurality of material into a constructive unity, and as the way that this unity is brought together establishes relational determinacies for the process of concrescence that feels this datum, then the process of construction is a contrast.

3. 1. Contemporary Events

But, once again, for all of its real and determinatively relational, organizational contributions, the given multiplicity of the objective datum is not as entirely synthesized as a singular world as it shall become through the concrescence of the actual entity that it is a part of. There are diversities to be unified within it. This is in part due to the fact that not all actual entities are in the past of a present concrescing actual entity.

To repeat my illustration from Chapter Three: Imagine the inter-evental becoming of actual entities as a multitude of partially overlapping, infinite pyramids, with a present, concrescing actual entity as their apexes, and other actual entities, descending infinitely below it as their past, forming chains of interconnecting points that can be traced to a convergence with that a present moment. Note that each of those points of the past are themselves the apexes of pyramids, that also descend infinitely into the past.

These pyramidal tendencies in the connection of events is due to the asymmetric directionality of feeling and actualization are due to the way each feeling and each actualization unifies its past: Everything conspires towards a transference and an apex of assimilated becomings, which is the enfolding of past and present processes within the singular event, as was noted in the first three chapters.
However, not every actual entity is directly related to every other actual entity. If an actual entity has the same past – the same convergences of past actual entities – as another actual entity, then they are not directly related to each other. (PR, 61) These actual entities are “contemporaries” of each other, and just as each actual entity in the past of a present actual entity would have contemporaries, the present actual entity would also have its contemporaries as well.

Within the objective datum of a present actual entity, there would be nexūs of actual entities that are directly related to each other, but also the nexūs of their contemporary events as well. As these are not directly related to each other, they are brought into relation through the way they are felt and synthesized within the objective datum. As not every event directly influences every other event directly, these contemporaries are thus causally independent (PR, 61, 316 – 318). However, they are still indirectly related to each other through their shared past, and through their shared future within the synthetical concrescence of future actual events.

In the case of the opera that Patrick is listening to, we can imagine that when the instrumentalists and vocalists were recording the piece, the events of that constituted the activities of the two musicians would have included events of hearing each other playing. We may imagine a moment when a soprano and a bass are singing different notes, and to each musician it sounds as if they are singing at the same time.

But the events that constitute the activities of each musician would not actually hear the notes of the other musician being simultaneous with that event but happening in the immediate past of those events. Each musician hears the note by the other musician after the other has already vocally produced. What they heard were the
contemporary events of the two notes being played, synthesized within the vibratory
events that enter their bodies as two notes being played seemingly at once.

The plurality of nexūs within the multiplicity that is the objective datum, which is
not only nexūs that are directly related to each other, but others that are not a part of the
directly related nexūs, brings us back to some of the important aspects of contrasts as
conditions for relationality. The objective datum is a diversity of content that is
progressively unified by subsequent prehensions, but this content within the datum, and
within the actual world that went into the formation of that datum, is an irreducible
plurality. (PR, 225) The plurality could include the nexūs of the events of the two
musicians becoming unified to form a datum that can be felt as two musicians playing
music in synch with each other.

The unity of the objective datum is, in part, due to the nexūs that it contains, and
which has a dominating influence on the subjective forms and aim of the physical
feelings, but there is a diversity of such subjective forms and aims within the past. What
brings together all of the subjective forms of the physical prehensions as the objective
datum is just this general aim towards unification.

3. 2. Extensive Regions

The events that constitute the phonograph relate in such a way that material
configurations and electrical processes are passed along as conformal patterns within
causally efficacious processes of transition. The negative prehensions within these
events diminish everything within the past that is irrelevant to the endurance of its
structure and the function of its parts, although never with such success that these structures or functions can endure everlastingly as structures or functions for future events: everything eventually decays.

From the machine, the vibrations are generated from the needle in the grooves of the vinyl record, and these are carried – as a transference of information and energy – through the events that constitute the environment of Patrick’s room and into the environments that are Patrick’s body, including its various auditory processes. These are the physical things of our experience, and we discern their relationships with each through the way each event determines a singular unity of affective intensity to, and connectivity with, other such unities by the process of morphological analysis.

These unities relate to each other as singular “regions,” quanta of extensive connection, and Whitehead called regions the “relata which are involved in a scheme of ‘extensive connection,’” and are what establish any extensive connection. (PR, 449)

All actual entities produce a region through their becoming, and this region is the way in which the actual entity determines its “place” within the vast matrices of connectiveness within actuality. But “place” should not be taken to mean something like a simple location. Events define open areas for relational connection and influence rather than points, and the points that are (more or less) equivalent to the event’s determined relationships within its environment are the abstractions derived from those determinant relationships that the nexūs of events define.

It is by these abstractions from these regionally defined extensive connections that we attain the means for measurement and spatial-temporal configuration. What makes these equivalences derivable are the modes that determine extensive
relationships, such as the connection of two regions, or of part and whole, and it is the manner by which these are carried over from event to event – from region to region – which provides the means for discerning relative position, motion, and speed. Indeed, Whitehead’s theory of extension may be called a theory of connectivity amongst entities, and the “pure” potentiality for such connectivity – the potential for extensive connection that every actuality realizes as its region of affective causality – is composed of those pure determinables for connectivity and relationality: eternal objects.

The objective datum contains these regions given in the earlier feelings along with their valuation by various subjective forms. The initial physical feelings carried over these regions as realized eternal objects; realized by the earlier events. But while these regions and their determinations of extensive connectivity are included within the objective datum, their potential for perspicuously abstract notions of location, motion, and intensity are not yet apparent for the becoming actuality. Instead, what is given through the objective datum to the concrescing event are “vague spatial relations,” and in our example, these vague relations exhibit “musical qualities.” (PR, 234)

It is only in later, more complex prehensions that these vague aspects of the given physical world will attain those more abstractly general aspects we’d recognize as musical qualities or sound that has a certain pitch, quality (timbre), and intensity (loudness). etc. but also many other qualities within the experience that may or may not be relevant for further prehensions. This may include the other noises in the room that were given as the immediate past to the event (perhaps someone coughed quietly during the audition of the two notes).
But these felt regions provided the connective determinations and intensities of eternal objects, and so provided the means for the next phase of prehension – the phase of conceptual prehensions. This is a more subjectively intensive phase and includes a new phase of subjective form: valuation. It is due to valuation that concrescence attains something like a “new” subjective aim.

4. Conceptual Prehensions

The initial physical feelings provided the next condition for the realization of the subjective aim through their production of the objective datum, (PR, 224) and the diverse nexūs of actual entities within this datum includes eternal objects. Every determination of actuality within concrescence is a determination of an eternal object and the subjective forms felt by the hybrid prehensions are past subjective forms’ feeling and realization of a certain mode for becoming; of a qualitative pattern of quantitative intensity: an eternal object.

Thus, every eternal object that has been realized in the past is made available through the objective datum, and every eternal object that has not been realized is also available within the datum. The reason for this excessive availability shall be explained, but the upshot is that the objective datum provides both kinds of potential for the becoming of an actual entity. The first kind is the already realized forms of potentiality within past events, or “real potential” (as I called them in previously), (PR, 23, 65) and the other kind is “general” or “pure potentiality,” or the excess of potentiality: those many, yet unrealized eternal objects. (PR, 23 – 23; 65 - 66)
The datum of a conceptual feeling is an eternal object (PR, 240), felt through the hybrid physical prehensions, that incorporated them from the subjective forms of past actual entities. The eternal object that is felt is a “referent (qua possibility) to any actual entities,” and so is the variability of eternal objects felt by conceptual feelings that render the felt past as potential alternatives for actualization. (PR, 257)

Also, the conceptual feeling’s reception of these entities is their “primary metaphysical character of being an object.” (PR, 239) It is as an “object” within conceptual feelings that the eternal object has the “capacity” – the potential – for being realized as a determinate within concrescence. An eternal object is only capable of being the potential for anything when it is incorporated within a feeling.

This will be very important for my argument that eternal objects require an actual activity to bring them together into any kind of relational unity, for without this incorporation in feeling the eternal objects have no objective status and no capacity for attaining a coherent unity except through feeling. I shall be able to finally present this argument in Chapter Five, but more ground must be covered first.

4. 1. The Subjective Aspect

Within audition, the potentials and possibilities felt by the conceptual prehensions include those qualities that characterize a musical sound: its tone, pitch, harmony, duration, timbre, etc. These qualities are all eternal objects felt and carried over from the events that produced the musical noise. The capacity of an eternal object within
conceptual feeling includes the object’s potentiality for exclusiveness. This concerns its potentiality for rendering certain characteristics irrelevant within realization.

When we try to remember a melody, we want to include those eternal objects that are relevant to that melody as we heard it, and would reject those other sounds that are not of that melody. Those eternal objects that were contributory to the melody as it was heard are compatible with the feelings of remembering that melody, whereas all the other ways that the melody could have gone are also isolatable as eternal objects that are incompatible with the sounds as we remember them. It is within conceptual feelings that eternal objects are unified to determine such compatibility. (PR, 240)

Just as in the case of physical prehensions, conceptual prehensions can also function as negative feelings, whereby the datum being rejected is an eternal object as a possibility in excess to what has been actualized, as opposed to rejecting patterns from the past. But when feeling the capacity for determination in an eternal object, the conceptual prehension feels this potential in terms of how it may be diversely applicable within the given circumstance of its becoming, such as in the case of remembering.

The subjective form of a conceptual prehension is the singular manner it treats this diverse character of an eternal object. A prehension feels it in this way or in that way as alternatives of determinable content for realization. In doing so, the feeling becomes as a process of including certain capacities within it and not others. (PR, 240)

From these responses to the variability of eternal objects, the subjective processes are produced. These are emotions, or valuations of varying qualitative intensity, desires, purposes, dispositions, moods, and (if the transferred content of the datum is sufficient) possibly even a kind of conscious experience. (PR, 24)
I mentioned above that the difference between physical and conceptual prehensions – which are jointly the physical and mental aspects of a concrescing actual entity – should not be regarded as distinct in an ontologically dualistic, Cartesian sense. The physical prehensions are direct feelings of past subjective processes, and they have – as we saw – their own subjective forms, and, as such, become as processes that gain a subjective aspect of their own (even if it is a conformal or reproductive one).

A Prehension’s “physicality” is their function as modes for conformally transitioning and conditioning actual, concrete content from the past into a novel concrescence. The “mentality” of conceptual prehensions also include aspects of transitioning and conditioning, but these are concerned with the abstractable elements – the eternal objects – from the concrete material provided by the physical prehensions.

Once the conceptual prehensions have elicited their own valuative pattern and intensity from these abstractable elements, their subjective forms will be passed directly by future physical prehensions within future actualizations of events. Still, each type of prehension is a process of feeling with its own subjective form – and each, in their way, is carrying forward the process of mentality into the next phase or event.

But it is through these conceptual prehensions that we will attain the means for creating judgments and imaginings, and exercise freedom as we normally understand it.

4. 2. The Integrated Datum and Negative Prehensions

As the actual entity’s concrescence becomes more and more cohered towards a definite realization of actuality, the conceptual feelings become progressively simplified
and reduced of their possible alternatives. But one could say, “What about those instances where possibilities seem to become more complex, such as when I’m writing a poem and am suddenly faced with so many possibilities of form, tone, metaphor?”

As we shall see in the coming chapter, the development of conscious activities comes from how a great number of possibilities may be integrated given the already established complexity of the physical background of a concrescence (a human can write a poem, but a stone cannot), but when this integration occurs there is still a narrowing of possibilities from the welter of alternatives available for conscious activity.

Indeed, the fact that we are aware of the many alternatives of what to write and say is itself due to a process of progressive integration and narrowing, where these possibilities standout in a way that diminishes the prominence of so many others (such as making a sandwich instead of a poem). So, an increase of a complexity of creative activity is still due to the narrowing of possibilities that would be relevant to that activity – that of writing a poem – and not to another activity.

We may also understand that this is due not only the progressively integrative, asymmetric nature of a concrescence as it unifies towards some moment of actuality but also because of the initial subjective aim towards the intensive realization of some pattern of value. If, instead of deciding on “Rosebud,” Charles Foster Kane just thought of a number of alternatives of what to say and then died, these events are still integrative unities in the sense that Kane’s last living events were a consideration of these few alternatives of what to say, as opposed to other things he could have done, such as just experience a silent meditation on his relationship with his parents.
So, even here, if we were to somehow perceive inside Kane’s last silent moments, we would not be confronted with just an openness of possibility but definite events produced from a narrowing of what would be relevant for those events. Otherwise, again, if there was no such finalization of specific possibilities, then it would just be a chaos of equally applicable alternatives.

When the initial conceptual feelings pass on to supervening phases, the datum of each feeling become integrated as a new, complex datum; as a new unity or patterned entity (they are the products of contrasts, as contrasts are also their produced “patterned unities”). (PR, 240 – 241) When a conceptual feeling’s datum informs a subsequent feeling, it can only do so because of that eternal object’s conformation with the other eternal objects that are a part of the relevant structures carried over into concrescence by the pure and hybrid physical feelings. (PR, 241)

There is a determination by these conceptual feeling’s subjective forms that determine exactly how the eternal object is to ingress conjointly into the integrated datum. This is a process in which a felt eternal object is ingressed with the other eternal objects of past actual entities from the physical feelings. This determination is effectuated by the subjective aim, which aims at further integration of the concrescence with its given material for becoming, and the new complex, integrated datum – which is a new patterned entity – will be, says Whitehead, “some sort of ‘contrast,’” a relational unity produced through synthesis. (PR, 240)

The process of constructing the objective datum from the initial data was also a contrast, but this new contrast now comprises of the earlier phases of feeling, now made compatible through the subjective aim for integration within later phases.
Because of this integration, the role of negative prehensions change. The supervening integrations of the later phases of feeling do not require negative prehensions to eliminate incompatible feelings, such as from those felt from the past. Negative prehensions exist as a response to the way the given data conflict with the subjective aim. Indeed, as they are the process of synthesizing this data with the subjective aim, the result of this process is a patterned entity of rejected feelings, they thus function as contrasts.

But, again, negative prehensions are not postulated ad hoc but arise through a contrast of the subjective aim and the felt content. If the felt contrast does not present any incompatibility of material to the aim, then negative prehensions do not arise. But, while negative prehensions of feelings are unnecessary, an eternal object may still be rejected in these later phases, though not the feeling’s phase itself. (PR, 240)

4. 3. Valuation

As I mentioned above, the subjective form of a conceptual feeling is a valuation; a subjective response to the determinability felt in an eternal object. (PR, 240) I mentioned in the last chapter that eternal objects function as immanent modes for existence called “values” within concrescence and that these values function as “lures for feeling,” or felt possibilities for realization, and they only gain this functionality when included within feeling; within a process of valuation.

I also mentioned parenthetically that “valuation” is distinct from “evaluation.” Evaluation is a later process of conceptual analysis in which alternatives between
multiple eternal objects are felt within a proposition, and we have not yet come to propositional feelings, let alone conscious thoughts (a form of proposition). (PR, 247)

Each eternal object is felt within the objective datum much in the same way that each actual entity is felt as the initial data, and for the same reasons: the data provides the condition for the feeling. Thus, the valuation that occurs within this phase is of a single eternal object for each feeling, and since we are still dealing with subjective forms that are guided by the initial subjective aim’s trajectory of integrative harmony, and not yet a self-determination singular to that concrescence, the first phase of conceptual feeling is – like the initial physical feelings – “blind.” (PR, 247)

A valuation has three characteristics:

(1) it is dependent on those other feelings that made its datum available for feeling, and the way each feeling is mutually integrated towards the subjective aim;

(2) it determines what manner of status the felt eternal object shall have within the integration of the other components from the physically felt nexūs;

(3) its subjective form performs either an adversive “valuation up” or an aversive “valuation down” of its felt eternal object. The former is the attaching of an enhanced, intensive importance to the eternal object, and the latter attaches an attenuated intensive importance to the eternal object.

Characteristic (2) is a qualitative aspect, in that it concerns how the eternal object is to be utilized within concrescence relative to the other aspects and elements of that concrescence, and characteristic (3) is a quantitative aspect, in that it determines the level of intensity the eternal object shall have. (PR, 241) As these are aspects of the
subjective form, then the qualitative and quantitative aspects cannot be divorced from each other but are diverse elements in contrast.

Even if the particular actual entity never develops the complex emotionality that can be found in animals, this phase of conceptual feelings is basic to all events and it is from their sensitive valuations that these emotional operations originate. (PR, 248)

What is more, while they yet remain blind, these initial conceptual valuations are the processes that will introduce “creative purpose” into the concrescing actual entity. This is as a “subject” that is a “determinate of its own concrescence.” (PR, 248) The blind conceptual feelings are the creative, self-purposive subject in embryo, as an aim for actualization that is both for and through itself.

