FINDING THE FOUNDATIONS OF THE WORLD IN AESTHETIC EXPERIENCE: THE RADICAL EMPIRICISM OF WILLIAM JAMES AND THE METAPHYSICS OF ALFRED NORTH WHITEHEAD

A Dissertation

by

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ABSTRACT

In this manuscript I widen the interpretive parameters of Alfred North Whitehead's thought in an effort to make his philosophy more readily available to concerns it is not usually taken to address, such as those that define an existential sensibility. I contend that an adequate rendering of Whitehead's philosophy must include a consideration and discussion of the aesthetic dimension and character of experience. By conceiving of the world in processual and compositional terms, Whitehead is conceiving of the world in aesthetic terms, in terms of feeling, affect, value, possibility, and achievement. Without this grounding in aesthetic experience and expression, Whitehead's philosophy loses its experiential purchase.

What I offer herein is a two-pronged approach to understanding Whitehead that will be salutary for opening engagement with Whitehead's thought, both within and outside of circles already familiar with his philosophy. The first prong is to develop the connection between Whitehead and the thought of William James, especially James's radical empiricism. Whitehead, alongside James, was a radical empiricist in a thorough sense. The second prong is to emphasize Whitehead's rendering of aesthetics as the fulcrum of his philosophy, the node through which its various complexities are synthesized. But Whitehead's aesthetics cannot be adequately grasped without working through James's radical empiricism and Whitehead's own understanding of time and possibility. For this reason, this manuscript is largely devoted to elaborating the necessary metaphysical substructure to working on Whitehead's aesthetics in broader existential, social, political, environmental, and scientific contexts.

In pursuing these aims, I articulate the metaphysical sweep of radical empiricism and its unwavering commitment to rendering the world intelligible in experiential terms. I also extend the spirit of radical empiricism to the discussion of time and possibility and show that these two ideas, properly understood, are essential to understanding Whitehead's theory of actual occasions and thus his rendering of process and of experience. The resultant version of Whitehead's metaphysics makes the transition to understanding the aesthetic dimension of experience and the various applications of Whitehead's ideas that much more coherent.

DEDICATION

To

John J. McDermott

Peerless Teacher, Wise Mentor, Dear Friend

For a once-in-a-lifetime experience.

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CHAPTER I

INTRODUCTION

My intention in this manuscript is to widen the interpretive parameters of Alfred North Whitehead's thought in an effort to make his philosophy more readily available to concerns it is not usually taken to address. Whitehead's philosophy is rich and has much to offer diverse fields of inquiry, humanistic and scientific, and the ever more extensive body of scholarly literature developing out of his work is only beginning to tap its deep stores of potentiality. What I offer herein is a two-pronged approach to understanding Whitehead that I believe will be salutary for opening engagement with Whitehead's thought, both within and outside of circles already familiar with his philosophy. The first prong is to develop the connection between Whitehead and the thought of William James, especially James's radical empiricism. Whitehead, alongside James, was a radical empiricist in a thorough sense. The second prong is to emphasize Whitehead's rendering of aesthetics as the fulcrum of his philosophy, the node through which its various complexities are synthesized. Although I have separated them here, Whitehead's radical empiricism and the importance of the aesthetic in his philosophy are related to each other. Individually, each is acknowledged more than it is written about.[1] The task I have set for myself is to develop

[1] Both Whitehead's connection to James and Whitehead's aesthetics have been subjects of scholarly attention, though I think the amount written about each is incommensurate with their joint importance for interpreting and further developing Whitehead's philosophy. Without attempting to be comprehensive, here are a few of the more important works studying the relation between the thought of William James and that of Whitehead: Victor Lowe, "William James and Whitehead's Doctrine of Prehensions," *The Journal of Philosophy* 38, no. 5 (1941): 113–26; Victor Lowe, "The Influence of Bergson, James and Alexander on Whitehead," *Journal of the History of Ideas* 10, no. 2 (1949): 267–96; Craig R. Eisendrath, *The Unifying Moment: The Psychological Philosophy of William James and Alfred North Whitehead* (Cambridge: Harvard University Press, 1971). Eisendrath's book is noteworthy in part because it a book-length study, and he

both strands, beginning with radical empiricism and moving to aesthetic experience, so that the strength and scope of Whitehead's philosophical vision becomes more evident and, hopefully, appreciable within wider ranges of philosophical conversation, and beyond.

This project grew out of my conviction that Whitehead's sense of the aesthetic, while an interpretive key to his systematic thought, is also the key to recognizing the existential sensibility latent in his metaphysical system. I hold that Whitehead has much to offer in the way of understanding the precarious, transient, and sometimes joyful situation in which we human beings find ourselves thrown. This includes, importantly, the deeply rooted ways in which we are entwined in and dependent upon our environments, human and natural, historical and structural. Whitehead does not develop his ideas in an explicitly existential vein himself, though the soil he prepares for such inquiry is rich. And yet, as I considered how Whitehead's version of the aesthetic contributes to such existential inquiry, I came to realize that Whitehead's aesthetics cannot be adequately grasped without working through William James's radical empiricism and Whitehead's own understanding of time and possibility—issues also interesting in their own right. Thus was born the structure of the present manuscript. But James's radical empiricism and Whitehead's

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recognizes and articulates well the deep sympathy between the philosophical ideas of these two men. Victor Lowe had hoped to write a joint study of James and Whitehead, but never completed it. Some of this study, including the above cited article concerning James and prehension, appears in Lowe's *Understanding Whitehead*. See Victor Lowe, *Understanding Whitehead* (Baltimore: Johns Hopkins University Press, 1962), viii.

Regarding the few works on Whitehead's aesthetics and its applications, here are several books of note, again without pretense to comprehensiveness: Donald Sherburne, *A Whiteheadian Aesthetic* (New Haven: Yale University Press, 1961); Steven Shaviro, *Without Criteria: Kant, Whitehead, Deleuze, and Aesthetics* (Cambridge, MA: The MIT Press, 2009); Steve Odin, *Tragic Beauty in Whitehead and Japanese Aesthetics*, Contemporary Whitehead Studies (Lanham: Lexington Books, 2016). Of these three books, Sherburne's deals the most exclusively with Whitehead and the integration of metaphysics and aesthetics, though the aesthetics he develops is his own "original way of approaching aesthetic problems" (Sherburne, *A Whiteheadian Aesthetic*, 5). Partly for this reason, but without disparaging Sherburne's efforts, I have found it largely tangential to the concerns I bring to Whitehead's aesthetic ideas and the way I develop them out of the radically empirical basis of Whitehead's metaphysics.

metaphysics are not simple things to work through, especially since each requires a retuning of received philosophical assumptions and language. For this reason, this manuscript is largely devoted to elaborating the necessary metaphysical substructure to working on Whitehead's aesthetics in broader existential, social, political, environmental, and scientific contexts. This is the true task of the present work. The full flowering of the aesthetic sensibility latent within Whitehead's writings will have to wait for a future work.

My approach to this metaphysical exposition is thematic, and my aim is at narrative intelligibility. The contrasts here are systematic exposition and systematic intelligibility, though truthfully the differences are matters of degree and not of kind. By thematic exposition, I mean that I take up themes within the work of both James and Whitehead and organize my discussion around these themes as anchors. With regard to James's radical empiricism, the orienting themes are pluralism, experience, relations, and appropriation. Regarding Whitehead, they are time and possibility. Additionally, the following related contrasts are woven into the subsequent metaphysical inquiry, coloring it and troubling it always: immanence and transcendence, continuity and atomism, publicity and privacy, object and subject, community and individual, world and self, one and many. With these ideas, our watchwords are *coordination* and *reconciliation*, not *elimination* or *reduction*.

These themes cut across various works by each author, and through them we can find the core of their metaphysical speculations. Interpretively, I hold that James's philosophical works cross-illuminate one another, that Whitehead's do as well, and that James and Whitehead perform this service for one another. Indeed, I am in full agreement with Craig Eisendrath when he writes of James and Whitehead: "By and large, the two philosophers offer together a single philosophy. It is a line of thought which is alive to

contemporary evidence and which speaks meaningfully of the universe."[2] The justification for my accepting this position is borne out, or not, in the strength of the interpretations I give. In this thematic exposition I endeavor to bring together and articulate the *Weltanschauung* that James and Whitehead each sought to express in different ways, without setting out a complete systematic exposition of the full range of relevant metaphysical ideas.

In other words, and with regard to Whitehead in particular, I aim to convey the eros of Whitehead's philosophy and to cultivate an intuitive sympathy with and appreciation for some of its main ideas, rather than provide the reader a guidebook to the systematic interconnection of Whitehead's technical vocabulary. Indeed, the vocabulary can only be understood in light of an intuitive sympathy and appreciation, that is, in light of the system's connection with and derivation from experience. Consequently, I seek narrative rather than systematic intelligibility in my presentation. By this I mean that I elaborate themes and ideas gradually, refining, supplementing, complicating, and synthesizing them as the narrative progresses, and that I hope that this growth and development is followed by the reader. This process of thickening and integrating contains its share of technical and detailed discussion. An intuitive sympathy with Whitehead's ideas is a hard won achievement and complexity cannot be avoided, for reality is complex. Yet I have not attempted to provide a complete account of Whitehead's thought, limiting my more in-depth explorations to select topics, such as time. All I mean when I say my aim is not systematic intelligibility is that my focus is on the connection of Whitehead's philosophy

[2] Eisendrath, *The Unifying Moment*, xiii.

and some of its essential notions with experience, and not on elaborating the internal coherence of his system in a comprehensive manner.

I deeply appreciate the following remark by Jacques Barzun regarding Whitehead: "Even when his prose is full of snarls and knots, which is usually the result of trying to tame original ideas, one always has the sense of his direct contact with experience, of his concreteness."[3] These original ideas with which Whitehead approaches experience, grappling with it and attempting to express its concreteness—these are the ones that I want. But, in the effort to think clearly, most of us vastly oversimplify reality.[4] Ideas that touch more deeply at what is going on in the world of our experience often appear vague and imprecise due to the complexities and ambiguities of what they tap into. Thus the move to thinking concretely is not easy. Leaning on James and Whitehead, I make my effort in the present work.

With regard to the structure of this manuscript, the body is comprised of six chapters, numbered II through VII. Chapters II and III are the foundational chapters on radical empiricism, wherein I lay out its metaphysical architecture. The focus is on William James, though I also explore Whitehead's connection to radical empiricism. These two chapters are crucial to the whole project, for I hold that they contain the rest of the

[3] Jacques Barzun, "New Books: On the Art of Saying 'Quite Mad,'" *Harper's Magazine* 148 (March 1948): 289–95; 289.

[4] I here echo, and thus am reminded of, a statement by Charles Hartshorne that is similar to the one cited from Barzun, above, and with which I likewise agree. At the end of his essay "Whitehead's Idea of God" (1941) Hartshorne writes: "Most of us, to think with any clearness, must drastically oversimplify reality. Every page of Whitehead shows that his power to grasp complex relationships and his familiarity with diverse aspects of life and the world as disclosed in science and experience are greatly superior to that of most of us teachers and writers in philosophy." In Charles Hartshorne, *Whitehead's Philosophy: Selected Essays, 1935-1970* (Lincoln: University of Nebraska Press, 1972), 63-97; 97.

manuscript, including the chapter on aesthetics, *in posse*. They provide the material which will be drawn out, explored, and synthesized in the subsequent chapters.

Chapters IV, V, and VI are the three parts of my exploration of Whitehead's philosophy, organized around the themes of time and possibility. They form a single arc. The question always lurking in the background here is, how are we to understand process? Of significance in these chapters is the reconciliation I offer between atomism and continuity. I also stress the importance of final causality, or efficacious possibility, in shaping an atomic entity. Whitehead's emphasis on the atomicity of actual entities does not stand in opposition to the reality or importance of continuity; rather, it gives us a way of thinking about the creation of individuals in and through time.

The final chapter, Chapter VII, brings the metaphysical issues of the previous chapters to bloom in a discussion of aesthetics, especially aesthetic experience. Whitehead holds that aesthetic experience is perhaps our richest field of insight concerning metaphysical matters, and he thereby patterns his understanding of process and of actuality—of experience generally—upon aesthetic notions, especially that of composition yielding value. I draw a connection between these aesthetic ideas and the subterranean existential sensibility woven throughout Whitehead's thought. The ideas presented in this chapter resonate retroactively through the manuscript, showing our various discussions to have never been very far from explicitly aesthetic considerations. This discussion of existential sensibility and aesthetic experience, though herein incomplete, is both the terminus of my exploration of Whitehead's thought and the final touch that brings the whole together and, with any luck, establishes its indelible concreteness.

CHAPTER II

RADICAL EMPIRICISM AS A METAPHYSICAL POINT OF DEPARTURE: PLURALISM AND EXPERIENCE

Whitehead's understanding of the aesthetic offers a philosophically rich way of appreciating the confluence of metaphysical, existential, and cultural concerns because it brings process, the activity of composition, and the creative living of value to our understanding of what it means to be actual. In subsequent chapters this contention will gain contour and thickness as the focus shifts towards Whitehead. At the moment, though, much needs to be done to lay the foundation for such a discussion. There is a general metaphysical perspective, a *Weltanschauung*, as William James might have put it, that informs my views and, I hasten to point out, underlies Whitehead's philosophy of organism as well. This is of course the doctrine that James calls 'radical empiricism.' It shall serve as our metaphysical point of departure. To introduce us to radical empiricism and prepare us for the explorations of metaphysics and aesthetics that follow, my focus in this and the following chapter will be on four crucial themes in radical empiricism: pluralism; experience; relations; and appropriation. This last notion is not usually emphasized when discussing James's radical empiricism, but exploring it here will not only be helpful in our coming to understand James's version of radical empiricism, but also Whitehead's notion of prehension. In the idea of experience as prehensive activity, aesthetic and existential considerations begin to merge with metaphysical ones.

A few words about the import of radical empiricism and its central contentions will help us retain our orientation as we forge into the metaphysical woods. Radical empiricism

is a powerful metaphysical starting point because of the emphasis it lays on openness and fidelity to experience. For the moment, do not dwell too much on the word experience. In its ordinary usage, experience implies things undergone or lived through that, at least in some dim fashion, touch upon awareness. More generally, experience names our situation as creatures in and of a world with which we transact—we are both affected by the world and affect it with our actions. We shall alter, refine, and thicken this understanding of experience as we progress.

Taking the disclosures of experience to be the proper matter of philosophical reflection, James writes that, "[t]o be radical, an empiricism must neither admit into its constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced."[5] We cannot be dismissive of what we encounter in experience, interrogate it though we must, for experience is the only locus of actuality with which we are acquainted. Moreover, if we attend carefully, James thinks, we shall see that experience is thick enough to 'hang together' on its own; no extra-experiential entities or activities need be postulated for its explanation.[6] "[*T*]*he relations that connect experiences must themselves be experienced relations, and any kind of relation experienced must be*

[5] William James, *Essays in Radical Empiricism*, ed. Fredson Bowers and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1976 [1912]), 22. The essays that comprise this posthumously edited volume were largely published in 1904 and 1905 in several journals, notably the *Journal of Philosophy, Psychology, and Scientific Methods* and *Mind*. A note regarding citations: after the initial citation to a specific work, all references to James's works from the Harvard Critical Edition will be abbreviated "*Works:* [*Title*]."

[6] The fortunate phrase 'hang together' is used by James occasionally throughout the essays that comprise *Essays in Radical Empiricism*. See, for example, Sec. IV of "The Thing and Its Relations," in James, *Works: Essays in Radical Empiricism*, 52.

accounted as 'real' as anything else in the system."[7] Such is the heart of radical empiricism, though its ramifications are hidden from this first view.

What we gain metaphysically from a radically empirical cleaving to experience is a way of talking about the world in a palpable, experiential way. This does not mean that a radically empirical metaphysics is 'easy;' it means that metaphysical speculation and description retains a footing in the concrete. Of course, this is a desideratum for metaphysics generally. One can find it admirably pursued in thinkers ranging from Aristotle to John Dewey. Frequently, though, the metaphysical desire to search after reality is deflected (from the radical empiricist's perspective) by an equation of reality with (the objects of) conceptual thought; or by the often tacit assumption of the isomorphism of mind and reality, meaning that the structures of cognition are supposed to mirror those of reality.[8] In this way conceptual thought is taken to be adequate, or rather ideal, for the full and complete disclosure of the world. Such a scheme sidelines the importance of those aspects of experience that are felt but only grope at conceptual expression.

Bearing this in mind, the danger facing metaphysics, and a charge dogging it throughout its history, is that it has no true bearing on life—that it is all castles in the air. Radical empiricism is an endeavor to keep the castle's foundation securely rooted in the earth of experience, however wild its architecture might appear at a casual glance. In other

[7] James, *Works: Essays in Radical Empiricism*, 22 [emphasis in original].
[8] Cf. Dewey's diagnosis of a major and abiding philosophical deposit left in Western thought by the Greeks: "…there is complete correspondence between knowledge in its true meaning and what is real. What is known, what is true for cognition, is what is real in being. The objects of knowledge form the standards of measures of the reality of all other objects of experience." In John Dewey, *The Quest for Certainty,* ed. Jo Ann Boydston, vol. 4, John Dewey: The Later Works, 1925-1953 (Carbondale: Southern Illinois University Press, 1984 [1929]), 17. After the initial citation to a specific work, all references to Dewey's works from the Critical Edition will be abbreviated "[*Early*/*Middle*/*Later*] *Works:* [*Title*]."

words, the radical empiricist actively attempts to avoid Nietzsche's indictment that "[a]ll that philosophers have handled for millennia has been conceptual mummies; nothing actual has escaped from their hands alive."[9] To the contrary, what is sought are ideas and an understanding equal to the fluidity of life as experienced.[10] Speculation, metaphysical imagination, is not non-empirical; rather, metaphysical categories and generalizations retain a felt applicability to experience—a palpability—and the expansiveness and fruitfulness of this applicability is the measure of a concept's adequacy. For remember, it is experience that is being explored and described. This is the thrust of radical empiricism: reality and experience are not separable things, and experience has layers, complexities, crannies, and depths not easily laid bare to cognition. According to James—and Dewey, and Whitehead—there is enough thickness here to sustain our inquiries indefinitely.

In a word, the attentiveness to experience fostered by a radically empirical sensibility combined with speculative boldness and imagination yields a way of thinking about and doing metaphysics that does not isolate it from the existential, social, and scientific concerns of life. The *what* and especially the *how* of experiencing is revelatory of ourselves, the world in which we find ourselves, and our tenuous foothold in this world of others. The radical empiricism of William James opens the conceptual landscape for the philosophical shift towards process and consummation, aesthetically felt and physically

[9] Friedrich Nietzsche, *Twilight of the Idols*, trans. R.J. Hollingdale, Penguin Classics (London: Penguin Books, 1990 [1889]), 45; this Penguin edition of *Twilight of the Idols* is published and bound with Nietzsche's *The Anti-Christ*.

[10] Cf. Bergson in "Introduction to Metaphysics:" "[M]etaphysics…is strictly itself…when it frees itself of the inflexible and ready-made concepts and creates others very different from those we usually handle, I mean flexible, mobile, almost fluid representations, always ready to mold themselves on the fleeting forms of intuition." In Henri Bergson, *The Creative Mind: An Introduction to Metaphysics*, trans. Mabelle L. Andison (New York: Citadel Press, 1992 [1946]), 168.

efficacious, that I explore in this manuscript. To unfold James's radical empiricism as a metaphysical point of departure, we shall first consider James's direct statements as regard it, beginning with the idea of pluralism.[11]

Pluralism (and the Tenor of a Radically Empirical Metaphysics)

In the Preface to *The Will to Believe*, James writes: "He who takes for his hypothesis the notion that [pluralism] is the permanent form of the world is what I call a radical empiricist."[12] Besides the central importance given here to pluralism, it is worthy of note that James uses the word "hypothesis," for this gives an important clue as to the tenor of a radically empirical metaphysics. Neither James nor Whitehead was interested in attributing dogmatic certitude to any metaphysical doctrine. No system that hopes to capture the whole of the world can be known to be complete or absolute. Indeed, for James the stern openness to revision in the face of experiences as yet unhad is a crucial aspect of radical empiricism. As Whitehead will later say, the whole endeavor of philosophical thought is an "experimental adventure."[13] This is an important feature of Jamesean and Whiteheadian metaphysical speculation to bear in mind as we proceed. I also add that it follows directly from each thinker's pluralistic attitude. For, to get ahead of myself only

[11] A general note for the reader: I am here looking at and building upon James's metaphysical views primarily as developed in the years before his death. The main texts here are *Essays in Radical Empiricism*, *Pluralistic Universe*, and *Some Problems of Philosophy*. The epistemological issues James addresses with his radical empiricism, though related to his metaphysical contentions, are not a pressing a concern for us at present, nor is the genesis and development of radical empiricism within James's intellectual life. This latter is admirably conveyed in John J. McDermott's "Introduction" to the critical edition published by Harvard; see James, *Works: Essays in Radical Empiricism*, xi-xlviii. Probably the best monograph-length treatment of James's radical empiricism in the round is: David C. Lamberth, *William James and the Metaphysics of Experience* (Cambridge: Cambridge University Press, 1999).

[12] William James, *The Will to Believe*, ed. Frederick Burkhardt, Fredson Bowers, and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1979 [1897]), 6.

[13] Alfred North Whitehead, *Process and Reality*, ed. David Ray Griffin and Donald W. Sherburne, Corrected Edition (New York: The Free Press, 1978 [1929]), 9.

slightly, both Whitehead and James hold to a growing pluralism, where the growth is infused with novelty. Each is firm that our experience discloses "the everlasting coming of concrete novelty into being," to cite one of James's formulations.[14] To now use Whitehead's phraseology, at each step of the world's creative advance into novelty, "[t]he many become one, and are increased by one."[15] And if the 'pluralistic universe' is never total but always growing—and in novel ways, no less—hypothesis and openness to experience would seem to be our best ways forward, so far as action and thought are concerned.

This is an important but preliminary perspectival adumbration of the radically empirical *Weltanschauung*. Let us continue to explore the matter of pluralism while also concentrating on James's explicit statements concerning radical empiricism; in particular, on what he describes as the 'postulate,' the 'statement of fact,' and the 'generalized conclusion' of radical empiricism.

> Again, in the Preface to *The Will to Believe*, James writes:
>
> *Primâ facie* the world is a pluralism; as we find it, its unity seems to be that of any collection; and our higher thinking consists chiefly of an effort to redeem it from that first crude form. Postulating more unity than the first experiences yield, we also discover more.[16]

There are several important points raised in this text. First, James contends that the world as disclosed by experience is a pluralism; that is, it is composed of or constituted by many

[14] William James, *Some Problems of Philosophy*, ed. Fredson Bowers and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1979 [1911]), 77.
[15] Whitehead, *Process and Reality*, 21.
[16] James, *Works: The Will to Believe*, 5-6.

things. And this initial and immediate disclosure of experience is not to be rejected as out of hand. Indeed, it is the starting point for all of our thinking. Here we see James cleaving to what he will later call (in the Preface to *The Meaning of Truth*) the 'postulate' of radical empiricism; namely, "that the only things that shall be debatable among philosophers shall be things definable in terms drawn from experience."[17] That is, it is experience that yields the material for and is the end of all our reflections. James's postulate is the methodological core of radical empiricism, whereby experience is that which is revelatory of reality. And what experience tells us about the world is that it is a pluralism, with a multiplicity of things, activities, energies, and purposes working with and against one another in its seemingly chaotic advance.

Second, James's text points out that the function of our thinking about the world is largely a search for connections between the plural *many* with which we are confronted. According to James, through thinking and exploration we are able to discover connections within experience hidden behind the more obvious separations, and if we seek connections we often find them (though perhaps not of the stripe originally sought). This is the third point raised in the text above; namely, the plurality disclosed by experience is, upon inspection, found to have a relational structure through which the many hang together. We discover relations, connections, and unity within experience as we continue to probe and explore. Thus we meet with radical empiricism's 'statement of fact:' "[T]he relations

[17] William James, *The Meaning of Truth*, ed. Fredson Bowers and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1975 [1909]), 6.

between things, conjunctive as well as disjunctive, are just as much matters of direct particular experience, neither more so nor less so, than the things themselves."[18]

We experience connections—such as those that bind the various and wandering thoughts had throughout the day into 'me,' between water and the slaking of thirst, or between my effort and the attainment of the desired water—and as we inquire into the world we find yet more connections—between the soil, sun, and the growth of plants, between the parts of plants and nutrition, between microscopic, proto-living viral activities and illness, and on and on. There are relations everywhere, and they are *experienced relations* and *experienced as relations*, even if they are often hidden from view.[19] The empiricism of disjoined and particulate 'sense data' that is combined, recombined, and associated over and over again, which was masterfully articulated by Hume, is what needs to be made radical, according to James. This is because it overlooks the connective tissuing of experience.[20]

We see, then, that James thinks there are relations everywhere within experience, binding its disparate and plural parts together. But there is a limit to this togetherness; namely, the many individuals remain individuals, and felt gaps are real gaps. James affirms in his 'statement of fact' that relations can be disjunctive; separation is real and experienced as such. He writes, "whatever separateness is actually experienced is not

[18] James, *Works: The Meaning of Truth*, 7.
[19] NB: "Experienced" does not mean "obvious" or "readily apparent." As will be discussed later, the meaning of experience is closer to "affective" or "affective togetherness."
[20] The following is not our present concern, but I note that James thinks the connectivity exhibited by the experiential flux was overlooked because the affective experience of relations wriggles free from our conceptual grasp. The error of the British empirical tradition, in short, is that it relies too heavily on the adequacy and descriptive applicability of rather rigid concepts, forcing experience to fit them, and not enough on a phenomenological acquaintance with experience.

overcome, it stays and counts as separateness to the end."[21] Thus James rejects, strongly, the idea that the world is truly monistic. The connections we find within experience are not of the sort that reveals the world to be an unfettered unity. They are piecemeal, of some limited scope; and disconnection is found as well. The monistic thesis might not carry the same urgency for the contemporary mind as it did for James and his contemporaries, but James himself battled it relentlessly throughout his life. It was the great bugbear he wanted to dispatch.

Here are the main points of James's opposition.[22] First, James sees the 'rationalist' sort of mind, typified for him by the Idealists of his day, especially his colleague at Harvard Josiah Royce and his English epistolary interlocutor Francis Herbert Bradley, as finding the world of experience too fragmentary, partial, and disconnected.[23] Like in the

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[21] James, *Works: Essays in Radical Empiricism,* 42.

[22] James argues against monism and Idealism (or, absolutism) in numerous of his published works and in his correspondence. One concentrated, clear, and late-stated articulation of his position occurs in *A Pluralistic Universe* under the chapter heading "Monistic Idealism." See William James, *A Pluralistic Universe,* ed. Fredson Bowers and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1977 [1909]), 25-42.

[23] While James did apply this criticism to 'rationalist' thought generally, we can see that caveats and qualifications will need to be applied to fit the nuances of particular thinkers. Bradley, for example—who has a complicated relationship to rationalism, to say the least—bases his metaphysics on 'immediate experience.' But Bradley thinks such experience, "however relational its contents, is in the end non-relational" (176; see the bottom of this note for source information). Again, "[a]t every moment my state, whatever else it is, is a whole of which I am immediately aware. It is an experienced non-relational unity of many in one" (175). So we see that, for Bradley, immediate experience is *not* partial and disconnected, but is essentially of a wholeness within which there is "an indefinite amount of difference" (174). And yet, this wholeness of immediate experience always contains hints of, and pushes towards, a 'more'—it harbors a "blind uneasiness" or "unrest" that urges and demands completeness, that is, something that transcends and completes itself (161). According to Bradley, "we cannot explain how this transcendence of feeling is possible" (190). The following text from Bradley admirably and clearly captures his movement from immediate experience to the Absolute:

> But the fact remains that feeling, while it remains as a constant basis, nevertheless contains a world which in a sense goes beyond itself. And when we seek for a unity which holds together these two aspects of our world, we seem to find given to us nothing but this unity of feeling which itself is transcended. Hence, as I have urged elsewhere, we are driven to postulate a higher form of unity, a form which combines the two aspects neither of which

> can be excluded. That such a form is given to us directly in any experience I have never pretended. On the other hand against its possibility I have nowhere found a conclusive objection. And because this satisfies our demands, and because nothing but this satisfies them, I therefore conclude that such an idea, so far as it does, is final and absolute truth (190).

There are several very important points to note here. First, dealing with the matter-at-hand, namely, how Bradley fits within James's critique of rationalist thought generally, we see that although Bradley insists on the non-relational unity and wholeness of immediate experience and thus does not characterize it as fragmentary, he nevertheless holds that the "unrest" or "uneasiness" within immediate experience is not and cannot be resolved within experience itself. Since it must be resolved, a "higher form of unity" must be postulated. That immediate experience is felt as containing an unrest or gesture towards a transcendent more that it cannot itself make good on—i.e., that experience cannot hold itself together through the movement of time—fits James's criticism that 'rationalists' tend to overlook felt connections within experience. In this sense, Bradley's view of experience is "fragmentary" according to James, despite Bradley's insistence on the wholeness and "living emotion" (159) of immediate experience that cannot be captured by any perception or knowledge of objects. Except for Bradley's resolution of the unrest of experience within a supraexperiential unity, James and Bradley characterize immediate experience in remarkably similar ways. This is the second point to notice. The emphasis on feeling and emotion as overflowing clear cut objects and forging every moment of experience into a finite manyness-in-unity is common to both thinkers, as is the commitment to reality as what is experienced. James would agree with the following text of Bradley's: "Nothing in the end is real but what is felt, and for me nothing in the end is real but that which I feel" (190). (I should add that these commonalities extend to Whitehead as well.) This common ground might be why James and Bradley took such pains, through correspondence, to understand why their final views seemed so far apart.