4. 4. The Aim at Contrasts

The development of the conceptual and subjective side of an actual entity does not mean that there are no more physical feelings, or that they are no longer relevant to the development of that actual entity. Once the integrated datum is effectuated by the initial phase of conceptual feelings, there are new physical feelings that are integrated with the conceptual prehensions of the objective datum. (PR, 248) All the same, within the subsequent phases of concrescence the conceptual feelings shall operate more independently from the originative physical feelings. (PR, 249)

We are now leaving the phases of conformation and reproduction, and entering into new phases in which the subjective forms of the prehensions are guided by a subjective aim that has itself as an aim, as a potential determination of the future, and
not just a general impetus of determination, or determinations of past actual events, as its goal. Those conformal valuations introduced emotional responses within the concrescing actual entity, and by these valuations its “creative purpose” will become gradually more distinguishable as singular to that process of concrescence. (PR, 248)

This second phase in the development of the actual entity’s subjectivity is due to a process of “conceptual reversion,” in which the eternal objects that proximately present alternatives for determination are conceptual felt.

These alternatives are potentials for novelty, or of an actual existence that is distinct from what has already been realized within the nexūs of the given past. (PR, 249) These alternatives are carried over through each phase from the initial physical data and are thus material which presented no physical or conceptual incompatibility with those earlier phases of concrescence.

As I noted, if the event has a sufficient complex background, then it may bring together elements that were incompatible with specific elements in that background. Through the conceptual prehension of these relevant alternatives, the subjective forms are enriched in their qualitative pattern and intensity, which means that they are now enriched in terms of the material and productive synthesis of their contrasts. (PR, 249)

This does not necessarily mean that the process of concrescence will opt for a novel alternative. If it is an event with a very low grade of complexity, then the relevant novel alternatives available to it will be correspondingly limited. It will be without as much emotional intensity associated with them as the realized patterns of the past felt through the physical prehensions. In this way, the physical feelings dominate over conceptual ones within less complex processes of concrescence.
However, even if the event becomes as just another moment of a stone, or as the succeeding reverberation of a bit of musical noise, this is still a major shift in the becoming of the event. By this enrichment of pattern and intensity, the becoming actual entity feels a distinction between its former, conformal phases and the open ground for its subsequent, qualitatively complex and intensive realization as an event via the felt alternatives. This distinction is established through the contrasts presented by those alternative potentials and those already realized and incorporated in the earlier feelings, and this has the result of re-establishing a subjective aim of the concrescing actuality. (PR, 249) This becoming actuality is now distinguished as these singular responsive processes of actively appropriating, valuating, and transforming these diverse complexes of realized and unrealized potentia within contrasts, with an aim at producing from them some “maximum depth of intensity of feeling” by these contrasts. (PR, 249)

This “depth of intensity of feeling” is achieved through the synthesis of its diversely given content, producing itself as a singular, complex intensity and pattern of unification through this content. This new ground of a subjective aim for the becoming actual entity is the aim of realizing itself as a process of contrasts. In short, this process is an “aim at contrast.” (PR, 249)

4. 5. Contrasts Within the Early Stages of Concrescence

In his paper on contrasts, Lango locates contrasts in the later, “supplementary” phases of concrescence. These are phases that begin with “transmuted feelings” and
progress on through perceptive and conscious feelings.  

Within these phases that we deal with “contrasting” alternative directions for the whole event between what is given through the nexūs and prehended by the physical and conceptual feelings, and these may be further developed into propositions, which are, after all a kind of contrast.

Lango is quite correct when he describes contrasts as “patterned entities” as real particulars; real unities that may function as both providing manners of relatedness and relata for relations.  

It is true that the felt nexūs provide particular unities from the past that condition the means for relational unification within the process of concrescence, both as determinable patterns as well as the relata for determining further patternning by feelings within concrescence. This can be found in the event’s supplementary phases.

Within audition, the feeling of sound occurs because there were those already realized unified particulars within the physical environment, such as the particular vibrations, and the various receptive parts of the body, which provided the means for a bodily process of sufficient complexity to organize these unities into a moment of heard noise (again illustrating the principle of heterotypal assemblage)

Still, Lango’s interpretation of contrasts strikes me as too narrow to properly illustrate their function as a condition for relationality, especially if we consider how aptly the description of contrasts as both modes of synthesis as well as patterned entities apply not just to the unities and processes of unification in the later stages but to process generally, to the nature and function of prehensions, and especially to the way in which prehensions function as a means of unifying given content and conditions with


73 John Lango, “Whitehead’s Category of Contrasts,” 39
a subjective aim. In this case, we would still be dealing with real unities as given material that will serve to condition how further unification may come to be, but we would also have a means of explaining unity as such as well as its derivative modes through prehensive activity, which always seem to function as a contrast: bringing plural material into a new, particular unity.

This, as we saw, occurred at every level of the early stages of feeling, as each prehension brought its plural content into a new – a particular – cohesion or unity.

5. Transmuted Feelings and the Decision

Not everything becomes with a degree of complexity sufficient for a moment of conscious thought, which means that not every actual entity’s prehension that establishes the terminus of its becoming will occur at the same point of concrescence. Some – indeed, most – of the decisions that finalize an event occur well before much of the material that conditions consciousness is ever introduced, and usually because there is just not enough material of the right complexity within the event for this to even happen. But where would this occur within those events involved in constructing elementary particles, atoms, molecules, cell units, minerals, bacteria, etc.? These are enduring societies that require a very meagre amount of creativity in their becoming.

The *locus in quo* for this issue is the “transmuted feelings.” You may recall that I had said that, in conceptual reversion, there is an enrichment of potential for contrast and creativity through the potential available to this stage of concrescence, but that this does not mean that it will opt for those alternatives that reversion may make available to
This crossroads occurs when the physical feelings become integrated into a prehension that is the feeling of a unity of the multifarious unities – the societies or nexūs – given in the original, felt environment. (PR, 251)

Transmutation is when the quality – the eternal object, or pure variable of determination – which characterizes the unity of the feelings that constitute the unity of a society or nexūs, such as timbre or pitch of a sound as it is carried over from moment to moment as an enduring object, becomes a “predicate” of those societies or nexus. (PR, 252) The pluralistic past becomes simplified as an abstract quality that may become for the feeling what that feeling is “about.”

Simplification (abstraction) and intensification of potential elements given through the initial feelings is the goal of concrescence, and the disjunctive plurality of the multifarious societies and nexūs is unified within a feeling as a determinate event of experience; as the resolution of some definite moment of actual reality. Within transmutation, the conceptual feelings prehend the eternal objects that characterize the complex background as a simple predicate, and if this predicate is valuated adversely (a valuation upwards), then physical feelings which transmitted those unified aspects of the complex background become dominant again because of their now “enhanced intensity” via the adverse feeling’s subjective forms. (PR, 254)

Because of this valuation, the concrescence has effectively aligned itself with what has already been established within the past, and the alternatives given through the conceptual feelings are no longer relevant to it. It is thus by this prehension that a breaking-off point – a decision – is established within the process of concrescence.
Judging by the complexity of most of the enduring societies of our known universe, this appears to be as far as creativity goes for the vast bulk of our world.

This would be the decision for those events that constituted the machinery of the phonograph, the electrical events, the events of digital processing, the structure of the space that Patrick is in, the transmission of the waves of sound through the environment, and to some of the events that constitute Patrick’s body. The terminus occurred because, again, the eternal object that conditioned the transmuted feeling was prehended as an adversive valuation.

But if, instead of an adversive valuation, there could have been an aversive valuation (a valuation downward) then the predicative quality of the past, and the physical feelings that transmitted it, would have an “attenuated intensity.” (PR, 254) This would render the eternal objects prehended as a reverted feeling more relevant than before, and, due to this, other opportunities become available to that concrescence to obtain a much higher complexity, including a chance to be a conscious event.

5.1. The Transition to Propositions

The events that have transferred the sounds from the phonograph through the space of the room, through Patrick’s body, and through systems that received and processes auditory information within his body, have brought the qualities that may be interpreted as musical sound within those events that constitute Patrick’s ongoing processes of mentality (such as they are). These are those processes that determine the ongoing physical structure of Patrick’s brain and nervous system as well as those
events that constitute Patrick’s most intense and complex feelings or emotions, concomitant with the physical determinations, including those events that contribute to the flow of conscious feelings and thoughts.

It is within this phase of development that propositions emerge, for it is here from this bodily environment that there is sufficient complexity for the process of prehension to valuate the nexus as predicate either adversely or aversely, and, if aversely valuated then the alternatives for development given through the reversion of the conceptual feelings present a contrast between the nexus of the actual, given past and the eternal objects that would allow the concrescence to follow a novel path beyond that past.

One may ask why the valuative process at this stage should opt for either the nexus or for the reverted conceptual feelings. It is not necessary, after all, for a concrescence to reach the propositional stage in order to account for evolutionary process at either the general cosmological or specifically geological or biological levels.

Novelty of physical, chemical, or genetic combination or variation need only go as far as transmuted feelings for two reasons:

(1) The abstraction of the nexus is conditioned by the complexity of that given background, so that a slight shift of the component nexūs or societies involved, so that, due to relatively remote causal influences, one type or complex of types of qualitative determinability may come to predominate over another type. If this occurs within the process of realization, then the realized event would effectuate a moment of primitive physical change, including genetic divergences. The immense plurality of elements within nature, and the nigh equally diverse processes of synthesizing these elements across and through nigh equally diverse societies and nexūs present a condition in
which aspects of relative stability but also aspects of chance and randomization become inextricable components of our given universe.

(2) Creative advance, as the movement from plurality to unity and back again, and as the general realization of creativity through an intensive, singular feeling of value as some realized pattern, is at work even here. The subjective forms of past actualities bring their own self-determinations for creative advance into the subjective aim present process of concrescence, and if the relevant past is complex enough then there is a concomitant transmission of complex drives for intensity into the present.

Reasons (1) and (2) also supply us with what we need to answer to why the concrescence may opt for the reverted feelings.

(2) The creative impetus towards some intensive realization of value may, under certain given conditions, have the means to realize a more complex, and thereby more intensive, singular expression of value through its actualization.

(1) The “certain given conditions” would have to include both the complexity of the environment and the way in which it had been incorporated within the early stages of feeling. If this happened to include an environment that was complex enough so that the subjective aim was able to incorporate more relevant subjective forms from the past whose aim was greater intensity of feeling, then the “valued-up” conceptual prehensions would predominate, and the chances of opting for the revered conceptual feelings increase. (PR, 254) From this given complexity and its increase in conceptual intensity, the transitions into the propositional stage have been effectuated.
6. Conclusion

We have seen in this chapter that the early stages of becoming are a process of producing a novel constructive, synthetical unity from its various given conditions. They always involve contrasts. These novel unifications establish not only real connectivity between various events and their components but also establish the various manners of connectivity (relations) that will obtain between each aspect of the event.

We are not yet at a stage in which this role that contrasts play in relational actuality can be consciously recognized. This occurs within propositional feeling, which will be one of the main subjects of the last chapter, but we will first return to the issue of the eternal objects and the problem as to whether their togetherness is sufficient as a condition of relationality, or whether some kind of actual process is required in order for them to properly function as a contributor to the various modes of relationality.

This would mean that some actual process would be required, and if we are dealing with an actual process, then we are always dealing with a synthetical activity of producing some type of unity from diversity, and, without this activity, there would be no types of unity whatsoever. Thus, we are always dealing with the process of contrasts.
CHAPTER FIVE

CONTRASTS, PREHENSIONS, AND ACTUALITY – PART TWO:

GOD’S PREHENSIONS AND THE RELATIONALITY OF ETERNAL OBJECTS

1. Introduction

To return to the two basic conditions at work in the becomings of actual events that I mentioned in Chapter Four, each novel moment of becoming requires:

(1) A given environment of already realized other actual entities and other elements immanent to every becoming. These many elements call forth some manner of synthetical response as a way of resolving the problem posed by its initial provocation;

(2) A given purpose towards becoming that effectuates this synthetical response to the many elements. This purpose has, as its aim, the feeling of some creative satisfaction with the way it can bring these diversely felt elements into a particular unity, integral to itself as the entire world of present, transformative, valuative feelings.

But there is another component that Whitehead hypothesizes for the creative advance of the entire system. Without this component, there would not be a given order of possibility that is required both for any actualization, as well as an explanation of the origin of the given purpose that each actual entity realizes in its own actualization.

This component is Whitehead’s conception of God, which is, after the eternal objects, the most controversial aspect of his philosophy. In this chapter, I shall try to
give as clear a description of this conception of God as I can, and defend, at least, one of the underlying ideas behind Whitehead’s theological hypothesis: That there must be some manner of actual process at work even in the bringing together of the eternal objects into a relational unity, from which orders of possibility may be derived.

This shall have an important bearing on the account of prehension and conceptualization from Chapter Four and finalizing in Chapter Six in that the order of eternal objects constitute the extensive continuum, from which Patrick is feeling given extensive regions determined by each auditory event and his body’s feeling of them, as well as the various orders of possible eternal objects that Patrick may utilize in the conceptual generalizations from these auditory events.

This shall also have an important bearing on my thesis in that, if my argument concerning God and eternal objects is successful, then contrasts (within God’s prehensions of eternal objects) are indeed involved at even the most fundamental levels of possible, relational order, including in the becoming of the extensive continuum.

2. God

Each actual entity passes along potentiality and an aim to its successor, but if we attempted to explain as to how these elements come to be included within any successive event without something that functions as an original source for potentiality and purpose immanent to all successive actualizations, there would be an infinite regression of causal influence.
According to the ontological principle, all reasons must be explained through the becoming and determinative legacies of actual entities. If the system is to be consistent, this must also be the case for both the availability of potentiality for every actual becoming as well as for the purpose for realization that is given to every actual event.

Whitehead proposes that there is such a process that immanently provides these conditions for successive becoming, and as it is a process which would have to be immanent of a chain of actualizations that extends infinitely into the past, then there must be at least some aspect of this process that is eternal and is not itself affected by the chain of events of actualization. This chain of events constitutes the flow of temporality, as successive events determine a qualitative and quantitative duration relative to those that have come before it, and shall become relative to those that come after it, so this eternal aspect of the condition for potentiality and purpose is non-temporal. This is Whitehead’s notion of God (specifically of God’s “primordial” aspect).

The topic of Whitehead’s notion of God is hugely complex, and this project shall primarily concentrate on those aspects of this topic relevant to the relationality of Whitehead’s system. I am in full agreement with Whitehead that in so far as the variables for determinability (not just the various aspects of relationality but also the ingredients for mathematical thought), are not transcendent of actuality but immanent to it, then this immanence must be accounted for through constructive, evolutionary processes of actuality, with no appeal to anything apart from such processes.

God, while distinct from other actual entities in some important respects (none of them arbitrary, and are due entirely to the kind of material that is being felt by its prehensions), is still just an actual entity: a singular process of actual feeling and
constructive process. In this regard, God is on the same level of everything else in actual existence, whatever its complexity. (PR, 18) This points directly to the importance of contrasts within this constructive condition for immanent potentiality, as contrasts are always involved within actual, prehensive establishments of various types of unity, connectivity, and other relational determinations.

However, I do not think that Whitehead makes an entirely convincing case for his notion of God as being entirely sufficient to fulfill this role. In Chapter Six, I shall suggest some criticisms of Whitehead's notion of God, as well a possible resolution to these criticisms. But where I believe Whitehead's notion of God definitely works is in providing a case for the need for some kind of constructive, actual process for the relational order and availability of potentials, and in this chapter and its sequel I shall argue that Whitehead's notion of God successfully fulfills this need and function.

2. 1. Envisagement

Whitehead's God, as with Leibniz's, incorporates all possibilities within its feelings, selectively valuates their potential for incorporation within actuality, and in so doing produces a synthesis of the eternal objects within a complex series of definite possibilities. (RM, 153) God is thus a principle of limitation on the infinitude of possibility, and also the condition for any rational order within actuality as it is by God's calculated selection from the infinite realm of possibility that there can any consistency within actuality, as each realization requires that there be at least some ordered relevance within its given potentiality.
“Envisagement” is Whitehead’s word for how God’s feelings feel and valuates the infinite realm of eternal objects, and it is through this process of envisagement, as Cobb perceptively explains, that God’s function as a principle of limitation is fulfilled.\textsuperscript{74}

This activity has “three types of envisagement”:

(1) the envisagement of eternal objects;

(2) the envisagement of possible value in reference to how each of the eternal objects may be synthesized for actuality;

(3) the envisagement of the realized, actual world as the preparation for a future actual world. (SMW, 104 – 105)

However, Whitehead adds that to conceive this activity in abstraction from actuality, then “the eternal activity” would be “divorced from value.” (SMW, 105) “Value,” in this context, is to be understood as the significance an actual event has for its own realization, rather than what effect this realization will have, but it is still the sense of value that feels the relevance of certain possibilities as more salient than others.

The envisagement of God results in these particular, non-binding lures of feeling for each event of actual process to realize some value. But, as I have said, these are not just an indiscriminate world of unbounded possibilities, but rather certain possibilities have been valued over others for the actualization of actual events.

This is to say that, from God’s underlying activity of envisagement, which imposes a limitation on the unlimited possibilities for value, all actual processes now

\textsuperscript{74} John B. Cobb, Jr., \textit{A Christian Natural Theology: Based on the Thought of Alfred North Whitehead}, 89
have a way of connecting to the eternal objects through God’s feelings, without which there would be no way of establishing any order by the other actual entities.

But it is to be noted that in this earlier conception, God’s process is just a principle of harmonization, limitation, and value for creative process, but it is not actual. In 1925’s *Science and the Modern World*, Whitehead explicitly says that “God is not concrete” in the way that an actuality is. (SMW, 178) This shall change in 1927 with *Process and Reality*, in which this earlier Spinozistic monism will be replaced by a Leibnizian pluralism and actualism.75

By 1927, Whitehead was now treating God as an actual entity, but God’s function as a supplier of an envisagement of grades the relevance of eternal objects, as well as the provider of an initial aim for the early stages of individual concrescences, remains the same. Still, as we shall see, Whitehead’s later work not only reconceives God but also the nature and order of eternal objects.

In *Science and the Modern World*, apart from God’s envisagement, the eternal objects present an infinity of potential orders of possibility for actuality, but this does not mean that there isn’t already some relational togetherness amongst the eternal objects. In Whitehead’s work of 1925, the eternal objects may be conceived as a connective “realm” independent of their organization by envisagement, but by 1927 the togetherness of the eternal objects shall also be dependent on God’s feeling activity. This shall be of huge importance for my thesis on contrasts.

75 John B. Cobb, Jr., *A Christian Natural Theology: Based on the Thought of Alfred North Whitehead*, 91
2. 2. God as a Causal Condition for Actualization

As an actual process, God, like all actual entities, has feelings with subjective forms that are directed towards a subjective aim. The aim is this: that the subjective forms of God’s feelings of the infinite variables of determinability shall be unified in such a way that the eternal objects shall become relevant lures of feeling “severally appropriate” for all realizable conditions of actuality. (PR, 88) The reason why it has this aim is due to the fact that its only objects of feeling are the eternal objects. All that it feels are relative orders of possibilities for realization. Each feeling is of a possibility for actuality, and these feelings relate to other feelings of possibility.

Given the pyramidal structure of the feeling of feelings, the feelings of possibility inevitably come to some moment of selecting some complex of orders over the other possible orders, comparable to the moment of decision and satisfaction.

But even when this is reached, and shall function as a total envisagement of all eternal objects and their latent possibilities, this is not enough for anything like real satisfaction for God’s feelings. This is because this unity would still be just a unity of possibilities for actuality as just possibilities and generalities. Nothing final has been achieved in so far as a realization of these possibilities within actual process.

For this reason, God has not foreseen all actual events before they have happened. God feelings of possibility do not foresee particularity, as possibility does not determine anything actual (as no universal could do so) but only generalities that may apply to actuality under certain circumstances. God’s primordial feelings have established the realizability of there being three things of many types, but God’s
primordiality has not already felt (foreseen) the realization of the three rabbits living under my house, of three Sibelius symphonies, or three of anything in particular.

What is required is some means of bringing these possibilities into an actual unity, or else this unity for the sake of definiteness is nothing but feelings of generalities and nothing of real definiteness. But even when a determinative unity is achieved by an actual event, no series of events could ever exhaust the potentialities latent in the eternal objects, even if there is a restriction on what orders of possibility may apply.

So, God is a ceaseless thirst for creativity and is dependent on the becoming of other actual entities for realization of its appetitive nature. But this appetition for creativity is distinct from Spinoza’s notion of “conatus,” in that God’s appetition is not a drive for the persistence of its “being” but, rather, for singular, novel, intensive realizations of value through the creative, determinative becomings of other actualities.

In this way, God functions as a causal process in becoming, as the purposeful feelings transferred into each concrescence are originary in God’s feelings of infinite potentiality, and, since God’s feelings of infinite becoming is not included as a moment within the temporal series of concatenated becomings but is presupposed as the efficient cause and condition for finalizations within this series, God effectively functions as the immanent condition for the perpetual becoming of new events. (PR, 224, 244)

2. 3. God’s Primordial and Consequent Natures

With the distinction established between conceptual and physical feelings in the last chapter, we may consider what Whitehead called God’s dual natures. These are
God’s primordial and consequent natures and characterized by the conceptual and physical feelings respectively. Once again, neither conceptual nor physical prehensions are radically distinct types of feeling. This is also the case with God’s conceptual and physical feelings. God’s conceptual feelings precede the physical feelings because God has no actual entities prior to it to feel. For this reason, God’s primordial nature has no past, and the eternal objects are not temporal entities (eternal objects do not have any actual entities from the past to be derived from). (PR, 87)

But this does not mean that God has no objective content to its feelings: God feels the eternal objects. As in the earlier conception of God, God’s activity commences with the feeling of the eternal objects. As these are not actual unities but just the determinables for unity, then they shall be felt as conceptual feelings. As these feelings are the condition for not only every finite event of actuality but also for the other aspect of God’s nature, this is God’s “primordial” nature. (PR, 31 – 32)

The consequent nature of God is called “consequent” because it is consequent upon not only upon God’s primordial nature, but also on the activity of other actual events. In God’s consequent nature, God physically prehends every other actual entity. (PR, 345) The physicality of these feelings is due to the fact that what is being felt are not just variables for determination but actual, determined unities of realized fact.

I shall have to wait until the next chapter in order to explain how the consequent nature of God is able to feel all the realized actual entities (this is because I have yet to discuss prehensions as propositions, let alone the extensive continuum), but it is worth mentioning right now that the actualization of other actual entities occur something like at a point between God’s primordial and consequent feelings.
2. 3. 1. God’s Valuative Feelings

With our background in valuative, conceptual feelings, we may be able to better understand the process by which God envisages the eternal objects and, in so doing, makes definite possibilities for order available to other actual entities. Eternal objects are not simply “given” as potentia for actualities. In both *Science and the Modern World* and *Process and Reality*, eternal objects require an activity of valuation in order to condition them as possibilities for qualitative determinacy and order within actuality.

Eternal objects are given in a mediated way, through the “graded relevance” of God’s primordial prehensions. (PR, 46) The “graded relevance” of eternal objects is the determination, through God’s valuating envisagement, of the relevance of each eternal object to the becoming of actual entities. We’ve discussed relevance a number of times in this essay, but here relevance may be understood not just in the sense of what may be compossible given the complexity of the specific process of actualization, but also in terms of what type of situation for constructive synthesis a contrast may pose for any becoming actuality, as the disjunctively diverse material presents multifarious ways in which the finalization of an actual entity may be achieved, but only some of which will become concordant with the subjective aim towards harmonization within that becoming actuality. A contrast thus presents a condition by which relevance and irrelevance for actuality may be determined. (PR, 112)

In God’s envisagement, something akin to the divine calculation of Leibniz’s God is effectuated. Within the primordial feelings, the infinite possible determinations of actuality – however compossible or incompossible to any event of our world – are
incorporated, and, as with Leibniz’s God, the goal is to achieve a maximal effect. For Leibniz’s God, it was to achieve the greatest diversity of phenomena through the most economical of means: a maximum of variety balanced with a sufficiently simple amount of order.\textsuperscript{76} For Whitehead’s God, the goal is for infinite becomings of intensive realizations of value, also with an infinite variety. Towards this end, a maximum potential for coordinate feelings is sought, with a minimization of triviality.

Triviality is a lack of coordination in a feeling so that there is nothing in the uncoordinated aspects of a feeling that may have a determinative lure for that prehending actuality. Coordination is due to factors in various feelings reinforcing each other. (PR, 111) When triviality occurs, there is insufficient data in the feeling to “elicit a depth of feeling from contrasts thus presented” and, in these instances, incompatibility has “predominated over contrasts.” (PR, 111)

Triviality is due to an excess of a width of selection of possibilities over a narrowness of intensity in the “higher categories” of contrasts, thus presenting a condition of incompatible differentiation in feeling. (PR, 111) This would be something like an event being given an environment with too many nexūs whose variety of feelings overwhelm the event’s capacity to effectively unify this variety through valuation into anything except an expression of chaos and is akin to when we feel overwhelmed by too much competing and conflicting sensual data.

As with Leibniz, what is sought through the grading of the possibilities of eternal objects is the chance for harmony to be realized over chaos (for Whitehead, chaos is an

\textsuperscript{76} Gottfried Leibniz, \textit{Philosophical Essays}, 210, 218 – 220
entropic condition; PR, 92 – 93). “Harmony” is not the same thing as a pleasant concord of effects. For Whitehead, it is a “combination of width with narrowness.” (PR, 111)

Harmony is achieved when only a limited number of possible effects become concentrated within a feeling, this is how a feeling may have a depth of intensity. When there are higher categories of contrasts involved, then what was formerly incompatible differentiation in the lower categories may become canalized into an intensive, multiplistic-yet-focused (synthesized) depth of feeling. (PR, 111)

The relative compatibility or incompatibility of determinables within actualization are prefigured in God’s envisagement, which selected certain orders for possibility over others for realization. But, it is to be remembered, that God’s envisagement only unifies a certain complex order of general possibility, so it was not decreed that our universe had to have one set of particular features and not another set. Still, God’s feelings have determined that there would not be a conflict between incompatible features: given the potentiality available to it, and given the complexity of the processes involved in it, a star may capable of becoming a red giant but not becoming happy.

But degrees of relevance, and therefore of harmonious compatibility, does not appear to be absolute but, rather, is a matter of degree. (PR, 148) Even when we are dealing with one situation wherein the constituents of a depth of feeling renders an element in feeling irrelevant with a zero-degree of intensity (happiness for a star), this same element may become compatible with those same constituents in another situation if that depth has also become complex enough to admit not only those same constituents but also that once irrelevant element. This is because the eternal object,
abstracted from feeling, “retains its potentiality of indefinite diversity of modes of
ingression,” which had been denied in those earlier ingressions. (PR, 149)

However, an actual entity always enters into the prehensions of becoming actual
entities in a limited way: there is always some incompatibilities of feeling within a
temporal actual entity’s prehension. Each entity has one, obstinate role to play within
every event of actualization. No entity can function both as itself as well as what is
contrary to that role that it plays. This is because each entity is formally singular and
irreducible to another entity. This is true of the eternal objects as well as the actual
entities. (PR, 225) This is why, even in unification, the elements of a contrast do not
become reduced to a relational totality, subsuming its identity. As each element of a
contrast has a singular role within that contrast, then nothing functions in a way that is
identical to anything else. These are the conditions of incompatibility. (PR, 225)

In by their function as determinables for actual fact, there is an “exclusiveness” in
the nature of eternal objects. When an eternal object is felt by a conceptual feeling, its
determinate character is felt as well as the exclusiveness of that character, so if its
character is this, it cannot also be that or that character. (PR, 240)

But just to avoid any misunderstanding: the identity of an entity is not separable
from how they are functioning within some actual feeling. To conceive of an eternal
object – or even an actual entity – as a static, self-identity, transcendent of actuality is to
conceive it abstractly, and to overlook how the consistency of its function is dependent
on its ingression within feeling. Its self-identical nature is, in the context of Whitehead’s
ontology, entirely due to its determinative character within some actual feeling.
However, as there is nothing prior to this determination by God of possibilities for rational order, there is no rational justification for the selection of this set of possibilities over another determination of another set of possibilities, for an axiological designation of better or worse can only come from the valuative process of feeling.

For this reason, Whitehead called the particular conditions for order and determination that characterize our world as being the result of an activity of “ultimate irrationality.” (PR, 178) But by making a consistent order of possibilities available for actualizations, God has also provided the condition for valuation in actualization, as it is through the availability of possibilities that a response is elicited in feeling, and the elicited response also includes a selective gravitation towards a certain set of possibilities for realization in preference to another set of possibilities.

This is a process dictated by the relevance of the possibilities at hand and by the selective, creative power of the feeling involved. The former is always involved even if the type or scope of its restrictions have been modified by the complexity and power of the latter. The conscious feelings of an artist have a greater power of selectivity than the conscious feelings of an ant, but both are restricted by the scope of possibilities at hand, even if the artist is constantly broadening the possibilities for expression with each work.

2. 3. 1. 1. Gradation Without Negativity

It is by the gradation of the exclusive natures of eternal objects for the sake of contrasts (because it is through contrasts that we achieve a unity of qualities in feeling and thus an intensive realization of value) amongst other actual entities that some
intensive character may be gained that would allow for the establishment of a novel advancement of creative becoming. Rather than the narrowness that comes from gradation hindering creativity, intensity becomes “the reward of narrowness.” (PR, 112)

This principle of intensive relevance, says Whitehead, saves actual entities from being mere repetitions of previous actual entities by allowing degrees of relevance, differences amongst possibilities, and degrees of intensity (“more or less”). (PR, 148)

The principle states that everything in the universe, no matter how remote or how ridiculous as a conception in thought, has some gradated degree of relevance within the prehension of an actual entity, and this includes a relevance of a “zero degree,” as determined by the negative prehensions within the other actual entities. (PR, 148)

This reveals an inversion of the Leibnizian idea of sufficient reason: God is no longer what creates the sufficient reason, or internal unfolding of events within each monad’s structure through the fiat of “pre-established harmony.” Although God established the condition for any harmony through the gradation of eternal objects, it is each event itself that establishes its own harmonic ordering through its immanent self-creative and self-actualizing process. The event’s own sufficient reason is what determines how the event shall be expressive or a certain kind of order; as certain kind of cause, or a certain kind of pattern amongst other events; as a self-determinative selection from the possibilities given to it by envisagement. This unification is accomplished in part through the negative prehensions of actual entities.

But the strange thing is that God does not have any negative prehensions. In neither the primordial or in the consequent nature of God are there any subjective forms that dismiss a possibility or an actuality as irrelevant or incompatible to its feelings. (PR,
345 – 346) Indeed, God’s conceptual experience is conceived as a fact that is “limited by no actuality which it presupposes,” and for this reason it is “infinite” and “devoid of all negative prehensions.” (PR, 345)

This leads one to ask how any effective valuation can occur if there are no negative prehensions in God, especially since Whitehead distinguishes positive and negative prehensions as a process of valuing up and valuing down, respectively.

However, what really characterizes negative prehensions is that they are the dismissal of feelings as incompatibles. (PR, 83, 106) Whitehead does allow that there can be conceptual feelings that do not negatively dismiss certain feelings but simply down-grades their relevance. (PR, 240) These feelings would not reject the feelings of the eternal objects but are an aversive valuation of certain eternal objects as having less of an allure towards constructive impact than others. In this way, the feelings of the eternal objects are not dismissed, but have a different grade of relevance to the overall actual entity than the other eternal objects that were adversely valuated instead.

But this does not entirely resolve the matter, as Whitehead is here referring to propositions (a topic we shall cover in the next chapter), and the primordial feelings of God are not propositions. On the other hand, every conceptual prehension is a process of valuation, and, as we have noted, God does not dismiss its feelings of eternal objects that are possibly incompatible within a certain situation, but allows a degree of relevance for each one, depending on the circumstance of its inclusion (within an actual entity of sufficient complexity and intensive creative power). In this way, God may attach any number of both adverse and of aversive valuations to an eternal object as the nature of its set for ingression, or essence of its manner of particularization given the
way it may operate within an actual contrast. By establishing relative scales of relevance, God’s grading of eternal objects requires no negativity.

3. The Order of Eternal Objects

But regarding the eternal objects themselves, how are we to understand their nature independent of God’s prehensions (if such is possible)? How do we become aware of the types of order and organization of eternal objects that God’s primordial prehensions supposedly make available to us? And can we be sure that these eternal objects do not, in fact, have a relational togetherness ontologically prior to, and thus independent of, the contrasts involved within God’s primordial feelings?

If we’re curious whether any kind of togetherness obtains amongst the eternal objects themselves, the locus of examination is – as always – an experience. We experience syntheses of actual entities and elements given as components of complex contrasts, and what we discern in experience – via analyses of spatially distributed objects or concepts – are also derived from the components of complex contrasts. As usual with complex contrasts, their components may be analyzable into components, and then into components of those components.\(^{77}\)

When we analyze the elements of experience, such as emotions, degrees of speed, or the content of visual perception, we discern various grades of complexity that are comprised of are patterns and sensa. Patterns are complexes of eternal objects, as opposed to the sensa, which are simple and do not involve other simple eternal objects.

\(^{77}\) Chris van Haeften, “‘Number’ and Deity According to Alfred North Whitehead,” 48
3. 1. Patterns and Sensa:

From the activity of prehension, we may discern two “relational types” which are the products of prehensive activity:

(1) The concrete particularity of the unities produced through contrasts;

(2) The patterns that may be abstracted from these particularities. A pattern is a complex of an eternal object that functions as “a manner of relatedness between other eternal objects.” (PR, 144)

This “manner of relatedness” is the singular way in which the determinate qualities within a felt datum may be felt as a unity to the feeling subject. The unity of the felt datum as a particularity also includes an eternal object which qualifies that new unity. This unity is of the determinate quality of how those irreducible particularities are felt together in that unity as a contrast.

But the irreducibly simple constituents of these patterns are the simple eternal objects, the sensa. The sensa are perspicuous qualities, such as a singular shade of “red,” and these basic qualities are brought together to form complex qualities, such as “reddish brown,” as well as general abstract notions such as the color “red” itself and, even more general abstract, the notion of “colors.”

As it is assumed that no other eternal objects are involved in the determinability of its singular quality, sensa have a zero-degree grade of complexity. (SMW, 166) But the three faces of a tetrahedron, that has a relation R (a,e,o), is an eternal object with a first degree of complexity in that this complex eternal object expresses only one type of relational order amongst its simple components. (SMW, 166 – 167)
There are patterns within the discernable relationships of extensive realizations given in experience with higher and higher degrees of analyzable complexity, from which we may form progressively more complex mathematical notions. As in the case of mathematics, we may progress beyond any particularity of given extensive relationships and begin conceiving pure abstract notions, including relations *qua* relations.