This leads us to the third and final point, which is that the primary difference between Bradley and James hinges on the reality of what James calls feelings 'of tendency' and 'of transition.' The key text here, with many well-described examples, is James's chapter on "The Stream of Thought" in his *Principles of Psychology*. For James relations are *felt*, not imposed by analysis onto the contents of an experience essentially non-relational and whole. That is to say, the "unrest" of experience resolves itself (or at least moves towards resolution) within experience as we feel one moment glide into another and serve as the basis for the present feeling. A feeling of transition is a feeling of a relation in the making, heavy with 'living emotion,' to borrow Bradley's phrase used above. More will be said about relations and radical empiricism later in this and the next chapter. For now, just know that to deny that relations are felt is to abandon the ground for the entire *Weltanschauung* of radical empiricism. Bradley seems to make just such a denial, writing that "[a] relation exists only between terms, and those terms, to be known as such, must be objects. And hence immediate experience, taken as the term of a relation, becomes so far a partial object and ceases so far to keep its nature as a felt totality" (176-177). For Bradley, terms and relations are abstractions introduced by intellective activity, by *analysis*, and "[w]hat analysis leaves for ever outstanding is no mere residue, but is a vital condition of the analysis itself" (176). That is, for Bradley relations are an intellectual tool and are not part of the flux of immediate experience—or, that wherever a relation is experienced "what is experienced is more than the mere relation," namely, the totality of which the relation is an abstract part (200). Thus, "[t]o take reality as a relational scheme, no matter whether the relations are 'external' or 'internal', seems therefore impossible and perhaps even ridiculous" (190). For James, relations are not a tool of analysis whereby wholes are rendered into definite and separate 'terms' and 'relations'; what feelings of transition and of tendency show us is that relations are the organic mortar through which the world of experience hangs together. Relations are felt as relating and, because of their slippery and mobile character, they resist easy conceptualization. Hence Bradley's story about relations is, for James, inherently partial and inadequate. Here, then, there is a parting of the ways, and it is not a parting that can be reasoned through. James thinks that relations are felt, experienced, in a way that Bradley simply thinks they are not. The appeal is phenomenological. Which account best accords with your experience, James's or Bradley's? I, for one, am with James. But the appeal is always to experience, and it is best not to become dogmatic about such things, for that is how the world slips by you.

earlier empiricisms that James did not find radical enough, experienced connections were ignored and perceived disconnections emphasized. But, according to James, the desire of reason for unity and connection leads the idealists to posit an overarching unity, often called the Absolute and within which the entire world has its place, as a logical necessity and presupposition of all thinking. The crux of James's opposition is that we are importing, through reason, a level or amount of unity found nowhere in experience; the tightest and closest bonds experienced fall short of what is claimed for the Absolute, and so the Absolute (and its brand of unity) must be transexperiential. This in itself transgresses the 'postulate' of radical empiricism.

Moreover, the idealists or absolutists are selective in the evidence they accept from experience. Because they do not recognize the relating and connecting that occurs *within* the fabric of experience and that is, according to James, sufficient to lace the world together, they reason that the unity of the world must come from somewhere and then allow the activities of reason to direct them to that unity. But such reasoning overdoes it, meaning that it reaches beyond any unity actually experienced, and what we end up with is a 'block-universe' alien to some of our deepest sensibilities about the world we experience.[24] Now, neither James nor any of us can with certainty rule out the possibility

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For the Bradley texts, see his chapter "On Our Knowledge of Immediate Experience" in Francis Herbert Bradley, *Essays on Truth and Reality* (Oxford: Clarendon Press, 1914), 159-201. All the numbers in parentheses given above refer to this text.

[24] See James, *Works: A Pluralistic Universe*, 39. While James does refer to a monistic world as a block-universe, we can see in the charge of 'block-universe' James's preference for a certain kind of pluralism; namely, one in which the pluralism grows through novel addition or creation. This preference of James's has already been noted, and the issue of novel growth will reappear as we discuss *time* in chapters IV, V, and VI. For now I simply add that a deterministic plural universe, without freedom and thus without genuine novelty—like the atomic cosmos of Democritus, or the bare, Newtonian world of matter in motion as envisioned by Laplace—is more or less the same as a monistic one, for James. For with mechanical determinism, if you truly have one thing, with all its incoming forces, tendencies, and so on, then you have

that we indeed live in a block-universe, but James urges us to consider the pluralistic alternative, not least because those urging the monistic thesis have reached that conclusion by jumping ahead of the evidence. James writes:

> Things are 'with' one another in many ways, but nothing includes everything, or dominates over everything. The word 'and' trails along after every sentence. Something always escapes. 'Ever not quite' has to be said of the best attempts made anywhere in the universe at attaining all-inclusiveness.[25]

For James, then, the world is a pluralism where "[r]eal possibilities, real indeterminations, real beginnings, real ends, real evil, real crises, catastrophes, and escapes, a real God, and a real moral life" may all prove to have footing.[26] This pluralism is not a mere heap, but one creating[27] its own relational structure. As James puts it in the 'generalized conclusion' of radical empiricism: "[T]he parts of experience hold together from next to next by relations that are themselves parts of experience. The directly apprehended universe needs, in short, no extraneous trans-empirical connective support, but possesses in its own right a concatenated or continuous structure."[28] This text articulates *the* most important contention of radical empiricism. If it holds good of experience, if felt relations do bind together the universe as apprehended, then there is no need to move in the monistic or absolutistic direction. And this is precisely what James's

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got the whole universe. That is, despite its plurality of parts, the universe behaves as a block, a completely unified system from which there is no escape or deviance.

[25] James, *Works: A Pluralistic Universe*, 145.

[26] James, *Works: The Will to Believe*, 6.

[27] This idea of *creating* a relational structure will recur when we discuss relations in the next chapter and time in the subsequent chapters.

[28] James, *Works: The Meaning of Truth*, 7.

urges—our world does not require such a hypothesis, and indeed seems to push against it, so why postulate it?[29]

James's pluralism, as we have discussed it thus far, leaves us with a number of important questions. First, how are we to reconcile pluralism with continuity, with the idea that felt relations afford the world of experience a 'continuous structure?' This metaphysical question gains its weight because the fluid blending together or continuity of the plural parts might seem to direct us back towards monism. We may ask, why do real relations not fuse the world universe into a monistic block? James's treatment of relations addresses this question, and if it does not entirely remove the air of paradox at the conceptual level, it at least tries to assure us that pluralism and continuity are experientially compatible, that is, experienced as together.

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[29] It is worth comparing the above texts from James, in particular the block quote from *The Will to Believe* that begins, "*Primâ facie* the world is a pluralism…", to a very similar text found in one of Whitehead's earlier philosophical essays, "Space, Time, and Relativity." This piece was written in 1915, as Whitehead was beginning to think and write about the philosophical underpinnings of natural science. Though his philosophical statements will become more refined and broader in their intended application in the coming decades, this text shows Whitehead's affinity with Jamesean radical empiricism. Whitehead writes:

> My point in this respect is that fragmentary individual experiences are all that we know, and that all speculation must start from these disjecta membra as its sole datum. It is not true that we are directly aware of a smooth running world, which in our speculations we are to conceive as given. In my view the creation of the world is the first unconscious act of speculative thought; and the first task of a self-conscious philosophy is to explain how it has been done. (Citation information at the end of this note.)

Here we see pluralism and a commitment to immediate experience as the basis of thought. One might be tempted to take the last sentence of this text in a Kantian manner, attributing all powers of synthesis, all of the world's connective tissue, to the thinking subject, but the immediate context of this quote leads us towards a Jamesean interpretation. Like James saying that the effect of "higher thinking" is to "redeem" what at first appears as a mere collection, Whitehead writes that: "The fact that immediate experience is capable of this deductive superstructure [i.e., of bearing "the creation of the world"] must mean that it itself has a certain uniformity of texture. So this great fact still remains." Thus as James says, we postulate more unity than is at first apparent, and then we (sometimes) uncover relations and connections within experience that were initially obscured from view. Whitehead's "uniformity of texture" is a fact of experience, and this is analogous to James's contention that the relational structure of experience is itself a part of experience. See Alfred North Whitehead, "Space, Time, and Relativity," *Proceedings of the Aristotelian Society*, New Series, 16 (1915): 104–29; 122-23.

Second, we have seen that radical empiricism is "essentially a mosaic philosophy, a philosophy of plural facts," but what are the tile pieces of the mosaic?[30] *Of what* is the world a pluralism? Of 'facts,' as the above text might suggest? Or of selves, or objects? Of values, possibilities, beginnings and endings? In a way, the world is a pluralism of all of the above and more—it is a rich and fecund pluralism. Truthfully, James did not focus on this question as explicitly as he might have. As Victor Lowe reminds us, James's advocation of pluralism was in large part meant to help us banish the supposed necessity of the Absolute, and "a 'part' was anything less than the Absolute."[31] But this does not mean James was not clear about the ultimate elements of his pluralism, just that he was not as forthright about it as he might have been. There is a metaphysically crucial way in which James's pluralism centers on the notion of experience, as is to be expected from his development of and adherence to radical empiricism. There is a pluralism *of* experiences as well as *within* experience. Cashing out James's pluralism as a radically empirical metaphysics not only leads to metaphysical insight, but to existential insight as well. I shall have my eye on the existential edge of radically empirical metaphysics throughout this dissertation, as this is where much of the fruit of our inquiries lay.

It is this second question we shall discuss first, examining the notion of experience within James's radical empiricism, and then, in the next chapter, we shall explore the importance and nature of relations in radical empiricism.

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[30] James, *Works: Essays in Radical Empiricism*, 22.
[31] Victor Lowe, "William James's Pluralistic Metaphysics of Experience," in *In Commemoration of William James, 1842-1942*, ed. Brand Blanshard and Herbert W. Schneider (New York: AMS Press, 1967 [1942]), 157–77; 158.

Experience

Regarding James's pluralism, I agree wholeheartedly with Victor Lowe's interpretation: "It is without doubt a pluralism of drops or pulses of experience," where a pulse is initially to be thought of as a living occurrence of the "specious present."[32] For, as Lowe points out, when James directly tackles metaphysical and epistemological matters, "We find that he always begins with a multitude of pulses of experience and interprets all other things as either extracts cut out from these or wholes composed of a number of them knit together by felt transitions."[33] A reading of *Essays in Radical Empiricism* and *Some Problems of Philosophy*, especially, bears out Lowe's contention. The questions now confronting us concern, first, the nature or metaphysical status of 'experience' within

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[32] Lowe, "William James's Pluralistic Metaphysics of Experience," 165. This essay by Lowe is a very good essay on the metaphysical aspects of James's pluralism.

The idea of a pulse of experience will be a topic of much consideration as this manuscript unfolds. I approximate it here with the notion of the "specious present," which James characterizes as "*the short duration of which we are immediately and incessantly sensible*" (William James, *Principles of Psychology*, ed. Fredson Bowers and Ignas K. Skrupskelis, 3 vols., The Works of William James (Cambridge: Harvard University Press, 1981), vol. I, 594). The occurrence or happening of this short duration is what is meant by a pulse of experience. The boundaries and length of this duration are vague and flexible, and, moreover, their precise definition is beside the point. The key idea is that our experience "is no knife-edge, but a saddle-back, with a certain breadth of its own on which we sit perched, and from which we look in two directions into time" (James, *Works: Principles of Psychology*, vol. I, 574). In short, experience is *finite*, not *infinitesimal.* The finite character of *an* experience, that is has a nucleus and a limited temporal scope, is what the idea of a pulse tries to capture. Now, there is a key difference between the idea of a pulse of experience and the specious present as James discusses it in his *Psychology*. A pulse occurs and then fades, begins and then ends—it happens, and then another pulse, and another, and another. I have one experience, then another. This is one aspect of the finitude of experience. But the specious present, *as a feature of conscious awareness*, does not disappear so long as consciousness does not; rather, the specious present *remains* and the happenings or 'contents' of experience seem to pass through so as to make of our experience a stream (cf. James, *Works: Principles of Psychology*, vol. I, 593). Here, with the contrast between a stream and a pulse, we touch upon a central theme in this manuscript. Thus I shall say no more of it at this juncture.

A final note about the term "specious present." It was coined by E.R. Clay, who called the short duration of which we are aware "specious" in contrast to "the real present," which is merely where past and future are coterminous (see James, *Works: Principles of Psychology*, vol. I, 573-574). Though James takes up the term "specious present," as he uses it is loses the derogatory sense that the word "specious" carries. In the idea of the specious present James finds "*the original paragon and prototype of all conceived times*" (James, *Works: Principles of Psychology*, vol. I, 594). In this elevation of the specious present over the instantaneous now, we have an example of James's radically empirical sensibility: experience is primary, conceptual constructions secondary.

[33] Lowe, "William James's Pluralistic Metaphysics of Experience," 162.

radical empiricism, and, second, the meaning and significance of treating experience as coming in 'drops' or 'pulses.' In the next chapter we shall discuss the interweaving or 'compenetrating' of these pulses and the import of such immanence-making.

Let us take as our lead text here part of James's entry for "experience" in James Baldwin's *Dictionary of Philosophy and Psychology*, for it concisely furnishes us with the key notions we shall use to develop the idea of experience.[34] James writes that experience is:

> …the entire process of phenomena, of present data considered in their raw immediacy, before reflective thought has analysed them into subjective and objective aspects or ingredients. It is the summum genus of which everything must have been a part before we can speak of it at all.[35]

Note the breadth of James's description of experience as well as the primordiality he ascribes to it. Experience, generically, is a wide net meant to capture "the entire process of phenomena." But this process is nothing but the process of experiencing, the happening of many experiences and their relations. The flexibility of the term experience, from its generic inclusivity to its insistence on finitude and multiplicity when speaking of "many experiences," is both a boon and a curse. It captures something vital about our metaphysical situation, but it resists attempts to box it in. Experience is our widest horizon and yet is only known through the rhythmic and pulsating stream of our lives. In what follows, the reader should be alert as to the multivalent resonances of this term.

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[34] See James Baldwin, ed., *Dictionary of Philosophy and Psychology*, 3 vols. (New York: Macmillan, 1901-1905).
[35] William James, *Essays in Philosophy*, ed. Frederick Burkhardt, Fredson Bowers, and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1978), 95.

According to James, experience takes in the whole of "present data," of what is felt and affective and in any way available for feeling and for cognition. This includes and encompasses what philosophers generally speak of as 'subjective' and 'objective.' These are determinations made *within* the field of experience given for present feeling. This means that the 'subject' is not merely a haver of experience, that experience is not *only* the inwardness and privacy of a being, and further, that experience is not *inside* the subject. The subject is a locus of action, feeling, and awareness sometimes culminating in consciousness. But consciousness is not exhaustive of experience. Consciousness, according to James, occurs *within* experience as a functional relating of some of the given 'ingredients' or 'contents' of some experiences to others.[36] We, as human beings, begin with consciousness, but it is always 'fringed' by a more, leading out into a dimly but insistently felt world of influences and presences.[37] Experience is wider and thicker than consciousness, comprised of the full variety of affective energies localizing, layering, and tunneling as the present and immediate field of feeling.[38] This means that the 'objective'

[36] James explicitly develops the idea of consciousness as a functional relation within experience in his essay "Does Consciousness Exist?" See James, *Works: Essays in Radical Empiricism*, 3-19. This essay is often taken to initiate discussions of radical empiricism. Presently, the idea of experiences relating to one another requires more development. This will occur as the idea of 'drops' or 'pulses' of experience comes to the fore.
[37] See James's chapter "The Stream of Thought" in James, *Works: Principles of Psychology*, vol. 1, 219-278. On page 249, for example, James writes that the influence of the "fringe" upon our thought is to "[make] it aware of relations and objects but dimly perceived." James's chapter is replete with convincing examples of this.
[38] It is important that we not reduce immediate experience or immediate awareness to the thin consciousness of the world as disclosed by the five basic human senses; or to reduce even this to the simpler and thus more abstract (but all-too-common) example of the visual field. Here James's psychological writings and his contentions about the sheer volume of present data and the sifting and simplifying effect of awareness and of thought can help point us to a more inclusive understanding of experience. We can also think of alienation from oneself as described by Hegel and Marx, of the deep undercurrents of the mind probed by Kierkegaard and Nietzsche, of the 'subconscious' and the 'unconscious' of Freud and 20th century psychoanalysis, of the rampant self-deception with which existentialist thinkers confront us—these are all descriptions and analyses of fields of feeling that are explicitly and purposely distanced from conscious awareness but are nonetheless asserted to have affective efficacy in the broader experiential stream that constitutes one's life. These diverse

world, too—the world of 'external reality,' or 'nature'—is a determination within the field of experience, a certain relational scheme of feelings. Experience, taken whole, is neither subjective nor objective, but is instead an affective flux precipitating a locus suffused by an insistent fringe—the locus being what is traditionally called the 'subject'—hurtling forward, through nature and into the future.

James also writes in Baldwin's *Dictionary* that in this "neutrality of signification," the meaning of experience is "exactly correlative" to John Dewey's fourth definition for "phenomenon." Dewey writes:

> It is used in a colourless philosophical sense, as equivalent to "fact," or event—to any particular which requires explanation. And it may be questioned whether this practical, apparently non-philosophic sense is not in truth the most philosophic of all.[39]

The word I want to focus on here is "fact." (Above, James uses "data" to refer to what are here called facts.) Start by thinking of "fact" in an ordinary sense, as something that *has happened* and/or *is the case*. James memorably calls facts "irreducible and s[t]ubborn," indicating their particularity and their imposition of constraint upon what and how we experience.[40] That is, facts have to be reckoned with 'as is.' They are 'out of our control.'

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realms of 'potentially unaware feeling' are all part of the full-bodied field of experience that James (and Whitehead) take to be the basic, given fact of existence and ground for all philosophizing (and for activity generally, both theoretical and practical). Indefinitely more is experienced than is present for conscious awareness at any given moment.

[39] John Dewey, *Essays on Logical Theory: 1902-1903*, ed. Jo Ann Boydston, vol. 2, John Dewey: The Middle Works, 1899-1924 (Carbondale: Southern Illinois University Press, 1976), 190; from Baldwin's *Dictionary*, vol. II, 323.

[40] Ignas K. Skrupskelis and Elizabeth M. Berkeley, eds., *The Correspondence of William James: Volume 2: William and Henry: 1885-1896* (Charlottesville: University of Virginia Press, 1993), 59 (letter to Henry, March 10, 1887). The phrase "stubborn fact" does not originate with James. It can be found in the second

And as *imposing* constraint, facts are felt as having come from without, at least from beyond the present moment of experience. In other words, what we experience, the objects or 'contents' of our experiencing, are in some measure *given* to us for feeling—this even though facts are always *for* experience, that is, exist within the experiential field. Experience is a matter of receiving, reacting, and adjusting to facts, throwing one's (re)action into the swirl of facts with which others must contend. The weather is inclement—that is a fact of my present experience—and I must act accordingly or face the consequences; personal fiat does nothing to change the weather. My forgetting to take an umbrella now becomes a fact with which the future me shall have to reckon, as well as one for the people who must now interact with an annoyed, soggy me. Note that both the weather and my having forgotten an umbrella are equally facts for the present experience; the subjective/objective distinction, if it is to be made, is a posterior determination. And, as Dewey astutely points out, facts are given but are not given as complete. They carry with them the 'more' that I mentioned above, the leading out into a wider environment. In Dewey's language, facts call for explanation. The presence of factuality within experience, the element of givenness, indicates that many feelings which comprise an experience are felt as coming from *without*; facts are felt as a press, from there to here. They condition experience. It is on this basis that, from the starting point of conscious awareness, the radical empiricist grounds the claim that we inhabit a pluralistic universe.

Let us thicken the idea of fact. A fact for experience is something felt as effective within the constitution of that experience. According to James, experience in its "raw

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paragraph of Charles Dickens's novel *Hard Times* (1854), was uttered by John Adams in 1770, and can be traced even further back to the early 18th Century.

immediacy" is affective; that is, to experience is to feel, and to feel is to be affected in some way, shape, or form, however slight. The affective involves a sense of power, of something impinging from without or being thrust forward, a sense of derivation and influence, of 'provocation.'[41] In this way the radically empirical 'take' on the affective, and thus on the experiential, is a modern rendering of Plato's suggestion in the *Sophist*, 247e, that '*those which are*' (τὰ ὄντα) are defined by, and are nothing other than, '*power*' (δύναμις).[42] To be is to be affective, and in experience the affective given—facts—are felt together, comprising a complex, particular occurrence. Thus we may say that experience is a compositional or synthetic affective togetherness. As James might put it, an experience is, in a local and temporal way, an occurrence of "many-in-one," of many facts—chemical, biological, somatic, emotional, social, and on and on—felt together, here and now.[43] This is not to suggest that experience is a mere agglomeration of facts, for in order that an experience 'be' it must itself be affective (express power) elsewhere, but for the moment that which is given for experience is what concerns us.[44]

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[41] Cf. Alfred North Whitehead, *Adventures of Ideas* (Cambridge: Cambridge University Press, 1933), 226.
[42] Whitehead was fond of this passage in Plato's *Sophist*. For example, he discusses it explicitly in *Adventures of Ideas* and made a marginal note of it in his copy of *Process and Reality* alongside the fourth category of explanation. I should note, though, that in *Process and Reality* Whitehead's treatment of power draws more explicitly from Locke's *Essay* than from Plato. See Whitehead, *Adventures of Ideas*, 152-153 & 230; and Whitehead, *Process and Reality*, 394. We might also compare this Platonic suggestion with the Berkeleyan motto, *esse est percipi*.
[43] Cf. James, *Works: A Pluralistic Universe*, 127-128.
[44] The text of the *Sophist* does not unequivocally lead to the idea that, in order to be, a being must express power elsewhere. The suggestion there is that to be is 'to affect or to be affected.' But the emphasis on being efficacious elsewhere is appropriate in a Jamesean account of experience. We need, for example, only to read the following text as metaphysically significant and suggestive: "There can *be* no difference anywhere that does n't *make* a difference elsewhere." Thus the "or" in the Platonic suggestion is transformed into an "and"—the description of experience above (as confronting a given) removes the possibility of a pure actor (pure affector, unaffected), and the text just cited denies the possibility of a pure receiver (pure recipient, ineffective). See William James, *Pragmatism*, ed. Fredson Bowers and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1975 [1907]), 30.

A text from Whitehead's *Process and Reality* illuminates the affective importance of facts within experience. To open oneself to experience in its efficacious relations, to feel the press of fact upon the present occasion of experience,

> produces percepta which are vague, not to be controlled, heavy with emotion: it produces the sense of derivation from an immediate past, and of passage to an immediate future; a sense of emotional feeling, belonging to oneself in the past, passing into oneself in the present, and passing from oneself in the present towards oneself in the future; a sense of influx of influence from other vaguer presences in the past, localized and yet evading local definition, such influence modifying, enhancing, inhibiting, diverting, the stream of feeling which we are receiving, unifying, enjoying, and transmitting. This is our general sense of existence, as one item among others, in an efficacious actual world.[45]

The idea of 'fact' or 'datum,' when examined concretely and experientially, leads to a sense of activity and effectiveness permeating experience. And this is effectiveness both *within* and *of* experience, for past experiences become data for future ones. Facts are *dynamic*, provocative; they are static only in abstraction. They are not merely *there*, but they are influential, powerful. All facts are affective, but all are not felt within the focal region of conscious awareness. They can be vague but insistent, or simply subtle, inhabiting the fringe of awareness "that shades insensibly into a subconscious more."[46] And perhaps most importantly, the activity of facts within the process of experiencing

[45] Whitehead, *Process and Reality*, 178.
[46] James, *Works: A Pluralistic Universe*, 130.

gives us our sense that the world stretches beyond the present occasion of experience, forming its wider environment while pouring itself into the experience. Thus Dewey writes that "experience is *of* as well as *in* nature."[47] An experience contains an actual world (nature) as alive within itself as its datum and content, and this living activity is inseparable from the sense that the individual occasion of experience inhabits this world as one finite part. Nature is something experienced, and it is experienced as that within which derivation, modification, and passage occurs.

On this account of experiencing, the ideas of feeling, affect, and power cannot be extricated from one another. The words "feeling" and "affective" are so prominently used because they suggest the various qualitative colorings that suffuse experience and are part and parcel of any expression of power. A central contention of this radically empirical version of experience is that anything felt *makes a difference*. Something felt alters the tone, flavor, and shape of the feeling-experience in however minute a way. Thus James writes, "[t]here can *be* no difference anywhere that does n't *make* a difference elsewhere."[48] Acknowledging the primacy of affectivity within what it means to experience and to be experienced is to acknowledge experience as active and dynamic.

The purpose of discussing facts (or the data of experience) thus far has been to introduce the importance of affectivity and power, and thus of dynamism, within experience. Even what is given is only so within a flux of efficacious activity. The radical empiricist cleaves to this experience of activity and finds in it the original of our ideas of

[47] John Dewey, *Experience and Nature*, ed. Jo Ann Boydston, vol. 1, John Dewey: The Later Works, 1925-1953 (Carbondale: Southern Illinois University Press, 1981 [1925]), 12.
[48] James, *Works: Pragmatism*, 30. Here we can see a connection between James's pragmatism and the radically empirical view of experience. If experience is a matter of active affectivity and efficaciousness—of *making a difference*—then the pragmatic attitude has solid metaphysical footing.

causality and freedom.[49] But recall that we began discussing fact in the context of experience's "neutrality of signification." The experiential flux is, for James, the cloth from which both mental and physical existence are cut; in its "purity"—a somewhat contentious term James uses to develop a theory of experience in his 1904-05 essays—experience encompasses, and thus is potentially both, 'thought' and 'thing.'[50] Facts are likewise neutral and can be determined as either mental or physical, or even as a blend between them.[51] The weather is just as much a present fact as is my mood, and the beauty of a flower seems to dance somewhere between a purely mental and purely physical signification. Yet regardless of determination, facts are still efficacious.[52] What differs among facts are their contexts of effectiveness, which contexts form the basis for sorting the facts into classes. This means that affectivity is primary and pervasive within experience and its 'contents,' while the sifting of various affective activities into different types is metaphysically secondary.

[49] See, for example, "The Experience of Activity" in James, *Works: Essays in Radical Empiricism*, 79-95; and "Causation: The Perceptual View" in James, *Works: Some Problems of Philosophy*, 105-110.
[50] I say the idea of 'pure experience' is contentious in the sense that it is a difficult doctrine to interpret and thus about which it is difficult to find agreement. On my reading of James, pure experience is an abstract way of treating experience, fixing its immediacy in the sense of forcing a reflective stasis upon experience. Temporal relations—an indispensable aspect of full-bodied and vital experience—are shorn, and we thereby learn that it is such relations that constitute the subjective and objective aspects of experience. We shall return to the idea of pure experience later, but only briefly, for a thorough examination of James's doctrine of pure experience would be a digression. For an extended treatment of this topic, see Lamberth, *William James and the Metaphysics of Experience*, esp. Ch. 1.
[51] See "The Place of Affectional Facts in a World of Pure Experience," in James, *Works: Essays in Radical Empiricism*, 69-77.
[52] In case there is any hesitation about efficacious mental facts, consider that the text from Whitehead above (p. 27) mentions past emotion passing into the present—who would deny that their sorrow or joy of a moment ago does not color and influence the present occasion of experience?

James calls this neutrality of signification the "double-barrelled" quality of experience.[53] A text from John Dewey where he comments on James's use of this term will help us see how concrete the radically empirical interpretation of experience is:

> We begin by noting that "experience" is what James called a double-barrelled word. Like its congeners, life and history, it includes *what* men do and suffer, *what* they strive for, love, believe and endure, and also *how* men act and are acted upon, the ways in which they do and suffer, desire and enjoy, see, believe, imagine—in short, processes of *experiencing*. "Experience" denotes the planted field, the sowed seeds, the reaped harvests, the changes of night and day, spring and autumn, wet and dry, heat and cold, that are observed, feared, longed for; it also denotes the one who plants and reaps, who works and rejoices, hopes, fears, plans, invokes magic or chemistry to aid him, who is downcast or triumphant. It is "double-barrelled" in that it recognizes in its primary integrity no division between act and material, subject and object, but contains them both in an unanalyzed totality.[54]

Experience as described here is nothing unusual or abstract, but is precisely what all of us live through every day: fear, longing, hope, joy, disappointment regarding various complex situations; goals strived for, sometimes aided and sometimes hindered by unexpected events, a helping hand or a clenched fist; awareness shading off into memories, anticipations, suggestions, inklings—all continuing to shade into the nothingness of the

[53] See "Does Consciousness Exist?," in James, *Works: Essays in Radical Empiricism*, 7.
[54] Dewey, *Later Works: Experience and Nature*, 18.

unfelt. As James writes, "If you ask what any one bit of pure experience is made of, the answer is always the same: 'It is made of *that*, of just what appears….'"[55] Do you want to know if you experience hardness? Knock on your table. Joy? Find someone to kiss. The matter of experience could not be more concrete, for it is the very basis of our idea of concreteness. But rendering the felt concreteness of experience into an articulated philosophical system is a difficult task.

Colloquially, we speak about experience without issue, and the fullness and richness of concrete experience, which Dewey indicates by naming 'life' and 'history' as its kindred terms, is what the radical empiricist wants to maintain as the subject matter for philosophical discourse. The difficulty in using a Jamesean version of experience as a basis for philosophical and especially metaphysical theory is the inadequacy of prevailing conceptual schemes and their attendant vocabularies.[56] James wishes to develop an originating way of talking about experience, and a new way of talking and thinking is always difficult to grasp at first. Thus, an attempt to treat complex philosophical issues in a metaphysically sophisticated matter using a 'philosophy of pure experience,' like that of radical empiricism, is bound to sound strange to a philosophically educated ear. Familiar concepts have an altered meaning, and some are discarded outright; everyday terms like

[55] James, *Works: Essays in Radical Empiricism*, 14-15.
[56] There is a detailed story to be told here which we shall not enter into. The short version is simply that many philosophical concepts and terms refer to abstractions of various degrees but are mistakenly treated as if they lay hold of the concrete, with the result that they are inadequate for linguistically rendering concrete experience in its full actuality. The problem of mistaking the abstract for the concrete is what Whitehead calls the 'fallacy of misplaced concreteness.' Its application in the history of philosophy is that many philosophers ground their thinking in abstract elements of experience, rather than in the concrete. See Alfred North Whitehead, *Science and the Modern World* (New York: The Free Press, 1967 [1925]), 51.