3. 2. Abstractive Hierarchies

From this method of progressive abstraction, Whitehead developed what he called an “abstractive hierarchy,” which begins with those sensa of zero-degree complexity and can extend indefinitely into more and more complex patterns.78

An abstractive hierarchy expresses the order of eternal objects as phenomenologically given; as the elements that contribute to the intensive and extensive characteristics in experience that may be abstracted as determinacies of singular eternal objects. In Whitehead’s 1925 book, *Science and the Modern World*, the givenness of this content and its discernable nature by conscious abstraction is due to the order of eternal objects as they refer to the actual world.

Imagine a set of abstractions based upon group g, “where g is a group of simple eternal objects.” The simple eternal objects of group g are generalizations from feelings that include basic qualia such as primary colors. (SMW, 167)

This is an abstractive set, and any such organization is an abstractive hierarchy if the set of eternal objects satisfy these conditions:

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78 Chris van Haeften, “‘Number’ and Deity According to Alfred North Whitehead,” 48 – 49
(1) the members of the group g belong to this group, and are the only simple eternal objects within this hierarchy;

(2) the components of any complex eternal object in this hierarchy are also members of this hierarchy;

(3) no matter whether the eternal objects are of the same grade or differ amongst each other regarding their grade, any set of eternal objects that belong to this hierarchy is “jointly among the components or derivative components of at least one eternal object which also belongs to the hierarchy.” (SMW, 167)

The “components” referred to are the relata of a complex eternal object, and that they are themselves eternal objects. These may themselves be complex eternal objects with their own components. These latter components are the “derivative components” of the complex eternal object that they are the relata of. (SMW, 166)

Whitehead is here using set-theoretic rules to define this group inclusion, and one may object to their imposition as arbitrary, but because the relative analyzability of the elements determines their status as either simple eternal objects or as complex eternal objects as elements within a group with a certain structure, then there is an empirical basis for these rules, which only follow from the patterns and relations that seem to obtain from any analysis of experience.

Because any experience should have components of determinability that can be analyzable in terms of these hierarchies, then it would seem that from this process of abstraction we may generalize rules – or one universal rule – for how eternal objects may become realized by means of some relational manner obtaining amongst them.
3. 2. 2. Connexity

Connexity, says van Haeften, would be this general relationality that obtains between the members of these abstract hierarchies, and it is from this relation that we “come to the definite logic of the realm of extension.” This is because connexity is, says van Haeften, is a “well-defined logical property of certain relations,” including those types of properties that determine the order of a relation, such as in seriality.\(^79\)

The relation of connexity, says van Haeften, “implies that the relation between different complex situations is asymmetrical and transitive.”\(^80\) From the discernment of how individual and overlapping patterns of eternal objects can be included within graded hierarchies, as well as from an overall relationship of connexity and asymmetry obtaining to all of them, we may generalize an overall togetherness of eternal objects, and from this a “realm” of eternal objects.

It is to be noted that this general togetherness was deduced from how the sensa and patterns may be included within abstractive hierarchies, and not from how a synthetical process unified these eternal objects within actual fact. These unifications, it seems, would be indicative of the processes of synthesis within particular instances of unity, whereas the generalized notion of connexity indicates a universal condition for togetherness as it is derived from the rules that govern the inclusion of eternal objects within any type of order and organization whatsoever.

\(^{79}\) Chris van Haeften, “‘Number’ and Deity According to Alfred North Whitehead,” 49

\(^{80}\) Chris van Haeften, “‘Number’ and Deity According to Alfred North Whitehead,” 49
This conjectured togetherness seems appropriate if we recall that eternal objects are abstractions derived from our ability to discern alternatives to any given actual situation. I had mentioned in Chapter Two that we may understand the infinite plentitude of eternal objects when we consider the infinite ways any actual fact may be characterized, and we may understand their eternality when we consider how each of these infinite possibilities of characterization may be repeated from moment to moment as abstractable qualities of those moments.

The implication of connexity seems to be that it is the relational essence of an eternal object to be somehow related to the process of actual becoming. It is the relational essence, it is argued, that relates an eternal object to every other eternal object in part because of their shared capacity to be determined within actual process, and because their singular capacities for determinability – their individual essence – includes also their capacity to:

(a) be determined with or

(b) being determined due to the shared incorporability of the other eternal objects.

When we are dealing with a complex eternal object, we are dealing with (b), one whose singularity is that they function as the various ways in which component eternal objects are ingressible within a certain relationship – like “x” and “y” in an “x/y” relation.

When we are dealing with a simple eternal object, or sensa, we are dealing with (a), but their unanalyzable singularity is still their capacity to be included in both actuality and as components within complex eternal objects.

81 Chris van Haeften, “’Number’ and Deity According to Alfred North Whitehead,” 46
If this were not so, they would be truly transcendent and discrete entities whose relationship to actuality would be tenuous if not utterly incomprehensible.

Every eternal object is in reference to actuality as a potential that may be realized, and this conditions an overall connective, extensive relationship that obtains between all of them and exhaustively arranges orders of possibility (that may or may not be made available to other actual processes through God’s envisagement). The capacity for reference that each eternal object may have would perforce include how it may be referenced with all other eternal objects in every possible combination, no matter how irrelevant they would be to the present order of our world, but always in terms of some manner of extensive connection.\(^{82}\)

From this, we may conclude that a general connective relationality would hold necessarily between all eternal objects, which determines how they may become available to actual fact as constituents of a pattern (the general relations of which we may obtain through abstractive hierarchies). While these eternal objects would still be ontologically dependent on actuality, their order and togetherness would not have to refer to any particular process of actualization, as they are already ordered for inclusion within any actualization whatsoever.

If the connexity that can be deduced from how abstractive hierarchies can refer any sort of ordering of potentiality to actuality, and thereby indicate an exhaustive connective togetherness of all eternal objects through the way their relational essences refer them to any possible pattern of order, then no contrasts were required in order for this general relational togetherness to obtain amongst the eternal objects. What is more,

\(^{82}\) Chris van Haeften, “‘Number’ and Deity According to Alfred North Whitehead,” 47
as this condition of connexity describes how any order may be realized, then this
general relationality, and the “realm” of potentials for inclusion it determines would be
the true condition for all relationality and not contrasts.

3.2.3. The “Realm” of Eternal Objects

So, in *Science and the Modern World*, there does seem to be a sense that
Whitehead conceives that there is a “realm” of eternal objects and that this realm seems
to have a necessary, relational order due to connexity. This condition of connexity is
pre-given to actuality as the condition for any relational determinability, thus
independent of actuality and prior to any contrasts. This would seem to contradict
Whitehead’s later formulation of the ontological principle in *Process and Reality*.

In fact, there isn’t any mention of “abstractive hierarchies” in *Process and Reality*.
Henry suggests that this is perhaps because Whitehead became aware that orders of
eternal objects cannot be convincingly reduced to a hierarchy.83 In the abstractive
hierarchies of eternal objects of the objective species – such as mathematical patterns –
it is relatively easy to discern a formal order of extensive determinables and modes.

However, it becomes more difficult to find something like a necessary abstractive
order amongst subjective eternal objects, such as various colors and emotions. Indeed,
Henry suggests that it may be due to the introduction of emotional eternal objects
amongst the subjective species of eternal objects that have forestalled further
development of the theory of abstractive hierarchies. Henry asks whether emotions

83 Granville C. Henry, *Forms of Concrrence*, 103
such as “comfort” or “satisfaction” are simple or complex: If they are complex, what are their component, simpler eternal objects?

If they are simple, then how is it that in a feeling such as complacency the eternal objects of “comfort” and “satisfaction” appear to be so linked together in the determinant aspect of that feeling as to make it difficult to distinguish the two? The relationships between them appear to be “locally conventional” rather than “fixed relationships,” says Henry.84 It is not obvious how these eternal objects express an order prior to an actual unity of feeling. So, an actual event determines them to have their relational order.

However, we may still obtain a sense from the later work of how there is still a discernable togetherness of eternal objects, and thus an extensive continuum conditioning the connectivity and communicability of the actual world. Again, this would be an analysis of whether the qualitatively determinable aspects within experience can be further analyzed into more basic elements.

We may conceive of an emotion such as schadenfreude as having more basic elements, such as shame and joy, both of which are involved within a contrasting pattern of these elements, but with the latter quality having a more dominant, intensive role within the complex pattern of that particular feeling. This pattern would indicate the same connexity and asymmetry as indicated above would still obtain within such groups as an abstractive hierarchy of eternal objects from more basic to more complex or general patterns, and we may thus generalize a basic connectivity and order obtaining amongst all eternal objects; generalize from those that have already been realized by past actual entities to those that are in excess in any actualization.

84 Granville C. Henry, Forms of Concruncence, 102
3. 3. The Extensive Continuum

In order for there to be not only various types of social order but also influence amongst them, there must also be some means by which communication is facilitated within and between these various societies. This communicability is essential for scientific analysis and measurement, poetic insight, and everyday activities such as feeling and remembering. Communication functions across actual events not only because there is the capacity for connectivity between those events, but also because there is a capacity for the transition, reintegration, or re-conception of patterns of order, organization, and of connectivity, from event to event.

The condition for the becoming of connectivity and repetition of pattern is the eternal objects, whose togetherness as realized and unrealized potential constitutes an extensive continuum. This continuum is a universal relational matrix that comprises both the togetherness of past actualities and the togetherness of unactualized potentiality. In this way, the extensive continuum is the matrix of both “real” and “pure” potentiality.

When a concrescing actual entity utilizes any degree or type of potentiality for its realization, it does so due to the togetherness of potentiality available for it through the extensive continuum. The extensive continuum renders the potential for connectivity available for every actuality, as it provides the condition for establishing past, present, and future actuality, as well as the condition for social connectivity amongst and across various nexūs, and for realizing or discerning patterns for determinate actuality that may be carried over from past to present to future actuality. Indeed, this continuum is the condition for any determinations of any connective actuality. (PR, 327)
The extensive continuum’s function is as a scheme of potentials for relations and is comprised of patterns for possible realization. This includes both the way in which past actual entities have realized these potentials, as well as the eternal objects that are in excess to any particular realization. The togetherness of the continuum is comprised of the various manners by which each past actuality realized their given potential as unities of determined patterns for order, organization, and connectivity, as well as how the eternal objects themselves – both realized and unrealized – are together as potentials patterns for order, organization, and connectivity.

It is by this togetherness that every non-contemporary actual entity, no matter how distant in the past, is connected to and (to some degree) determinate of a present, concrescing actual entity. It is also by this togetherness that every pattern for realization, whether immediately proximate or intensely distant in their relevance, or whether already realized or in excess to any realization, are also available for a concrescing actual entity through the feelings of the past actual entities.

As the universe evolves from event to event, it evolves as the evental realization and reconfiguration of these patterns. Thus, scientific analysis and measurement may help generate practicable tools, and memory can access – however imperfectly – the realized patterns of the past as they become available to the present. All actual entities are thus successively related to each other due to the successive determinations of this “one basic scheme of extensive connection.” (PR, 286)

Every mode of connectivity, whether within and across determined actualities or amongst potentials for determinability, is some form of an extensive relation. Extension is not necessarily a “spatial” relation but may be the condition for one. More generally,
extension is a relationship that forms a “bond” between or through entities or elements and may unite singular actual events as a society or nexūs.

The extensive continuum provides the conditions by which such bonds or unifications may be realized. Events are realized as an aspect of this entire continuum; as a concrete entity that expresses solidarity with the same conditions that produced its past environment, as well as its future as a condition for further events. (PR, 327)

3. 3. 1. Perception and the Extensive Continuum

The manners by which the actual entities and their constituent elements may be related, as well as the infinite potential for connectivity, communicability, order, and organization, are due to the infinite eternal objects, whose extensive togetherness expresses this continuum, and whose excess to any concrete, actual realization of themselves means that the continuum is itself infinite and infinitely divisible as potential regions for actualization, as potential centers for extensive connectivity by events.

The actual entities are connected due to the potentials for connectivity realized by their process of concrescence, and as every eternal object has a relational essence that defines their relationship to every other eternal object, then every eternal object – both realized and unrealized – is available to every actual entity due to the way each actual entity utilizes potentials within the extensive continuum.

I had stated above that we may understand how eternal objects may have a general togetherness, and thus constitute such a continuum, when we consider the relationship each eternal object would have to the process of actualization and to every
other eternal object as they also condition actualization. We may further our understanding of this general togetherness of the continuum when we consider the extensive relationships disclosed by perception.

The world perceived through the mode of presentational immediacy is, as we saw in Chapter Two, composed of clear and distinct objects that may be characterized as sensa, or perspicuous qualities in spatial-temporal relations. (PR, 62) Each discerned sensum is an eternal object that has been ingressed into perception in the mode of presentational immediacy through the modes of causal efficacy.

But at first, these are, as I said, felt as just “vaguely” spatial. In the earlier stages of experience, the distinctive relationships between the felt regions defined by those qualities presented for those feelings only a determinate, environmental condition that will causally influence the formation of the present event of actuality, but the discernment of the relations themselves that express these differences are not yet relevant for the earlier feelings. But in presentational immediacy, we may not only discern these relationships and other qualia and generalize from them our notions of temporal or spatial order.

3.3.2. Patrick and the Extensive Continuum

Everything that Patrick derives as potentia for his experiences of hearing music, thinking about the relational structure of the music, and finally of thinking about relations themselves, is obtained from the extensive continuum.
The various nexūs of sound vibrations and other physical goings-on that Patrick’s physical feelings bring together as an objective datum, are all already realized portions of the continuum, and their communicability with Patrick’s experiences are due to how those past events are determinations of eternal objects that define – and endlessly redefine – connective relationships within that same continuum.

Each event that is felt was the realization of a region of extensive connection, and these regions compose the already actualized aspect of the continuum, with each event determining a “place” within the continuum relative to the other ones. This, again, is not a “place” in terms of just spatial locality, as these regions open up pathways of influence to other events, but they do determine relationships of order to other events that do not change once they have been realized, even if the way they are experienced changes from event to subsequent event. (PR, 449)

When Patrick hears the prelude of Mussorgsky’s opera, he is hearing events defined by extensive regions that connectively determine the order that Patrick shall hear the sounds in, as one note in the melody follows on the other. But when Patrick remembers the melody, he may not remember the order of the notes the exact way in which he heard them. This does not change the order of the original events within the past, but Patrick’s memory is feeling their order in such a way where, instead of just replicating the order as it was originally heard, Patrick’s memory is also incorporating into those feelings the ways by which those determined regions can also be connected with different notes and different possibilities of connected them.

This is because, while the events themselves occurred within a certain order, they are also connected with those areas within the extensive continuum where
associations can be made between similar but different notes, or similar but different eternal objects that may be realized as certain pitches and timbres within auditory experience, including imagination, as when a composer draws forth combinations of sounds they never heard before in the exact order that they are presently unifying them.

But these are later developments that occur within experiences of a certain complexity, and so far, we have only gotten to Patrick’s transmuted feelings. Patrick’s experiences are only at the level of being feeling “vague spatial relations” that exhibit vaguely ordered “musical qualities.” (PR, 234)

However, we shall soon cover those feelings that shall discern those features available within those vaguely felt regions that can be brought into greater perspicuity. When Patrick’s feelings enter the modes of presentational immediacy and symbolic reference, he will be able to extract not only more sharply defined musical feelings – in which the relationships between the notes gain a greater “precision” or significance to his feelings – but he will also be able to experience those qualities that inform those experiences in a way that is removed from those particular experiences themselves.

This shall be when Patrick is thinking of the related material of the musical events in terms of just the relations. This, too, shall be because Patrick is feeling qualities that are available due to the general connectivity of the extensive continuum, but, thanks to the graded order of relevance determined by God’s primordial feelings, he did not have before him as an issue before he could consciously entertain them.
3. 4. Is There Anything Inevitable for the Eternal Objects?

But this brings us back to the order of the eternal objects, and to God’s part in making them available to us. The types of order we discern by abstractive hierarchy may well find to be derivations from a general scheme of extensive connection, presupposed by any type of physical or conceptual relationship. But this still leaves the question of whether the singular orders discerned from abstractive hierarchies are inevitable, or whether the only inevitability to the order of eternal objects is that they will be of some kind of connective, asymmetric order.

There is also the question of whether the togetherness of eternal objects provide an already given condition for any relational togetherness, such as those that condition how a nexus may be formed and how the various modes of determined connectivity within the nexus may be abstracted as manners for relational order by concrescing actual entities. For Lango, there is already such a "unity of togetherness" implicit within nexūs, and rather than regarding this unity as singular productions by the prehensions – and so through contrasts – of the actual entities that come to comprise the nexūs, this togetherness is due to way in which each eternal object is related to, and so conditions, every other eternal object.85

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85 John Lango, “Whitehead’s Category of Contrasts,” 40
4. Why A Pre-Given Order of Eternal Objects is Unnecessary

It may seem that when Whitehead speaks of “all” eternal objects, or the “totality” of eternal objects, specifically when God is supposed to envisage all eternal objects as a totality, that he is introducing a problematic – even contradictory – aspect into his system. If there is already a totality of eternal objects, independent of God’s primordial prehensions, then our conception of them already involves a relational ordering of these entities that are independent of prehensions and their power of establishing relational determinations in both possibility as well as actual fact.