'feeling' and 'affect' gain philosophical thickness, sometimes even technicality.[57] The following point made by Dewey when discussing Whitehead's conception of experience is equally applicable to the Jamesean picture being developed here. Dewey writes that, "given a reasonable degree of emancipation of philosophic imagination from philosophic tradition and its language, that idea [of experience] seems to me extraordinarily luminous as well as productive."[58]

The difficulties of articulating a radically empirical philosophy and the need to emancipate the philosophical imagination bring us back to the lead text of this section, namely, James's definition of experience in Baldwin's *Dictionary*. The reason I began with this rather bland text and not one of the thousand other passages in which James discusses experience, often more vividly, is that here he writes of experience as the "summum genus," and I wanted the enveloping sense of experience present at the outset. Also, the phrase "summum genus" allows for a felicitous metaphysical interpretation that highlights the radicalness of a metaphysics based in radical empiricism. As "the summum genus of which everything must have been a part before we can speak of it at all," experience is the widest possible category within which our thinking moves. Every other term, category, and class must be more special than experience. Anything that falls outside of experience is nothing for us at all—Parmenidean silence must reign.[59] This is but an affirmation and

[57] Cf. Whitehead, *Process and Reality*, 4: Here he writes that in framing a metaphysics, "[w]ords and phrases must be stretched towards a generality foreign to their ordinary usage; and however such elements of language be stabilized as technicalities, they remain metaphors mutely appealing for an imaginative leap."
[58] John Dewey, "Whitehead's Philosophy," *The Philosophical Review* 46, no. 2 (1937): 170–77; 177. Also in John Dewey, *1935-1937: Essays, Reviews, Trotsky Inquiry, Miscellany, and* Liberalism and Social Action, ed. Jo Ann Boydston, vol. 11, John Dewey: The Later Works, 1925-1953 (Carbondale: Southern Illinois University Press, 1987), 153.
[59] We must here remember the width and thickness of experience as recognized by the radical empiricist, which encompasses both physical and conceptual feeling. Imaginative experience is still experience—it is a

application of James's 'postulate' of radical empiricism. In metaphysical terms, the world of radical empiricism is "a world where experience and reality come to the same thing."[60] Experience, then, serves as a replacement for the other ultimates prevalent at one time or another throughout the history of philosophy: Being, the One, the Good, the Absolute, God, Spirit, Fire, Nature, Mind, Matter and Motion, Time and Space, and so on. All of these terms have their meaning only within experience, for to be utterly transexperiential is to be cut off from any possible transaction with experience and thus to be nothing for experience, not even absence.

This replacement is not a mere substitution of one ultimate for another, however. If we follow the trail of philosophical inquiry, beginning from whatever question we choose, matters eventually turn to the general nature or character of the world and the things in it. One purpose, or perhaps *the* purpose, of the ultimate principle(s) is that of resolving the perplexities which confront philosophers in their investigations into the nature of things. Conflicts, seeming incompatibilities, brute and unexplained facts or qualities—really, the natures of things in general—are tied back to or taken to be explained by the nature of the ultimate, be it God, the Good, Being, or whatever, which is the final, fundamental, immutable given. These Finals serve as 'canopies of ultimate explanation,' to borrow a

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factor within the larger concrete experience that forms the present occasion of my life. If something is fully and completely unexperienceable in any way, it cannot even enter the imagination as a far-flung possibility. Now, something might only be experienceable conceptually or imaginatively and never as part of the nexus of events we recognize as 'external,' but here we enter into the sifting of the factors of experience into different contextual orders and levels of concreteness, which task does not concern us here. Both James and Whitehead do address such sifting throughout their work. See, for example, James's *Essays in Radical Empiricism* ("A World of Pure Experience" is a helpful place to start) and *Some Problems of Philosophy*, especially the sections devoted to percepts and concepts; for Whitehead, *Process and Reality* contains much of value in this regard throughout (such as the chapters on propositions), though *Modes of Thought* or the third part of *Adventures of Ideas* is likely a better entry point for a synoptic view of Whitehead's account of experience.

[60] James, *Works: Essays in Radical Empiricism*, 30.

phrase from John J. McDermott, epistemological and metaphysical (and often, but sometimes covertly, existential) safety blankets.[61] Experience, for the radical empiricist, is no such canopy. It is extraordinarily inclusive, encompassing all that we may do or think. But look back to Dewey's definition of phenomenon, quoted above: the stuff of experience is precisely what requires explanation. And it is other experiences that provide the explanation for any given fact or phenomenon. Experience furnishes both questions and answers. 'John, why did your tomatoes grow when mine did not?' 'Well, Alex, I took care of mine and you forgot about yours for a month.' Since no experience is final (that is, totalizing) no explanation is final. Processes of experiencing are ongoing and succeed one another continuously. There are always more questions and further complications to our answers.

Radical empiricism is an endeavor to emancipate the philosophical imagination from 'canopies of ultimate explanation' and direct our attention squarely on experience, allowing its multiplicity and fecundity to surprise us, to push and revise the boundaries of what *is* and what *is known*. As far as we can tell, there is no set boundary to experience, no prescribed canopy (neither epistemological nor ontological). By James's reckoning, experience discloses to us an open universe, where "experience itself, taken at large, can grow by its edges," where what is actual for experience "is continuously one with possibles not yet in our present sight."[62] These are expressions of what James took to be an obvious fact, if one often papered over by our intellectual constructions, namely, that the

[61] See John J. McDermott, "A Lost Horizon: Perils and Possibilities of the Obvious," *The Pluralist* 5, no. 2 (Summer 2010): 1–17. The phrase 'canopy of ultimate explanation' is used and explained throughout the essay.
[62] First text: James, *Works: Essays in Radical Empiricism*, 42. Second text: James, *Works: A Pluralistic Universe*, 131.

experiential flux forever confronts us with "[t]he everlasting coming of concrete novelty into being."[63] Within such a growing world, the task of metaphysics is not to enumerate fundamental principles that hold *a priori*; rather, it is an effort to discern and describe the most general structures found within experience and their bearing on the concrete complexities met face-to-face in daily life. This is done through efforts of descriptive and imaginative generalization, which generalizations must be tested for their adequacy by recurrence to many and varied experiences.[64] Canopies of explanation are sought and tested; the pretenses of finality and ultimacy are abandoned. Within metaphysics, as within all else, the final matter is always a return to experience. Experiences form the warp and woof of our world.[65]

Thus we may fairly call experience, in a generic sense, the "ultimate" of radical empiricism, though as we just saw this "ultimate" has neither the epistemological finality of other ultimates nor their ability to provide comfort as an absolute salve for inquiry. Experience only exists in the concrete and is that with which we are most intimate. There is no fundamental aloofness of this "ultimate," in the sense of exhibiting an epistemological gulf from, or being metaphysically transcendent of, the immediate deliverances of conscious awareness. All actual experiences are particular, finite centers of feeling, a perspective imposed on the vastness that is felt, shading from focus to fringe to the increasingly vague more without hitting any definite boundaries. As James writes, "the

[63] James, *Works: Some Problems of Philosophy*, 77.
[64] Whitehead gives an admirable description and defense of this type of philosophy, which he calls "Speculative Philosophy," in the first chapter of *Process and Reality*. It is well worth reading. See Whitehead, *Process and Reality*, 3-17. See also Brian G. Henning, "Recovering the Adventure of Ideas: In Defense of Metaphysics as Revisable, Systematic, Speculative Philosophy," *The Journal of Speculative Philosophy* 29, no. 4 (2015): 437-56.
[65] The colloquial phrase 'warp and woof' was favored by John Dewey.

fact is all shades and no boundaries."[66] It is the stuff of our lives and of nature, that is, the environing situation within which the various finite processes of moving, doing, and knowing occur and find their meaning. James characterizes this situation well, writing:

> In the pulse of inner life immediately present now in each of us is a little past, a little future, a little awareness of our own body, of each other's persons, of these sublimities we are trying to talk about, of the earth's geography and the direction of history, of truth and error, of good and bad, and of who knows how much more? Feeling, however dimly and subconsciously, all these things, your pulse of inner life is continuous with them, belongs to them and they to it.[67]

Dewey makes an overlapping point in a more naturalistic way, writing that "[e]xperience…reaches down into nature; it has depth. It also has breadth and to an indefinitely elastic extent. It stretches. That stretch constitutes inference."[68] The point James and Dewey are making is as follows: though experience is focal and finite, it is both expansive, in the sense of reaching out into far more than can ever enter conscious awareness, and expandable, in that we are able, through inquiry, to reveal or disclose regions of this 'more' with which we are continuous and which conditions the character of the focal awareness. This latter point of expandability is Dewey's stretching. Though

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[66] James, *Works: A Pluralistic Universe*, 130. Immediately following the quoted text, James continues: "Which part of it properly is in my consciousness, which out? If I name what is out, it already has come in. The centre works in one way while the margins work in another, and presently overpower the centre and are central themselves. What we conceptually identify ourselves with and say we are thinking of at any time is the centre; but our *full* self is the whole field, with all those indefinitely radiating subconscious possibilities of increase that we can only feel without conceiving, and can hardly begin to analyze."
[67] James, *Works: A Pluralistic Universe*, 129.
[68] Dewey, *Later Works: Experience and Nature*, 13.

experience, taken generically, is coterminous with reality, as a streaming of concrete particular experiences it is capable of modifying, changing, and stretching the successive focal regions so as to be more revelatory, intense, enjoyable, and, alas, threatening.

With this, we are in a position to take stock of and then further thicken our discussion of the metaphysics of experience here being sketched. The crucial points are, one, that experience as summum genus refers not to any one substantial or metaphysically unitary thing, but rather to the equation of reality, of whatever type or sort, with experience or elements/regions/factors thereof. Two, experience exists concretely as indefinitely many finite, individual processes of experiencing, each of which is a finite center of feeling of the massive affective press of the universe in its full multifariousness. Each of these experiences then contributes to this universe, that is to say, it 'makes a difference' in what is to follow. And three, every occasion of experience has a focal-diffuse structure—or, in Jamesean language, a consciousness-fringe-'more' structure; in Whiteheadian terms: focus-penumbra-umbra.[69] This structure refers to the activity of every experience, in that each is a site of affective togetherness that at once feels itself as deriving from without, vaguely discerned influences pushing through the fringe, and as efficacious in what lies beyond, a thrusting outward of its affective energies.

We shall now discuss the first two points explicitly; the third is interwoven throughout the subsequent discussion.

The first point, regarding experience as the summum genus, is an expression of the methodology of radical empiricism and its extension into speculative metaphysics. In

[69] Cf. James, *Works: A Pluralistic Universe*, 130, and Alfred North Whitehead, "Harvard: The Future," *The Atlantic Monthly*, September 1936, 260–270; 263-264.

recognizing that the experience of the subject is that from which all thought and action begins, radical empiricism falls within the subjective turn of modern philosophy initiated by Descartes, modified and developed by Locke, Berkeley, and Hume, and given definitive weight by Kant. Our individual, concrete experiences—moments of conscious awareness—are the only locus of actuality with which we are acquainted, and radical empiricism is a serious, sustained, and unflinching attempt to make good on this situation. The methodological point is that experience is the beginning and end and context of all our reflections and ideas, including those of actuality and reality; its metaphysical extension is that there is no going beyond the experiences of subjects to find anything more real. James's genius in this regard, and how he pushes this 'subjectivist' tradition to its limits, is his probing interrogation and description of immediate experience, looking for the concrete and perceptually felt elements thereof while exposing conceptual overlays precisely as *overlays*, framings and characterizations of aspects of experience. The aim is to avoid mistaking our abstract concepts for the authentic, concrete experiences they attempt to elucidate (or, following Whitehead, the aim is to avoid the 'fallacy of misplaced concreteness'). This forces us to take the realm of feeling seriously, especially those feelings that lay on the fringes of conscious awareness and so escaping its frequent conceptualizations. Thus James writes that "the recesses of feeling, the darker, blinder strata of character, are the only places in the world in which we catch real fact in the making, and directly perceive how events happen, and how work is actually done."[70] And, when we cleave to the flux of feeling that constitutes immediate experience, the traditional

[70] William James, *The Varieties of Religious Experience*, ed. Fredson Bowers and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1985 [1902]), 395.

idea of the subject vanishes.[71] For "[t]he individualized self, which I believe to be the only thing properly called self, is a part of the content of the world experienced."[72] Gone is the subject as seat of consciousness and haver of experiences; here is the subject in the making, a series of experiences knitting themselves together through felt transitions of affective energy while buffeted by the "push and pressure of the cosmos" with which these experiences are continuous.[73] This is the doctrine of the 'promethean self,' of the self as (self-)creative activity within an environing situation, as much the outcome of experience as it is that which undergoes experience.[74] The self or subject is the finite center, focus, or position of the affective togetherness that is an experience.[75] For us, this storm-center "lies in the body."[76] Indeed, our bodies are fields of amalgamation whereby the vastness and vagueness of 'the fringe' becomes canalized, narrowed, and illuminated, culminating in conscious awareness. I briefly mention the body lest this discussion make the world seem too ethereal; organic corporeality is a dominate texture of our experience.

Thus we see that the methodological postulate of radical empiricism—that experience is the sole datum of our thoughts and actions, is all we know—directs and guides possible metaphysical descriptions of the universe. The metaphysical primacy of experience stems from our ineluctable starting point. A particular field of experience

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[71] Cf. John Dewey, "The Vanishing Subject in the Psychology of William James" (1940), in John Dewey, *1939-1941: Essays, Reviews, and Miscellany*, ed. Jo Ann Boydston, vol. 14, John Dewey: The Later Works, 1925-1953 (Carbondale: Southern Illinois University Press, 1988), 155-167. This essay was originally published in the *Journal of Philosophy*.
[72] James, *Works: Essays in Radical Empiricism*, 86 (text appears in a footnote).
[73] James, *Works: Pragmatism*, 9.
[74] See John J. McDermott, "The Promethean Self and Community in the Philosophy of William James," *Rice University Studies* 66, no. 4 (Fall 1980): 87–101.
[75] Cf. James, *Works: A Pluralistic Universe*, 130: "What we conceptually identify ourselves with and say we are thinking of at any time is the centre [of the present field of consciousness]…" (brackets added).
[76] James, *Works: Essays in Radical Empiricism*, 86n.

encompasses reality—"the whole is somehow felt as one pulse of our life"[77]—and is a finite, partial (selective), temporal, and compositional disclosure of reality, leading and tending into the 'more.'

The second point, that experiences are all finite processes of experiencing, returns us to the idea of pluralism and the texts from Victor Lowe with which this section begins. It also allows us to pivot to the second topic I promised we would discuss, namely, the significance of the pulse-character of experience. James's pluralism, metaphysically, is a pluralism of pulses, drops, or buds of experience—this is the direction in which James took his philosophy in the last decade of his life. But his fondness for the word "pulse" goes back to his *Principles*, and still further back to his 1884 essay "On Some Omissions of Introspective Psychology."[78] Indeed, we may read the later 'pulse of experience' (or pulse of perception) as heir to the 'passing thought' of the *Principles of Psychology*, freed from the dualistic baggage that clings to it in that text.[79]

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[77] James, *Works: A Pluralistic Universe*, 130.

[78] See "On Some Omissions of Introspective Psychology" (1884), in William James, *Essays in Psychology*, ed. Fredson Bowers and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1983), 142-167.

[79] In his later works James will sometimes talk about moments or pulses of experience and other times of pulses of perception. In the next few paragraphs both the words "experience" and "perception" will appear, and I mean them to be understood complimentarily, almost as synonyms. There are differences between experience and perception, but they are of little importance here. What James means to indicate with both words is the immediate moment of life as it is before us, and especially *how* this moment is felt. Generally speaking, James has an extraordinarily wide understanding of perception, one that overlaps greatly with his idea of experience. We should not reduce the fullness of Jamesean perception to conscious perception through the five senses. To perceive something is to experience it, to be affected by it in some way, consciously or not. Roughly, perception marks our initial transaction with alterity, or the acceptance of the given factors of experience. Experience is not reduced to perception, but perception is overwhelmingly rich and powerful within experience. In *Some Problems of Philosophy*, for example, James contrasts perceptual experience with conceptual experience and argues that the most fundamental aspects of experience—its continuity, its pulse-character, its fringing and relating, in short, what we have been discussing about experience thus far—are to be found in perception. As a summary, James writes: "The deeper features of reality are found only in perceptual experience" (James, *Works: Some Problems of Philosophy*, 54). See Ch. IV of *Some Problems* for his discussion of perceptual and conceptual experience.

These pulses are processes, active and temporal. Experience, as James says, is finite, transient, and characterized by affectivity. It is always "a coming and a going."[80] This is a descriptive, phenomenological claim; an examination of conscious awareness reveals that "[t]he smallest effective pulse of consciousness, whatever else it may be consciousness of, is also consciousness of passing time."[81] Note the phrase "smallest effective pulse"—James affirms that an experience occurs as a definite event, that its focus has some thickness. The perceptual basis for this view is that "[a]ll our sensible experiences, as we get them immediately, do thus change by discrete pulses of perception."[82] These temporal, experiential pulses are the fundamental concrete realities with which we are acquainted: "[t]he *passing* moment is the only thing that ever concretely was or is or shall be."[83]

But this budding, pulsational character of experiences is only part of the story. Yes, our experience comes moment by moment, event-like, with a blistering variety of detail and a definite center of awareness, but the whole "series" of experiences flows together as if a stream. As James writes, "[p]erception changes pulsewise, but the pulses continue each other and melt their bounds."[84] Here are more texts from James to underscore this point: "The concrete pulses of experience…run into one another continuously and seem to interpenetrate."[85], "All real units of experience *overlap*."[86], "They are not separate from

[80] James, *Works: A Pluralistic Universe*, 153.
[81] James, "The Knowing of Things Together" (1894) in *Works: Essays in Philosophy*, 71-89; 76.
[82] James, *Works: A Pluralistic Universe*, 104.
[83] James, "The Knowing of Things Together," *Works: Essays in Philosophy*, 77.
[84] James, *Works: Some Problems of Philosophy*, 49.
[85] James, *Works: A Pluralistic Universe*, 127.
[86] James, *Works: A Pluralistic Universe*, 130.

their own others."[87] Note that James continues to talk of "concrete pulses" and "real units" as he affirms their continuity; neither aspect of experience is abandoned or explained away, though their combination might seem paradoxical, conceptually. Dewey, writing on Whitehead's treatment of experience, smartly captures the concrete situation which confronts a radically empirical metaphysics: "Every conscious experience is a completely unitary pulse in a continuous stream."[88] The language of "pulses" captures the integrity and individuality of occasions of experience and suggests that experience contains sites of novelty, of genuine beginnings and endings; while that of "continuity" alerts us to the feelings of influence and derivation that give meaning to the phrase "actual, efficacious world." The question is, how is a unitary pulse reconciled with its blending with others such that there is continuity?[89]

In so far as this question has a satisfactory answer, a clue is to be found in a text cited above: "[t]he *passing* moment is the only thing that ever concretely was or is or shall be." The present occasion of experience is a passing moment, a coming and a going, a movement. It is in their *temporality* that occasions of experience melt their bounds and become immanent and continuous. Time is a mark of that "uneasiness" or "unrest" that Bradley astutely recognizes as ingredient in every immediate experience.[90] This unrest stretches beyond the immediate experience and calls for satisfaction in another, future

[87] James, *Works: A Pluralistic Universe*, 130.
[88] Dewey, "Whitehead's Philosophy," 172.
[89] James thinks that the reconciliation is recognized as actual through perceptual experience, but that the application of concepts will, or has a tendency to, break apart the continuous flow. Whitehead has more faith in intellectual thought. His metaphysics can be read as an attempt to provide us with a new scheme of concepts with which we can better understand the atomic-yet-continuous character of experience. For both, the ultimate appeal remains to immediate experience, but Whitehead thinks that (new) concepts could carry us farther down the road of understanding than does James.
[90] Bradley, *Essays on Truth and Reality*, 161.

experience. As is plain from the course of daily life, immediate experience is always transcended by another experience; the present immediacy of feeling always perishes but is felt as continuing in another immediacy. This movement of transcendence is the thrust of time as creation of a future conditioned by the past.

James and Whitehead both use the act of speaking to illustrate this movement.[91] To complete a phrase or sentence, the entirety of which extends beyond the immediacy of present awareness, the earlier moments of experience must harbor an intent (unrest), likely inchoate, that extends beyond themselves and which the later moments feel themselves as continuing and completing by virtue of shared energy. This illustrates the influence of past fact and the anticipated future upon the present, the 'felt transition' between them, and thus the entwinement or "overlap" of multiple pulses of experience with one another. Much of the relating here occurs outside the explicit focus of the experience and rather runs through its fringes.[92]

For the radical empiricist, the transcendent movement of temporality is only locally, and not absolutely, transcendent.[93] This means that it is the immediate pulse of experience that is transcended, and it is transcended by a new pulse. Experience as a

[91] See James, *Works: Principles of Psychology*, vol. I, 266-273; and Whitehead, *Adventures of Ideas*, 233-235.

[92] The spotlight of consciousness is more likely to reveal the various sensa of experience as bare, without the contextual relatings that bind the proximate experiences together. To borrow from James's example in the *Principles* ("the pack of cards is on the table"), the word "cards" as an abstract sensum has nothing in it relating it to "table"—any word whatsoever may conceivably follow. But within that phrase in the mouth of an actual speaker, even before it is fully uttered, "the pack of cards" carries with it its being-on-the-table, for "in our feeling of each word there chimes an echo or foretaste of every other," and these echoes and foretastes reside in "the overtone, halo, or fringe of the word" as presently experienced. Thus if there is an interruption, or an errant thought erupts into consciousness, we have the sense of something left incomplete, even if we forget what it is we were to say. And often a reflective return to the moment before the disruption helps us resume our discourse, for the directional thrust of feeling there broken off, though past, is retained in the fringe, halo, or penumbra of present experience. See James, *Works: Principles of Psychology*, vol. I, 271.

[93] The topic of time will be discussed more thoroughly in chapters IV, V, and VI, and the importance of the aesthetic in the pulsating yet continuous movement of experience will be explored in chapter VII.

whole, as the generic name for the plural pulsational processes in question, is not transcended. The movement remains wholly within experience; indeed, it is just the movement *of* experience. As James writes: "According to my view, experience as a whole is a process in time, whereby innumerable particular terms lapse and are superseded by others that follow upon them by transitions which, whether disjunctive or conjunctive in content, are themselves experiences, and must in general be accounted at least as real as the terms which they relate."[94] This is a reiteration of the most important claim of radical empiricism (its 'generalized conclusion'): experiences are connected by relations that are themselves part of experience, meaning that the world needs no trans-empirical support or binding, in a word, does not need an Absolute.

Significantly, this generalized conclusion and the experiences that underlie it are the basis for an imaginative generalization, a metaphysical speculation, made by both James and Whitehead. We feel our lives passing as a series of events or separate moments of immediacy, each with its own content, and yet each flowing into the next, forming a stream of experiencing. I feel my past self, the self of a moment ago, as continuing into the present, requiring a measure of conformity even as I feel that "some things at least are decided here and now."[95] Thus "the passing moment may contain some novelty, be an original starting-point of events, and not merely transmit a push from elsewhere."[96] This

[94] James, *Works: Essays in Radical Empiricism*, 31-32. Because relations are experiential just as terms are, the heterogeneity suggested by the language of "terms" and "relations" is unfortunate, as it might suggest a world of disjoined things ("terms") held at arm's length and which need a third thing (a "relation") to join them, whereas actual experiences overlap, interpenetrate—"What in them is relation and what is matter related is hard to discern" (James, *Works: A Pluralistic Universe*, 127). This terminological problem calls our attention to the difficulty of creating a conceptual framework within which we can express the perception of experience as comprised of 'completely unitary pulses in a continuous stream.'
[95] James, *Works: Some Problems of Philosophy*, 72.
[96] James, *Works: Some Problems of Philosophy*, 72.

feeling of novelty that inhabits the present is hard-won in the sense that there is much more than our past self influencing the present and demanding conformity. We feel many things, gross physical objects to name only the most obvious, and they, too, require conformity, if not as intimately as does our past self. This is the press of fact discussed earlier, of things felt as other, as given, and as influential in the makeup of the present occasion. I know my self of a moment past was an experiential immediacy like the present, and this is due to the interpenetration of these two events.

But what of the other things felt? As I contended before, experience is the only locus of actuality with which we are acquainted. Our notions of actuality and reality themselves have meaning only within and in relation to experience. We feel our present selves as efficacious, as powerful, within a world of others (think back to the Platonic suggestion that 'being is power'), and we can confirm this efficaciousness by once again observing the influence our own past exercises on our present. What we directly perceive as efficacious is a pulse of experience, and what we directly perceive as affected is another pulse of experience. We also feel the influence of other, more distant things and feel ourselves as influencing them. Reasoning from analogy, we ask: mightn't these other things be experiences for themselves, too? Here is the speculative response: yes, they are.

This is the tendency of thought directing metaphysics towards "pluralistic panpsychism," to use James's phrase for his hypothesis.[97] As James later writes: "The [existing] beyond must of course always in our philosophy be itself of an experiential nature. If not a future experience of our own or a present one of our neighbor…it must be

[97] See William James, "Syllabus of Philosophy 3 (1902-1903)," in *The Thought and Character of William James: Philosophy and Psychology*, by Ralph Barton Perry, vol. II, 2 vols. (Boston: Little, Brown and Company, 1935), 745–49; 745.

an experience *for* itself whose relation to other things we translate into the action of molecules, ether-waves, or whatever else the physical symbols may be."[98] Though James never develops this line of thought in detail, he remains sympathetic to it and mentions it occasionally in manuscripts, notes, and published works.[99] Such a view of actualities all being *for* themselves is explicitly taken up and defended by Whitehead, though Victor Lowe reports that Whitehead "was not altogether happy" when Lowe and other students called his pluralistic metaphysics a panpsychism.[100] I suspect this was because the term has an association with the elevation of the mental over the physical and carries with it the intimation, if not the explicit affirmation, that all things have some degree of consciousness. The above discussion of experience as enveloping both the subjective/objective, and thus the mental/physical, distinctions should disabuse us of thinking that such an interpretation of panpsychism applies to James and Whitehead. (Truth be told, due to its associations and connotations I do not care for the term panpsychism much myself and propose to drop it once it is no longer of use in filling out the *Weltanschauung* of radical empiricism.)

Whatever is made of the appellation "pluralistic panpsychism," this name marks an important direction in the thought of both James and Whitehead. The key points are as follows. First, as we have seen, there is a pluralism of pulses or drops of experience that interpenetrate due to the activity of relatings. But Jamesean pluralism has another

[98] James, *Works: Essays in Radical Empiricism*, 43.
[99] For a helpful overview on James's relationship with panpsychism, how it fits with his pluralism, and where in his writings James mentions it, see: Lamberth, *William James and the Metaphysics of Experience*, 57-58, 185-196.
[100] Victor Lowe, "The Concept of Experience in Whitehead's Metaphysics," in *Alfred North Whitehead: Essays On His Philosophy*, ed. George L. Kline (Englewood Cliffs: Prentice-Hall, 1963), 124–33; 126.

dimension; namely, that "[t]here are as many stuffs as there are 'natures' in the things experienced."[101] Experience is a single name, but it has a polyphonic signification, encompassing as many and more natures as are felt—Dewey's aforementioned planted field and the one who plants and reaps. There is no dearth of qualitative variety among experiences that can be continuous, intertwining, and felt together. Each of the plural pulses has its own character derived from its world and that it then newly contributes to the world. Such a pluralism does not view reality as finished or completed; the door is left open for birth and death, growth and decay. As James writes, "reality is created temporally day by day."[102]

Second, and as the pluralism of 'natures' suggests, this radically empirical "panpsychism" has nothing intrinsically to do with consciousness. What is "pan" is experience in the broad sense sketched in the previous pages. Conscious awareness is not essential here, nor even what is usually thought of as mental activity.[103] What is important is the characterization of every experience as a nexus of affective energy, immediately felt and outwardly influential. Whitehead, whose metaphysics is more fleshed out than is James's, can help us here. Attributing experience to all actualities is "first of all the attribution of a peculiar pattern of synthesis to each such actuality."[104] This synthesis or composition, bringing the many into one, yields a localized occurrence, a pulse that feels

[101] James, *Works: Essays in Radical Empiricism*, 14.
[102] James, *Works: Some Problems of Philosophy*, 55.
[103] Cf. Whitehead, *Process and Reality*, 36: "[I]n the cosmological scheme here outlined one implicit assumption of the philosophical tradition is repudiated. The assumption is that the basic elements of experience are to be described in terms of one, or all, of the three ingredients, consciousness, thought, sense-perception. … According to the philosophy of organism these three components are unessential elements in experience, either physical or mental."
[104] Lowe, "The Concept of Experience in Whitehead's Metaphysics," 126.

the world in its own way and then is felt by others. Everything coming together in this way, here, is me; everything coming together in that way, there, is a leaf, or a stone, or breath of wind. This process of localization[105] yields the 'subjective immediacy' that characterizes experience. Thus Whitehead "interprets experience as meaning the 'self-enjoyment of being one among many, and of being one arising out of the composition of many.'"[106] Careful, though, that the terms 'subjective immediacy' and 'self-enjoyment' do not lead you astray. These terms point to the affective togetherness, focal yet diffuse, temporal and efficacious, that characterizes processes of experiencing and that enters into human consciousness as our sense of immediacy. Stripped of conscious overtones, this immediacy, or being *for* itself, is just a way to say that a confluence of affective energy (power) is coming together *here* and *now* in a moment of realization; this is an expression of what it means to be a finite occurrence. What the words 'subjective immediacy' and 'self-enjoyment' latch onto is that to be actual is to be *for* oneself. We have a sense of this in the case of our own experiences; I am real because I feel, because the actual world comes to a head here, and because my reaction flows back into the world. The sense of focused togetherness, of the creation of a 'one,' a 'me-here-now,' is essential to experience; consciousness or any particular qualitative feeling of the togetherness is not. The expression of this 'subjective immediacy' outwardly (that is, from the vantage of and in relation to another pulse of experience) is that an actuality *means* something. In a rush of concurrent and crosscurrent meanings, the world gains its drama. This is a version of the 'being is power' motto discussed earlier. In other words, the thrust of the radically

[105] In *Process and Reality* Whitehead will call it the process of concrescence.
[106] Whitehead, *Process and Reality*, 145.

empirical version of panpsychism is that everything must subjectively be something before it is objectively anything.[107]

If you are uncomfortable using the word "experience" to refer to all moments or occasions of actuality, substitute "event" (or, if you would prefer Whitehead's more technical terminology, "actual entity" or "actual occasion"). The metaphysically salient point of "panpsychism" is that it rids us of what Whitehead calls 'vacuous actuality,' that is, actuality that does not realize meaning or value for itself, where value is the outcome of

[107] I do not here mean to challenge the radical empiricist's affirmation of the "double-barrelled" nature of experience; indeed, I mean to reinforce it. In the statement "everything must subjectively be something before it is objectively anything," the Scholastic sense of the distinction between the subjective (or formal) and objective is more to the point here than is our modern rendering of it. In contemporary use, the subjective is associated with 'mental' existence and the objective with 'external' or 'physical' (often 'real') existence. For the medieval scholastics, the 'subjective' denoted actual existence and the 'objective' existence within the mind—more or less the opposite of the way we currently think about these words. Translating the scholastic sense of these terms into the *Weltanschauung* of radical empiricism (especially its Whiteheadian version), subjects are actual because they are *for themselves*, and their existence *for others* is their objective existence. Thus, even in modifying the distinction, a pulse of experience is both subject and object. As the experience it is, it is subject; as it relates to others, it is object. Both aspects are required; neither can exist alone. The panpsychist point is that there are no bare objects. Note that the ordinary connotations of 'mental' and 'physical' do not operate at this level in this version of the subject/object distinction. Indeed, in this context 'object' can be considered as equivalent to 'fact' as discussed at the beginning of this section. Objects impinge, influence, and condition; subjects are loci of these activities.