This is, in essence, van Haeften’s interpretation of an extensive realm that all eternal objects constitute, independent of prehensions through the universal relational condition of connexity (although their determination as a relational order is always in reference to the processes of actualization).

However, if we remember that eternal objects – as objects – are already constituted as determining content within the primordial prehension, then we can see that the relation of totality, or to speak in any way of “all” eternal objects, is only applicable due to how they are unified by the primordial prehensions. The total unity of the realm of eternal objects is equivalent to the synthesis of primordial prehensions. Each eternal object not only has a primordial prehension but cannot be divorced from those prehensions without being reduced to a mere abstraction.

This is why if one were to ask why every eternal object should have its own prehension, because, it may be supposed, there may be eternal objects without being
prehended, misses the point that such an entity is a bare and impotent abstraction unless it is already incorporated within a prehension as the datum of that prehension.

This, as I shall argue below, is the true the ground for potentiality, extensive connection, and abstract possibility: actual processes; processes of constructive synthesis. Each of God’s conceptual feelings includes an eternal object as its datum is brought into conjunction with other such prehensions, and these (non-temporally) successive conjunctions construct the entire extensive realm of possibility.

4. 1. Bringing Order to the Eternal Objects

An actual entity feels two colors, red and blue, within distinct prehensions and has the manner of these feelings of red and blue within the subjective forms of these respective prehensions. These prehensions of red and blue occur through a conceptual valuation of the physical feelings, which would include hybrid feelings, resulting in conceptual prehensions with respective subjective forms of red and of blue.

If this was a more complex actual entity, both of these “red” and “blue” subjective forms may be related together in a general feeling of color whose subjective form has both prior subjective forms felt in terms of a general qualitative relationship, diminishing the particular, intensive aspects that distinguish those prior subjective forms.

This general feeling of color would then become processed though conscious feelings (as I shall explain in the next chapter), with the possible result of a conceptual feeling that is an understanding of “color” as having an abstract, generalized
relationship to red and blue, and is, in fact, the abstraction from and generalization of the particular, intensive aspects of red and blue.

This phase of understanding is a feeling, and it is a feeling the contrast of the abstraction and generalization of “color” from the general feeling of color, which is itself an abstraction resulting from the synthetical contrast of particular colors red and blue. Henry’s contention is that it is through the way in which past actual entities have established a “dominance” of how we feel color and understand “color” via similar feelings, producing an abstraction that may itself be abstracted as a discrete entity indicating the consistency and stability of subjective meaning within these feelings.

It is by this process of dominance that eternal objects of the subjective species may obtain a consistency and order like those of the objective species. Due to this gradation of relevance, a pre-given abstractive hierarchy is not necessary for the establishment of real possibilities for order and determination in actuality.

However, an abstractive hierarchy is still valuable for the abstractive analysis of extension, which expresses the general connectivity of eternal objects. From what may be abstracted and generalized from the later stages of concrescence, we may note that, to quote Henry, the “dominant patterns of eternal objects that demonstrate their phenomenological structure.”

For a tetrahedron, the relation of the sides may be included in a contrast with the relational orderings of sides that express different angles, and thus different shapes that nevertheless less have comparable extensive relationality. From the content of this

86 Granville C. Henry, *Forms of Concrescence*, 103

87 Granville C. Henry, *Forms of Concrescence*, 103
contrast, a general concept of shape is abstracted, which will express the basic conditions for any type of shape.

But Henry notes that the idea of grades of eternal objects as being ontologically dependent on actuality seems disjointed from the idea of abstractive hierarchies as evincing phenomenologically given eternal objects with a pre-given inevitability of ordering, as assumed in *Science and the Modern World*. To see why we must turn to the disjunctive “multiplicity” of eternal objects as described in *Process and Reality*.

4. 2. The Multiplicity of Eternal Objects

In *Process and Reality*, multiplicities are called “Pure Disjunctions of Diverse Entities.” (PR, 22) These disjunctions, as a grouping of entities, are unified by a property that its constituent members possess that other entities cannot perform. (PR, 24)

As a “collection of kinds,” the grouping of entities as general types called “actual entities,” “prehensions,” “nexüs,” “subjective forms,” “eternal objects,” and “propositions” are all multiplicities in that each of its members demonstrate a certain, singular way by each of them become a part of the entire process of concrescence which is exclusive to them and not to the other members of the multiplicity: a subjective form produces a certain affective tone while an eternal object does not. (PR, 29 – 30)

But, says Whitehead, a multiplicity has an entirely disjunctive relationship with the actual world, which is a world of unities produced through activity. It is a mistake, he continues, to assume that a multiplicity has the same kind of unity that any of its members have, such as the power of synthesis that belongs to prehensions. The
universe is a multiplicity only in the way it is initially a disjunctive collection of data that feeling unifies as a datum. (PR, 30)

From this, we may understand that multiplicities have no power to unify in themselves when entirely abstracted from the process of concrescence, and whenever we call something a multiplicity we are making “a disjunctive statement about its individual members.” (PR, 30) A multiplicity, unlike a class or a set, does not have a unity in itself, and when we consider eternal objects as a multiplicity, we are also only considering each eternal object in disjunctive terms. (PR, 30)

While a multiplicity may have a unity as an abstract or general statement about its members, this statement is nevertheless not a statement about a multiplicity having an affective power to self-organize in virtue of the singularity of its members. It is only a statement about a diverse group that have relationship with each other in virtue of the singular way in which they may be brought within the process of concrescence, or the singular way in which they affectively contribute to the process of concrescence, much in the same way in which the given universe is a multiplicity via the way it a disjunctive diversity of content within the initial stages of concrescence. So, it is an abstraction or generalization from how elements perform within actual concrescence. Actual process is thus prior in terms of unity even for a multiplicity.

But this does not mean that a multiplicity is not functionally important, even for actual process. Multiplicities, while abstract and disjunctive relative to actual process, are what provide creative process with the objectifiable material that it requires to realize itself, and then realize itself again, and again, and again.
This, as we shall see, is how Whitehead regards eternal objects in *Process and Reality*: as requirements for actual process, but also dependent for their unity on actual process – and thus on contrasts. As we said above, these eternal objects are a multiplicity, and in *Process and Reality* we have a definite sense that “a multiplicity” does not have an implicit relationality apart from how it is included within prehensions.

In this sense, a multiplicity requires an agency to have unity, and God’s “unconditional valuation of the entire multiplicity of eternal objects” establishes this unity, and constitutes God’s primordial nature. (PR, 31)\(^88\) If eternal objects, when conceived in abstraction from actual activity, are a mere multiplicity of potentials for determination, then we can understand why Whitehead’s asserts in *Process and Reality* that it is due to God’s mediation *via* primordial prehensions that the “barren insufficient of abstract potentialities obtains primordially the efficient conjunction of ideal realization.” (PR, 40)

It is through this “ideal realization” that there is a relative stability in each process of actualization, as these processes partially realize the conditions of potentiality, constituted as general possibilities for order and intensity from within God’s feelings. Every process that determines the temporal world is an expression of these general possibilities, and apart from this ordering within God’s primordial feelings, “there would a complete disjunction of eternal objects unrealized in the temporal world.” (PR, 40)

We may find further evidence of this change in Whitehead’s later work when he states that the “general relationships of eternal objects to each other, relationships of diversity and of pattern, are their relationships in God’s conceptual realization. Apart from this realization, there is mere isolation indistinguishable from nonentity.” (PR, 257)

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\(^88\) Granville C. Henry, *Forms of Concrècence*, 120
4. 3. Formal and Objective Existence – Revisited

The key thing is this: eternal objects \textit{are objects}. What follows is, I must note, a controversial argument, but it seems to me to be consistent with what Whitehead says about objects generally: that they are productions of objectification. In preceding chapters, we noted that objects are the resultants of both the formal determinability of a real entity and the transformative, responsive power of a feeling and that this dual productivity occurs entirely within the process of some feeling – or prehension.

Indeed, I begged the reader in Chapter Four to take note of an eternal object’s inclusion within a conceptual feeling as their “primary metaphysical character of being an object,” (PR, 239) and that it is only through this inclusion in feeling that they can have any \textit{effective determinability} as a potential for concrescence. This is not to say that their status \textit{as formal entities} is entirely constructed through feelings, but that their functionality as objective determinables is dependent on feeling.

There is thus a distinction between their formal status and their status as objects; their status as entities that have been ingressed within and transformed through a process of objectification. Their formal existence, in so far as we mean their existence \textit{relative} to any actual process, is as a barren multiplicity. They are simple potentials for order and realization through pathways of organization, order, and determinable realization singular to themselves, but, as the elements of a multiplicity, they are without power in themselves to effectuate these relational determinations apart from their inclusion within actual process. They are included within actual process as objects, through a felt objectification of their singular capacities to be organized as a multiplicity.
for a prehension. Their objective existence is their function within a prehension; in this case, within God’s primordial feelings.

It is as an object within feeling that eternal objects have a determinate individual essence and a determinate relational essence with the other eternal objects – through the prehension and only through prehension. Else, they would only be utterly indeterminate potential for such a determinate individuality as well as determinate relationality. But how would my interpretation explain the relational essence of eternal objects? These did seem to be the real reasons for their relationality due to the way they internally constituted the eternal objects.

4. 4. Explaining Relational and Individual Essence

In a 1936 letter to Hartshorne, Whitehead includes a qualification for his definition of an eternal object’s relational essence. The relational essence of an eternal object “involves its (potential) interconnections with all other eternal objects.” (L, ix – xii)

That parenthetical “(potential)” appears to me as quite important for understanding what relational essence means in the later stages of Whitehead’s philosophical career: that relational essence, rather than being what already internally determines every eternal object prior to any primordial valuation, is, in fact, its potential for interconnections within any mode of actuality.

So, apart from how they are ingressed in prehensions, eternal objects are not just potentials, they are mere potentials; a mere barren multiplicity, without anything within themselves to bring any realized determination to what their determinable
givenness would be in a feeling. It is only within prehension that they may effectuate any order, including their order as consistent, repeatable patterns for determinability from event to event.

When the eternal object is felt as a datum in prehension, it is an entity that has a singular determinate quality, and this determinate quality is how it may be relevant to other eternal objects. This is why the eternal object has a relational essence as a potentiality, and it is in its inclusion in feeling that this relational essence has a connective determination to all other eternal objects, and the “how” of its singular, felt quality determines it is that singular relational essence that provides “an infinitude of entry into realizations” (L, xi – xii); as this potential essence determines togetherness with all other eternal objects involved within feeling. But at this most basic level, and (logically) prior to the graded relevances of later prehensions in God’s primordial nature, the relational essence results in “an infinitude of incompatibles.” (L, ix – xii)

To be clear: My argument is not that eternal objects lack their own individual or relational essences, or that these aspects are just lent both by the charitableness of primordial prehensions. Rather, if we consider the eternal object as abstracted from how it is included in the primordial prehensions, we may still have a sense of what their individual and relational essences would be – as potentia.

This is potentiality in the sense of having a given dispositional determinacy. The individual essence is the manner that the eternal object is to be prehended, and the relational essence is the manner this determination is to be significant for the other eternal objects. So, my interpretation does not place the entire burden on the primordial prehensions, because the eternal objects do have their own determinative essence.
As I said above, in *Process and Reality* the “manner” of a pattern is how Whitehead characterized the individual essence of an eternal object, and Whitehead is emphatic that no individual essence can be realized apart from its relational essence, which constitutes the eternal objects “potentialities of relationship.” (PR, 115) But relational essences are also dependent: Just as eternal objects – as objects – gain their individual essence only as they are included in prehensions, so too do they fully gain their relational essence. Apart from how they are included in these prehensions, the eternal objects are just, as Whitehead said, a “disjunctive multiplicity.”

4. 5. Actual Activity is the Requirement for Any Unity

It may be contested that by “disjunctive multiplicity,” Whitehead only means diversely incompossible orders for actuality. But let us remember how “multiplicity” is defined in *Process and Reality:* a multiplicity is a disjunctive statement about individuals without an *inherent* unity. (PR, 30) Any unity is only to be gained within some process of feeling, according to the ontological principle.

But should this really apply to everything that can be said about eternal objects? I have said that their determinability constitutes and conditions both their individual and relational essence, but – as I agree that these capacities are not given to the eternal objects by prehensions – what activity accounts for this determinability if eternal objects are not themselves active entities?

But, to begin with, simply *having* determinability will alone affect no real *determination,* and to suppose otherwise – to suppose that it would be the red quality of
redness alone that makes things, including potentials, red – would commit the fallacy of misplaced concreteness. The actual determination of this determinability can only be accounted through the activity of determination.

The singular determinability of each eternal object, when considered by itself, is an irrational element; there is no explaining why there is such determinability as it was not effectuated by an active determination. An eternal object in itself is simply a blind power for effectuating actuality, but, as it must be always stressed, this blind power cannot be divorced from actuality, either in terms of its efficacity or even in its ontological status as a real entity. This is why the togetherness of eternal objects, as experienced through the extensive continuum, must have actual activities – and thus contrasts – as the reason for that experienced togetherness, or else they would remain an incoherent, mere potentiality for togetherness, but as yet empty of any determinability for what such togetherness could be.

5. Conclusion

By the time of writing his Gifford Lectures, which eventually became *Process and Reality*, Whitehead was reconsidering how to explain the order and connection of eternal objects. In the earlier *Science and the Modern World*, the togetherness of the eternal objects could be deduced from the universal relationship of connexity that each abstractive hierarchy of patterns and sensa seems to evince.

If this could be shown to be consistent with a theory of immanent potentiality and value, then the function of contrasts would not be required for the relational
togetherness and order of these eternal objects. Contrasts would still be required in the valuation of orders of possibility by God’s envisagement for the sake of ongoing actualizations, but there would still be an inevitable order of these possibilities prior to their selective valuation through the prior togetherness of eternal objects via connexity.

However, this seems to commit the fallacy of misplaced concreteness, in that it is an explanation of relational order as it is concretely experienced in terms of a generalized abstraction derived from experienced order. Whitehead’s later philosophy takes greater care when considering the ontological status of eternal objects as an object; as something that is already incorporated within an actual process of prehension, and the totality of eternal objects as a disjunctive multiplicity of potentials for determinability when abstracted from their inclusion within actual process.

God’s primordial feelings in *Process and Reality* therefore take on a greater role than that of simply mediating between potentiality and actuality. God’s envisagement, in the later conception, not only valuates a system of possible orders for actuality (based on grades of degrees of relevance for actualizations of varying degrees of complexity), but also, through the subjective aim’s self-organization, brings the eternal objects together as a relational unity through the syntheses of the primordial feelings.

The contrasts involved in the process of each feeling, and in the coalescence of these feelings into an entire process of envisagement, are thereby required for the togetherness of eternal objects. The resultant extensive continuum may be then regarded as a patterned entity; a unity from which various types of orders, including that of general extensive connection, may be derived, but whose unity and abstractable relations cannot be divorced from the actual process of its construction.
1. Introduction

If contrasts are integral to the relational determinacy of each actual entity, and to each stage of the becoming of an actual entity, then contrasts are also integral to our ability to generalize theories about relationality. This brings us back to what Whitehead called the true role of philosophy: that philosophy does not explain the concrete but the abstract. In this case, I am proposing that the theory of contrasts, as the condition for any relational determinability, is one of the real conditions involved in the production of conceptualizations and our evaluations of these concepts as apposite ways of symbolically indicating aspects of reality as it is experienced.

In this way, we will be able to show that contrasts are a necessary aspect of Whitehead’s metaphysical theory, in keeping with our definition of metaphysical necessity: a theoretical component is necessary if it is not only consistent with other elements of theory, and applicable to aspects of experience, but also facilitates the means for its own conception and evaluation.

This chapter shall continue the development of an actual entity, as we work towards the moment where conscious analysis and generalization may think of the
nature of relations as real but derivative aspects of the process of contrasts, which the conscious event has abstracted from the contrasts discerned amongst musical sounds.

In this chapter, we shall cover the development of propositional feelings, which are the means by which some events – and they are precious few – can become conscious perceptions as well as judgments and other elements involved in the generalization and evaluation of concepts.

I shall conclude this chapter with a consideration of how this interpretation of Whitehead and contrasts can be evaluated as a metaphysical explanation through the criterial desiderata outlined in Chapter Three. My position is that Whitehead succeeds in so far as showing that we can form a coherent, applicable, and necessary account of how we are experientially involved in actuality through a theory of relationality that always requires some actual process of contrast in every level of its organization.

But I shall also level some criticisms at the way that Whitehead has conceived of the mutually determinative relationship of the consequent nature of God and the other actual entities. I shall suggest a possible solution to this problem.

2. The Propositional Stage

Due to the integrated datum, in which the earlier conceptual prehensions have been integrated with the physical prehensions, we have now come to have both ways of feeling eternal objects as elements included within the objective component of prehensions, functioning – again – as a kind of contrast.
These are the types of prehensions that not only serve as the basis for intellectual and conscious feelings, but, in fact, all intellectual or conscious feelings shall be some form of propositional feeling. (PR, 259) This shall constitute a new and important stage in the development of a complex actual entity.