The "panpsychist" thesis is that the subjective has ontological primacy over the objective—all objects disclosed in experience have subjective existences. (Or, more precisely, all such objects have subjective existences *or can be traced in origin to a subjective existence*, that is, are the novel issue of some pulse of experience. I add this last clause in order to make room for fantastic, imaginative, and hypothetical, or "unreal," objects—the sort of thing we would today call "purely subjective," such as mythical creatures, fictional characters, and daydreams. The genesis of fanciful objects is too large a topic to delve into here. (For Whitehead's version, see *Process and Reality*, Part III, Chapter IV, Section V.) But I remind you that the distinction between "pure fancy" and "efficacious object impinging from without" is not always a clear one. Indeed, the collapse of this dichotomy is a primary feature of radical empiricism, as has been discussed in this chapter. Sifting between "unreal" or "mental" and "real" or "physical" objects is not an infallible process. "Unreal" objects are real factors in shaping experience, but their reality—their efficaciousness—depends upon subjective existences and is limited by their general lack of systematic efficacy when compared with "real" or "physical" objects. That is, it is their relational contexts that matter. James discusses his version of this sifting in "Does 'Consciousness' Exist?" and "A World of Pure Experience," in *Essays in Radical Empiricism*.) This version of "panpsychism" is part of what I think James is getting at, or gesturing towards, when he treats 'pure experiences' as distinct from experienced relations or transitions. Relations meld things together, make one thing for another, but there are still the moments of togetherness, of limitation and selection, of here-but-not-there—in short, of finitude—that are flowing together. These finite drops are the subjects—experiences *for* themselves—through which reality moves and 'self' is created.

limitation (that is, processes of selection, of choosing and excluding, create value).[108] Vacuous actuality, for Whitehead, is an abstraction, useful for certain limited purposes, but not for a general account of reality.[109] Our own experience is the only type of actuality and locality, and the only site of transmission/transition, that we know, and if our experience really discloses other actualities to us, as both James and Whitehead contend that it does, we ought to think of these others as actual in the way we are.[110]

Thus the world of radical empiricism, 'a world of pure experience,' is a world of plural occasions or pulses that 'compenetrate' and form plural streams of experiencing. These streams jostle, shove, join, flee, haunt, shadow, and lead one another, interweaving, folding, and diverging, forming the fabric, texture, and reality in which we live and act. 'Flux of energy obeying quantum conditions' is a physical rendering of this idea,

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[108] Cf. Whitehead, *Science and the Modern World*, 93-94: "These unities, which I call events, are the emergence into actuality of something. How are we to characterise the something which thus emerges? The name 'event' given to such a unity, draws attention to the inherent transitoriness, combined with the actual unity. But this abstract word cannot be sufficient to characterise what the fact of the reality of an event is in itself. A moment's thought shows us that no one idea can in itself be sufficient. For every idea which finds its significance in each event must represent something which contributes to what realisation is in itself. Thus no one word can be adequate. But conversely, nothing must be left out. Remembering the poetic rendering of our concrete experience, we see at once that the element of value, of being valuable, of having value, of being an end in itself, of being something which is for its own sake, must not be omitted in any account of an event as the most concrete actual something. 'Value' is the word I use for the intrinsic reality of an event. Value is an element which permeates through and through the poetic view of nature. We have only to transfer to the very texture of realisation in itself that value which we recognise so readily in terms of human life. … Realisation therefore is in itself the attainment of value. But there is no such thing as mere value. Value is the outcome of limitation. The definite finite entity is the selected mode which is the shaping of attainment…. The mere fusion of all that there is would be the nonentity of indefiniteness. The salvation of reality is its obstinate, irreducible, matter-of-fact entities, which are limited to be no other than themselves."

[109] Cf. Whitehead, *Process and Reality*, 309: "But what has vanished from the field of ultimate scientific conceptions is the notion of vacuous material existence with passive endurance, with primary individual attributes, and with accidental adventures. Some features of the physical world can be expressed in that way. But the concept is useless as an ultimate notion in science, and in cosmology." And also p. xiii: "This whole metaphysical position is an implicit repudiation of the doctrine of 'vacuous actuality.'"

[110] Cf. Whitehead, *Process and Reality*, 145: "For the philosophy of organism, the percipient occasion is its own standard of actuality. If in its knowledge other actual entities appear, it can only be because they conform to its standard of actuality. There can only be evidence of a world of actual entities, if the immediate actual entity discloses them as essential to its own composition."

according to Whitehead.[111] This, and all I have written above, is a basic, adumbrated version of the metaphysical picture that James and especially Whitehead develop from the radically empirical point of departure—experience, in all its forms and varieties, and only that!

It will have been observed by now that the felt reality of relations is crucial to this radically empirical point of departure. To reiterate James's 'statement of fact:' "[T]he relations between things, conjunctive as well as disjunctive, are just as much matters of direct particular experience, neither more so nor less so, than the things themselves."[112] The preceding discussion of experience is saturated with the importance of relations, especially the feeling of relations as that transitionary, affective flow whereby a new experient occasion becomes. This treatment of relations is so important to understanding radical empiricism's contribution to thought as well as understanding any metaphysics grounded in radical empiricism, that we shall focus on it more directly in the following chapter.

[111] See Whitehead, *Process and Reality*, 309.
[112] James, *Works: The Meaning of Truth*, 7.

CHAPTER III

RADICAL EMPIRICISM AS A METAPHYSICAL POINT OF DEPARTURE: RELATIONS AND APPROPRIATION

In the previous chapter our focus was on the themes of pluralism and experience as two pillars of radical empiricism. We here continue and extend that discussion by emphasizing the very important matter of relations.

Relations

With this shift from the general nature of experiencing to the matter of relations, we return to two questions I raised at the end of the "Pluralism" section in the previous chapter: How is it that pulses of experience continuing one another through overlap or interpenetration retain their plurality, their individuality? Why does such mutual suffusing not render the world as a monistic whole, a 'block universe?' There are a number ways of formulating the concern here touched upon, including as the question of reconciling atomism and continuity, or as that of reconciling pluralism and immanence. In more characteristically Jamesean language, there is a tension between 'irreducible and stubborn facts' and 'the stream of consciousness.' The most general and philosophically venerable way of expressing the concern is as 'the problem of the one and the many.'

To this problem no definitive and entirely comprehensive answer shall be given. For in an ultimate sense, the individuality retained within the flow is a mystery of being. As James reminds us, being is a gift or datum that can only be begged by the philosopher,

whether it is taken all at once or in installments.[113] *Why* immediacy fades, perishes, and is replaced by a new throb of experience, rather than simply ceasing or remaining the same, is a mystery. *That* it does so, and *that* the many are together in one experience while all retaining their individuality, are not mysteries but are rather descriptions of how experience actually occurs. We are each intimately familiar with the fact that, in each of our individual lives, the 'me' of a moment ago is continuous with my present self while the past pulse of my life is distinct from the present one. But we can do our best to understand this fact, *how* it happens and its internal reasons for so happening, and incorporate such disclosures within our understanding of the world.

Radical empiricism holds to both the one and the many, for the many are together as one in a particular drop of experience. According to James, this "[o]neness…is realized *dynamically*, through my actions on *my* objects influencing *yours*."[114] Indeed, rather than conceiving of oneness or unity as complete unto itself, James thinks that "dynamic union is perhaps the deeper category to use."[115] We have already encountered such unity in describing experience as an affective togetherness. The "vehicle" for realizing such union—relations—is our present concern.

Thus in this chapter I provide an overview of how we might think of relations dynamically, as the life and glue of a plural but interconnected world. Transition, tendency, feeling, separation, continuity, and temporality are all notions bound up with that of

[113] James, *Some Problems of Philosophy*, 30 and 75.
[114] This text is from notebooks James kept between 1905 and 1908, where he tried to square radical empiricism with critics' objections, as reproduced in Ralph Barton Perry, "Appendix X" of *The Thought and Character of William James: Philosophy and Psychology*, vol. II, 2 vols. (Boston: Little, Brown and Company, 1935), 750-765; 753.
[115] Perry, *The Thought and Character of William James*, vol. II, 753.

'relation' in James's radical empiricism, and all are touched on below. Since radical empiricism is a philosophy of experience, I must elaborate upon the place of relations within James's larger view of experience. To highlight the tremendous philosophical turn involved in James's treatment of relations, I also briefly discuss static relations and several illuminating departures James (and Whitehead) make from ideas prevalent in the history of Western philosophy. In this way we shall come to appreciate James's treatment of relations as the heart of radical empiricism.

In Jamesean terms, the relatedness of the stream of experiencing is achieved by transitions *felt* within each pulse of experience. We have already discussed the affective sense of passage felt as residing in the fringes of experience. There, removed from the direct eye of consciousness and its conceptual operations, is the 'unrest' that pushes experience forward and retains feeling of the 'beyond.' Thus as experience succeeds experience, the transition is marked by a flow of energy or affective tone from one to the next, a felt continuity that constitutes a relation of the several experiences, whether that relation be one of friendly continuance, violent rupture, illuminating juxtaposition, or whatever other character the relation may take on. The case of felt discontinuity constituting a continuing relation may strike one as odd, or simply incorrect, but James admirably illustrates the vital role of felt transitions, and hence of relations, in the substantive content of a drop of experience, whether the feelings be of continuation or separation. Discussing an experience of thunder, James writes:

> Into the awareness of the thunder itself the awareness of the previous silence creeps and continues; for what we hear when the thunder crashes is not thunder pure, but thunder-breaking-upon-silence-and-contrasting-with-

> it. Our feeling of the same objective thunder, coming in this way, is quite different from what it would be were the thunder a continuation of previous thunder. The thunder itself we believe to abolish and exclude the silence; but the feeling of the thunder is also a feeling of the silence as just gone; and it would be difficult to find in the actual concrete consciousness of man a feeling so limited to the present as not to have an inkling of anything that went before.[116]

This is a powerful and revelatory text, enfolding much of what we have already discussed in a concrete example. First, it highlights that the continuity of experience—its 'overlap' or interpenetration, and thus its affectivity or influence—is preserved and can be perceived through either conjunction or disjunction, affinity or separation. Separation and contrast are vital to shaping the affective tone of any unitary pulse of experience, as, for example, with the *otherness* of others and the thunder breaking upon silence. Absence can be felt just as powerfully as can positive and conjunctive content, such as a thought smoothly filling out its inchoate germ, or the growth of mutual love. We have only to call to mind the empty pangs in the shape of a dead loved one or the nameless anxiety glimpsed when life's potential seems to languish or when one peers over the bounds of finitude to see that absences are felt. As James reminds us, "the feeling of an absence is *toto cælo* other than the absence of a feeling: it is an intense feeling."[117] And the examples of absence need not be as singular or dramatic as those just cited; various absences permeate everyday life: "Everyone must know the tantalizing effect of the blank rhythm of some

[116] James, *Works: Principles of Psychology*, vol. I, 234.
[117] James, *Works: Principles of Psychology*, vol. I, 243-244.

forgotten verse, restlessly dancing in one's mind, striving to be filled out with words."[118] What the affectivity of absence means with regard to the composition of an experience is that both conjunction and disjunction are felt, and thus the incipient experient's relations stretch beyond the obvious or easily nameable. We cannot forget that the environmental tributaries to any one pulse of experience are multiform and multitudinous. The above examples, including James's, are cast in simplified terms, as if one experience leads into a next all alone—silence to thunder. But the reality is that the wide flow of feeling from indefinite sources, pouring into the present but passing moment, constitutes this moment as a 'bundle of relations,' here knotted but extending out through the actual world.[119]

> In short, where there is relation, there is feeling. James writes:
>
> If there be such things as feelings at all, *then so surely as relations between objects exist in rerum naturâ, so surely, and more surely, do feelings exist to which these relations are known*. There is not a conjunction or a preposition, and hardly an adverbial phrase, syntactic form, or inflection of voice, in human speech, that does not express some shading or other of relation which we at some moment actually feel to exist between the larger objects of our thought.[120]

The potential dualism here between relations and feelings is, in my judgment, an artifact of James's professed disengagement from metaphysics in his *Psychology* and the resultant dualism of mind and body that floats in and out of that text. With the further development of radical empiricism throughout the 1890s and James's taking an ardent stand against

[118] James, *Works: Principles of Psychology*, vol. I, 244.
[119] Indeed, it is better to say that the world itself is that which is touched by our radiating relational shoots.
[120] James, *Works: Principles of Psychology*, vol. I, 238.

various dualisms, felt transitions become the concrete life of what, conceptually and abstractly, we call relatedness.[121]

For James, then, where there is relation, there is continuance, or the bringing of the external relata (or, in cases of absence or separation, the affective tonality of such fissures) within the fold of the present pulse of experience. This is what is meant by immanence, overlap, interpenetration, and compenetration. The experiential occurrence of immanence is not developed metaphysically by James in his *Psychology*, though it is flirted with and described, especially in the phenomenologically astute chapter on "The Stream of Thought." However, the experience of immanence gains a metaphysical cast as James formulates his philosophical views during the last years of his life.[122] Victor Lowe helpfully describes the core of the interpenetrative idea as "the view that relations 'diffuse' and 'affect,' so that the 'continuity' of contiguous passing thoughts becomes a compenetration."[123] In this radically empirical metaphysics of experience, we are "conceiving relations as vectors, transforming thrusts conveying something of one thing into various other things; as common sense supposes the light of the sun is 'related' to growing plants. A relation diffuses the first thing and affects the others."[124] The relationship between this description of relations and what we have said about affectivity and experience makes plain the importance of relations in a Jamesean and radically empirical interpretation of the world. Relations are dynamic and affective, making one

[121] Cf. James, *Works: A Pluralistic Universe*, esp. Lecture VII "The Continuity of Experience," 125-135; and Lowe, "William James and Whitehead's Doctrine of Prehensions."
[122] See Lowe, "William James's Pluralistic Metaphysics of Experience," esp. 171-173; also see James's 1905-1908 notebook entries in Perry, *The Thought and Character of William James,* vol. II, Appendix X, 750-765.
[123] Lowe, "William James's Pluralistic Metaphysics of Experience," 172.
[124] Lowe, "William James's Pluralistic Metaphysics of Experience," 172.

thing present to another, and they are felt. Indeed, they are nothing but the felt transition of affective presence.

One application of this view of relations, introduced here as an illustration, is to the description and theory of knowledge. For our purposes, it is enough to say two things: (i) that knowing can be characterized as a function of relating, which is to say that knowing is a feature of transition or movement, through which plural experiences interpenetrate and affect one another; (ii) that if we begin with what we know, we begin with feeling.[125] Point two is a reformulation of radical empiricism's methodological postulate.

In the above block text from the *Principles*, James says that relations are known to feelings; in other words, there are feelings that know. What this means, especially in the context of our discussion of relations and immanence, is that affectivity and interpenetration form the basis for cognition. There is no stark separation of feeling and knowing. Cognitions are felt, or are affective; and feelings are cognitive in that they are the bringing in, the relating, of what is 'out there' to the 'in here' of the experient occasion. Feelings are *of* and *about* objects, or what is other. Feelings bring them in and make them available *for* the present experience. Now that something is here for experience, there is a knowledge, namely, that potent seed 'acquaintance.' At a basic level, then, to feel something is to know it, though the sophistications of conscious, human cognition—which can involve projection, remembrance, inference, error, and so on—require much additional discussion which we shall leave aside. Many of James's essays collected in *Essays in Radical Empiricism*, as well as others, explicitly address the question of knowing. The

[125] Cf. Bradley, *Essays on Truth and Reality*, 190: "Nothing in the end is real but what is felt, and for me nothing in the end is real but that which I feel."

upshot of James's discussions is that knowledge is characterized by relational pathways, wherein the compenetration effected by the relations has some degree of systematic structure that is rendered luminously, meaning that possibilities of action and interaction are revealed.

This 'compenetrative' view of relations temporalizes them, and taking the unity of an experience to be a dynamic achievement implies temporality.[126] Not only do relations "unroll themselves in time,"[127] but their very happening is what makes temporal thickness and flow an aspect of a drop of experience. The present experience, as both a coming and a going, includes a sense of where it comes from (the past) and where it may lead to (the future), courtesy of Jamesean felt transitions. James also captures this sense of temporal movement by describing transitions as 'feelings of tendency.' At the moment I want to suggest that temporalizing relations by conceiving them as created through transitions felt within experience, rather than treating them as static things joining two distinct and separate terms, is an important advance in understanding an experiential situation that we cannot explain away. The experiential situation is the existence of plural and authentically individual experiences that nonetheless overlap or compenetrate. The most mundane example is that of the felt efficaciousness of the past in the present. As James writes in the thunder text quoted above, "it would be difficult to find in the actual concrete consciousness of man a feeling so limited to the present as not to have an inkling of anything that went before." And he elsewhere describes the conflux of past and present, writing: "In the same act by which I feel that this passing minute is a new pulse of my life,

[126] A description and analysis of temporality is so important to an elaboration of the notion of experience and its aesthetic dimensions that this will be the focus of the next three chapters.
[127] James, *Works: Essays in Radical Empiricism*, 29.

I feel that the old life continues into it, and the feeling of continuance in no wise jars upon the simultaneous feeling of a novelty. They, too, compenetrate harmoniously."[128] If one is concerned that the compenetration of the past and the present annihilates the distinction between them, Victor Lowe reminds us plainly that "[t]here is nothing we know better than the difference and the connection between the present and the past. We are acquainted with the emergence of a new particular and with the change in the status of its predecessor, which suffers loss."[129] Relations make the past, which has lost its immediacy of feeling, immanent in the present. We cannot explain this situation away because, working within a radically empirical *Weltanschauung*, we have no recourse to a reality above or below that which we encounter in experience.

Referring again to the thunder text from James's *Psychology*, he writes that "what we hear when the thunder crashes is not thunder pure." The previous silence is there, modifying the tonality of the rumble. The general point is that there is no 'pure' experience of the present; that is, temporality—suffusion by feeling of the past and anticipation of the future—is ingredient in any experient occasion. We should extend this insight to James's doctrine of 'pure experience' as developed in the 1904-1905 essays that will later comprise the bulk of *Essays in Radical Empiricism*. James's exposition of what he means by pure experience in these essays is not particularly clear; at least it is open to various interpretations, and unfortunately to deadly misunderstandings. In his introduction of the idea James calls pure experience the 'primal stuff' of the world, and says that the 'external' relations of bits of this stuff—characterized variously as 'the instant field of the present,'

[128] James, *Works: Essays in Radical Empiricism*, 46-47.
[129] Lowe, "William James and Whitehead's Doctrine of Prehensions," 119.

'plain, unqualified actuality,' and 'a simple *that*'—constitute it as thought or thing, subject or object, knower or known.[130] Though qualifying, clarifying, and alternative statements abound in James's essays, the (misleading) idea of pure experience as a stuff with external relations both stands out and lends itself to a schematic rather than a processive interpretation.[131] In his notebooks, James acknowledges this tendency towards a static version of his pure experience theory, a tendency he even finds in himself. While working through problems raised by his colleagues concerning his published account of pure experience, James writes (Sept. 12, 1906): "May not my whole trouble be due to the fact that I am still treating what is really a living and dynamic situation by logical and statical categories?"[132]

I take James's difficulties to be those attending the articulation of any deeply original idea: existing concepts cannot bear the load placed upon them. Nevertheless, James is leading us to an important insight. 'Pure experience' does express something crucial within experience, as does James's insistence on feelings of relation. By saying that pure experience is experience "isolated," and that relations are the temporal unfolding through which experience grows, James highlights two fundamental aspects of experience; namely, (i) that of qualitative togetherness yielding immediate feeling and its intensities, and (ii) that of the outstretching relationality and movement that make the qualities felt, or

[130] James, *Works: Essays in Radical Empiricism*, 4, 13.
[131] That relations are (i) themselves experienced and thus a part of experience, and (ii) temporal, is sidelined on a schematic interpretation. But James inadvertently encourages this oversight, too, by saying little about how the experience *of* 'experienced relations' is related to the 'pure' experiences to which the relations are 'external.' That he says relations are "part of pure experience" does not shed much light on their 'externality.' See James, *Works: Essays in Radical Empiricism*, 4; McDermott's "Introduction," pp. xxii-xxxiv, gives an insightful and more detailed look at James's doctrine of 'pure experience' than I do here.
[132] In Perry, *The Thought and Character of William James,* vol. II, 760.

'bring them in.'[133] This distinction is made so that the elements, structures, and movements of experience might be better understood. The concrete reality of experience involves both felt immediacy and felt transition, together. A 'pure' experience, reflectively isolated, is an abstraction, as is a bare relation. James reminds himself to be wary of taking such abstractions as concrete reality, writing in his notebook on Sept. 14, 1906: "Radical empiricism . . . don't forget it—is a theory that arises on the level of analysis…."[134] Concretely, there is no pure experience, as there is no pure sound of thunder. In every present experience there is always relation to what came before and, at least vaguely, anticipation of what is to come. It is worth noting that James drops the language of pure experience by the time of his 1908 Hibbert Lectures, published in 1909 as *A Pluralistic Universe,* where he so eloquently describes the continuities of experience. It seems that James decided the term was no longer helpful in articulating the dynamism of his *Weltanschauung*.[135]

Yet the term "pure experience" has the benefit of drawing our attention to the achievement of qualitative togetherness and immediacy of feeling. This qualitative togetherness is epitomized by the field of conscious awareness, the sights and sounds of the living present. It is the "anchor" or "thing" yielded by experiencing out of which new experiences grow. It is what allows experiences to function as "terms" that relate to one another, as James uses this language in *Essays in Radical Empiricism*. Immediacy and togetherness are facts of experience as undergone. Shifting to a more Deweyan

[133] See James, *Works: Essays in Radical Empiricism*, 13, 29, 42. Page 13 has James's reference to pure experience as experience isolated; 29 and 42 include texts emphasizing that relations grow in time.
[134] In Perry, *The Thought and Character of William James,* vol. II, 760.
[135] Cf. McDermott, "Introduction," xlii, in James, *Works: Essays in Radical Empiricism*.

phraseology, they express the consummatory element of experience, or what establishes *an* experience as a 'completely unitary pulse,' albeit one in a continuous stream. Regardless of the judgment made concerning pure experience as a technical concept, it brings to the fore an aspect of experience that would be lost (or at least suppressed and then tacitly supposed in our theories) if we considered relations *solely*. Both relations and the achieved togetherness are necessary, and they require one another.

In the *Principles of Psychology*, James touches upon these two vital aspects of experience without using technical terminology, instead favoring an organic metaphor. He writes of our stream of experiencing that, "[l]ike a bird's life, it seems to be made of an alternation of flights and perchings."[136] The flights are the transitions or relatings, and the perchings are the several achievements of togetherness. The achievements seem more 'substantive' to us, resting places from which to strike out once more. But we would be remiss if we were to think of the togetherness of experience, these perchings, as devoid of fluency. Rather, they are a different type of flow than that exhibited by the transitions. Though I have suggested that this distinction is all but explicit in James, Whitehead makes it clearly. He writes in *Process and Reality* that there are two kinds of fluency, which he calls "concrescence" and "transition."[137] Transition we have already been discussing. Concrescence is the growing together of the many feelings (or the many things felt) into a finite unity. It thus suggests process where "togetherness" or "perch" might not. Concrescence and transition are different, but each requires the other to be what it is. Concrescence is the transition of the many into the togetherness of one, and every

[136] James, *Works: Principles of Psychology,* vol. I, 236.
[137] Whitehead, *Process and Reality*, 210.

concrescence transitions into an influence upon the many that come after. Every transition is *to*, or forms a part of, a concrescence. I mention this Whiteheadian terminology here only because Whitehead explicitly formulates what lurks behind James's flights and perchings metaphor and is just below the surface of the doctrine of pure experience. The idea is that the world of experience includes, in Whitehead's words, "the essence of transition and the success of achievement. The transition is real, and the achievement is real. The difficulty is for language to express one of them without explaining away the other."[138]

Too often in the history of thought the failure to meet—or even see—this difficulty has resulted in the elevation of static achievement and the evaporation of real movement. When neither achievement nor transition is dismissed, the difficulty for language manifests itself. Among systematic thinkers, Hegel and Whitehead stand out to me as giving voice to both achievement and movement, and both are criticized for their language and obscurity. We have seen James, master of introspection and description, struggle to express himself, too, in introducing his doctrine of pure experience and when he self-critically wonders if he is too reliant on fixed concepts and statical ideas.

James's use of the distinction between 'internal' and 'external' relations in describing radical empiricism is another example where the existing language is, I think, more unhelpful than helpful. Ralph Barton Perry summarizes clearly the thrust of James's doctrine of external relations: "Everything in the world has a real environment, that is, a relation to something which is genuinely other than itself, and which it is compelled to

[138] Alfred North Whitehead, *Modes of Thought* (New York: The Free Press, 1968 [1938]), 102.

meet and take account of without any sort of antecedent complicity."[139] Here we see that external relations are part and parcel of James's pluralistic metaphysics.[140] By calling (some) relations external, James is affirming that there are many extant things, and thus that we experience a pluralistic universe. This is a salutary understanding of externality. But around James there raged a fraught discussion over external relations, meaning he had little control over the "standard" meaning of the phrase "external relations." I agree with Victor Lowe's characterization that the center of gravity of this debate tended towards "the thesis that relations do not necessarily alter their terms" and that "the controversy went wrong because it was discussed in terms of *terms*,—as abstract a way as is possible."[141] To focus on *terms* and *relations* abstractly, treating them as wholly distinct kinds of *things*, is to trim away much of the experiential content of both terms and relations as *lived*—in particular their character as Jamesean perchings and flights. If we take the logical distinction between terms and relations to entail the ontological *separation* of what is so named, we arrive at a position like that of Bradley: "[a] relation exists only between terms, and those terms, to be known as such, must be objects. And hence immediate experience, taken as the term of a relation, becomes so far a partial object and ceases so far to keep its

[139] Perry, *The Thought and Character of William James,* vol. II, 586.
[140] Cf. James, *Works: A Pluralistic Universe*, 145: "Pragmatically interpreted, pluralism or the doctrine that it is many means only that the sundry parts of reality *may be externally related.* Everything you can think of, however vast or inclusive, has on the pluralistic view a genuinely 'external' environment of some sort or amount."
[141] Lowe, "William James and Whitehead's Doctrine of Prehensions," 122. I refer the reader to footnote 23 in Chapter II, wherein I discuss the view of F.H. Bradley on relations and the point at which he and James go their separate ways. This note will, I hope, help clarify how the Jamesean version of relations differs from others of the time period. Bradley characterizes both terms and relations abstractly and statically, and as such they falsely characterize immediate experience. He does not attempt to inject life into these terms, as James does, and thereby bring out the truth they hold for the elucidation of experience.

nature as a felt totality."[142] Bradley's statement is true as far as it goes, but if we maintain that Bradley captures the entirety of what terms and relations may mean, we preclude from the outset the overlap or immanence discussed above and thus deny the conjunctive relations James insists we experience. That experience might hang together, continuously, through felt transitions, whether conjunctive or disjunctive, is denied *a priori* purely on the basis of the definitions employed in the discussion. This is what James calls "vicious intellectualism," meaning, "[*t*]*he treating of a name as excluding from the fact named what the name's definition fails positively to include*."[143] What is excluded by the names "term" and "relation," abstractly understood, are the activities of which they name aspects. James's understanding of relations as marking the compenetration of experiences through felt transitions is an effort at being more phenomenologically adequate to the character of reality as experienced.

Relations as active are seen to have the dual aspect of being both internal and external. As 'external,' they mark transactions with alterity, with an independently existing environment. As 'internal,' relations express the almost trite fact that to be experienced, something must enter into or become part of the experient occasion. By something entering that occasion, the experience is of course different than it would have been otherwise. Thus the relation is internal. This something is experienced as an other with its own integrity, however, and thus the relation is external. The expression of these two aspects as features of one relation is clearest when we speak in temporal terms. The past as gathered together in the present is internally related to that incipient occasion, while *from the perspective of*

[142] Bradley, *Essays on Truth and Reality*, 176-177.
[143] James, *Works: A Pluralistic Universe*, 32 [italics in original].

the past occasion the relation is external, since at that past time the now incipient occasion was nothing and its present occurrence cannot affect the already faded immediacy of the past, that is, the past's character as *fact*, irreducible and stubborn. My experience of a minute ago is a constitutive factor within my present experience (internally related to it), while this present experiencing cannot change the fact that a minute ago I felt such-and-such (the external aspect of the relation).