The proposition-stage builds off of the previous stages and, through its process of unifying its given content of eternal objects as possibilities and eternal objects as past determinations, it contributes to the realization of the new subjective aim of maximizing an intensity of feeling – through the content of contrasts – as a “lure for feeling” within the process of concrescence (PR, 259) for the sake of finally determining itself as a realized event of concrescence that is, in essence, a realization of a final contrast between its aim and its potential for self-determination.

However, not only do the vast majority of actual entities never have the sufficient degree of complexity for propositions to arise, but there are even fewer actual entities that have the sufficient degree of complexity within their relevant background in order for propositions that function as intellectual or conscious feelings to arise within them.

This includes those events that constitute the various streams of our own mentality. If one takes the majority of our mental life into consideration, our rational deliberations (quantitatively speaking) play an immensely small part in it. We are not the rational animal, according to Whitehead. It is only that, thanks to the frequency and complexity of our propositional feelings, we are an animal that is “only intermittently rational – merely liable to rationality.” (PR, 79)

Whitehead notes that the term “proposition” has often been conflated with the term “judgment” by logicians, with the result being that propositions are assumed to be
“merely appanages” of conscious judgment. (PR, 259) But a proposition’s subjective form is a valuation, not consciousness, which is just one form of such feeling, (PR, 261) and the subjective form of a proposition is an aversive or adersive feeling of valuation.

That a judgment may discern some element of truth is just one such possible realization. “Truth” may be relevant to propositions, but it is generally more important that a proposition be “interesting,” as interest lures feeling towards some realization. A proposition may have truth as its object, but this is because truth, in this instance, added an intensity of interest for its realization. (PR, 259)

2. 1. Logical Subjects and Predicative Patterns

These are other important aspects of propositions I need to cover. Propositions are syntheses of a “logical subject” and a “predicative pattern.”

The logical subjects are the past actual events given to the event’s physical feelings as a nexus or nexūs (some definite pattern of connectivity, resulting from the serial order of actualizations). These nexuses and nexūs are available to the physical feelings, subsequently, to the propositions due to the way they define connective regions within the extensive continuum.

The predicative pattern is the unactualized, excessive eternal objects that are prehended by the subjective form and presents possibilities for becoming distinct from the logical subjects. Both logical subjects and the predicative pattern are given to the proposition through the subjective forms of prior prehensions. The predicative pattern is also available to the propositions due to the general connectedness of the extensive
continuum, so that they are included within feeling along with the realized extensive regions of the actual entities, nexuses, and nexūs.

The past prehensions obtain specific roles within propositional feeling. The physical feelings that provide the determinants of past actualities are now treated as possibilities, much as eternal objects also function as possibilities. In this case, the physical feelings function as “indicative feelings” in that the way they indicate a given physical condition. This, says Whitehead, renders the logical subjects as an abstraction: “a bare ‘it’ among actualities,” in the way they now function as alternatives for actualization within propositional feelings. (PR, 258)

By a “bare ‘it’,” Whitehead means that the physical feelings are now a point of reference for propositions about them, rather than having the once causally determinative role they had in causal efficacy. In the case of musical audition, it would be treating the note we just heard as a particular sound that we may associate certain feelings, ideas, and theories about, but that sound itself will not entirely, conformally determine which feeling, idea, or theory will be used.

But the physical feelings also include the predicative patterns of past actual entities, and these would include some manner of relatedness between entities that would be relevant for the proposition’s relationship to the logical subjects.

In this way, the physical feeling functions as a kind of “physical recognition” with the given past, in that, because the transmissions of relational structures – as the felt determinables for actual connectivity – occurs from event to event and define the connective determinations of those events, then these physical feelings provide the
conceptual means for “recognizing” the logical subjects (a reincorporating of the past’s organizational structure) through the predicative pattern. (PR, 260)

When the feeling involved within the datum of the propositions is a conceptual feeling that “provides the predicative pattern,” it is a “predicative feeling.” (PR, 260) These predicative feelings are distinct from physical recognition, in that the feelings that inform physical recognition include predicative patterns simply as a reference to the past, and the predicative patterns of the predicative feelings may extend beyond those realized in the past.

But those physical feelings were still the initial stage of feeling that supplied the conceptual feelings with their eternal objects, and thus with their functionality as predicative feelings. In this way, says Whitehead, his system agrees with the empiricism of Locke and Hume in that “every conceptual feeling has a physical basis.” (PR, 260)

3. Perception and Propositions

This physical stage of concrescence, as we saw, provides the conditions for both the initial conceptual stages of feeling, as well as for the indicative feelings and feelings of physical recognition within propositional feelings. Even thoughts require physical feelings in order to occur. But the vast bulk of events that occur as our given universe, occur as events dominated by the physical, and become just another transference of a pattern-structure. Even so, the physical may be the chief concern of propositions.

A hydrozoa such as the “Flower hat jelly,” while rudimentary in its sensitivity when compared to other organisms, still has sufficient bodily organization to respond to
their given environment in a variety of ways. They may extend their tentacles to hunt for food, activate the muscles within their mesoglea to swim, pursue their prey, evade other predators, and they can mate with each other.

These solutions to a given situation (eating, swimming, evading, and mating) require readjustments of their bodily organization as well as a very basic ability to affirm one amongst alternative possibilities as what may be the case. The jelly has in its background a series of actual entities that comprise the nexūs of its past physical make-up, which had been reincorporated into present events through physical feelings, and present alternatives for flight or fight, to feed or breed, based on the decisions that determined these patterns in the past.

These alternatives are the “lures of feeling” that propositions provide for the developing actual entity, and these lures function as “theories” about its given situation that will be valuated either avervably or adversely towards the moment of finalization.

For a jelly, the predicative pattern of a proposition does not function with the same richness of possibility as a more sensitively developed organism (as many had been eliminated as irrelevant; PR, 261), but when a jelly moves in a certain direction it does so with an impetus for self-maintenance, and it may fail to do so given what the situation might actually be. Its evolutionarily developed repertoire of activity is successful only in so far as it is suited to the situation that it is in, and there are moments when it does not respond with flight when it is in danger or will try to feed on what it cannot actually digest.

This is because its logical subjects – the nexūs of the ocean and its body – are relatively reduced as abstract possibilities (PR, 263) that are brought into some
comparative unity within a contrast with the eternal objects derived from its feelings of physical recognition and then developed into a predicative pattern.

We can find this "theoretical" difference between a given situation and how to respond to it in not just non-conscious organisms like jellies or even plants (as they extend their bodies to the light above or the nutrients below, often twisting themselves around obstacles to do so), but also in our bodies which are sometimes conscious.

When we are asleep we are still responsive to the environment around our body, as when the cold air prompts a greedy pull for more bedclothes, or when a slight sensation on the nose prompts some reflexive swats at whatever may – or may not – be there. This nervous activity also occurs when we are awake, and we suddenly jump up when we may – or may not – have seen or felt a spider crawling, or when we hear music and begin to feel vaguely frightened or delighted due to its tone or pace.

That this stage of feeling concerns not just what is immediately felt but the possibilities of what it might be, indicates that we are moving beyond the vague, compulsory feeling in the earliest stages of perception. However, this we are still dealing with Merleau-Pontian "touching," which indicates that we are still in the realm of causal efficacy and the vagueness of a given environment associated with this mode of perception. But because of this feeling of alternatives, we have the conditions for conscious perception in the mode of presentational immediacy.
3. 1. Imaginative Feelings

According to Whitehead, the condition for conscious feeling within the phase of propositional feeling is when the “affirmation-negation contrast” enters that phase. (PR, 261) When propositional feelings become components within a proposition that integrates a physically indicated nexus (the logical subjects) along with propositions that may negate the importance of the indicated nexus, then consciousness becomes a part of the subjective forms of propositional feelings.

These propositions, which may negate the importance of the indicated nexus, are feelings of the predicative pattern derived from the feelings of physical recognition. From an increase of relevance (of compatibility or compossibility) of eternal objects beyond the patterns already established by the indicated nexus, due to the intensification of conceptual valuation from a sufficiently complex integration of simpler modes of perception, the predicative pattern gains a significance in the way by which it may function as a “lure for feeling” beyond the established world of the given nexus.

This felt “difference” within the contrast of the indicative feelings and the possibilities derived from the feelings of physical recognition are called by Whitehead “imaginative feelings.” When no significant difference is felt, but an identification of the feelings of physical recognition with the indicative feelings are felt instead, these are called by Whitehead “perceptive feelings.” (PR, 262)

Previously, I defined “imagination” as being some degree of creative power, and in Chapter Three, I defended the notion that creativity is generally a power aimed at the realization of some end, howsoever vague. Whitehead affirms this general description
of imagination when he says that, according to his theory of actualization as goal orientated, “self-determination is always imaginative in its origin,” and this would be true even for events of actualization with “negligible autonomous energy.” (PR, 245)

But Whitehead uses the term “imaginative feelings,” his intention is not to restrict the meaning or appositeness of imagination to only this very late and refined moment of actual process. It is only that it is here that the general creative power of experiential becoming takes on aspects that we may be more familiar with when we use the term, for it is here that “imagination” means a kind of creativity that might – or might not – actively work beyond the actual world as an already realized fact.

Consciousness, according to Whitehead, is the feeling of this contrast between the nexus as felt through the indicative feelings and the “imaginative freedom” that the conceptually dominant propositional feelings may offer to concrescence by way of realizable alternatives to the felt nexus.

Consciousness is a feeling that is essentially a process of contrast, which has its diverse components a difference between possibilities that may refer to the world as it is or to the world as it could be beyond the feelings that may or may not be correct in treating it as it “is.” But the result of this contrast need not be a choice between “reality” or “imagination,” for the resulting synthesis may be one in which value is attached to both possibilities (PR, 262).
3. 2. Conscious Perception

It is at this point where we can rejoin material that was introduced in Chapters One and Two, such as presentational immediacy and symbolic reference, and concern ourselves with the events that may occur as Patrick’s processes of consciously hearing a recording of Mussorgsky’s *Boris Godunov* also derives concepts from that audition.

The actual entities have become logical subjects, which are abstractions from the welter of givenness. They are transformed into relatively distinguishable elements in feeling that have patterns of relationships that obtain amongst them, as felt through the indicative feelings and brought into contrast with the patterns given through the feelings of physical recognition. If there is no felt significant difference, then there is a re-identification of possible pattern with the patterns felt through the indicative feelings.

This, as I said, is a perceptive feeling, and it may be regarded as a feeling of the world as a set of relationships between the abstracted actual entities. Because this abstracted world is linked to their process of production from very specified feelings that constitute aspects of a body that sensitively responds to its environment, we may call these the grounds for “sense perception.” This is close to the usual meaning of the term, as when we say that our perceptions are always conditioned through some medium, such as our ears or skin.

“Conscious perception” is a contrast of sense perception with the patterns both associated with and possibly not associated with the perceived nexus. In this case, the imaginative feelings within the felt contrast called consciousness are involved in such a
way as to bring the patterns within the perceptive feelings into a greater intensive importance through its own conceptually valuated intensity.

As the imaginative feelings are derived from the feelings of physical recognition, then, as in perceptive feelings, this becomes another re-integration through contrasts of these two branches of feeling, with conscious perception as a confrontation between the indicated nexus with, “the potentiality derived from itself, limited to itself, and exemplified in itself.” (PR, 269) The subjective form of a conscious perception obtains an intense vividness through the way the nexus is realized through its potential.

This is to say that the given nexus is now abstracted in feeling as exemplified patterns of entities and the relationships these entities stand within or exemplify, thus rendering the singular qualities themselves as being singularly more affective in perception as those elements that bring distinctness and distinguishing aspects to perception, much more so than the vague world of jellies and our non-conscious bodies. The “force and vivacity” of these objects qualifies them to be identical to Humean “impressions,” (PR, 269) and, indeed, this is where we finally come to the sensa felt in the mode of presentational immediacy.

Although visual perception provides appropriate examples of this mode, such as seeing two glasses of whiskey on a table at relative distances from each other, this mode does not just pertain to sensations associated with sight. A blind person would still have perceptions of the world as composed of distinguishable objects, but with shapes, textures, and the measured crossing of spatiotemporal gulfs between objects being given a greater significance than those for whom visual qualia are relevant.
But whether we are talking about sight, touch, or hearing, we are dealing with the perception of patterns of eternal objects, as they have been realized in perceived fact and how they extend beyond such facts. This is due to the “togetherness” that obtains amongst eternal objects, and in previous chapters, we covered this togetherness and how contrasts are involved in determining it at every level, contrary to those who would have the eternal objects as sufficient for their own order and organization independent of contrasts. And, as we said earlier, it is this togetherness that allows for the discernment of musical qualities.

4. Feeling Music and Thinking Relations

Returning to Patrick as he listens to Mussorgsky’s opera, the events of audited sound have determined a nexus that is given through his body and is felt by those events that will constitute his perceptive and conscious processes. Although he only briefly listens to the music before he falls into philosophical abstraction, Patrick loves it above all other musical works, so when he consciously perceives the music he attaches a great deal of intensive importance to the patterns that are discernable from each auditory moment. After the bassoon plays solo for a few bars, the strings briefly join the bassoon and are brought together in the moment of audition as two events that constitute one logical subject. From this, we may discern sensa within the unity of these patterns, and consider their production through contrasts.
4. 1. Discerning “Musical Qualities”

Within the auditory synthesis of the bassoon and the strings playing two notes, Patrick experiences a contrast of two distinct sensa. According to Lango, who also used the example of a music in his paper on Whiteheadian contrasts, the determinate timbres of the sounds played on two different instruments are the two sensa that are perceived. Included in the audition of this contrast of two determinate timbres is a feeling with a subjective form. This feeling also includes a felt contrast between the two pitches of the two notes, as well as a felt contrast between the pitch of the one note and the timbre of the other note. This does not exhaust all that there is in the felt, complex datum, but this may suffice.

The audition of the two notes, much as it would be for just one note, is a feeling. “This feeling has first an auditor, who is the subject of the feeling.” (PR, 233 – 234) The subject or auditor of this feeling is the entity that experiences these notes as a complex sound. The datum of this feeling is the antecedent events that make up the physiological background of the event. In the case of hearing this would be the human body, “and the presentational immediacy of the presented locus.” (PR, 234)

This presented locus, given immediately in feeling, is the “vague spatial relations" that exhibit “musical qualities." These musical qualities are that which is given in the region perceived by the actual entity. (PR, 234) A musical quality is a sound that has a certain pitch, quality (timbre), and intensity (loudness). There are degrees of qualitative intensity for any determinable quality, just as they are differing shades for any

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89 John Lango, "Whitehead’s Category of Contrasts," 41
determinable color, but what is presently felt is how they have been realized by the past as determinations of the extensive continuum.

Again, the two timbres are heard together within the entity’s experience. And again, the contents of a contrast are felt together as a “real unity.” (PR, 229) Within the contrast, the two timbres, their pitches, and their intensity, exemplify a real, actual togetherness as a complex of a unity of irreducibly particular past actual entities.

But this unity is also original to the feeling; it is the product of the contrast as both singular in-itself, and as a synthesis of those singularities into a new particular unity of feeling. This unity of the two musical notes provides potentia for them to be contrasted as “relata,” or as particular, determinate entities that are relatable.

Within the subjective form’s activity, the singular qualities of each musical relata are together felt as a feeling containing individual particularities. As such, they now present potential for the determination of the subjective processes. It is the togetherness of the irreducibly singular terms within the datum that makes possible both the contrast of relata and the contrast of datum to the subject.

The experience of a real unity of the notes, with their determined, concretized timbres, pitch, loudness, and extensive regionality, contains also the subjective form of enjoying their difference felt in togetherness: the contrasts of their timbres, pitch, loudness, and extensive regionality. This enjoyment of diverse, contrasting togetherness “is a commonplace of art.” (PR, 229) But it is also a commonplace of experience in general, as we recognize those dual aspects of continuity and

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90 John Lango, “Whitehead’s Category of Contrasts,” 41
discontinuity, wholeness and discreteness, and diversity and unity as integral aspects to our enjoyment of all things in this world, including our own selves as unities in contrast.

4. 2. Propositions and Judgments

The way by which conscious feelings may isolate patterns as the determinative characteristics (including forms of relatedness) of the content of conscious experience is through another form of propositional feeling called “Judgments.”

Propositions, as I said, are not necessarily conscious propositional feelings, but judgments are a possible form of conscious propositional feelings. (PR, 184) Judgments are one of the two species of feeling that follow from the integration within a propositional contrast of a proposition derived from the indicative feelings and from physical recognition and the indicative feelings themselves. Whitehead terms this integrated, propositional contrast “intellectual feelings.” (PR, 266)

Conscious perception, being a contrast that highlights the conceptual elements within the logical subjects and the predicative patterns derived from the feelings of physical recognition is a type of intellectual feeling, and judgments are another kind of intellectual feeling. As judgments are also a contrast that brings into comparison the possibilities from the logical subjects and from the predicative patterns, then judgment feelings are also a form of conscious feeling. (PR, 266)

A judgment is the possible result of a “felt contrast” between a given environment as an “objectified state of affairs” and a “propositional,” potential determination that may be actualized as a response to those states of affairs. A judgment involves a valuative
affirmation or negation of how the logical subjects compare with possibilities available through the predicative pattern (a “suspended judgment” is possible) (PR, 270) This functions as a *hypothesis* regarding a given state of affairs and its potential.