There is, then, no strict dichotomy between internal and external relations when they are understood concretely, and thus the late 19th/early 20th century debate over external relations does not illuminate much about James's final metaphysical *Weltanschauung*—this despite the fact that James participated in that debate. James's emphasis on external relations is meant to assure us that a world pervaded by relationality is not a disguised monism. This brings us back to the concern with which I opened this chapter, namely, the reconciliation of pluralism and immanence. The internality of relations expresses the immanence of things in one another, while the externality of relations expresses the limitations of this immanence due to the irreducible individuality of each plural part. The language of internal and external relations is helpful just so far as it alerts us to this puzzling character of experience, but beyond this, the dichotomy suggested by these words serves only to make our experiential situation seem more opaque to understanding than it truly is.[144]

[144] Whitehead, unlike James, explicitly (rather than implicitly) acknowledges the dual aspect of relations, or 'connectedness,' as internal and external. He ties this duality to temporality and to 'extension' more generally. See Whitehead, *Process and Reality*, 309. Charles Hartshorne and Ivor Leclerc have helpful discussions of internal and external relations in Whitehead. See Charles Hartshorne, "Whitehead's Metaphysics," in *Whitehead and the Modern World* (New York: Books for Libraries Press, 1972 [1950]),

There is a further general point I wish to make about relations in radical empiricism, followed by an historical elaboration, before moving on to the *appropriative* character of relations and the close affinity of this character with Whitehead's notion of prehension. The above discussion about relations as fundamentally temporal raises the question, what about abstract relations, that is, relations between concepts or relations considered conceptually? These relations will be general and static rather than particular and dynamic. The abstract relation between the ideas of whole and part, for example, just *is*. Mathematics is paradigmatic of such static relations. What has the relation between 2 and 3 to do with time or transition? That 3 is greater than 2 is so, end of story. As James writes, "[n]othing *happens* in the realm of concepts; relations there are 'eternal' only."[145] That there are static relations I do not deny. The question, though, is whether static relations are all fundamentally derivative from temporal ones. This is a complicated issue, though fortunately one we may leave without ultimate resolution. Our purposes here require only that there are genuinely individual, temporal relations experienced as transitions. I shall, however, suggest an interpretation of static relations that builds on a definite tendency in both James's and Whitehead's thought in order to illustrate how strongly the radically empirical *Weltanschauung* cleaves to the flow of temporality disclosed by experience.

James says he treats "concepts as a co-ordinate realm [of reality]," thus affirming a version of "logical realism," and this certainly suggests that he is open to real, static

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25–41; 34-35. And also see Ivor Leclerc, *Whitehead's Metaphysics* (Bloomington: Indiana University Press, 1958), 115-119.

[145] James, *Works: A Pluralistic Universe*, 122.

relations.[146] Whitehead, if anything, appears more committed to static relations than James.[147] But both James and Whitehead describe concepts as abstractions from the pulsational flux of experience. Using the word "perception" for the broad, concrete movement of experience, James writes that "concepts are like evaporations out of the bosom of perceptions."[148] To be abstract—to be an evaporation—does not mean to be unreal, but it does mean that the existence of the abstraction is couched within, or dependent upon, some concrete actuality. Thus "the famous world of universals would disappear like a soap-bubble, if the definite contents of feeling, the *thises* and *thats*, which its terms severally denote, could be at once withdrawn. Whether our concepts live by returning to the perceptual world or not, they live by having come from it. It is the nourishing ground from which their sap is drawn."[149] And for James and Whitehead the concrete actualities of 'the perceptual world' reveal themselves as full of life and motion.

Whitehead expresses this idea of the dependence of static orders upon temporal happenings with reference to mathematics, his first major field of study. Considered in its abstractness, the generality of which is its great strength, mathematics seems to have nothing to do with transition. Even when time or motion enters mathematical discourse, there is an abstraction away from the "timefulness of time."[150] Yet, for Whitehead, this appearance of stasis yields an impoverished understanding of mathematics, for "nothing is

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[146] For "co-ordinate realm," see James, *Works: The Meaning of Truth*, 32. For "logical realism," see James, *Works: Some Problems of Philosophy*, 58 (and cf. pp. 55-56).
[147] Cf. Whitehead, *Science and the Modern World*, Ch. 10: Abstraction. This chapter is Whitehead's first major discussion of 'eternal objects,' that is, possibilities. The relationality of eternal objects with one another is the locus in Whitehead for what can be interpreted as 'really' static relations.
[148] James, *Works: Some Problems of Philosophy*, 58.
[149] James, *Works: Some Problems of Philosophy*, 46.
[150] Whitehead, *Modes of Thought*, 46.

finally understood until its reference to process has been made evident."[151] This means that the error of mathematics, concomitant with its generation, "was the introduction of the doctrine of form, devoid of life and motion."[152] With this error, "mathematics has been conceived as the test case, which is the citadel for a false metaphysics."[153] Understood in its concrete relevance, "mathematics is concerned with certain forms of process issuing into forms which are components for further process."[154] What mathematics is *about*, according to Whitehead, is patterns of transition. "All mathematical notions have reference to process of intermingling."[155] Such formal structures and relations are all found in individual happenings and their temporal relations. Thus the generality of mathematics depends upon an historical world of events interwoven through time in such a way that its bequest to the future is this communal framework of relations. Perhaps the most helpful way to understand this is to say that mathematical patterns are emergent from repetitions or rhythms of concrete transitions within organized systems of experience.[156] The benefit of apprehending these patterns, and the originality involved in devising ways to so apprehend them, "consists in the fact that in mathematical science connections between things are exhibited which, apart from the agency of human reason, are extremely unobvious."[157] But we need not dwell on the nature of mathematics and order here.[158] My point is that both James and Whitehead admit that there are felt, temporal relations, and that such living

[151] Whitehead, *Modes of Thought*, 46.
[152] Whitehead, *Modes of Thought*, 93.
[153] Whitehead, *Modes of Thought*, 97.
[154] Whitehead, *Modes of Thought*, 92.
[155] Whitehead, *Modes of Thought*, 93.
[156] Cf., with specific reference to the notion of number, Whitehead, *Modes of Thought*, 93: "There is no such entity as a mere static number. There are only numbers playing their parts in various processes conceived in abstraction from the world-process."
[157] Whitehead, *Science and the Modern World*, 19.
[158] The idea of order will reemerge as we focus on aesthetics later in this manuscript.

relationality is extraordinarily important for our understanding of the world, including for our understanding of the static relations with which logic and mathematics are concerned.

This brief discussion of abstract relations highlights the real thrust of the radically empirical treatment of relations, mentioned already several times. The contention is that relations are felt, or experienced, as transitions, carrying energy, purpose, and character from one pulse of experience to another. It is through such felt transitions that we are acquainted with activity and efficaciousness. Transitions are also the vehicle for the plurality-preserving immanence currently under discussion. The sheer power and centrality of felt transitions within radical empiricism raises an important question. Why has such an important aspect of experience not been explored or accorded its due place in metaphysical speculation for much of western intellectual history? I shall provide the core of an answer and discuss an historical example below, though this question is deserving of fuller treatment than I can give it here.[159] One thing, however, is clear. If the doctrine and description of felt relations is denied, then the entire project of radical empiricism unravels. I cannot see how either James or Whitehead can be productively read if one is not willing to entertain the doctrine of felt relations.

As for the question, James gives a direct answer:

> Now it is very difficult, introspectively, to see the transitive parts [of the stream of experience] for what they really are. If they are but flights to a conclusion, stopping them to look at them before the conclusion is reached is really annihilating them. Whilst if we wait till the conclusion *be* reached,

[159] A closely related inquiry was already undertaken by John Dewey, which would serve as an excellent point of departure. See Dewey, *Later Works: The Quest for Certainty*.

> it so exceeds them in vigor and stability that it quite eclipses and swallows them up in its glare.[160]

The 'conclusions' of which James speaks are those qualitatively unified aspects of the flow of experience—the consummations of the various pulses—that, by virtue of their focal togetherness, lend themselves to conceptual sorting and retention. The transitions are, as has been said, the integrating movements that create togetherness of experience. James's point is that the act of conception—"stopping them to look at them"—does not or cannot grasp the concrete movement of transition well, for transitions are always singular and fit poorly within the abstract fixity of a concept. It is very difficult to lay hold of feelings of transition and give them words. As James writes, "relations are numberless, and no existing language is capable of doing justice to all their shades. / We ought to say a feeling of *and,* a feeling of *if,* a feeling of *but,* and a feeling of *by,* quite as readily as we say a feeling of *blue* or a feeling of *cold.* Yet we do not…."[161] Hence James's locating of feelings of transition within the vague fringes of experience. As a result of this difficulty of conception, reflective analyses of experience tend to overlook or explain away these feelings of relation or tendency. Couple this with the (very Greek) idea that that which is most clearly present to mind, once stripped of irrelevant perceptual accretions, is most truly real, and a persistent blind spot is formed.[162] This blindness is responsible for most of the "omissions" on which James based his crucial chapter on "The Stream of Thought."[163]

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[160] James, *Works: Principles of Psychology,* vol. I, 236.
[161] James, *Works: Principles of Psychology,* vol. I, 238.
[162] There are of course exceptions to the trend of thought that subordinates movement and 'becoming' to fixity, with Heraclitus standing as an example during the very period when the Western tradition was coming into its own. But it cannot be denied that the Greeks bequeathed Western thought a fascination with the static, or with what is most readily conceptualized—with "form devoid of life and motion," as we have seen

Whitehead's concise diagnosis follows James's closely. Whitehead suggests that philosophical interpretations of experience tend towards a "disastrous confusion…of conceptual feelings with perceptual feelings"—a palmary example of the 'fallacy of misplaced concreteness.'[164] This means that what in actuality is a simplified conceptual rendering of experience is substituted for and taken to be the basic character of experience, that is, the genuine *what* and *how* of experience. What is left out here just is *out*; either the "extraneous" factors are ignored, interpreted in terms of the new schema, or are simply denied as real experiences. Since feelings of transition elude easy conceptualization, they are a casualty of this pervasive confusion. Whitehead has David Hume and his disjoined 'impressions of sensation' particularly in mind, and from Hume there is a direct line to the associationist psychologists against whom James positioned his psychological work.

This "disastrous confusion" is understandable in that the conceptual and perceptual are deeply intertwined in human consciousness. It is not easy to discern what is a perceptual given and what a conceptual outgrowth, for they are experienced together, as when we recognize a familiar neighborhood.[165] As experience continues to compound

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Whitehead say. The Jamesean claim is that feelings of transition or relation are a crucial aspect of experience as it is actually undergone. Thus no philosopher is without such feelings, and insights into this neglected realm of experience can be found scattered within the tradition. For example, Whitehead credits Plato with recognizing that reality does require life and motion, while the Platonic deposit in the history of thought tends in the direction of forms as static. And with Hegel the ideas of movement, history, and process take central position, certain interpretations of his Absolute notwithstanding, and the door is thus opened for thinkers like James, Bergson, Whitehead, and Dewey. Literary and poetic expressions of experience, less reliant upon intellectualization, conceptualization, and classification than is philosophical theory, appear to be less prone to shunting aside feelings of transition. We can think here of Whitehead's turn to English Romantic poetry in developing his philosophy in *Science and the Modern World* (see, for example, Chapter Five, "The Romantic Reaction").

[163] Cf. "On Some Omissions of Introspective Psychology" (1884), in James, *Works: Essays in Psychology*, 142-167.

[164] Whitehead, *Process and Reality*, 230.

[165] I here set aside a discussion of what James and Whitehead understood by the terms "conceptual" and "perceptual." James discusses this distinction directly in *Works: Some Problems of Philosophy*, 31-60.

upon itself, any conscious sifting among 'concepts' and 'percepts' is made retrospectively and is subject to revision. This is one reason for the insuperable fallibility of the radically empirical style of inquiry.

Nevertheless, by recognizing and giving voice to the multifaceted and rich realm of feelings of transition, James opens to philosophy an experiential landscape striated with relations and meaning. Above I claimed that neglect of this landscape, in its fullness if not in its entirety, is common. A brief discussion of two key figures in modern philosophy who do neglect the fullness of Jamesean feelings of transition will serve well to illustrate the philosophical shift I believe James and Whitehead represent.

Two examples of a conceptually narrowed treatment of perceptual experience, chosen because of the definitive shaping they have given to modern Western thought, philosophic and scientific, are Hume's 'impressions of sensation' and Kant's bifurcation of sensibility and understanding. I shall focus primarily on Kant, for he generally accepts Hume's account of sensation. But a brief introduction of Hume's idea is in order. For Hume, our impressions of sensation arise "in the soul originally, from unknown causes."[166] In Kantian terms, sensations are "empirical intuitions." They are what 'comes in'—the basic 'matter' or 'content' or 'data' of our experiencing. These data are ultimately simple, meaning that they "admit of no distinction nor separation."[167] Examples are a particular shade of red, a definite smell, or a specific feeling of pleasure, with complex impressions, such as an apple, being formed of simple ones. There are two points I wish to highlight.

Whitehead's treatment is not as centralized, though the chapters "The Subjectivist Principle," "Symbolic Reference," and "The Propositions" in *Process and Reality* contain a good deal of relevant material.

[166] David Hume, *A Treatise of Human Nature*, ed. David Fate Norton and Mary J. Norton, Oxford Philosophical Texts (Oxford: Oxford University Press, 2000 [1739-1740]), 11.

[167] Hume, *Treatise*, 7.

First, any sense of derivation or transmission is left out of Hume's account of impressions of sensation, for "[t]he examination of our sensations belongs more to anatomists and natural philosophers than to moral; and therefore shall not at present be enter'd upon."[168] Thus the connection between the 'external world' and impressions is not taken up, and, in effect, a gap between self and world presupposed. James's recognition of feelings of tendency and transition finds no place in a Humean account, and there is thus no way for Hume to say that we experience *particular things*, that is, individuals comprising an experienced world. We have only "unknown causes;" our sensations are qualities in the mind. (Hume embraced all of this. He argued explicitly that we cannot justify belief in an external world. That experience encompasses the objective or "external" as well as the subjective, the "extra-mental" as well as the "mental," is not a Humean idea at all.)

Second, when a simple impression—say, that shade of red—is considered on its own, nothing can be found within it saying from whence it came or where it is headed, that is, it reveals nothing of its neighbors in our experiential life. An impression of sensation is, in itself, isolated, and its place within our perceptions is a contingent or accidental matter. Since our entire mental apparatus is built upon these impressions as a foundation, according to Hume, it is not surprising that their connections with one another and with real, particular things could not be found. Hume is of course famous for arguing that our feelings of cause and effect derive not from true connection between impressions or ideas, but from a form of habit, namely, the observation of constant conjunction. The connections within the flow of our perceptual life are reduced to associational patterns derived

[168] Hume, *Treatise*, 11.

primarily from resemblance and contiguity. The Jamesean idea of efficacious derivation accomplished through felt transitions is denied by the atomic, associationist version of perceptual experience with which Hume begins. This means there is no overlap, blending, or compenetration among the elements of experience—this is ruled out from the start since sensations are taken to include only definite qualities and not feelings of transition or of concrete, individual things.

Let us now turn to Kant, who I shall use to point out a few significant ramifications that accepting a Jamesean version of the character of experience has for creating philosophical systems. As stated above, Kant begins from a broadly Humean version of sensory experience. Sensation is rendered as the receiving of a 'manifold' of 'empirical intuitions,' which manifold has the key properties of Hume's impressions of sensation, namely, of disjunctive, qualitative particularity and of originating from unknown causes. The faculty of reception is the sensibility, and the understanding supplies the determinate synthetic rules allowing for the experience and cognition of objects. Thus in seeing a chair, both sensibility and understanding are in play, though the synthetic rules of the understanding are, strictly speaking, distinct in origin from any empirical intuition. This means that Kant's dualism of sensibility and understanding, that is, of affect and cognition, places the burden of connectivity entirely in the sphere of the (cognitive) subject, leaving empirical intuitions as essentially barren of any important relationality.[169]

[169] Kant is clear that there is no synthetic activity within the objects of empirical intuitions or perception. Consider the following text, for example: "Combination does not lie in the objects, however, and cannot as it were be borrowed from them through perception and by that means first taken up into the understanding, but is rather only an operation of the understanding, which is itself nothing further than the faculty of combining *a priori* and bringing the manifold of given representations under unity of apperception, which principle is the supreme one in the whole of human cognition." In Immanuel Kant, *Critique of Pure Reason,* trans. Paul

Kant of course introduces into philosophy the remarkable idea of experience as a synthetic, appropriative activity—a contribution and reorientation worthy of the attention it has received, and known philosophically as Kant's 'Copernican Turn.' In the radically empirical *Weltanschauung* here being sketched, this idea is retained as the compositional activity of a pulse of experience. A difference emerges in the fact that, for Kant, experiential unity is achieved through the schematization and operation of the categories of the understanding, whereas for James and Whitehead the process of experiential integration is primarily affective.[170] This is not to deny concepts a role in organizing experience, but it is to break down the Kantian bifurcation of sensibility and understanding. For Kant, the categories and the syntheses they enable are *required* for the possibility of experience. The sensuous manifold on its own could support no determinate experience; such a hypothetical experience, insofar as it can be thought, would be white noise resembling nonentity. The necessity for *a priori*, that is, non-historical and non-experiential, modes of synthesis dissipates once the data of experience are admitted to possess their own connectivity.[171] For then the forms of synthesis Kant places solely in the

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Guyer and Allen W. Wood, The Cambridge Edition of the Works of Immanuel Kant (Cambridge: Cambridge University Press, 1998 [1781; 1787 second edition]), 248 (B134-B135).

[170] Whitehead recognizes that, even for Kant, the *entire* process of achieving experiential unity is not due to the operation of the categories of the understanding alone, but that affectivity has something of a role. Whitehead writes, "The exception [to conceiving the process by which experiential unity is achieved in the guise of modes of thought] is to be found in Kant's preliminary sections on 'Transcendental Aesthetic,' by which he provides space and time" (Whitehead, *Process and Reality*, 113). But in the Transcendental Aesthetic orderliness is still placed on the subjective side rather than the objective (in the human over against the natural). That is, it is the sensibility that introduces the spatial and temporal forms of intuition, and empirical intuitions themselves, the "pure data" of experience, are bereft of salient interconnection. Thus Kant's including an affective element in his analysis of experiential synthesis does not vitiate my point, which is that, for Kant, connectivity and synthetic activity have a solely subjective (human) locus. Since much of the synthesis on which Kant focuses is cognitive, my brief discussion of him emphasizes this aspect of his thought.

[171] A fundamental connectivity within the 'data' of experience is that of temporality, where time is not understood as a pure succession but rather as "the derivation of state from state, with the later state exhibiting

understanding need not be only there; they shall have 'perceptual originals,' to use James's phrase, establishing continuity where Kant saw disjunction. There is thus no need for a 'transcendental deduction' to bridge the gap between sensibility and understanding, for concepts grow out of percepts and return to them, modifying the flow of experience. Concepts are, as Kant held, efficacious in the constitution of experience, but their efficaciousness is part of the stream and not an external condition of the streaming. They are not aloof from experience, but partake in experiential application and feedback. Extending synthesis beyond conceptual cognition means that the affective itself enacts synthetic activity, or the bringing of many things together into the unity of a pulse of experience. In other words, feelings are 'cognizant' of objects, and, as part of the experiential flow, cognitions carry with them affective tone. More than this, the feeling of objects as particular, 'other' occurrences involves the perception of interconnections 'out there,' as part of the flow we do not identify as ourselves.[172] In short, for James and for Whitehead the affective and the cognitive are intertwined, and 'empirical intuitions' come to us pregnant with forms of connection and separation, not as a mere disjunction of 'sense data.' Here "pregnancy" refers to the possible but as yet unrealized relations that

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conformity to the antecedent" (Alfred North Whitehead, *Symbolism: Its Meaning and Effect* (New York: Capricorn Books, 1959 [1927]), 35). Whitehead writes that "[t]ime in the concrete is the conformation of state to state, the later to the earlier; and the pure succession is an abstraction from the irreversible relationship of settled past to derivative present (Whitehead, *Symbolism*, 35). From this rendering of time, whereby we experience ourselves, now, to have derived from what has come before, Whitehead contends that there is no need for *a priori* forms of intuition or understanding to mold or organize the data of experience into the relations of time or causality, for example. He writes: "There is nothing which 'simply happens.' [*Whitehead is here referring to the idea that the data of experience, our empirical intuitions, 'simply occur,' or lack salient relationality to other occurrences of data. He attributes this idea to both Hume and Kant.*] Such a belief is the baseless doctrine of time as 'pure succession.' The alternative doctrine, that the pure succession of time is merely an abstract from the fundamental relationship of conformation, sweeps away the whole basis for the intervention of constitutive thought, or constitutive intuition, in the formation of the directly apprehended world" (Whitehead, *Symbolism*, 38-39).

[172] Cf. Whitehead, *Process and Reality*, 113.

experience harbors and that trace the boundaries within which a new pulse of experience becomes.[173]

Since the compositional activities of an incipient experience are largely within the realm of feeling, rather than of cognition, Whitehead suggests that what is needed is a "critique of pure feeling" in place of Kant's *Critiques*.[174] The Jamesean and Whiteheadian emphasis on the felt and affective should make the heightened prominence of aesthetics in metaphysics less surprising. The formation of pulses of experience, or Whitehead's 'actual occasions,' results from the aesthetic coordination of many feelings instead of from determination by Kant's *a priori* categories of the understanding. To think of Kant's critical project in this way is a major step towards James's radical empiricism and Whitehead's philosophy of organism, though it upsets the tenor of this project by displacing reason as the primary object of critique. It is worth noting that Kant, when he tries to reconcile sensibility and understanding (within the larger context of reconciling theoretical and practical reason and their respective domains, nature and morality) in his *Critique of the Power of Judgment*, turns to aesthetic experience and judgments of taste. As I have said, in Whitehead, too, there is the idea that aesthetic experience is revelatory of how experience generally 'hangs together,' as we shall see more clearly as this manuscript unfolds.

To summarize, from a Jamesean and Whiteheadian point of view, both Hume's and Kant's philosophies run into trouble at least in part because they are too 'sensationalistic'

[173] To explore how the relations of the world condition the compositional activity of the nascent subject and what the contribution of that subject to its own character is requires a more extensive discussion that must be deferred.
[174] Whitehead, *Process and Reality*, 113.

in their characterization of the data of experience. James's feelings of relation, of tendency and transition, are not found in these narrowly defined sensations and are either dismissed, explained away, or functionally imported into the pre-experiential subject dressed as *a priori* categories. The consequent philosophical systems are, from the radically empirical perspective, lopsided. That experience and its data, which is simply more experience, are pervasively relational is precisely what James and Whitehead contend, as I have described throughout this and the previous chapter. Indeed, what I have written in the last few pages is but a concentrated application of our discussion of experience and relations used to provide a critique of historically influential modes of thought. This entire section on relations is meant not as a comprehensive exegesis, but to introduce the purposes and importance of James's treatment of feelings of relation within his general account of experience. To take James seriously on relations has significant philosophical ramifications. From this lynchpin idea of relations as transitions, we are primed to explore its metaphysical, aesthetical, cultural, and pedagogical dimensions.

But there is still some work to do laying the foundations of the radically empirical *Weltanschauung*. You will have noticed that, above, I described Kant's great contribution to thought to be his recognition of experience as a synthetic, appropriative activity. What this word "appropriative" means in radical empiricism and its importance in understanding Jamesean relations is the subject of the next section.

Appropriation

In the present context, the word "appropriation" refers to the appropriative character of relations. This character has already been discussed in this and in the previous chapter as the diffusive aspect of experience, whereby experiences affect one another and

the plurality of the world "enters" the immediacy of a finite pulse of experience. It is also indicated by the words "compenetration," "interpenetration," "immanence," and "overlap." Appropriation describes the means by which the 'experiential togetherness' with which we have been dealing comes together. Thus we have already discussed appropriation without naming it, and I shall not add anything wholly new to our understanding of Jamesean experience in this section. Rather, I am bringing into focus a metaphysically crucial aspect of James's treatment of relations. Very few people mention appropriation when discussing radical empiricism, but the idea helps us make sense of the compenetrative pluralism that characterizes James's *Weltanschauung*. Furthermore, this idea helps us glide into Whitehead's notion of prehension, making it more readily apparent that James's radical empiricism and Whitehead's philosophy of organism are part of the same philosophical tapestry.

I shall begin by quoting James's most explicit discussion of appropriation in his *Essays in Radical Empiricism* (found in the essay "How Two Minds Can Know One Thing"). Then I shall use this text to show the importance of recognizing appropriative activity as central to a Jamesean account of relations.

Discussing how a sense of self is maintained from one passing moment to another amid the flux of feeling, using the perception of a pen as an example, James writes that:

> …experiences come which look back on the old ones, find them 'warm,' and greet and appropriate them as 'mine.' These operations mean, when analyzed empirically, several tolerably definite things, viz.:
>
> 1. That the new experience has past time for its 'content,' and in that time a pen that 'was';

2. That ‘warmth’ was also about the pen, in the sense of a group of feelings (‘interest’ aroused, ‘attention’ turned, ‘eyes’ employed, etc.) that were closely connected with it and that now recur and evermore recur with unbroken vividness, though from the pen of now which may be only an image all such vividness may have gone;

3. That these feelings are the nucleus of ‘me’;

4. That whatever once was associated with them was, at least for that one moment, ‘mine’—my implement if associated with hand-feelings, my ‘percept’ only, if only eye-feelings and attention-feelings were involved.

The pen, realized in this retrospective was as my percept, thus figures as a fact of ‘conscious’ life. But it does so only so far as ‘appropriation’ has occurred….[175]

With this text, we see that appropriation has to do with ‘mineness’ or ‘ownness,’ specifically the ‘making one’s own’ that constitutes the focal center (“nucleus”) of an experience. ‘Warmth,’ for James, is the peculiar intimacy of feeling that marks off the ‘self’ from an ‘environment,’ the appropriation or transmission of which constitutes the growing, biographical self.[176] But set aside ‘warmth’ for a moment. The heart of appropriation lies in James’s first point: “That the new experience has past time for its ‘content’….” The contents, energies, and purposes of one pulse of experience are transmitted to another, which takes it up and modifies it according to its own activity of self-composition. This means that pulses of experience whose immediacy have faded now

[175] James, *Works: Essays in Radical Empiricism,* 64.
[176] See James, *Works: Principles of Psychology,* vol. I, Ch. X, “The Consciousness of Self,” esp. pp. 314-324. This chapter is where James most explicitly talks about ‘appropriation’ at length.

contribute to the constitution of a new pulse. The past lives on within and guides the formation of the present. That some experiences function in this way within other experiences is the work of relations or transitions, as described in the previous section. What the word "appropriation" does is draw our attention to the activity on the part of the nascent experience. There is transmission, a gifting; but there is also the agency of accretion. James writes: "There must be an agent of the appropriating and disowning; but that agent we have already named. It is the [experience] to whom the various 'constituents' are known. That [experience] is a vehicle of choice as well as of cognition; and among the choices it makes are these appropriations, or repudiations, of its 'own.'"[177] Appropriation is thus the activity of self-creation. As an experience appropriates various contents as its *own*, it makes itself; and once made, it can be appropriated by various other experiences. The 'self,' as created and growing in time, is 'promethean.'[178]

In his *Principles of Psychology*, James describes appropriation as that "trick which the nascent [experience] has of immediately taking up the expiring [experience] and 'adopting' it."[179] Due to this "trick," "[e]ach [experience] is thus born an owner, and dies owned, transmitting whatever it realized as its Self to its own later proprietor."[180] There are two points I wish to make here. First, and more importantly, we see that the activity of appropriation both maintains continuity and establishes difference. The continuity of the

[177] James, *Works: Principles of Psychology*, vol. I, 323. Nota bene: In "How Two Minds Can Know One Thing" James endorses substituting "experience" for the "passing thought" in his *Psychology*. I have accordingly altered the text above and will so alter other texts from this section of the *Psychology*, as the language of experience is the preferred language of radical empiricism. As a rule, this language supplants that of "thoughts" in James's later writings. See James, *Works: Essays in Radical Empiricism*, 64.
[178] Cf. McDermott, "The Promethean Self and Community in the Philosophy of William James."
[179] James, *Works: Principles of Psychology*, vol. I, 322.
[180] James, *Works: Principles of Psychology*, vol. I, 322.

self, for instance, rests upon it. But each passing experience involves difference; it is a new pulse recognized as other than any that came before. It is in appropriative activity that the paradox of a wholly individual pulse in a continuous stream both resides and is resolved. Appropriation is the act of making things one's own, that is, it is the creation of a finite and singular occasion that bears a perspective. But as appropriat*ing*, the incipient experient makes itself in continuity with its environment, drawing from past expressions of experience, expressions now called 'facts.' Every experience grows out of its world and in so doing transcends it. On the one side we have the creation of continuity and immanence, and on the other the introduction of novelty, singularity, difference.

The second point has to do with James's language in the *Psychology*. You will have noticed that, in the texts cited above, James uses the language of adoption and ownership. He also speaks of appropriation as the inheritance of a 'title.'[181] This perhaps suggests a metaphorical interpretation of appropriation, rather than a literal one in which the past experience is taken up immanently within the present experience. The chapter on "The Stream of Thought," with its emphasis on the relational fringe of experience and on feelings of transition, creates some friction with the notion of 'inheriting a title,' but not enough to safely pin down how James was thinking about appropriation in his *Psychology*.[182] In my judgment, though, James's move towards immanence and compenetration in his later writings settles the interpretive issue.[183] Appropriation is the relational activity whereby the past is implicated in the constitution of the present. As

[181] James, *Works: Principles of Psychology*, vol. I, 321.
[182] The word "appropriated" appears only once in that chapter, in the context of maintaining personal identity. See James, *Works: Principles of Psychology*, vol. I, 232.
[183] See, as just one example, James, *Works: A Pluralistic Universe*, 129; also see the discussion and texts concerning immanence and compenetration cited earlier in this chapter.

Victor Lowe puts it with characteristic clarity: "The past occasion can be experienced only by becoming *itself* present in the experience that is now. *It* must be *appropriated*. This may, if you like, be called the truism that that which is to be experienced must be brought within the experient occasion. … There is no mystery, because what was outside came inside. There is no solipsism of the present moment, because what is inside is felt as having come from outside."[184]

The overlapping or compenetration of experiences is the appropriative movement of experience and its contents from 'there' to 'here.' It is the felt transition of affective presence. This, you will notice, is how I described Jamesean relations above. James's crucial identification of "felt transitions as the observable elements by which an experience is found to be concrete of what was outside it"[185] is both foundational for radical empiricism and establishes relations as fundamentally appropriative movements. What relations *do*, in their temporal transitioning, is make one thing concrete to, and thereby efficacious within, another. It is through appropriations that interconnections are formed, giving rise to the structural relations (for example, mathematical, chemical, social, and political) of our shared world. Thus, despite the relatively few occasions on which James explicitly discusses the idea of appropriation, it is not an exaggeration to consider it a central concept of radical empiricism.

There is an important distinction to be made with regard to this central concept of appropriation, which I have avoided making thus far in order to speak generally about appropriation. The distinction is between appropriation in the generic sense, in which

[184] Lowe, "William James and Whitehead's Doctrine of Prehensions," 116-117.
[185] Lowe, "William James and Whitehead's Doctrine of Prehensions," 117.

everything experienced is appropriated or brought into that experience, and appropriation in the 'personal' sense, though which that most intimate part of my experience, the 'me,' is created and promulgated through time. This 'personal' sense of appropriation is the activity of selving, or of the 'promethean self.' It involves the 'warmth' about which James writes and its transmission and continuance. Such transmission of 'warmth' occurs where the appropriations involved are (more or less) serial and of predominant, intimate importance when considered alongside the broad influx of feeling into the incipient experience. This is the creation of biography, or, viewed with a cosmological lens, the creation of history. Paths or ways are marked out through time—marked by the flow of 'warmth and intimacy'—that create differentiations between 'self' and 'world' within the total occasion of experience.

When James discusses appropriation, both in the *Principles of Psychology* and in *Essays in Radical Empiricism*, he is discussing appropriation in this personal, historical sense. His concerns are the creation and consciousness of self, specifically a self recognizable over time. But his insights—(i) that the creation of the self (that intimate 'focus' or 'position' of experiential togetherness) involves *appropriating* and *being appropriated* (the creation and maintenance of ownness through bringing 'in,' over time), and (ii) that such appropriations establish relations and are felt as transitions—these insights extend beyond their importance for the activity of 'selving' and bear on how anything is 'mine' at all and how experiences relate at all. In other words, James's analysis of appropriation is revelatory of how the stream streams. I remain *me* through a particularly strong and warm type of appropriation, but the other things of experience are *mine*, that is, part of this particular experience, because they have been brought into this

experience. They have been appropriated, or felt. All relationality deals with the efficaciousness of interconnection and disconnection established by appropriations.[186]

James obliquely recognizes this broader meaning of appropriation in a footnote in "The Experience of Activity." Clarifying that the 'ours' he discusses in the *Principles of Psychology* is that of the "personal and individualized self," he writes:

> So far as we are 'persons,' and contrasted and opposed to an 'environment,' movements in our body figure as our activities; and I am unable to find any other activities that are ours in this strictly personal sense. There is a wider sense in which the whole 'choir of heaven and furniture of the earth,' and their activities, are ours, for they are our 'objects.' But 'we' are here only

[186] I explicitly mention disconnection because not all things, or all aspects of things, are preserved during a positive instance of appropriation. There is difference and loss in transition—the full immediacy of feeling of one moment is not passed to the next moment. Time always involves loss, or perishing. Yet disconnections between things still influence their individual characters. We should not forget that, like positive content, separations and absences are still felt, that is, have an affective tone and upshot. Thus disconnections form part of the fabric of relational experience just as do interconnections, as James affirms in radical empiricism's 'statement of fact.' Appropriations need not be 'positive' in the sense that there is 'inclusion' of some definite element—they might establish relationality through 'exclusion,' 'rejection,' or, transplanting a term James used in a text cited above, 'repudiation.' How might we understand this? For such repudiation *to be* at all it must be efficacious, which means to have an affective tone. This tone becoming 'mine,' in the sense of an object of my experience, perhaps even a constitutive part of my sense of myself, means that the absence or disconnection is appropriated—its character is woven into the constitution of the finite pulse of feeling. This idea of appropriating disconnection is difficult to make sense of, but is essential in creating the limiting contours of any finite experience. The experiential reality underlying this idea is attested to by James's recognition that absences are felt, as discussed earlier. Whitehead attempts to generalize and systematize this idea of 'felt absence' or 'exclusion' in his notion of 'negative prehension' (developed in *Process and Reality*). But naming the phenomenon of course does not mean all questions have been settled, and the idea of 'negative prehension' is worthy of deeper exploration. Whitehead agrees that this idea needs elaboration: "Here I am saying that rejection is a form of prehension. But I fully agree with Dr. Ushenko that this doctrine requires examination, and probably should be recast. However, I adhere to the position that it is an approximation to an important truth." From "Analysis of Meaning" in Alfred North Whitehead, *Essays in Science and Philosophy* (New York: Philosophical Library, 1947), 130.

> another name for the total process of experience, another name for all that is, in fact….[187]

I see in James's acknowledgement that the 'choir of heaven and furniture of the earth' are ours *objectively*—meaning, within the total pulsational process of experience—the idea that there is appropriation of "all that is" into the constitution of any moment of experience.[188] There are thus two senses of appropriation: (i) the personal sense, or that activity of 'selving' that establishes the 'me' and the 'other' through time; and (ii) the wider sense in which the entire universe is appropriated for feeling in a limited or finite standpoint.[189] Furthermore, in this same footnote, James treats what is 'ours,' personally, as a circumscribed part of the whole experience-process. This suggests there is continuity between the general activity and the more specific activity. Indeed, the personal sense of appropriation is built upon the successive inheritance and evolution of the limitation or perspective generated during the general appropriation of all (during the creating of 'experiential togetherness'). It designates some particular ways in which appropriation happens over the course of time. It is the creation of patterns and habits—the *activities* of

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[187] James, *Works: Essays in Radical Empiricism*, 86. Cf. Whitehead, *Process and Reality*, 75-76. Here Whitehead makes a point very similar to James, namely, that the "animal body" has a "peculiarly intimate association with immediate experience" but, "in principle, it would be equally true to say, 'The actual world is mine.'"

[188] I here look back to the (speculative) idea discussed earlier that 'objective' existence is dependent upon 'subjective' existence, in the modified radically empirical/scholastic sense of these terms (see fn. 107 in Chapter II). If an object has being apart from this moment in which it is my object, it must have (or be a factor within) a separate subjective existence, that is, an existence for itself apart from its objective existence in another. Coupled with the Jamesean contention that we feel a great many of our objects as having come from without, we may say that, in existing objectively, the 'choir of heaven and furniture of the earth' are already supposed to have "external" existence and thus must be brought in, or appropriated to, the incipient experient. This "supposition" is of course grounded in Jamesean feelings of transition. Deny these, and you may remain in your solipsism.

[189] Cf. James, *Works: A Pluralistic Universe*, 130: "[T]he whole is somehow felt as one pulse of our life…." The "Continuity of Experience" chapter in *A Pluralistic Universe* is replete with texts describing this broader sense of appropriation, though without using the word "appropriation."

enduring. But these activities take place within the world-unifying movement constituting a pulse of experience. In this way James's ideas about the formation of the self reveal an idea—appropriation—that is central to the activity of experience generally. The idea of appropriation helps us to get a handle on what happens during the manifold relational transitions that form our experiential bedding.

Though James's focus when he discusses appropriation in his own writing is on a species of the more general notion, I have suggested that the basic movement he outlines is central in making sense of a relational, processual world. It is especially helpful concerning that 'compenetration' or 'overlap' that brings together individuality and continuity. In Whitehead's notion of 'prehension' we find just such a generalization of Jamesean appropriation such that it is the constitutive activity of all experiences, not just the activity of forming 'personal' or 'historical' selves.[190] The notion of prehension is a core part of Whitehead's philosophy of organism and will be used throughout this project. An outline of its kinship with the ideas of appropriation, relation, and transition is my task in the following section, which will close our look at the radically empirical *Weltanschauung* as a metaphysical point of departure.

Appropriation and Prehension

As I stated above, appropriation is not usually stressed when discussing James's radical empiricism. Here are some features of the radically empirical *Weltanschauung* that come to the fore when appropriation in its broad sense is emphasized. During an appropriation, one thing is brought into or made part of another. But appropriation is not

[190] I am not here making a claim about the derivation of the idea of prehension. I am rather pointing out a philosophically significant similarity.

unadulterated identity. It does not mean that the "entire" first thing is wholly subsumed in the second, losing its individuality. Rather, an *aspect* of the first forms part of the integral whole of the new pulse of experience.[191] That is, the thing is appropriated, brought in, not in the entirety of its actuality as a living immediacy, but as an objectified actuality (based in part on what this other pulse 'diffuses' and also what the incipient one is patient to receive). In being thus brought in, an object serves a function, namely, that of contributing some character to the new pulse.[192] In this way pluralism is maintained, for there are many individual things in 'dynamic union,' to refer back to that phrase from James's 1905-1908 notebooks.[193] Appropriation, even in the strong sense that forges a 'self' over time, does not destroy individuality, but puts individuals in community. I recognize my past experiences as not precisely who I am now, while acknowledging their formative influence on the current me and as constitutive of my biography. And a specific past moment of my life not only has importance for my present self, but also for the innumerable other streams in which it has made a difference. A single thing may be appropriated many times over. Lastly, the term appropriation gives voice to the activity of the incipient occasion of experience in a way that may have slipped through my previous modes of expression. An

[191] Cf. Lowe, "William James and Whitehead's Doctrine of Prehensions," 119: "We must, moreover, be careful not to suppose that James and Whitehead assert, or need to assert, that the *entire* past occasion becomes immanent in the present. Each occasion consists of feelings, and it is necessary only to say that in so far as the past is a cause, feeling passes from the old to the new occasion."

[192] This character—visual, emotional, physical, purposive, or whatever else—may be simple or complex, contribute a sense of self or of alterity, and classed as 'subjective' or 'objective' (as those terms are usually understood—roughly, 'me' or 'world'—and not in the more refined sense of object here under consideration). The body may be said to supply feelings of hunger, tension, relief, desire, and so on. The appropriation of a room—of the many things that comprise a room—may supply the character of enclosure, patterned redness, illumination, and so on. The idea is that every object, in the sense of something appropriated for feeling, constrains the incipient occasion in some way, canalizing its feelings. Thus we see that objects function as 'facts,' as described in the "Experience" section in the previous chapter.

[193] See footnote 115.

experience, as appropriative, is active in its self-formation. It is formed out of its world, yes, but not in a completely deterministic sense. For there is some degree of selection and rejection involved in appropriation. There is originative power, perhaps unexercised, in how an experience finally unifies and directs its energy forward. This is how radical empiricism interprets the sense of localized, personal energy and activity we each encounter in our own experiences.[194]

These are some of the fruits of the Jamesean idea of appropriation, or, more precisely, of characterizing relations as appropriative activities. Whitehead's name for these activities is 'prehension,' and he weaves a complex metaphysical system around this notion. In this section I intend only to lay out the connection between James's feelings of transition, recognized as appropriative, and Whitehead's notion of prehension. This will further cement the continuity I have been developing between James's radical empiricism and Whitehead's philosophy of organism, such that the shift to Whitehead and to concerns about aesthetics in subsequent chapters should seem to be a natural outgrowth of radical empiricism, as I believe it to be.

Let us begin with a text from the Preface to *Process and Reality*. In this text, the notions of relation and appropriation are linked and many of the themes we have been discussing, such as time, stubborn fact, and compenetration, are touched upon. This is an important summary statement for Whitehead's philosophy.

[194] I suggested at the beginning of the section on relations that the existence of this originative power, and of the continual coming into being of new pulses of experience in general, is a mystery of being. *That* such a power exists is a fundamental disclosure of experience, on the radically empirical view, and the task is to make sense of the flow from within.

> All relatedness has its foundation in the relatedness of actualities; and such relatedness is wholly concerned with the appropriation of the dead by the living—that is to say, with 'objective immortality' whereby what is divested of its own living immediacy becomes a real component in other living immediacies of becoming. This is the doctrine that the creative advance of the world is the becoming, the perishing, and the objective immortalities of those things which jointly constitute *stubborn fact*.[195]

That relations are grounded in appropriations is clear from the first part of this passage. And once the differences in language are sorted out, we shall see that the description of appropriation developed in the rest of the passage mirrors our discussion in the previous section. Though emotional thickness is lost, we can rephrase "the appropriation of the dead by the living" as "the appropriation of the past by the present." This echoes James's contention that appropriation involves a new experience having "past time for its 'content.'"[196] Thus, as mentioned above, we cannot divorce temporality from the ideas of appropriation and relation. The meaning of appropriating the past, of taking it up as 'content,' is that the past "becomes a real component in," or compenetrates with, the present. Immanence is established and a relation created. Do not let Whitehead's phrase "objective immortality" pull you into a religious frame of mind. This "immortality" expresses the fact that a pulse of experience, or a "living immediacy of becoming," once past, still informs the present. That is, objective immortality points to the fact that a pulse of experience (or event) has an efficaciousness that exceeds its own living immediacy. This

[195] Whitehead, *Process and Reality*, xiii-xiv.
[196] James, *Works: Essays in Radical Empiricism*, 64.

"excess" is captured in the appropriation or compenetration of that event with others. The past or perished pulse remains an *object* in others through a transition of feeling, that is, through being appropriated. As having already become, this object expresses a *stubborn fact* to which the present must conform.[197] *That* I made a mistake and hurt you can be ameliorated, but it cannot be erased. Thus the 'me' of a moment past remains an efficacious, felt component within my present experience (and, in a different way, a component in the experiences of others) despite the fact that its particular living immediacy has undoubtedly perished. It lives as a component of the *now* rather than in its own right, as when it was becoming. *How* it remains as a component is through its being appropriated by an incipient experient.[198]

At this point, the above description of appropriation should be familiar to you. Though Whitehead uses the word appropriation in the text above, in general he uses it infrequently, instead replacing it with his technical term "prehension." He is forthright about the connection between appropriation and prehension, writing that in his philosophy of organism, each occasion of experience or "actual entity" is "exhibited as appropriating for the foundation of its own existence, the various elements of the universe out of which it

[197] Cf. Whitehead, *Process and Reality*, 82: "The creature [that is, the pulse of experience, or actual entity] perishes *and* is immortal. The actual entities beyond it can say, 'It is mine.' But the possession imposes conformation."

[198] At a symposium honoring his seventieth birthday, Whitehead made the following remarks about *Process and Reality* later published with slight revision in *Essays in Science and Philosophy* as "Process and Reality." In these remarks, Whitehead emphasizes the central position of the notion of perishing in his philosophy. Note that this pulls in the ideas of appropriation and prehension, as well. Whitehead writes: "Almost all of *Process and Reality* can be read as an attempt to analyze perishing on the same level as Aristotle's analysis of becoming. The notion of the prehension of the past means that the past is an element which perishes and thereby remains an element in the state beyond, and thus is objectified. That is the whole notion. If you get a general notion of what is meant by perishing, you will have accomplished an apprehension of what you mean by memory and causality, what you mean when you feel that what we are is of infinite importance, because as we perish we are immortal. That is the one key thought around which the whole development of *Process and Reality* is woven…." See Whitehead, *Essays in Science and Philosophy*, 117.

arises. Each process of appropriation of a particular element is termed a prehension."[199] A prehension, also called a feeling, "is essentially a transition effecting a concrescence."[200] (A concrescence, remember, is Whitehead's term for the activity of growing together that yields a finite pulse of experience.) Thus a prehension is that "rush of immediate transition" which creates continuity and relatedness and is felt as pushing through the fringes of experience.[201] As James says that feelings of transition reveal the life of the stream of experience, so Whitehead says that his emphasis on prehensions is part of an endeavor "to base philosophical thought upon the most concrete elements in our experience."[202]

This last coupling of James and Whitehead hints at an important difference between them; namely, between their respective attitudes towards conceptual thought. James, as we have discussed previously, finds in *feelings* of transition an essential aspect of experience that is elusive so far as conceptual thought is concerned. In this respect James is closer to Bergson than to Whitehead in thinking that intellectual thought cannot adequately render the 'process' or 'life' felt as the basis of existence. Concepts arrest and thus falsify flux. In my judgment, Whitehead does not fundamentally disagree with James or Bergson, in that he agrees no conceptual scheme will be entirely and perfectly adequate in rendering clear the richness and efflorescent novelty of experiential flow or its unlimited potentialities. But rather than give up on conceptual thought, as James and Bergson have occasionally been read as doing, Whitehead sees the improvement of understanding as

[199] Whitehead, *Process and Reality*, 219.
[200] Whitehead, *Process and Reality*, 221.
[201] Whitehead, *Process and Reality*, 129.
[202] Whitehead, *Process and Reality*, 18.

central to the adventure of thought, the zest of life, and development of civilization.[203] I do not think James or Bergson are as "anti-intellectualist" as they are sometimes made out to be; nevertheless, Whitehead does seem to have a stronger faith that conceptual thought does not necessarily need to analyze the world in terms of static categories.[204] Indeed, Whitehead's entire categoreal scheme in *Process and Reality* is an attempt to develop new concepts better suited for understanding the deeper, processual characteristics of the world.

As part of Whitehead's metaphysical system, the notion of prehension puts the Jamesean idea of appropriation to more general and technical uses, helping us to flesh out the many implications of Jamesean compenetration. The term "prehension" is well-chosen. With it, Whitehead means to evoke the word "apprehension" but to divest it of any necessarily cognitive connotation.[205] Prehension, apart from Whitehead's usage, also has the fortunate meaning of grasping, seizing, or laying hold of (especially with the hands). This fits nicely with the primordial and non-cognitive appropriative activity of 'making one's own' that Whiteheadian prehension is meant to describe. And we should not forget that prehension is a generic notion, meaning there are many types of prehension, including conscious ones, each creating different relations that are felt with different emotional or subjective tones. But at bottom "[t]he concept of prehension describes how temporal

[203] Cf. Whitehead, *Adventures of Ideas*, Part V: Civilization. This strain of thought is not hidden in Whitehead's writings. It is also prominent in *Science and the Modern World*, *Process and Reality*, and *The Function of Reason*, for example.
[204] See Whitehead, *Process and Reality*, 209. Whitehead does agree with the charge that philosophical thought has tended, on the whole, to ignore fluency and emphasize stasis.
[205] See Whitehead, *Science and the Modern World*, 69. Here "cognitive" is closer in meaning to "conscious knowledge" than it is to the wide sense in which feelings are cognitive, as discussed earlier. Whitehead is trying to distance "prehension" from the notions of consciousness and explicit knowledge. My use of "non-cognitive" shortly following this note follows Whitehead here in trying to establish distance from consciousness/thinking. Prehensions are still cognitive in that they are the root of acquaintance.

"relation" *happens*."[206] Since James describes the happening of relations as revealed by felt transitions, the closeness of the Jamesean and Whiteheadian ideas should at this point be apparent.

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[206] Lowe, "William James and Whitehead's Doctrine of Prehensions," 119. The word "relation" appears in quotation marks in Lowe's text because his immediate point is that prehension is "a better ultimate" than is relation.

There is a technical point I wish to raise here. We should read Lowe's text as saying that prehension, as the happening of a concrete relation, expresses *temporalization*. As an activity, prehension does not occur *in* time, where time is taken to be external to the happening of the prehension. Rather time is 'co-given' with, or becomes with, an occasion of experience (an actual entity). I agree with the sentiment Lowe is expressing, namely, that the prehension of one occasion by another expresses a concrete temporal bond between the two. But we must be careful not to conflate the *concept* of prehension with that of temporal flow. As will be discussed in the next chapter, Whitehead is careful to say that physical time, or the communal time of the shared world, expresses some features of a becoming entity but cannot be applied to becoming itself. In Whiteheadian language, the process of concrescence does not occur in physical time; rather, physical time occurs in the process of concrescence. (See, for example, Whitehead, *Process and Reality*, 69 and 283.) The idea here is that physical time is not an independent actuality, but rather a characteristic of what is actual, namely, occasions of experience. Thus the becoming of an actuality is not *in* time, though what becomes is a temporal event. According to the terminological usage of the philosophy of organism, this is true. But it can be slightly misleading. There is a distinction here between *becoming*, which, when paired with *perishing*, we can think of as the concrete happening of the 'creative advance into novelty,' and *physical time*, which is an idea used to describe a certain dimension of the publicity of this creative advance. The creative advance as a becoming still involves *passage* and *transition*, and so has some claim to be thought of as temporal, but the language of time is not how Whitehead decides to talk about becoming in *Process and Reality*. He reserves "time" to describe some of the coordinate relations of what has become (though there is an intimate relationship between the passage of becoming and the order of physical time; see Whitehead, *Process and Reality*, 288-289).

In our experience—that is, *concretely*—the facts of relatedness or the happening of relations (prehensions) are always bound up with temporality. But in analysis, which is to say, under abstraction, the ideas of prehension and time can be teased apart. (See Alfred North Whitehead, "Time," in *Proceedings of the Sixth International Congress of Philosophy*, ed. Edgar Sheffield Brightman (New York: Longmans, Green and Co., 1927), 59–64; 61.) The *idea* of prehension is not the *idea* of time. Prehension is the more general notion, time the more specific. But analytical difference does not entail concrete separation.

The activity of prehending "is essentially a transition effecting a concrescence" (Whitehead, *Process and Reality*, 221). The transition that a prehension represents is part of that 'temporalizing' activity through which time comes to be. Or, as Whitehead elsewhere puts it, "this transition exhibits itself, in the physical world, in the guise of routes of temporal succession" (Alfred North Whitehead, *Religion in the Making* (New York: Fordham University Press, 1996 [1926]), 92). This growth of transition/concretion is the becoming of the shared, public, divisible time of the physical world, but the concrescence itself includes an irreducible element of privacy and indivisibility that precludes it from being described in precisely the same way as physical time. Thus it is more accurate to say that prehensions—and more concretely, the occasions of experience in which prehensions are discerned—are *temporalizing* rather than *temporal*. As I hope this terminology makes clear, it would be grossly misleading to say that prehensions are atemporal. Prehensions involve time, and time involves prehensive activities, but the two notions are not reducible to one another. That is to say, it is possible to imagine systems of prehensions that are not temporalizing and instead form "a static morphological universe," but such prehensions answer to nothing in our experience (for the text, see Whitehead, *Process and Reality*, 222). Our experience is of creative advance. What we are concerned with,

Indeed, I offer to you that Whitehead's philosophy follows the interpretation of radical empiricism given here, but he provides much more philosophical detail and scrutiny with his handling of the basic notions than James ever does. This has its advantages and its drawbacks, one of the major drawbacks being the difficulty of approaching a novel philosophical terminology. But as a pair, James and Whitehead form an impressive philosophical front. James's work is the best place to get an overall feel for the radically empirical *Weltanschauung* and to become acquainted with the phenomenological descriptions that anchor the philosophy. This is one of the reasons I began this dissertation with James. The power, structure, and systematic reach of which this *Weltanschauung* is capable has been better exhibited by Whitehead than by anyone else. And when there is frequent recurrence to the experiential roots of the system, there is much less temptation to dismiss it as a castle in the air. Thus even as we move deeper into Whitehead's philosophy, James's radically empirical sensibility will be a constant companion.

This has been a long tour of the geography of radical empiricism. In case it has become lost amid the trees, here is a last glimpse of the forest—the metaphysical bite of radical empiricism. James's recognition of the thick tissuing of experience and his efforts to construct a philosophy centered on *all* that experience has to offer, *and only this*, opens

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and all we can be concerned with as radical empiricists, is that cosmic epoch (or world) disclosed in our experience, and this is through and through temporal.

In reference to the possibility of 'a static morphological universe,' consider the following text: "The notion of nature as an organic extensive community omits the equally essential point of view that nature is never complete. It is always passing beyond itself. This is the creative advance of nature. Here we come to the problem of time" (Whitehead, *Process and Reality*, 289).

That time and the relatedness established by prehensions are not actually apart in the occasions that constitute our world—that in our experience relations are felt with a temporal edge—is enough to justify Victor Lowe's statement that prehension describes how temporal relations happen, though he might have done better to say 'how the transition of passage or creative advance happens.'

the way for new metaphysical thinking that avails itself of ideas meant to capture and describe the richness of experiential activity. To repeat the contention of radical empiricism in a metaphysical register, the field of immediate experience is what is *actual*, and all else must be referred back to this field in order to stake its claim as something real. Upon attentive inspection and analysis, we see that this field—really a 'fielding'—has relational shoots woven throughout that extend into the dimly felt fringes of experience and beyond. This is the common root of both James's and Whitehead's metaphysics. There are two strands within this radically empirical *Weltanschauung*, mentioned several times over the course of this chapter and Chapter II, which we need to develop in order to more fully understand the ideas of appropriation and prehension and their importance. These strands are 'time' and 'possibility.' Once these notions are laid out in the next three chapters, we shall be able to move smoothly into the centrality of aesthetic considerations within Whitehead's radically empirical metaphysics.

CHAPTER IV

TIME, POSSIBILITY, AND PROCESS: PART I

We can summarize the conclusion of our discussion of radical empiricism by saying that we can only understand the flow of experience as a process. This word "process" has a particular sense within Whitehead's philosophy of organism, though of course it is meant to resonate with the ordinary meaning of the word, including its sense of movement, of pattern or structural order, and of difference established between beginning and ending. Perhaps the most characteristic feature of Whitehead's understanding of process can be expressed by the phrase "creative advance."

Let me explain what I mean. The previous chapter ended with a discussion of the connective tissuing of experience, the felt transitions that can be described under the generic term 'appropriation,' or, in Whitehead's language, 'prehension.' Such transitions coalesce in virtue of the activity of self-creation, which is the becoming of a new pulse of experience. Thus there is in experience the primacy of a feeling of activity, which in its most general form Whitehead calls the "creative advance into novelty."[207] This is Whitehead's way of saying that our experience discloses "the everlasting coming of concrete novelty into being."[208] As the word 'novelty' suggests, there is in this creative advance passage from the perishing world to a new concrete togetherness. This singular concrete togetherness is an 'actual occasion,' or a pulse of experience. Additionally, the coalescence or concrescence of appropriative activity marks the transition from the old to

[207] Whitehead, *Process and Reality*, 28; also see pg. 21.
[208] James, *Works: Some Problems of Philosophy*, 77.

the new. Appropriations establish the continuity of the flow of experience, though each pulse is a singular occasion and thus introduces definite novelty into the flow. This, in broad contours, is 'process.' It is an analytical description of how our experience goes, generalized so as to be adequate for philosophical explanation.

Thus 'process' is our root metaphor for understanding the unfolding of experience, and, looking at the world experienced, the happening of events.[209] There are two vertebral strands within the notion of process that must be discussed, lest the metaphor be inadequate to our experience. These two strands are 'time' and 'possibility.' Experience is awash in possibilities, both in the form of the 'might be' and the 'might have been.' And the movement of experience—the creative advance into novelty—reveals it to be "continuously one with possibles not yet in our present sight."[210] As the language of the last two sentences suggests, we also cannot avoid time when discussing experience. I have previously quoted James as saying that "[t]he smallest effective pulse of consciousness, whatever else it may be consciousness of, is also consciousness of passing time."[211] Indeed, given its character of passage all experience seems to be ineluctably temporal. In short, the constitution of a pulse of experience is inexpressible apart from the notions of time and possibility.

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[209] Though I sometimes use the word 'event' as synonymous with 'actual occasion' or 'actual entity,' Whitehead generally restricts his use of 'event' to the occurrences of nature, nature being a portion of the entire experiential activity that he describes and analyzes as an actual occasion. The niceties of the distinction do not concern us here, though it is best to be aware that there is a distinction. The reason I sometimes use 'event' when discussing actual occasions (pulses of experience) is that the word captures something of the character of 'what is going on' in an occasion of experience. Indeed, even in Whitehead's usage, the structure of events mirrors that of actual entities/occasions to a significant extent. See, for example, Whitehead, *Process and Reality*, 73.

[210] James, *Works: A Pluralistic Universe*, 131.

[211] James, "The Knowing of Things Together" (1894) in James, *Works: Essays in Philosophy*, 71-89; 76.

My task in this and the following two chapters, then, is to provide a version of how these two strands are characterized in the philosophy of organism, filling out the scattered suggestions made in the previous chapters. Discussing time and possibility is no minor waypoint in the exploration of the role of the aesthetic in Whitehead's metaphysics. Indeed, once we conclude this discussion of time and possibility, we shall be in an excellent position to appreciate the aesthetic dimension of Whitehead's metaphysics and its existential import. For a version of 'aesthetic unity,' signifying the togetherness of feeling and its attendant contrasts and intensities, is the capstone of the discussion embarked upon in this trilogy of chapters.

These three chapters also mark a pivot towards Whitehead in that his philosophy will become the explicit focus of attention, though of course James and others will be discussed as appropriate. The contemporary and historical literature surrounding the matters of time and possibility is immense. My focus, however, shall remain resolutely on the radically empirical versions of time and possibility as developed by Whitehead. Connections and divergences from other philosophical traditions certainly exist, though will not be germane to this discussion.[212]

The movement of this three chapter arc will be roughly circular, with the three titular themes present throughout. We begin with the character of time as a dynamic union, where past, present, and future cannot be extricated from one another within the dynamism of creative activity. We end with an expanded interpretation of this union in Whitehead's "atomism." As the discussion of dynamic union and its atomic character thickens, we shall

[212] They of course remain as topics for future inquiry.

discuss epochs, decisions, continuity, and extension—all facets of Whitehead's understanding of time, possibility, and process.

Since the 'creative advance' is our experiential starting point, the problem of novelty will be a touchstone throughout what follows. Time is witness to the birth of novelty, to a singular actuality that is a decision and leap amid possibilities. The discussion I began in the radical empiricism chapters concerning the tension between plurality and mutual immanence or compenetration will continue here as the problem of atomism and continuity. Furthermore, a thick account of possibility is needed to add richness to the notion of time, for without possibility time is empty, meaning it is a bare succession without process, without novelty, without consequences. The resultant picture of process as a rhythmic coalescing and diverging of actualities and possibilities will leave us on the doorstep of the aesthetic.