A simpler, non-conscious response would not entertain its possibilities “abstractly,” as contrasting possibilities that may determine different courses for its development. “It must be held that judgment concerns the universe as objectified from the standpoint of the judging subject. It concerns the universe through that subject.” (PR, 305) The “universe” of the judging subject is a cache of potential available to it from both the abstracted logical subjects and the predicative patterns.

### 4. 2. 1. Symbolic Reference – Revisited

At this point, Patrick has discerned the relationships from the contrasts of notes, and is at the point of performing further abstractive feelings to regard those contrasts as possibly indicating some generalizable rule regarding relationships and their realizations. The earlier indicative and conceptual feelings of previous propositional feelings have already narrowed the scope of the judgment’s particular datum, that is the contrast of the earlier feelings now included within in the content of the propositional feelings. This, again, is the role of a logical subject in the concrescence of the actual entity: its role as an “abstracted form” that may indicate past actuality.

However, the actual entity within a proposition (the logical subject of that felt, unified content) has become an object for reference – an “it” – extrapolated from the formal wholeness of the concrete actual entities. (PR, 258) So, in judgments, the logical
subject (which extends back to the initial datum), is reduced to a variable entity, that may partially but never wholly correspond to the original actual entity.

This reduction was already performed by the indicative feelings, rather like the exclusion of factors unnecessary to an equation. The various events of space each sound passes through to reach my ears are needed for the communication of sound, but are irrelevant to what I enjoy in the music as musical qualities. But despite their ontological status as abstractions, they are still included within physical feelings as entities indicatively felt. Because of the reduction of the physically given facts of actuality to a variable, the function of judgment is interpretive and evaluative, in that it is a theory about the logical subjects; about what is there within felt reality.

Thus, we come to the function of symbolic reference in propositional feelings. Judgments are where we shall find “meaning” and “symbol” functioning in the roles of logical subjects and predicative patterns. Meaning in symbolic reference may be either the logical subject or the predicative pattern of a proposition. When the logical subject is the meaning of symbolic reference, then the symbol is the eternal objects or potential forms of definiteness. When the potential forms of definiteness in the predicative pattern are the meaning, then the symbol is the logical subject.

4. 3. Discerning Relations

Patrick may now attend to this question: How do relations become known? The discernment of relations qua relations is an exercise of conscious thought on the contents of perception, whether these are perceptions of events originating outside the
body or within the stream of mental events. Conscious thought, through the mode of symbolic reference, produces an analysis on the content given to it in perception.

From this analysis, the qualities that have been incorporated within the perception from the external world are encountered, including those qualities that characterize the connectivity between the perceiving subject and the thing perceived, and unified within the moment of perception and later abstracted as variable qualities through a series of prehensions. (S, 21 – 22)

A conscious and analytical perception of the audition of two musical notes is in the mode of presentational immediacy and symbolic reference. Presentational immediacy, the perception commonly understood as sensory, presents the world as a given organization of distinct, spatially arranged objects. (S, 79 – 80) In this case, it would be the discernment of notes heard in a temporal order of succession, and having specific spatial reference to certain sensory organs of the body.

The “artificial symbolisms,” such as language, logical signs, or even musical notation, originates through a concentration on the select or analyzed content of sense perceptions. (S, 83) Symbolic reference discerns the qualities in the sensory perception of the audition as presenting types of relatedness. This discernment already involves propositions of complex, unified entities, and so first the qualities – as connective characteristics – must be accounted for in the primary stages of perception: physical and conceptual feelings in the mode of causal efficacy.

When the qualities in experience are isolated via later stages of symbolic reference, the patterns that characterize felt entities are revealed to consciousness. These patterns are eternal objects functioning as a manner of relatedness. (PR, 114)
Patterns are given through the causal efficacy of physical feelings to conscious feelings. Consciousness presents to judgment these patterns given in causal efficacy. A pattern which would be analyzable from the auditory experience of one note may include “the interval of one octave between the pitch of the fundamental and the pitch of the lowest register.” In this analysis, the symbol would be the unity of the two notes. The meaning would be the pattern itself as it is analyzed from these notes.

In the audition of two musical notes, an eternal object characterizes or qualitatively determines a connection between the determined qualities (which are themselves determined eternal objects) of those musical notes experienced together as objective elements within a conscious experience of a piece of music being played.

The experience of the two notes can be analyzable into those qualities that help constitute and characterize it, such as their “fundamental” tones, and the overtones affecting their timbre. “This analysis reveals an abstract qualitative pattern that is the complex relatedness of the fundamental [tone-qualities] with the tone-qualities of [their] select overtones.” (PR, 234) Again, this qualitative pattern is the meaning of this act of symbolic reference with the fundamental tones and overtones as the symbols.

4. 3. 1. From Relations to Contrasts

Whitehead has illustrated his metaphysical conception of pattern through an abstract qualitative pattern, and his metaphysical conception of a sensum may be illustrated by, to quote from Lango’s own example, “these tone-qualities of the

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91 John Lango, “Whitehead’s Category of Contrasts,” 45
fundamental tone and the overtones.”92 An analysis of the qualities determined by the two notes reveals the pattern (manner of relatedness) that connect those qualities.

The two determinate pitches are experienced together as a determinate entity through the pattern that relates them through the unifying activity of contrasts. Between two notes heard together within a conscious experience we may discern, says Lango, “the interval of one octave between the pitches” as a pattern that characterizes or qualitatively determines the two musical notes within our conscious experience of a piece of music being played.93 The two intervals between the two notes are experienced as a contrast between those two notes. Those notes are together in the experience as the material and product of this particular contrast.94

Relevant to this analysis are contrasts of sensa and patterns of sensa. The former in the audition of two musical notes would include the determinate timbres of each note, while the latter would include the intervals between determinate pitches.95

Through a judgment-form of propositional feeling, the determinate timbres would be brought in contrast with the intervals, the result being that the patterns of the intervals would have a discernable relationship with the contrasting pitches. This would be a narrowing of the relevant content of this contrast and identifying it with the content of the physical feelings, the content being the identified patterns. We may now break

92 John Lango, “Whitehead’s Category of Contrasts,” 44
93 John Lango, “Whitehead’s Category of Contrasts,” 45
94 John Lango, “Whitehead’s Category of Contrasts,” 45
95 John Lango, “Whitehead’s Category of Contrasts,” 45
down this process of progressively abstracting from the relational, patterned content of
the audition for the generalization of concepts about relations in this way:

(1) Within this conscious mode of perception, Patrick notes that the complex
datum of the intervals and pitches and form this complex proposition: “The pattern of
intervals occurs with the determinate pitches.” This judgment is an act of symbolic
reference in that it this sentence is being elliptical: it expresses a referential context with
its datum. In this case, we can analyze and reconstruct the proposition: “it is an interval
of q and r occurs with the determinate pitches.”

(2) The “it” in the sentence “it is an interval of q and r occurs with the determinate
pitches” is the factor of the experience fact reduced down to the entity that is the logical
subject of the proposition and functions as the symbol of this act of symbolic reference.
The proposition-function “x occurs with the determinate pitches” is the “predicative
pattern” and function as the meaning of this act of symbolic reference. Remember that
propositions are a synthesis of logical subjects (the “it”) and predicative patterns (“x
occurs with the determinate pitches”).

(3) But analyzing the original sentence has produced an expression that is still a
complex proposition, for “an interval of q and r” expresses and adjectival function of this
occurring actuality, and the generalization from this function “x is an interval of q and r”
can express “a relation between the many ‘its’ constituting it.” In this case, first “x is an
interval of q and r” is the meaning” to the symbol “x occurs with determinate pitches” is
the symbol. Then “x is an interval of q and r that expresses a relation between the many
‘x’s that may constitute it” is the meaning of the symbol “x is an interval of q and r.”
(4) Although a further analysis is possible, it is not necessary to perform one in order to further analyze the proposition as a proposition, for it shall always be a synthesis of logical subjects involving a predicative pattern, and the analysis shall follow the same sequence of symbolic reference, as long as the symbol is the previous proposition as its logical subject.

(5) As such, we have determined that a certain kind of relationality shall always hold between its terms, and that this particular relationality shall function in a certain way. Thus, this function may then be generalized as a universal, in that it is a concept that we can repeatedly apply to future instances. So, from the concrete instances of hearing and thinking about the two musical notes, a notion of relations qua relations have been extrapolated from the process; from the contrasts as they determine connective unity and distinct relations.

(6) From this, Patrick may then analyze the process by which he was able to extrapolate this pattern as material for his generalized concept about relations. If he analyzes not just the pattern of the qualities in the proposition, but the proposition itself, Patrick discovers a synthetic process of unification that, in every level of his analysis of relations in music, determined a new, determinative type of unity amongst the qualities that Patrick heard and the various ways that they could be referred to.

This would follow the same process as stages (1) through (5) as Patrick considers a proposition as it applies to the propositional structure itself: “The particular type determinate relationality regarding how things are indicated (logical subjects) is unified with the various means of indicating and characterizing those things (predicative patterns) is the derivative result of a synthetical, conjunctive process.”
(7) Patrick may then apply this generalize this even further into a rule that *any type of relational unity is the result of a synthetical, constructive process*, and try to apply it the “things indicated” and to “how things are indicated,” and see whether these would also always include some process of synthesis to give them the kind of determinative unity or functionality that they have.

If so, then Patrick has found that his general rule applies to both the things indicated (the actual entities) and how things are indicated (eternal objects), and concludes that the relationality within each is due to contrasts as their condition.

4. 4. Finalization

Starting from the phase of the transmuted feelings to any point afterward, there could have been an “affirmation-negation” contrast that, if affirmed, would have brought the concrescence to an end, if the complexity and intensity of the given material and components may be “harmonized” with the subjective aim of the concrescence. In that moment when Patrick feels the relationships felt as “universals” which indicate real but derivative entities, and conceives of processes that would explain the production of such entities, he has managed to “satisfy” the aim of the concrescence of that particular event: to find some way of unifying the felt content of perception with a judgment that would affirm the givenness of the feeling as well as a judgment concerning how such givenness may become synthesized with a possible theory for its production.

This shall finalize the process as a whole process of becoming, which shall have a significance extending beyond its finalization. The event constituting Patrick’s moment
of judgment regarding the viability of contrasts “valued-up” the subjective forms of those prehensions that felt it as a possible solution to the problem of relations, rather than valuing them “down” as not preferable. The decision is now made.

This unity was suggested by the felt, complex diversity given in the conscious feelings. However, this was not a foregone conclusion. The imaginative feelings involved could have gone in various other directions, depending on how the actualizing event self-determinatively valuated the possibilities open to it. Patrick’s resulting concepts were not simply a deduction from the given content, but a construction through contrasts that selectively utilized some of the possibilities available to it while negating the importance of others.

The unity produced was thus a novel unity, irreducible to its origin, as all resultant contrasts are, and from our Whiteheadian account of its processual development, we have traced a development of both feeling and perception as well as imaginative generalization and descriptive generalization; of the ways that the genetic conditions for actual becoming also condition the philosophical method of creating and applying concepts that may express (but not represent) those genetic conditions.

5. A Return to the Criterial Desiderata

This brings us back to Whitehead’s criteria for evaluating the relative success or failure of his own system: Coherence and consistency, applicability and adequacy, and, finally, necessity. I have tried to present an account of how Whitehead’s theory of actuality as events of constructive feeling may account for the multitude of activities –
physical and mental, objective and subjective – that we find occurring within a chain of events that lead from a moment of audition to a moment of philosophical abstraction.

5. 1. Applicability and Adequacy

This does not mean that we have covered *everything encounterable* in any experience, or even in the very select types of experiences I focused on in this chapter. But if we have been successful in at least providing a likely story for how Whiteheadian concepts can illustrate the becoming of such events in a way that resonates with our perceptions and feelings, compliments and further explains the established scientific descriptions, and doesn’t discount anything that may challenge its comprehensiveness, then we would have satisfied the test of applicability if not adequacy (as no finite account of phenomena could completely represent or descriptively exhaust what is given, as according to the notion of formal existence).

The thing to do, then, is to continue to seek our scenarios from experience where we might run into some trouble in this applicability. I cannot claim to possess a very developed perspicacity, but I could myself discern anything in these events that presented an obvious challenge.

Also, I hope to have shown that this criterion of applicability is – at least tentatively speaking – satisfied regarding the operations of contrasts as a concept that has a general, descriptive merit. This is because in each instance of actual event – from musical audition to philosophical cogitation – and in each phase of such events, we have found the creative advance ofprehensions, actualizations, relational
determination, and processes of abstraction facilitated by the nature of contrasts within actual process to synthesize diverse material (whether it be a plurality of actual entities, nexus, nexūs, eternal objects, other prehensions, symbols, meanings, logical subjects, predicative patterns, and mixtures of all of these and more) as components within a singular type and manner of determined unity, that may itself become a determinable entity within future prehensions and processes of contrasts.

These unities produced by contrasts all established some type of relationality, either as a pattern of order, of connectivity, of causality, or of external and internal determinations, which were real features of moments of actual existence, and could be abstracted as concepts or types of relations by conscious thought.

5. 2. Coherence and Consistency

But this applicability also argues for the coherence for the notion of contrasts, for if Whitehead was not overstating when he said that a relation is a genus of contrast, then we should not only have found that every instance of relationality in thought and experience could be explained in terms of contrast, but that the nature and function of contrasts should have been consistent with the other aspects of Whitehead’s system.

Everything, according to the ontological principle, had to be explained in terms of some process of actuality. If we could find a contrast behind every instance of relationality, thus rendering it an (at least) applicable term, we would also find that every contrast was also due to the constructive becoming of actual entities, as it was by their constructive activity that there were any contrasts at all.
We also saw that any activity is an activity of synthesis from diversely irreducible elements, so contrasts are required for the consistency and coherence of the notion of actual activity and determinacy as much as actual activity and determinacy are required for the consistency and coherence of contrasts.

5.3. A Prelude to Necessity

Before we deal with the criterial condition of necessity, I must once more press my point regarding the operation of contrasts as a requirement for order and general connectivity amongst eternal objects, for as we saw many times already, it has been assumed or argued by a number of Whiteheadian scholars that it is the eternal objects primarily, and not contrasts or activity, that are the grounding condition for relationality and abstracted relations.

5.3.1. Eternal Objects and Consistency

I have tried to show that in Whitehead’s later work, Process and Reality, the ontological status as well the determinate order of eternal objects differ from his earlier work, Science and the Modern World, in that these eternal objects are dependent on the prehensive activities of an actual entity, e.g., God.

This means that the eternal objects are accounted for in actuality through another actuality, so this later revision is coherent with the ontological principle. If, to quote Ford, we take the patterning that entails the relations essence of each eternal object to be “a
complex genetic abstraction from the totality of contrasts involving only eternal objects that one eternal object is implicated in. The relational essence is constituted by all these contrasts shown of the individual eternal objects so related. 

There can be no relatedness – or even a ground for relatedness – without productive incorporation of diverse material within the synthesizing activity of a contrast, for "effective relevance" amongst entities that may become relations "requires agency" to bring these diverse entities together as material for relational determinacy, "and agency belongs exclusively to actual entities." (PR, 46)

However, how would the primacy of contrasts explain the problem of logical connectivity amongst the eternal objects? This concerns what seems to be the inevitability of ordering that constituted the realm of eternal objects in Science and the Modern World. The idea is that there is a pre-given consistency and order to this realm, so that through an analysis of the hierarchy of eternal objects we may discern an inevitable connexity amongst concepts and other elements of determinability.

The determinacy of the eternal objects would have each have a singularly effective power for the way they are ingressed in contrasts so that some type of order would have to be attributive to eternal objects of one type and not to others. However, the order of these eternal objects cannot be simply deduced from the eternal objects themselves but how they are brought together in within primordial feelings.

The subjective form of their reception within the primordial prehensions determines a selective and narrowing of the inexhaustible content of these eternal objects, with a concomitant mutual adjustment of these primordial feelings. This mutual

\[96\text{ Lewis S. Ford, "Whitehead’s Ontology and Lango’s Synonty," 59 – 60}\]
adjustment produces the order of eternal objects, and as the singularity of the subjective form cannot be deduced from its datum, the types of order that are produced by the mutual adjustment of these feelings cannot be simply deduced from some pre-given completeness amongst the eternal objects. An element of contingency cannot be eliminated from any type of order we are dealing within the primordial feelings.

It is in the active drive towards realizing complexity through the multitudinous potential of the eternal objects that dominates the subjective forms of the primordial feelings, which means that the resultant order from these feelings is due both to the content of the eternal objects and an order that is particular to the way they are brought into adjustment by the primordial feelings themselves.

The implicative order of concepts is not grounded in just the eternal objects themselves but by the contingency of feeling; by the syntheses of contrasts within feeling. An eternal object that seems to have its position in an abstractive hierarchy as a complex eternal object seems to necessarily imply certain other eternal objects as being its constituent elements.