The Dynamic Union of Time

Perhaps the most honest statement in Western literature concerning time was made by Augustine in the fourth century CE. In Book XI of his *Confessions*, Augustine asks: "What then is time? Provided that no one asks me, I know. If I want to explain it to an inquirer, I do not know."[213] This text serves to warn us that an understanding of time is a difficult thing to articulate, that it only becomes more knotted upon reflection, and thus that we should be careful in positing an answer to the question, what is time? Indeed, this question may not have an ultimately satisfying answer. This does not mean the question admits of no purchase or precludes *local*, that is, revisable and perspectival, answers. I

[213] Augustine, *Confessions*, trans. Henry Chadwick, Oxford World's Classics (Oxford: Oxford University Press, 1998 [397-400 CE]), 230-231.

offer such a local interpretation of time here to serve as an adumbration of Whitehead's metaphysics and to help situate my questions about aesthetic experience within this metaphysics.

Despite recognizing that perplexity clings to all inquiry into the nature of time, Augustine perseveres and, immediately following the text quoted above, offers an analysis of time centered on the introspection of temporal experience. This turn inward yields deep insights about time as a structuring factor within experience. It is one of Augustine's insights, as well as his warning above, that I wish to use as a starting point for discussing Whitehead's treatment of time.

Augustine writes: "…it is inexact language to speak of three times—past, present, and future. Perhaps it would be exact to say: there are three times, a present of things past, a present of things present, and a present of things to come."[214] For our purposes, the point to recognize is that there is a certain comingling or togetherness of the past, present, and future that makes time, as experienced, very unlike a mere arrangement according to earlier and later. This togetherness is indicated by Augustine's binding each of the three times in a present. But the three times are each different in that they have distinct modes of being present—for Augustine, memory, immediate awareness, and anticipation. This general structure reappears in the way Whitehead discusses time. The distillation of Whitehead's view is that every actual occasion, or pulse of experience, carries with it its past and anticipates its future such that both are essential to and co-given with the creation of the immediacy of the present. This is the 'dynamic union' of time within the creative

[214] Augustine, *Confessions*, 235.

advance. But just as immediacy becomes, so does it perish, and what has lost immediacy remains by playing a role in arising actualities. This activity of the past in the present is what we called appropriation or prehension in the last chapter.

Returning to James's doctrine of appropriation, he writes that through appropriation "the new experience has past time for its 'content.'"[215] This gathering of the past into the present, as that from which the present arises, is the initiating step in the becoming of a new pulse of experience (a new throb of actuality). Whitehead calls this process of becoming 'concrescence,' and its analysis, revealing the actuality's connections with its world, is into prehensions, or concrete facts of relatedness. That is, a major aspect of the creation of an individual actuality, here looked at as the present moment of experience, concerns the influence of past actualities upon the present and the derivation of present feeling from past fact. This sense of derivation, or of origination, is what is captured by the terms 'appropriation' and 'prehension.' What happens in appropriation or prehension is the absorption of the past into the present. Prehension is the past felt as effective within the creation of the present.[216] James calls this the 'compenetration' or 'overlap' of experience. This much we have discussed in the previous chapters.

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[215] James, *Works: Essays in Radical Empiricism*, 64.

[216] This statement requires some elaboration. Insofar as the past is conceived as a community of *physical* fact, prehension is not only the appropriation of the past. For possibilities are also prehended, meaning, the creation of the present involves a sense of what it could be and decision about what it is. (The less possibility plays a role, the more purely "physical" the occasion.) But actualities, including those now perished and past, are not *merely* physical but also shrouded by a sense of possibility (what they are not but could have been, what the decision of actuality excluded). Thus the past is also rich with suggestiveness, though it does not make much sense to consider the suggestions, merely as suggestions, to be 'located' in the past. They are suggestions derived *from* the past *by* and *for* the present. My point is that prehension can lay hold of possibilities as well as the unavoidably insistent conditions laid down by the past. The general notion of prehension remains 'a process of appropriation to an incipient experience,' but as we approach a discussion of possibility it becomes important to make clear that prehension, generally, does not represent some sort of deterministic transmission but involves the hints and hunches of possibility. I tried not to exclude this idea in

Now, since our present purpose is to focus on time more explicitly, let us limit our consideration to temporality as it concerns a single pulse of experience. How are we to characterize the functional role of the past in the present? The past is gathered together into the immediacy of a new moment. Immediacy is what characterizes the present and differentiates it from the past and future. What is past has lost its immediacy of feeling. This is what Whitehead means by perishing. Thus time, in its movement from present to past, has the character of 'perpetual perishing.'[217] But Whitehead is clear—strenuously so—that perishing does not imply annihilation. Perishing is indeed loss, loss of subjective immediacy, but it is more fully characterized as the activity of self-formation passing into the activity of other-formation.[218] Self-formation or self-constitution characterizes the present, and once the present has satisfied its creative impulse, its self-creative activity transitions into a contributing factor within another creative immediacy. Thus perishing, for Whitehead, reveals what he calls 'objective immortality,' which again is nothing other than the continued activity of the past within the present, imposing conformation.[219] From this fundamental idea of objective immortality we may describe both memory and causality, two more complex but also more experientially poignant ways in which the past

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my discussion of prehension and appropriation in the previous chapters, though I admit that I have generally been talking about prehension as it concerns the insistence of the past, and this is how I mean it the sentences above. Regarding my statement to which this note is appended, cf. Whitehead, *Adventures of Ideas*, 305.

[217] Whitehead adopts this phrase from John Locke and uses it occasionally in *Process and Reality*. See, for example, Whitehead, *Process and Reality*, 29 & 128.

[218] See Whitehead, *Adventures of Ideas*, 248.

[219] See Whitehead, *Process and Reality*, 60. Whitehead there writes that "the 'perishing' of absoluteness is the attainment of 'objective immortality.'" See also *Process and Reality*, xiii-xvi: Whitehead here states that objective immortality is that "whereby what is divested of its own living immediacy becomes a real component in other living immediacies of becoming."

is immanent in the present.[220] The visceral and very likely vague and ambiguous feeling of a past event asserting itself in the present—take a psychic trauma as an extreme and thus clear example—is closer to what Whitehead means to capture with the idea of objective immortality than is dispassionate reminiscence. Withdrawing from the extreme example, the subtle but pervasive feeling of objective immortality within experience is found in the sense of derivation of the present feeling from the immediate past.[221] The me of a quarter of a second ago is a pervasive influence upon my present course of action, such that I am in large part fulfilling the purposes there embarked upon, though I have of course modified, refined, and deflected the feelings and energies of that past time, intensifying some and dampening others.[222]

The past is immanent in the present in this way.[223] The immanence of the future in the present is a more difficult matter to elaborate, however, for there are no actualities in

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[220] See Whitehead, *Essays in Science and Philosophy*, 117; also see Whitehead, "Time;" and also see Whitehead, *Adventure of Ideas*, 305. Whitehead will sometimes describe the pure and raw ('physical') prehension of the past—or the living of the past in the present—as *being* memory or *being* causation (cf. Whitehead, *Process and Reality*, 239). In so doing, he draws our attention to the experiences that give rise to the obviously more complicated notion of, for example, memory as recalling an image of the past in the present. That such imagistic and episodic memory is possible in higher organisms is due to the general immanent functioning of the past in the present as the basis of feeling.

[221] Cf. Whitehead, *Adventures of Ideas*, 209-210.

[222] The prominence of the experience of derivation within consciousness is heightened when high-powered and demanding sense perception—especially vision—is reduced. Cf. Whitehead, *Process and Reality*, 176: "In the dark there are vague presences, doubtfully feared; in the silence, the irresistible causal efficacy of nature presses itself upon us; in the vagueness of the low hum of insects in an August woodland, the inflow into ourselves of feelings from enveloping nature overwhelms us; in the dim consciousness of half-sleep, the presentations of sense fade away, and we are left with the vague feeling of influences from vague things around us. It is quite untrue that the feelings of various types of influences are dependent upon the familiarity of well-marked sensa in immediate presentment. Every way of omitting the sensa still leaves us a prey to vague feelings of influence. Such feelings, divorced from immediate sensa, are pleasant, or unpleasant, according to mood; but they are always vague as to spatial and temporal definition, though their explicit dominance in experience may be heightened in the absence of sensa."

[223] The following passage from the end of chapter five in George Eliot's *The Mill on the Floss* beautifully captures the idea and effect of the immanence of the past in the present: "These familiar flowers, these well-remembered bird-notes, this sky, with its fitful brightness, these furrowed and grassy fields, each with a sort of personality given to it by the capricious hedgerows—such things as these are the mother tongue of our

the future. They have not happened yet. How, then, can the future be immanent in the present? Recall Augustine's suggestion that "the present of things to come" is disclosed in the mode of "anticipation." Along these lines, Whitehead suggests that the anticipatory feeling of the future, constituting its immanence in the present, is derived from the present feeling its own powers of transmission. What does this mean? Let us look at a few texts.

In *Adventures of Ideas,* Whitehead writes the following:

> The future is immanent in the present by reason of the fact that the present bears in its own essence the relationships which it will have to the future. It thereby includes in its essence the necessities to which the future must conform. The future is there in the present, as a general fact belonging to the nature of things. It is also there with such general determinations as it lies in the nature of the particular present to impose on the particular future which must succeed it.[224]

Whitehead is here saying that there are two ways in which the future is in the present. First, the future lives in the present "as a general fact belonging to the nature of things," meaning that the fact that there *will be* a future is immediately felt in the present. The feeling of futurity, of there being an unrealized beyond, of there being a "next," cannot be separated

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imagination, the language that is laden with all the subtle inextricable associations the fleeting hours of our childhood left behind them. Our delight in the sunshine on the deep-bladed grass today, might be no more than the faint perception of wearied souls, if it were not for the sunshine and the grass in the far-off years, which still live in us, and transform our perception into love." The compelling emotional weight of the past, with the compulsion arising out of the emotion, is precisely Whitehead's point. See George Eliot, *The Mill on the Floss* (Hertfordshire: Wordsworth Classics, 1999 [1860]), 36.

John Dewey cites this passage in a footnote on page 23 of *Art as Experience* to illustrate the "hushed reverberations" (George Santayana's phrase) of the past that enrich the present. See John Dewey, *Art as Experience*, ed. Jo Ann Boydston, vol. 10, John Dewey: The Later Works, 1925-1953 (Carbondale: Southern Illinois University Press, 1987 [1934]), 23.

[224] Whitehead, *Adventures of Ideas*, 250.

from how one is constituted in the present. This is the feeling of transition, of transitoriness, of finitude, and it permeates the present occasion of experience. Second, the future takes shape in the present insofar what *will happen* is determined by the transmitted energies of the past. That is, the present occasion feels itself as something that will impose a degree of conformation on subsequent becomings, and thus it feels the future as exhibiting the patterns of activity bequeathed to it. This is what Whitehead means when he says the present bears in its essence its relationships to the future. The future that "picks up" or prehends this present will have to *be* a certain way in virtue of this present activity being part of its past. This contouring of future occasions is felt in the present occasion as anticipations of potential futures towards which the present directs itself. These anticipations are part of, and thus color, present experience.

For example, take a speaker uttering the phrase "How are you this morning?" At the outset of the question, just as "how" is uttered, the end of the phrase is in the future. That is, it is unrealized, unsaid—nothing in itself. But the speaker, seeing a friend and desiring to greet her, intends to ask the entire question. The word "how" is spoken with the anticipation of an immediate future actualizing the rest of the phrase. The future occasion of the speaker's experience absorbs or conforms to this anticipation as its past and, in our example, completes the utterance, fulfilling what was anticipated. It is important that the anticipation is of a greeting rather than of, say, the exclamation "How did this happen!", for then the "how" in the present would take on a very different character. Anticipations are part of present feeling. Additionally, something may interrupt the greeting, but the future occasion will still absorb the past occasion, inclusive of its anticipatory feelings, and

thus contain in itself a sense that the intention of the past is unfulfilled.[225] In plainer language, the future speaker knows something was meant to be said but remains unsaid.[226] The point is that the future—whatever it may bring—will have to conform to the energies generated by the present activity. The future cannot be one where, in its past, there is not the occurrence of whatever is happening in the present.[227] In short, time is "cumulative."[228] That this is so is a matter of present experience; my present anticipations take as a fact—a stubborn fact—my present activity. The anticipations themselves are of potential futures based upon the activities of the present and its past. The idea of potentiality, as one way of approaching the openness of the future, requires elaboration.

Some slight repetition here will be helpful in order to unfold the meaning of anticipation. Whitehead summarizes immanence of the future in the present as follows: "What is objective in the present is the necessity of a future of actual occasions, and the necessity that these future occasions conform to the conditions inherent in the essence of

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[225] I am using an example involving human mentality and intentional behavior because of its usefulness in clearly illustrating the basic intuition behind Whitehead's idea. (I do this frequently.) But part of Whitehead's point is that the anticipations that constitute futurity are metaphysically general, meaning, that they are exemplified in all actual occasions, human and otherwise. This means that anticipations are often not conscious but are rather 'blind.' Consider muscle memory as an example. In a context where muscle memory is active, the body "knows" what its next motion is without conscious awareness of this fact. The proper coordination of the body for this particular motion, including the adjustments necessitated by external circumstances, occurs without thought. The anticipation guiding the motion is a blind impulse.

[226] Cf. Whitehead, *Adventures of Ideas*, 233-235. Also cf. James, *Works: Principles of Psychology*, vol. I, 268-273. Both of these discussions map out what I am saying here in different language. They also supplement one another quite nicely. Whitehead discusses a speaker saying "United States" and "United Fruit Company." The phrase James analyzes is "the pack of cards is on the table."

[227] I am here eliding any qualifications to be made on the basis of a theory of relativity as applied to time. Relativity does not change the thrust of my point, which is, put briefly, that time is 'cumulative.' But, for our present purposes, the physical theory of relativity just serves to complicate expression. For example, it is possible under relativistic conditions for there to be two events, one being in the future of the other, that are both in the present of a third event. But such a description requires a theory of the external coordination of time, which we need not enter into. Our focus at the moment is more narrow—the sense of temporality as undergone in a single occasion of experience.

[228] Cf. Whitehead, *Process and Reality*, 237-238.

the present occasion. The future belongs to the essence of present fact, and has no actuality other than the actuality of present fact."[229] The actuality of the future—that is, its immanence in the present—is in anticipatory feelings. Such anticipations, though, are incomplete, that is, inchoate, partial, and likely vague. Consider the example just discussed. When "how" is spoken, the anticipation suffusing the present and coloring its activity need not be the entire phrase "How are you this morning?" it its exactness. The anticipation is rather more likely to be that of 'verbally greeting a friend'—a field of related possibilities—where "How's it going?" or some other phrase might equally well satisfy the initial anticipation. I have often known what I want to say on some occasion and am just as often surprised or disappointed with how well I actually say it, not to mention with the specific words and phrases I use to say it, for the anticipation is not the *actual* saying but rather guides the creative activity of speaking. Another way of saying this is that the present does not fully determine the future.[230] For if this were so, then the future would be here and now, would be an actual occasion in its own right, would be a living and present experience.[231] But the future is not here or now, it is not actual in itself. This is precisely why it is future. That the future is immanent in the present, even as anticipation,

[229] Whitehead, *Adventures of Ideas*, 251.

[230] Cf. G. M. Jr., "Function of Reason: Student Notes on Whitehead Lectures, 1936." 1936, Houghton Library, Harvard University, http://id.lib.harvard.edu/aleph/009979915/catalog, call number: HOU GEN *2005M-57. On March 14, 1936, during a lecture on time, Whitehead is recorded as saying: "A definition of the future is not contained in any experience!" A note on the manuscript: this is an excellent set of notes on Whitehead's 1936 class on the function of reason. They appear to be almost verbatim records of what Whitehead said in class. There are no page numbers in the manuscript, but the notes are in good order and almost always dated.

[231] An underlying idea here, to be filled out throughout this and subsequent chapters, is that to be actual is to be 'fully determinate.' That is, when something is fully determined as to what it is to be, then it is an actual thing. But this process of determining one's place in the world, in time, space, character, and all else, is the process of becoming or concrescence. As Whitehead writes, "The actual entity, in becoming itself, also solves the question as to *what* it is to be" (*Process and Reality*, 150). So the future, as future, cannot be fully determined. Its distinctive character depends on its not being fully determinate.

means that the present is shot through with incompleteness. For Whitehead, "incompleteness means that every occasion holds in itself its own future."[232] To feel the future is to feel the incompleteness of the present with respect to the actualization of potential energies and relations. It is to recognize that the immediacy of the present contains 'unrest,' or "an appetition towards the unrealized future."[233] This unrest or appetition is the mark within the present of the "necessity of a future of actual occasions." It also marks that the present is transient and will perish and fade.

The future is held within the bosom of the present as anticipation, where anticipations are expressions of appetition or unrest. But this story still has gaps. For what reason is there unrest? A clue to Whitehead's answer is to be found in the following text: "[t]his doctrine, that the objectified future is prehended in each actual occasion, is only a version of the old doctrine that the process of becoming is a union of being with not-being."[234] Another way of saying this is that the immanence of the future is the revelation of a realm of possibility, or what *is not* but *might be*. The future, as sheer possibility, is limited by the conditions laid upon it by the constitution of present and past occasions. This power of conditioning is the objective immortality of what has perished and the decision of what is present. The present immediacy feels its own impending objective immortality as anticipation of the future.[235] To say that the present feels its own objective immortality means that an actual entity, or a pulse of experience, harbors potency (power)

[232] Whitehead, "Time," 61.
[233] Whitehead, *Modes of Thought*, 85.
[234] Whitehead, "Time," 61.
[235] Cf. Whitehead, *Process and Reality*, 278: "…one element in the immediate feelings of the concrescent subject is comprised of the anticipatory feelings of the transcendent future in its relation to immediate fact. This is the feeling of the objective immortality inherent in the nature of actuality." Other texts in *Process and Reality* may be brought to bear on this issue.

that is not exhausted by its own immediate activity. Above I called this aspect of an actual occasion its 'incompleteness' because the potentiality is not actualized. But we may equally well characterize it as an excess—an excess of power or energy—for the creative activity of an actuality continues after its present immediacy fades. This is the objective immortality of the actual occasion, its continued and varying activity as a multiplying object in innumerable other occasions of experience. Describing the immediate present (or "subject"), Whitehead writes: "It belongs to the essence of this subject that it pass into objective immortality. Thus its own constitution involves that its own activity of self-formation passes into its activity of other-formation. It is by reason of the constitution of the present subject that the future will embody the present subject and will re-enact its patterns of activity."[236] The present portends the future.

There is a major point raised in the above paragraph that requires further discussion. In order to fatten our understanding of time, the relationship between appetition and possibility in the constitution of the anticipated future needs to be brought out. This will lead into a discussion of the 'dynamic union' of the past, present, and future in an actual entity, or actual occasion. Once the interplay of past, present, and future is sketched, we shall move into a discussion of 'epochal becoming,' which is a way of talking about important aspects of 'dynamic union.' Then I shall explain what 'physical time' is for Whitehead and how it is related to the unity of past, present, and future in an act of becoming, a unity which Whitehead calls 'atomic.' This will require an examination of the

[236] Whitehead, *Adventures of Ideas*, 248.

notions of continuity and extension and how they influence our interpretation of Whiteheadian atoms and epochs.

Regarding the relationship between appetition and possibility, Whitehead writes: "Appetition is immediate matter of fact including in itself a principle of unrest, involving realization of what is not and may be."[237] Appetition, for Whitehead, is a feeling—a feeling within the present occasion of experience—of possibility. What a possibility *feels like*, how it is experienced in relation to the actuality experiencing it, is as a *lure for feeling*. A possibility is a suggestion tinged with desire, a suggestion concerning what actuality may be in the way of feeling and intensity. Possibilities beckon, orienting and guiding the formation of the present. That is, possibilities draw experience forward; they tinge activity with drive and restlessness.[238] Whitehead regards possibilities as the engine of activity within an actual occasion, within process. All movement and becoming—Whitehead's creative advance into novelty—is a pulsating flux due to the persistent sense of possibility within experience. Possibility is motive. Things can be otherwise, might have been otherwise. The past offers not only factuality to the present—conditions that cannot be evaded—but also the haunting sense of what might have been, the sense of alternatives.

[237] Whitehead, *Process and Reality*, 32.

[238] During its process of self-formation, an actual occasion may find some possibilities, some appetites, some suggestions, to be repugnant, or at least unworthy of action. The rejection of a possibility is what Whitehead means by 'negative prehension'—a possibility is denied efficacy in the aim or lure, though this denial still carries an affective tone that colors the final occasion. Thus possibilities may guide self-formation by aversion as well as by allure. But a possibility, as a possibility, is still an appetite (or lure) towards a way of being; it is up to the incipient occasion to turn away from this or that possibility (by turning towards another possibility). And whether by aversion or allure, possibilities still draw experience forward and constitute its internal element of unrest.

Whitehead holds that "[n]o fact is merely itself."[239] *All* things felt are felt as offering suggestions regarding ways of being in the world. Feelings, relations, prehensions—to bring into present experience what was originally beyond this experience is to suffuse experience with a sense of possibility, of what could happen in the future *on account of* the present feeling.

The appetite for the future that resides within every actual occasion is a feeling in the present that is oriented towards possibilities as a lure. Conscious contemplation of choices, as if window shopping, is an extremely special and a generally uncommon way of engaging with possibilities. The basic experience of possibilities is that of motivation or striving, as the bodily feeling of thirst is simultaneously a bodily desire for its quenching.[240] This pull is what Whitehead tries to capture by the word "appetition." The feeling of possibility includes 'yearning after concrete fact.'[241] This yearning suffuses and colors present experience, intensifying it, such that the way the present feels its own complexity is oriented towards heightening its sense of possibility and directed towards its future achievement.

This characterization of possibility is central to much of Whitehead's philosophy. For example, engagement with possibility is the germ of mentality for Whitehead, and what he calls the 'mental pole' of an actual occasion are the feelings through which possibilities leak into the general character of experience. Mentality is the grasping of and movement towards a lure. Heightened forms of mentality bring possibilities into focus,

[239] Whitehead, *Modes of Thought*, 9. Also see Whitehead, *Process and Reality*, 226-227, where he writes that an actual occasion "retains the impress of what it might have been, but is not. […] The actual cannot be reduced to mere matter of fact in divorce from the potential."
[240] Cf. Whitehead, *Process and Reality*, 32.
[241] Cf. Whitehead, *Process and Reality*, 33.

rather than allowing them to operate as blind forces—here the word appetitive seems especially appropriate. The more an experience is engaged with possibilities, the more 'mentally' sophisticated is the experience, eventually yielding conscious experience, which considers, imagines, and pursues possibilities in novel and complex ways. The more attenuated a role possibilities play in the constitution of experience, the blinder and the more purely 'physical' the experience. Such an experience more or less follows the tracks laid out for it by the past. The stone just sits there, disintegrating only slowly; the bacterium swims up the sugar gradient, only deviating from its activity as sugar decreases. Possibility has virtually no purchase on the stone's streaming; it is of severely restricted relevance in the case of the bacterium, when compared to the activities of human life. Yet, fundamentally, "[a]ll physical experience is accompanied by an appetite for, or against, its continuance: an example is the appetition of self-preservation."[242] This is a tremendous adumbration of Whitehead's position, but it does begin to give a sense of the importance he attaches to possibility, which topic we shall pick up again later. It also alerts us to the continuity between 'physical' and 'mental' experience, for the difference has to do with the ways, varieties, and intensities with which possibilities permeate experience.[243]

Anticipatory feelings of the future, as feelings of possibility, are lures that help orient and guide the self-formation of the present. That is, the future is immanent in the present as an intent, a vision, or, if we wish to divest ourselves of connotations of

[242] Whitehead, *Process and Reality*, 34.
[243] But, as Whitehead would point out, the difference between physical and mental experience can be so extreme so as to be in essence a difference in quality. Whitehead's remarks regarding the difference between animal and human being are apropos: "The distinction between men and animals is in one sense only a difference in degree. But the extent of the degree makes all the difference. The Rubicon has been crossed" (Whitehead, *Modes of Thought*, 27).

consciousness, we may speak of the future as present as an appetite. Without this (usually blind) aim at a future, the present would not be able to gather itself together in an individual, actual occasion of experience. For this reason, Whitehead writes: "Cut away the future, and the present collapses, emptied of its proper content. Immediate existence requires the insertion of the future in the crannies of the present."[244] Without the future, without the lure of possibility, the present is a husk. It is not really the present, or anything else. When we consider the present without the future, we are left with the mere abstraction of an isolated moment, removed from any notion of life or commerce with the living world. Possibility, the promise of futurity, is that through which life and activity gain thickness and importance. The living present—the immediate pulse of experience—cannot be divested of its possibilities if it is to remain a *real* experience.

With the immanence of the future as anticipation or appetite, and the immanence of the past as the conditioning activity of objective immortality, we can now characterize an actual occasion as a dynamic union of the past, present, and future. As we have seen, the immanence of both the past and the future in the present is bound up with the perishing of a pulse of experience, which is to say, with the fading of immediacy and the transformation of its activity into that of potentiality for other actualities (its objective immortality). The reality of this transformation is the past; the anticipation of it traces the future. This characterization of the past and the future draws out the fact that both are essentially implicated in the creative immediacy of the present. Indeed, all three modes of temporality are dependent on one another: the past on the future, the future on the past, both on the

[244] Whitehead, *Adventures of Ideas*, 246.

present, and the present on both. This is the dynamic union of time in the becoming of an actual occasion or pulse of experience. In this process there is no "temporal succession," as will be explained, but rather epochal becoming, the introduction of a novel actuality into the world.

As described above, the feeling of the past in the present is a feeling of relatedness and transition, of other things contributing to the character and definition of the present, of a world within which and out of which immediate experience arises. But immediacies perish (become past) and are not brought into the present in their fullness. A past event does not live in the present with the passions and intensities which it enjoyed when it was present. It exists in the present under a perspective. There is trimming, exclusion, selection. A past experience, when present, was a focal totality at the center of its world; now it is one event among many contributing to a new present immediacy. It is now a subservient activity, and as such is felt under a perspective as a factor within present feeling. This necessary reduction of the past to a perspective, this shift from the immediacy of self-creation to the subservient activity of other-formation, is what it means to call time a perpetual perishing. As Whitehead writes: "In the temporal world, it is the empirical fact that process entails loss: the past is present under an abstraction."[245] This is the reality of finite existence. But there are many ways to be present under an abstraction, many ways in which the past might contribute to the present. That is to say, there are innumerable ways a

[245] Whitehead, *Process and Reality*, 340. Nota Bene: Here we may read "under an abstraction" as "under a limitation" or "under a perspective." The idea is that the totality of the past, or any past event in its singularity, cannot be reenacted or repeated in the present in its completeness. It is past because something—the immediacy of creative action and self-enjoyment—has gone. Cf. Whitehead, *Adventures of Ideas*, 209: "We reduce this past to a perspective, and yet retain it as the basis of our present moment of realization. We are different from it, and yet we retain our individual identity with it."

past event might be taken up by and within the creative present.[246] Thus, in its abstract or perspectival immanence in the present, the past acts as a potential for the present and is also ringed with the sense that it is potentially more, that it can offer a multitude of possibilities to the present. Its excess remains felt. The past is rich. But the way the past is taken up within the creative bosom of the present, under *this* perspective with *this* character, is influenced by the way the present feels its future. The future affects how the past is felt.

The anticipated future, felt as appetition or lure, serves as a guide for how the provisions of the past are to be taken up and used within the creative present. It is because there is a certain anticipatory feeling that the past is taken up as it is and yields the character that it does; the possible future reflects onto the past and influences what is brought out of the past and the role it will play in immediate feeling. For example, in human life past events are experienced very differently depending on whether one has a hopeful or doleful outlook. The idea here is that the possibilities with which one concerns oneself influence how one can read and make use of the overwhelming potentialities provided by the past. Indeed, the past is so rich that winnowing is necessary, and the future

[246] This is the potential divisibility of the past, though as actual occurrences past events are individual, uncut. These potential divisions of an actual event are potentials for feeling, meaning, different parts, aspects, or factors that can be felt—'objectified'—by a subsequent occasion. These divisions constitute a perspective of the objectified event. (This idea of divisibility will again enter our discussion of time in the section on 'continuity and extension.') An objectified aspect is not it itself actual in that there is no actual thing with *only* that character—the event objectified is *more* than its objectification. But the appropriative feeling (prehension) effecting the objectification is a feeling of transition, and as such the real particularity or individuality of the objectified actuality is felt. In other words, by the compenetration of experiences, the present feels the past as whole, actual particulars, but particulars that are present only under a perspective (i.e. as real potentials for the current experiential activity, not as immediately actual in themselves). There is more to the past than it lets on. The moreness of the past event, its fringe of possibilities, accompanies its objectification into the present.

gives the ground upon which to select and reject. Thus, in the becoming of a pulse of experience, we cannot say that the feeling of futurity is *later than* the feeling of the past.

But, all the same, it is the materials provided by the past, both the stubborn conditions and the alternatives they suggest, out of which the possible future takes shape. Possibilities for the future make no sense without the context provided by the past. What is relevant for some occasion, and what is possible for it to become, depends on its inheritance; the history and circumstance of an enduring thing shapes its future. Within the act of becoming, the past and the future reciprocally play off of one another in the creation of the immediate present, which is the occasion that becomes. When considering a pulsation of experience, neither future nor past is earlier or later than the other, for a living experience envelops both. Past and future are functional activities within the creative process, providing content and direction. This process, in its immediacy, is the present. The present, as the enjoyment of self-creative, active experience, only is such by its interweaving of the past and the future into a complex of fact and potentiality.