However, one of the reasons why Whitehead may have fallen silent regarding abstractive hierarchies is because the same process of implication can be explained a different way: rather than being the conduit between those eternal objects and no other kind, the eternal object may be in fact the potential for determinable togetherness of certain complexities but not determining complexities of which kinds. How certain eternal objects are brought into adjustment with this eternal object would produce certain kinds of complex potentials for subsequent feeling.
So, what we discern within concepts are not the inevitable, implicative togetherness of certain eternal objects, but the contingent togetherness or certain simple eternal objects within a complex feeling. This means that logical consistency may be explained in terms of process, but this does not mean that the various methods and modes of logical ordering and consistency can simply be ignored, for if the primordial feelings established the means for ordering and consistency for this world, then we are still apprehending something real and lasting when we discern regularities in reason or in the connection of certain concepts or ideas.

5. 4. Necessity

So, this ground for consistency brings us finally to consider the criterial condition of necessity. We must recall that by some notion or concept being necessary, we meant that “it elucidates the way that experience provides its own conditions for both a theorization of itself and for its relative success or failure as theories; it provides those conditions that are required in order for its own investigation, or what appears to be assumed or is exemplified in every investigation of actuality.”

This is the pragmatic sense of “necessity” as I outlined in Chapter Three. As we can see, if the nature and function of contrasts is not only consistent and coherent with the general notion of actuality, but that it is indeed a contributor to the means by which actuality may be investigated, in not only the way it makes content available for perception and for abstractions to be generalized from perceptions, but also in the way it brings any sort of connectivity and order amongst potentialities, concepts, possibilities,
and actualities, then we may regard contrasts to be necessary, at least until we have empirically fond anything it cannot account for or logically discerned any fault within it.

But Whitehead also hypothesized a very particular sort of activity to be the reason why contrasts are involved in the organization of the eternal objects: God. But Whitehead’s formulation of God, at least in God’s consequent and not primordial, eternal object-arranging feelings, is problematic.

5. 4. 1. A Problem with Whitehead’s God

While I agree with Whitehead that some actual process is required in order to provide order and realizability to the infinite panoply or potentiality, there are issues that must be addressed regarding the felt relationship that the consequent nature of God has with the other actual entities, and the other actual entities with God. But first, I should briefly explain how this relationship seems to operate.

5. 4. 1. 1. God’s “Propositional Feelings”

Although it is nowhere stated explicitly in Process and Reality, my contention is that the consequent nature of God physically prehends the other actual entities through their realization of the extensive continuum. It is due to its universal communicability that God is able to physically prehend every actual entity. God prehends actual entities after they have actualized regions of this continuum.
But it is stated that it is through these prehensions the feelings of each and every actual entity become a part of the feelings of God, and in this way, present a determinative, affective condition for the everlasting becoming of God’s consequent nature. (PR, 345) As the extensive continuum is a development from the extensive potential latent within the eternal objects, the becoming of actual entities defines a realized, physical aspect of the potential conditioned through the potential envisaged through God’s primordial feelings. These are felt as physically given entities in God’s feelings subsequent to God’s conceptual feelings. God’s consequent nature is the felt inclusion of every actual entity.

But this is not all that this aspect of God feels. Because God is feeling both the other actual entities and its own conceptual feelings through these entities, then God now has both physical and conceptual feelings within its datum as a new phase of feeling: propositional feelings. These are not called “God’s propositions” explicitly by Whitehead, but this aspect of God’s nature is described as “the weaving of God’s physical feelings upon his primordial concepts.” (PR, 345)

This “weaving” describes the contrasts of propositions. God’s propositional feelings are a contrast of physical fact with possibility and it feels both the original appetition towards creativity in its primordial nature as well as the physical realization of it by every other actual entity. (PR, 348)
5. 4. 1. 2. God’s Incoherent Consequent Nature

But the relationship between God and the world presents a considerable problem. The problem is, as Nobo indicated, that if God’s consequent nature is always becoming, then God’s consequent nature is never a determinate entity and thus can never be an object for other actual entities. Nobo reminds us that this does not necessarily affect those aspects of God that are already determinate, which would be all of the feelings included in God’s primordial nature, and because the primordial feelings are completely determinate then they are available for objectification.

But this still leaves the problem of God’s consequent nature to deal with. Actual entities are not prehended while in concrescence. They are only available for prehension when their prehensions have reached the point of final unification can they be prehended by other actual entities. It is only at this point that all of the potentials for extensive connectivity and qualitative determinacy have been unified as a single region of concrete reality expressing determinate relations to other regions, else all that would be felt are disorganized possibilities.

The problem cuts both ways, for if God’s consequent nature is always becoming, then it is unclear how God could prehend each successive finite actual entity. The transition from one finite concrescence to another would, presumably, mean that there is some synthesis of God’s feelings of these finite actual entities within its process of concrescence as a determinate, incorporation of those entities.

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But it is not immediately clear how this determination can be achieved if God is always becoming, and if God is always becoming it is not clear how finalized actual entities can enter into God’s consequent feelings at one stage, and then other finalized actual entities can enter into God’s consequent feelings at another stage. And if this remains an unresolvable matter, then it may be that God’s whole consequent nature is unsupportable, as there would really be no way for God’s consequent nature to function across finite actual events.

5.4.2. A Possible Solution

A possible resolution to this problem is to not conceive the everlasting becoming of God’s consequent nature as single, ongoing concrescence, but as individual events that become through their incorporation of the finite actual entities and are satisfied in terms of having brought unification of these events together in feeling.

Because the subjective aim derived from within the primordial feelings is inexhaustible, then, as soon as a satisfaction occurs for God’s consequent nature, by which a propositional reunion with the primordial feelings is effectuated, there would then be established a condition that would open yet another condition for physical, temporal feelings within God’s becoming.

So, from the initial satisfaction there would be feelings of the possibilities still open for further satisfactions, and the feeling of the immediately given, temporal, actual world, which would contain the feelings of the immediately past satisfaction of previous consequent feelings of God. As in the case with finite actual entities, this presents a real
condition for a novel, actual event, and would provide the means for God’s consequent
nature to continue being realized; realized as a synthesis of distinct events, linked
through feeling and purpose, rather than a process of continuous becoming which does
not seem to have analogues elsewhere in Whitehead’s system.

The temporal world of finite actual events would present the condition of real
possibility to the feelings for creative advance derived from the primordial nature of God,
due to the fact that the primordial nature is not temporal. One may say that the two
aspects of God, the primordial and consequent nature, function as the two conditions for
temporal becomings, with the primordial nature providing the possibilities for temporal
determination and the consequent nature everlastingly reconnecting novel, temporal
determinateness with its original, primordial condition, as a means to continuously
replenish the world as an ongoing series of temporal becoming.

However, while Whitehead’s God may be rendered as a consistent and coherent
aspect of Whitehead’s system, this does not argue for the necessity of this conception.
Indeed, I would argue that Whitehead provides no convincing reason as to why actuality
must become as a contrast between a divine, everlasting actual activity and a series of
finite, perpetually perishing actual activities. If some kind of actual activity is required in
order to bring grades of relevance to the eternal objects and thereby rendering them
available to events as graded orders of possibilities, it does not strike me as there
having to be just one such actual process. An evolutionary account may be developed
that could possibly explain the ordering of the relative degrees of compossible
possibilities in an emergent, evolutionary fashion through the becoming and
coalescence of many processes of envisagement as opposed to just one.
Still, even if this could be present as a coherent and consistent account, it would not render itself more necessary (in the sense of it being the only workable possibility) than Whitehead's, nor preclude the possibility that Whitehead's metaphysical theology might come closer to indicating what is actually going on. All it could do is problematize the Whiteheadian claim that this is the only coherent way to bring relative order to the ongoing, processual becoming of reality.

6 Conclusion

In Chapter One, I introduced the notion of contrast as a process that Whitehead regarded as the condition for relationality, and I suggested that we could not only account for the relationality of Whitehead's system through the nature and function of contrasts (as well as the other components of the system) but that this would mean that Whitehead had made a very original contribution to the philosophy of relations, particularly in the way that relations are both real but derivative from actual experience.

I compared Whitehead's philosophy of relations with those of Hume, Bradley, and Russell, and while each bore some positive resonance with Whitehead, we could discern defects or assumptions in their systems that Whitehead either resolved or avoided in his account of relational actuality.

In Chapters Two and Three, I sought to argue for the overall integrity of Whitehead's concept of contrasts by further elucidating aspects of his system, such as his accounts of perception, causality, abstraction, and the means by which notions would be generalized from experienced, related back to those experiences, and the
criterial means for evaluating whether the types and systems of generalized notions are apposite as tentative descriptions and explanations of reality.

In these chapters, I sought to show that contrasts are involved in all of these processes, including the immanent conditions for actual becoming itself, such as creativity, pattern, and value.

In Chapters Four, Five, and Six, I attempted to describe the process of concrescence of an event of experience as well as the immanent conditions required for that concrescence, such as the availability of a graded relevance of possibility and a subjective aim for realization provided.

By this account I hoped to show that contrasts were included within every element of every phase of these developments, as well as within each aspect of these immanent conditions, and that these contrasts always determine the relationality and specific types of relationships within every element and at every level of a concrescence, but also that an event of actualization – if sufficiently complex – may also produce a theory of contrasts as conditions for relationality, and derive this theory of contrasts as the condition for relationality from its own relational process of becoming.

In this way, I hoped to bring some resolution as to whether Whitehead’s notion of contrasts could be found to satisfy the criterial conditions for evaluations as adumbrated in Chapter Three. In order to do so, I also had to explain how the order and organization of eternal objects could be explained by the operation of contrasts within actual activities of feeling, and also consider whether the means by which the eternal objects attain order and organization – Whitehead’s notion of God’s primordial feelings – can itself be shown to be coherent notion.
I found that while contrasts within actual processes can indeed explain the order and organization of eternal objects, and thus provide the means for the becoming of the actual events described in these two chapters, we found that difficulties remained in Whitehead’s notion of God.

While I suggested a way by which God’s processes could be made consistent with those of other actualities, I could not agree with Whitehead that he succeeded in showing that his notion of God was the only way by which order and organization could be established amongst the eternal objects.

Beyond this project, I shall develop my own solution to the problem of how to make graded orders of relevant possibility available for actualization, one that does not require the notion of God, or, at least, God as Whitehead conceived it, in order for the system to fulfill desiderata of coherence and consistency.

This shall incorporate what I briefly suggested above, that there could be many envisagments of possible order, and that the order and regularity that pertains to our world may be the result of the evolutionary adaptability of these various envisagments.

I anticipate bringing a great deal of Whitehead’s ideas into this project, although much may become modified or dropped along the way. But I am most especially impressed by his notion of contrast as a condition for any relationality, and, unless some unresolvable issue is discovered within it, I shall likely build everything that is my own on top of it.
GLOSSARY OF TERMS
FROM CHAPTERS FOUR, FIVE, AND SIX

ABSTRACTIVE HIERARCHY: The analysis of the organization of eternal objects as they are given within an experience, including within thoughts and concepts. (SMW, 167)

ADVERSION: Adversion is a subjective form’s qualitative pattern that performs a positive affirmation of a determinative connectivity. (PR, 233)

AFFIRMATION-NEGATION CONTRAST: A contrast between a nexus and possibilities for becoming that extend beyond that nexus. (PR, 261, 270)

AVERSION: Aversion is a subjective form’s qualitative pattern that performs a negative affirmation of a determinative connectivity. (PR, 233)

CONCEPTUAL FEELING: A prehension that feels an eternal object. Conceptual feelings are what introduce valuation and freedom into the process of concrescence. (PR, 27, 239 – 240, 257)

CONNEXITY: A relationality that is thought to obtain amongst eternal objects and describes how each eternal object refers to actuality through the infinite possibilities of incorporation within some pattern that they share with other eternal objects.

CONSCIOUS PERCEPTION: A proposition that highlights both the conceptual elements within the logical subjects and the predicative patterns derived from the feelings of physical recognition. (PR, 269)

DATUM: The felt, conditioning element within a feeling. It is the entity or unity of entities that a feeling feels and has a constructive response towards. (PR, 23, 40, 47)

ENVISAGEMENT: A series of prehensions in the primordial nature of God that valuate each eternal object’s infinite condition for determinability, and in so doing establishes certain combinations of eternal as possible for actualization. (SMW, 104 – 105; PR, 108)
EXTENSIVE CONNECTION: A mode of potential relational connectivity that can be determined between, across, with, or through various entities by the becoming of an actual entity. (SMW, 166 – 167; AI, 134 – 135, 150; PR, 35, 62, 67, 229, 286, 288 – 289)

EXTENSIVE CONTINUUM: The potential for, and realization of, extensive connectivity and communicability for every actual entity as well as every eternal object. (PR, 62, 67, 286, 288 – 289, 327)

GOD: An actual entity that is immanent to all other actual entities. God makes eternal objects and a subjective aim available for every other actual entity. (RM, 119 – 120, 153; SMW, 104 – 105, 123 – 124, 177 – 178; PR, 30 – 32, 46, 83, 87 – 88, 111 – 112, 178, 224, 240, 244, 345 – 346)

HYBRID PHYSICAL FEELING: A hybrid physical feeling is a physical feeling of the conceptual or subjective activity of a past actual entity. As it does so, it contains conceptual elements. (PR, 245 – 246)

INDICATIVE FEELING: Within a propositional feeling, the physical feelings function as indicative feelings, in that they indicate a given physical condition, rendering that given condition an abstractive as a mere point for reference amongst the alternatives for actualization. (PR, 258, 262, 266)

IMAGINATIVE FEELING: The feeling of difference within a contrast of indicative feelings and the possibilities derived from the feelings of physical recognition. (PR, 262, 269)

INTELLECTUAL FEELING: A feeling that is produced from the integration within a propositional contrast of a proposition derived from the indicative feelings and from physical recognition and the indicative feelings themselves. (PR, 259, 266)

INTEGRATED DATUM: When the valuations eternal objects by the conceptual feelings have been made compatible with the initial objective datum produced by the physical feelings, thus producing a contrast of possibilities for realization with a given environment. (PR, 240)
**JUDGMENT:** A proposition of conscious and intellectual feeling. A judgment involves a valuative affirmation that is positive or negative of how the logical subjects compare with possibilities available through the predicative pattern. (PR, 184, 259, 266, 270, 305)

**LOGICAL SUBJECT:** Logical subjects are a component of a proposition. They are past actualities that are given through a concrescing actual entity’s physical feelings as a nexus, providing an actual, connective pattern derived from that nexus of felt, connected actual entities. (PR, 258, 260, 263, 266)

**MULTIPlicity:** Describes a disjunctive relationship amongst the individual members within a plurality of entities. A multiplicity is unlike a class or a set in that it has no relational unity in itself. (PR, 29 – 30, 31)

**NEGATIVE PREHENSION:** Prehensions whose subjective form feels certain content in a way that does not intensify their potential for synthesis within the becoming of the event. (PR, 23, 41 – 42)

**OBJECTIVE DATUM:** The disjunctive diversity of the past as felt by the physical prehensions as a complex multiplicity, and unified by those feelings through the initial subjective aim as relevant material for intensive contrasts within subsequent feelings. (PR, 212, 224 – 225, 237)

**PATTERN OF INTENSIVE QUANTITY:** What characterizes the graded orders and elements within what has been affirmed by the qualitative pattern. (PR, 233)

**PERCEPTIVE FEELING:** A feeling of an identification between the feelings of physical recognition and the indicative feelings. (PR, 262, 269)

**PHYSICAL FEELING:** A feeling of a past actual entity. (PR, 248 – 249, 251, 254)

**PHYSICAL RECOGNITION:** A process within propositional feeling in which the physical feelings provide the predicative patterns of past actual entities, thus providing the propositions with the conceptual means for recognizing its logical subjects. (PR, 260, 262, 266)
**POSITIVE PREHENSION:** Prehensions whose subjective form feels certain content in a way that intensifies their potential for synthesis within the becoming of the event. (PR, 23, 41 – 42)

**PREDICATIVE PATTERN:** Predicative patterns are components of a proposition. The predicative pattern is the eternal objects prehended by the subjective form and contributes possibilities for becoming distinct from the patterns of definiteness already realized by the actual entities that constitute the logical subjects. (PR, 144, 258, 260 – 261)

**PROPOSITIONAL FEELING:** A proposition that feels another proposition as its object. (PR, 184, 258 – 259, 261)

**QUALITATIVE PATTERN:** The qualitative pattern of a subjective form is an affirmation of a singular mode of determinative connectivity amongst the various constituents felt within a prehension. (PR, 233 – 234)

**REGION:** The determination of potential extensivity within the extensive continuum. When an actual entity becomes, it becomes through the potential for extensive determination provided by the extensive continuum, and when it has concresced it shall occupy a certain role within that continuum. (PR, 234)

**SUBJECTIVE AIM:** The telic drive towards concrescence that all of the prehensions within a becoming actual entity share, but is modified throughout the process of concrescence. (PR, 19, 67, 224, 240, 248 – 249, 275, 308)

**TRANSMUTED FEELING:** The process by which an eternal object that characterizes the unity of the feelings which constitute the unity of a society or nexūs becomes simplified to a “predicate” of those societies or nexus. (PR, 251 – 252, 254)

**VALUATION:** The subjective form of a conceptual feeling. A valuation is a subjective response to the determinability felt in an eternal object, and will valuate this felt determinability either by a qualitative pattern of adversion or of aversion. (PR, 24, 240, 241, 247 – 248)
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