Consider muscle memory, specifically as pertains to the playing of a musical instrument, as illustrative of this comingling immanence of the modes of time. At present, the muscles harbor patterns of movement as potentialities due to the conditioning effect of the past. The musician is well-practiced. Realized fact no longer present—prior movements and exertions of these muscles—now exists as potentiality, as an 'object' for present experience that offers certain ways the present may feel and act. Specific, conditioned possibilities are on offer for realization. This potentiality may remain dormant, as other goads from the past may be more compelling for present experience. But say the musician begins to play. Once she begins, the hands 'know what to do.' The present

contains an appetite—that is, a feeling of and desire for the future—for the playing of some particular song. The dormant potentiality becomes more relevant; the patterns of movement are felt in the present, lifted into vivacity by the appetite for the future, and they bear a compulsion so strong that thought is not needed to carry them through to completion. Past practice has paid off; the notes follow one another effortlessly. The desire to play the song might be in the mind of the musician, but the appetite for the pattern, for some exertion of the index finger to be followed by a quick extension of the ring finger, is in the muscles of the hand—is embodied. Begin the kinetic pattern and the hand muscles anticipate what will come and makes present realization conform to this anticipation. This is an anticipation and appetition based on the retention of the past, a past that only becomes relevant in light of an aim or appetite for a specific future, namely, one in which there is music. What is happening now, in the present moment, cannot be disentangled from the influence of the past (the goading insistence of this pattern of muscular exertion) and the anticipation of the future (the appetite to complete the pattern).

But the present is not an exact repetition of the past. Practicing scales and songs gets them 'in your fingers,' but during an improvisational piece, for example, a musician will introduce variations or even entirely new ideas to things played before. But the weight of the past—the influence of practicing—keeps the notes clean, the finger movements precise. The past is immanent and influential but used to provide for a novel present, one where the allure of possibility, of futurity, is stronger than the push for conformation. The energies inherited from the past are diverted from simple repetition to imaginative variation and origination. This is accomplished by the creative direction of the present, which feels both past and future and acts as a moment of transition whereby the materials

of the past come together in an effort to make the future concrete, insofar as the constraints of past fact permit.

The purpose of this example is to help guide your intuition of temporal experience towards the irrevocable and felt togetherness of past, present, and future within immediate experience. Such guiding is warranted because this feeling of temporality is often submerged within the tumult that ordinarily accompanies human consciousness. The feeling is omnipresent and so goes unnoticed. Our conscious life is dominated by the sensations of sight, sound, smell, and touch, and according to Whitehead these modes of perception (especially sight) 'cover over' the more primary bodily feelings that give us "the sense of derivation from without, the sense of immediate enjoyment within, and the sense of transmission beyond."[247] These bodily feelings are those of our viscera and their commerce with each other and the world; they are the feelings of our bodies in operation. That is, for Whitehead our sense of temporality as cogredient with a process of self-creation, wherein the past and future are implicated in present activity, is derived from embodied experience and bodily feelings.[248] Thus my emphasis above on the hands of the musician is important. Our ordinary sense perception endows us with many obvious gifts, but the price is "a neglect of essential connections."[249] This neglect, too, has its advantages—allowing us to more easily focus attention and to imagine possible

[247] Whitehead, *Modes of Thought*, 71.
[248] See, for example, Whitehead, *Modes of Thought*, 71-73, 151-154; Whitehead, *Process and Reality*, 176; Whitehead, *Adventures of Ideas*, 231-233. References to the importance of bodily feelings are to be found at various places throughout Whitehead's philosophical writings. The above are merely a few clear examples. In the indicated pages from *Adventures of Ideas*, what I here call bodily feelings Whitehead describes under the heading of 'non-sensuous perception.' References to 'causal efficacy' should also be consulted when considering bodily feelings. For an intriguing discussion by Whitehead about how he thinks of the body, see the second chapter of *Modes of Thought*, titled "Expression."
[249] Whitehead, *Modes of Thought*, 73.

alternatives to what we sense, for example—but to lose sight of the connections entirely will result in a misguided philosophy with false pretenses to completeness. What is neglected is a major source of experiential evidence about the world.

To repeat, bodily experience affords us "the sense of qualitative experience derived from antecedent fact, enjoyed in the personal unity of present fact, and conditioning future fact."[250] This description of time and experience cleaves to the interpretation of the Platonic suggestion that 'being is power' given in Chapter II of the present manuscript.[251] An experience is both affected and affecting, and these feelings of influx and efflux correspond to the feelings of the past and the future. The process of shaping the influx and fashioning the efflux offers the opportunity for self-expression. This process, as enjoyed, is the living present. Self-expression here refers to the creative aspect of the present, whereby a decision is effected that stamps this occasion, this experience, as individual, with its own place, character, and contribution to offer the future. The nature of this decision will require closer examination later, but in short it is the exclusion of possibilities and 'determining of a course' that is definitive of actuality.[252] Decision characterizes how the present occasion handles the superabundant offerings of the past and allure of the future, and thus effects a resolution of possible alternatives into the concrete togetherness of actuality. The future is no longer anticipated but happening; action is taken and the future is no longer future, it is actual fact. Furthermore, it is this decision with which future

[250] Whitehead, *Modes of Thought*, 71.
[251] See page 26 of this manuscript.
[252] See Whitehead, *Process and Reality*, 43: "The word 'decision' does not here imply conscious judgment, though in some 'decisions' consciousness will be a factor. The word is used in its root sense of a 'cutting off.'" Also cf. Whitehead, *Process and Reality*, 27-28, 42-43, 46-48, 150, 164, 254. These are some of the more important of Whitehead's statements about 'decision,' but there are yet others.

occasions will have to reckon. It makes an occasion of experience a stubborn fact, objectively immortal. The musician is playing, present activity drawing from past experience and lured by an anticipation; a note is struck—a measure, a phrase; the playing of *that* phrase in *that* way means the alternative notes have been ruled out, excluded; there is now the concrete togetherness of immediate, actual fact—novel individuality; there has been decision, action; the musician has expressed herself, and the next notes in the performance will have to take into account those just produced.

It is because of this effective conditioning of the future that the word "expression" is appropriate in the above characterization of the present. And this expression is *self*-expression because, through decision, the present occasion of experience is an individual, novel and singular. Self-expression attends self-creation. The present is a creative moment and, once created, expresses itself throughout the world. This emphasis on creativity, or the creative advance into novelty, cannot be excluded when discussing time. As I discussed at the beginning of this chapter, the creative advance is the concrete process from which physical time originates as an abstraction.

The following text from Whitehead succinctly pulls together the various strands of temporality we have been discussing: the various functional modalities of past, present, and future, and their togetherness in creative activity, that is, in immediate experience. But it does so in a different vocabulary than we have been developing. Thus I offer my own interpolations in brackets in order to elucidate this important text.

> The reason for the temporal character of the actual world can now be given by reference to the creativity and the creatures [*that is, creative activity and actual occasions of experience*]. For the creativity is not separable from its

creatures. [*Every pulse of experience is an instance of the creative advance into novelty; experience is the expression of creativity.*] Thus the creatures remain with the creativity. [*Pulses of experience play a continued role in creative experiences beyond their own immediacies, that is, they are objectively immortal and thus condition future creativity.*] Accordingly, the creativity for a creature [*the decisions and appetites of the past in their continuing activity within the present, shaping and conditioning it—or, the objective immortality of perished occasions*] becomes the creativity with the creature [*the immediate activity of bringing together the many things felt, including anticipations of the future, into the unity of* an *experience, and the enjoyment of the existence and value thus realized*], and thereby passes into another phase of itself. It is now the creativity for a new creature [*the decision that marks the present contains appetitive energy that continues—becomes objectively immortal—despite the perishing or exhaustion of immediacy*]. Thus there is a transition of the creative action, and this transition exhibits itself, in the physical world, in the guise of routes of temporal succession. [*The creative activity with an occasion is always also creativity for something beyond, ejecting itself into the world, and the public coordination of the community thus formed involves the temporal ordering of earlier and later.*][253]

[253] Whitehead, *Religion in the Making*, 91-92.

Set aside the idea of temporal succession for now, we shall return to it. At the moment we want to continue to focus on the creative activity of the present. This creativity is conditioned by decisions for it and conditions future activity. But the present moment, as the transition—not the 'instant' or 'point' or 'boundary'—between past and future, includes both past and future within its own constitution.[254] The creativity *with* the present occasion could not be what it is without the creativity *for* the present occasion (the past) and the creativity *for* a *new* occasion (the future) as immanent within its activity. The present is the field of engagement whereby past and future mingle and possibilities are enacted to become actual fact.

In an immediate instance of creative process—what I have been calling the present occasion—there is no succession of past, present, and future.[255] As discussed above, past and future are coconspirators in the creation of an occasion of

[254] We can here think back to our discussion of radical empiricism in Chapters II and III, particularly the view of relations there expounded. The present is related to both past and future, and this means it brings both past and future within it—to be experienced, the past and the future must be within the experience.

[255] Whitehead is clear that the becoming of an actual occasion (its "genetic process") cannot be conceived as in physical time, meaning, as a succession of 'nows' or moments related by 'earlier' and 'later.' See Whitehead, *Process and Reality*, 283: "The actual entity is the enjoyment of a certain quantum of physical time. But the genetic process is not the temporal succession: such a view is exactly what is denied by the epochal theory of time." This statement will be elucidated in due time. For the moment, though, I wish to call to your attention the following text from Martin Heidegger's *Being and Time*, which illustrates that the understanding of temporality or self-creative activity as something to which the ordinary idea of succession does not apply was not unique to Whitehead. Heidegger writes: "Temporalizing does not mean a "succession" of the ecstasies. The future is *not later* than the having-been, and the having-been is *not earlier* than the present. Temporality temporalizes itself as a future that makes present, in the process of having-been." I find that Heidegger's analysis of the temporality of Dasein in *Being and Time* has many similarities with the becoming of an actual occasion (the process of concrescence). These similarities are not identities—indeed, Whitehead and Heidegger are often working at different "levels" and addressing different concerns—but I do think there is a shared insight that creative advance cannot be broken into successive parts or steps but must involve a fundamental, dynamic unity or singularity—a unity in which decision plays an important role. This line of thought must remain a promissory note for further inquiry, however, as pursuing it here would carry us too far from our present task. For the quoted text, see Martin Heidegger, *Being and Time*, trans. Joan Stambaugh and Dennis J. Schmidt (Albany: State University of New York Press, 2010 [1927]), 334.

experience, whose present immediacy is the creative process of unifying the past towards a future. Past and future are mutually immanent in an actual occasion; each has a different mode or kind of activity within a pulse of experience. But if we split past and future from one another, rend their togetherness within present activity, how are anticipations of the future and the desire to realize possibilities to place selective emphasis on certain aspects of the past? And how is the past to frame the possibilities of the future as relevant? The short answer is: they could not, if so separated. The creativity of the present and the integrity of a pulse of experience requires the non-successive togetherness of past, present, and future within an actual occasion. Above I called this the dynamic union of time within the creative advance. Whitehead calls the character of dynamic union an 'epoch,' and says that every epochal occurrence is 'atomic.'[256] An occasion of experience, when we

[256] "Epoch" is an important word for Whitehead, and he uses it in several different (but related) senses, including colloquially. The two primary contexts of use are the "epochal theory of time" and his theory of "cosmic epochs." Both uses involve a sense of unity—an epoch is a type of unity related to temporality. We shall be concerned with the sense of epoch that plays a role in the theory of time. In this context, an epoch is a period of time, or duration, which is required for the realization or becoming of some occasion of experience. That is, an experience is never bereft a lapse of time, is never an instantaneous moment. The use of the words "lapse" and "period" indicate we are using physical time, which is measurable and characterized by succession, to help us understand becoming, which, in itself, is neither. But we do not want to carry this division too far, for physical time becomes *with* the occasion (meaning the occasion is temporal), but the becoming itself cannot be divided into successive parts. Once an occasion has become, we can see that it fills, a duration; but the becoming marks an epoch, a hold or arrest whereby there occurs the creating of an experience. An epoch is the organic whole through which its (temporal) parts are created. This shall be elaborated in the main text of the following section.

When Whitehead introduces the epochal theory of time in *Science and the Modern World*, he applies the term epoch to a duration, that is, to some extensive portion of time. Thus the epoch has temporal parts but is not realized via its parts. Whitehead does not directly use the word epoch to refer to what I have called the dynamic union of past, present, and future in the creative advance. But the connection is not difficult to draw. In *Religion in the Making*, Whitehead applies the word epoch to an occasion of experience, calling them 'epochal occasions' instead of the term he will come to favor, 'actual occasions.' This alerts to us that occasions of experience have the character and temporal unity of an epoch. Since an actual occasion, in its creative activity, is immanent with past and future in a non-successive way, I believe I am justified in applying the word epoch to the dynamic union realized in an actual occasion. I am unpacking what is latent in Whitehead's usage. See Whitehead, *Science and the Modern World*, 124-127, 35-137; also see Whitehead,

analyze its becoming, is such an atomic epoch. This idea of epochs is needed in order that there be novelty in the world. That is, for there to be a new thing in the world, a new individual, a new experience, we cannot think of its becoming as in physical time, which is characterized by succession. Rather, we must think of

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Religion in the Making, 91-92, 212-214 (these last pages refer to the entry on epochal occasions in Randall Auxier's glossary). Cf. Whitehead, *Process and Reality*, 68-69.

Since I mentioned them above, here is a brief note on cosmic epochs. For Whitehead, a cosmic epoch—specifically *our* cosmic epoch—serves as a general limit for philosophical and scientific inquiry, of what is available for our experience. What links the idea of epoch in the epochal theory of time to what I am about to adumbrate is that an epoch is a 'unit' in which process expresses some character. In *Process and Reality*, Whitehead writes, "the phrase 'cosmic epoch' is used to mean that widest society of actual entities whose immediate relevance to ourselves is traceable." The word "immediate" at once draws our attention to experience. To be immediately relevant is to play a role in the constitution of an occasion of experience; it is to play a role in the process of the occasion's becoming. Thus the cosmic epoch serves as a limit idea for the meaning discernable within *human* experience. But to discern or 'trace' what is immediately relevant to experience is a difficult endeavor, to be approached without pretense to finality. Boundaries, as presently understood, must always be treated as revisable. Whitehead writes of our cosmic epoch: "Such an epoch may be, relatively to our powers, of immeasurable extent, temporally and spatially. But in reference to the ultimate nature of things, it is a limited nexus. Beyond that nexus, entities with new relationships, unrealized in our experiences and unforeseen by our imaginations, will make their appearance, introducing into the universe new types of order." This second text makes clear that a cosmic epoch does not exhaust Reality ("the universe"). Thus our finite experience, even with its depths, cannot be taken to exhaust what reality can and might be—there is always a possible 'more,' even on a cosmic scale. This passage also, by reference to the idea of new types of order, suggests that a cosmic epoch exhibits some general character and dominating forms of relatedness that are distinctive of that epoch. And while it is difficult to say just what the character of our epoch is, we can say markedly less about the full universe, or Reality. For the distinctive character of our epoch, which distinguishes it from other cosmic epochs, acts as a boundary and limit for our experience—perhaps not an impermeable boundary, but even this is difficult for us to discern. Let me give a brief illustration in a Whiteheadian vein. Our experience of spatiality is three dimensional, but we have no reason to think that the three dimensional character of space is a necessary feature of spatiality as such. Indeed, there are even conjectures that there are more dimensions of space in our epoch (in string theory, for example). But whether or not this is true, it remains beyond our capacities, as humans, to adequately imagine what spatial experience would be like with greater or fewer dimensions. In this way, we are limited by special conditions that pervade our cosmic epoch but might not pervade others. It is helpful to consider the theory of cosmic epochs as an expression of our finitude, where the cosmic epoch marks the limits of finite experience as we have it. And as finite experience has a sense of infinitude, so there is the sense that there is something beyond our cosmic epoch. Possibility—vague and insistent.

The theory of cosmic epochs is one way Whitehead construes the openness of his philosophical system. The field within which all human inquiry works is acknowledged to be limited so far as "the ultimate nature of things" is concerned. We do the best we can from where we are, but our understanding must always be open to revision and we cannot rule out the appearance of unforeseen possibilities, connections, and experiences. For the texts cited above, see Whitehead, *Process and Reality*, 91 (first text), 288 (second text). And cf. Whitehead, *Modes of Thought*, 87-88; also cf. Randall E. Auxier and Gary L. Herstein, *The Quantum of Explanation: Whitehead's Radical Empiricism*, Routledge Studies in American Philosophy 9 (New York: Routledge, 2017), 36-37, 151-162.

becoming as epochal, as temporalizing rather than as temporal. This notion will be elaborated in the following section and the following chapters.

Other questions remain. If past, present, and future are not successive in an actual occasion of experience, why refer to them as past, present, and future at all? We know from our ordinary experience that the past is earlier than the future, and that some events in the past are more distant than others. In short, we recognize time as successive. Whitehead's view in no way discounts the successive nature of physical time, but rather treats it as the external coordination of the plural processes of the universe, while epochal becoming characterizes the individual activities of the creative advance *in their creativity*. This, too, will be addressed in what follows.

Epochal Becoming

In this and in previous chapters, I have already alluded to the epochal nature of process many times using the language of pulses. Now we are going to look more closely at this epochal character, in particular its relationship to temporality. We saw in the previous section that the past, present, and future are held together in dynamic union during the epoch of an occasion's becoming. But what is the relationship of this epoch to temporal flow? The issue here is one with which we have been concerned since introducing radical empiricism, namely, how to outline a pluralistic metaphysics of experience in which every experience is a 'completely unitary pulse in a continuous stream.' I there suggested that temporality is key to understanding how genuine individuals can exist in and form a continuous stream. Now we have arrived at the proper point for this discussion, and I hold that it is through the epochal theory of time that atomism and continuity receive their reconciliation.

In approaching this question, we must remember that temporal flow is abstracted from the creative advance into novelty, in which there is passage from the many occasions of the past into a newly emergent center of feeling. Also recall that this 'creativity' is the fundamental character Whitehead attributes to process, generically, and that 'process' is the lead metaphor for interpreting experience and thus actuality. Thus the passage into novelty is essential to process, and it is the epochal nature of process that secures a place for novelty in the world. Consider the following text from Whitehead:

> There is a rhythm of process whereby creation produces natural pulsation, each pulsation forming a natural unit of historic fact. In this way, amid the infinitude of the connected universe, we can discern vaguely finite units of fact. If process be fundamental to actuality, then each ultimate individual fact must be describable as process.[257]

This text introduces us to Whitehead's understanding of process as epochal.[258] Here, a "pulsation" is an occasion of experience, or actual occasion. To say that each pulse is a "natural unit" is an acknowledgment of the epochal character of the process. These units are "vaguely finite," with an emphasis on vaguely, because the immanence of past and future within each pulse introduces a sense of infinitude within that experience—the penumbral 'more,' or Jamesean 'fringe.'[259] This becomes clear if we look at a second text.

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[257] Whitehead, *Modes of Thought*, 88.

[258] Perhaps the best book-length treatment of Whitehead's epochal understanding of process and his theory of time is F. Bradford Wallack, *The Epochal Nature of Process in Whitehead's Metaphysics* (Albany: State University of New York Press, 1980). This underappreciated book is a careful reading and interpretation of Whitehead's metaphysics, and I generally agree with Wallack's view of Whitehead's philosophy.

[259] This 'vague finitude' can be considered alongside Whitehead's denial of "simple location" to any of the "primary elements of nature as apprehended in our immediate experience" (Whitehead, *Science and the Modern World*, 58). Whitehead describes simple location in this way: "To say that a bit of matter has *simple location* means that, in expressing its spatio-temporal relations, it is adequate to state that it is where it is, in a

Whitehead writes: "each immediately present experience requires its past, antecedent to itself; and requires its future, an essential factor in its own existence. There are thus three factors within immediate existence—namely, past, present, and future. In this way immediacy of finite existence refuses to be deprived of that infinitude of extension which is its perspective."[260] And yet, returning to the first text, Whitehead calls each of these "vaguely finite" pulses or units an "ultimate individual fact." Throughout *Process and Reality*, Whitehead calls this ultimacy and individuality of the epochal units the atomic character of actuality.

Atomic, as Whitehead uses it, means uncut or undivided; it does not refer to physical atoms, or immeasurably small units, or even simple units—"Each atom is a system of all things."[261] The atoms are complex, but undivided. The atomic unity of an actual occasion, illustrated above by the non-successive togetherness of past, present and future in the occasion's epochal becoming, is what establishes individuality, thus allowing

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definite finite region of space, and throughout a definite finite duration of time, apart from any essential reference of the relations of that bit of matter to other regions of space and to other durations of time" (Whitehead, *Science and the Modern World*, 58). No actual occasion has simple location, which means that though it occupies some region of space-time, it cannot be said to be simply there and then; the very nature of an actual occasion requires its relatedness to diverse times and spaces. The occasion, as a synthetic, unifying activity, has a standpoint as its locus, but the prehended aspects that constitute its standpoint extend throughout the universe, meaning the occasion cannot be understood to be *simply* its standpoint. The occasion prehends, *here*, an aspect of something over *there*, and aspects of itself are prehended elsewhere, away from its standpoint (cf. Whitehead, *Science and the Modern World*, 69-73). Thus the occasion is "vaguely finite"—its standpoint is finite, but in drawing from the world and again in passing into the world it stretches and stretches, touching in some subtle way perhaps all spaces and times. Using his notion of the extensive continuum instead of space-time, Whitehead writes in *Process and Reality*: "Every actual entity in its relationship to other actual entities is in this sense somewhere in the continuum, and arises out of the data provided by this standpoint. But in another sense it is everywhere throughout the continuum; for its constitution includes the objectifications of the actual world and thereby includes the continuum; also the potential objectifications of itself contribute to the real potentialities whose solidarity the continuum expresses. Thus the continuum is present in each actual entity, and each actual entity pervades the continuum" (Whitehead, *Process and Reality*, 67).

[260] Whitehead, *Modes of Thought*, 83.

[261] Whitehead, *Process and Reality*, 36.

for plurality.[262] This atomic unity also allows, using James's words, "that the passing moment may contain some novelty, be an original starting-point of events, and not merely transmit a push from elsewhere."[263] Thus atomism—albeit an atomism of a peculiar sort—is how Whitehead provides for two cornerstones of radical empiricism, pluralism and novelty, within his philosophy.

At this point there are two things to recognize about Whitehead's atomism. First, we cannot forget that each of these atoms "must be describable as a process." Moreover, beyond description, each atom "can only be felt as a process, that is to say, as in passage."[264] The atoms are individual but incomplete, as discussed in the previous section. They contain unrest, appetite, vision, aim; the decision that completes them relates to the unrealized future, as an arrow in flight relates to its target. They are activities, pulses in a stream. We shall return to this point that an atom is felt as a process a little later. The idea is that the "inner life" of the atom, its present and creative immediacy, is characterized by activity, even though as perceived "from without" (as objectively immortal) it appears "totally or not at all," to again borrow the words of William James.[265] To think of atoms as

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[262] "Atom" and "individual," the first word of Greek and the second of Latin origin, share the same etymological meaning—namely, 'uncut' or 'undivided.' Whitehead talks about atomicity, but he might also have said individuality. The ordinary connotations of this latter word are helpful to keep in mind when interpreting Whitehead's atomism. To say that an actual occasion is atomic is, among other things, to say it is an individual, to some extent different and separate from other individuals. It is singular. Thus Whitehead's atomism is related to his pluralism. Indeed, I think the pluralism described in my first chapter on radical empiricism requires something like a Whiteheadian atomism to be metaphysically viable, and this includes treating becoming as epochal. Regarding Whitehead on the relationship between atomicity and individuality, cf. Whitehead, *Adventures of Ideas*, 227: "As used here the words 'individual' and 'atom' have the same meaning, that they apply to composite things with an absolute reality which their components lack. These words properly apply to an actual entity in its immediacy of self-attainment when it stands out as for itself alone, with its own affective self-enjoyment." We shall address these ideas more thoroughly in the main text.
[263] James, *Works: Some Problems of Philosophy*, 72.
[264] Whitehead, *Process and Reality*, 227.
[265] James, *Works: Some Problems of Philosophy*, 80. The full text in which this phrase appears is: "Either your experience is of no content, of no change, or it is of a perceptible amount of content or change. Your

static, then, is a mistake; they become and they weave themselves into the fabric of the world. And this becoming, of *this* occasion, either occurs totally or does not occur. When it occurs it marks an epoch.

Second, these Whiteheadian atoms are individuals, subjects, and thus have some measure of separateness or transcendence from the world. It is this transcendence that allows them to effect something new, or, rather, to be effective and novel existents. The mutual immanence of occasions is extremely important but cannot be carried too far. Mutual immanence carried to its extreme yields a block-universe. If everything were fully and completely immanent in everything else, the world would be a monism—nothing at all whatsoever that is not the whole.[266] Separateness has its role to play. The past and future are immanent in the creative activity of the present occasion, but this present, precisely as present, transcends the world from out of which it grows in order to be something new. It is this moment and no other. But moment is not right; the present occasion is an epoch, an arrest or a step out of the world, and in perishing it will then contribute something new to the world. In calling the becoming of an actual occasion epochal, we are claiming that the process separates itself from the world, not absolutely, but enough so that there may be a new individual, a new experience, that enters the world an organic whole.

Another name for this separateness is discontinuity. The plural becomings of the many occasions of experience are discontinuous in that each establishes *what* and *where* an

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acquaintance with reality grows literally by buds or drops of perception. Intellectually and on reflection you can divide these into components, but as immediately given, they come totally or not at all."

[266] Hence, to avoid this, James emphasized the 'external' character of some relations, as we saw in the second chapter on radical empiricism. Such relations allow for some "space" or separateness between things.

experience is in relative isolation from one another.[267] In order that something new may become, there must be some separation or transcendence from the infinitude of influences pressing upon the becoming occasion. This transcendence is exhibited in the fact that the final winnowing, selection, and shaping that stamps creative decision belong to that occasion alone. In experiential terms, the immediacy enjoyed by an occasion of experience—its decisive activity of unification and composition—is subjective, private; the self-enjoyment of experience is an absolute self-attainment. Every experience is singular, an individual with its own novel constitution and complex of feeling. No one can have, can *actively live*, the concrete experience you are now having, not even later you.[268] In Whitehead's words, every occasion of experience "is something individual for its own sake; and thereby transcends the rest of actuality."[269] Individual absoluteness grows out of its world and perishes into the publicity of objective immortality, but as a private attainment it marks an individual, an atom. Individual transcendence is the basis of freedom and it provides the 'elbow room' through which novelty enters the world.[270]

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[267] Cf. Whitehead, *Process and Reality*, 61: "…contemporary events happen in *causal* independence of one another." Also cf. Whitehead, *Process and Reality*, 62, 123-124. I here, as earlier, skip over Whitehead's discussions of contemporaneousness and simultaneity as they pertain to a physical theory of relativity. We need not go into these details as it is primarily an application of general ideas already discussed. For our purposes, the definition of contemporaries as occasions that are causally independent of one another will suffice. Just know that Whitehead's theory of time is certainly amenable to relativistic considerations. Here I am using "relativistic" in its physical sense, meaning, as this concept plays a role in modern physics. A cornerstone of Whitehead's philosophy is a metaphysical principle of relativity, different than the physical notion but upon which it would be based. See Whitehead, *Process and Reality*, 22. Cf. Alfred North Whitehead, *The Principle of Relativity with Applications to Physical Science* (Cambridge: Cambridge University Press, 1922).

[268] 'Later you' of course claims this experience as part of its biography—there is 'warmth and intimacy' about it—but the singular experience, in its concreteness and living immediacy, is never to recur. This is what perishes.

[269] Whitehead, *Process and Reality*, 88.

[270] Cf. Whitehead, *Process and Reality*, 88: "To be *causa sui* means that the process of concrescence is its own reason for the decision in respect to the qualitative clothing of feelings. It is finally responsible for the

Novelty requires this transcendence because it needs to enter the world somewhere. The novel thing certainly cannot have been around already, for then it would not be novel. Nor does it help to say that a novel thing, while not here yet, has been in perpetual becoming since "the beginning." There would then be an unfurling of the world, but, like the unfurling of a movie reel, one without essential novelty, for all that *is* is already given, at least as potentialities that *will be*.[271] If the future is predetermined, without genuine possibility or chance for deviation, then novelty, and time generally, is reduced to an illusion. The alternative is to say that the becoming of a thing has an initiation somewhere. The becoming also has a completion, namely, upon the achievement of the novel thing. This span from initiation to completion is the becoming's epoch. As described above, this epoch is the present occasion in its immediacy. Its initiation is the decision *for it* as made by the antecedent world, and its completion is its perishing and decision *for others* as embodied in the conditions laid by its objective immortality.[272] This decision *for others* is determined by the decision *for itself* that constitutes the becoming of the actual occasion.[273]

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decision by which any lure for feeling is admitted to efficiency. The freedom inherent in the universe is constituted by this element of self-causation."

[271] I recognize that the image of the movie reel is fast becoming an antique curiosity, but, in homage to one of Bergson's favorite metaphors, I keep it.

[272] Cf. Whitehead, *Process and Reality*, 84: "Completion is the perishing of immediacy: 'It never really is.'" Whitehead is here referencing Plato's *Timaeus*, 28a, which in the Zeyl translation reads: "It comes to be and passes away but never really is." The "it" in the *Timaeus* refers to "that which becomes." See John M. Cooper, ed., *Plato: Complete Works* (Indianapolis: Hackett Publishing Company, 1997), 1234.

[273] Here it might be helpful to reread the text from *Religion in the Making*, given above on pages 123-124 with my interpolations. Also cf. Whitehead, *Process and Reality*, 164. Here in *Process and Reality* Whitehead writes: "In 'transcendent decision' there is transition from the past to the immediacy of the present; and in 'immanent decision' there is the process of acquisition of subjective form and the integration of feelings." What Whitehead characterizes as transcendent decision I have here called the decision *for* the becoming occasion and earlier in this manuscript was characterized as the prehensive or appropriative transition of occasions to occasions. Whitehead's immanent decision is what I have called an occasion's decision *for itself*, whereby it has immediacy and works to attain individuality. It is the 'creativity *with* the creature,' to use the phrase from *Religion in the Making*. Immanent decision also yields an occasion's status as objectively immortal, "whereby its appetition becomes an element in the data of other entities superseding

The decision *for itself* arises out of the decisions *for it*—that is, out of the pluralistic world prehended and so brought into its own constitution—but final emphasis, coordination, and direction in bringing these complex factors together belongs to the present, or 'immanent,' decision.[274] This is the freedom within the epoch, within the occasion. Put another way, the freedom of the present occasion consists in its handling the decisions of the past and reaching a new decision for the future. And, as Whitehead reminds us: "it is to be noticed that 'decided' conditions are never such as to banish freedom. They only qualify it. There is always a contingency left open for immediate decision."[275] These considerations establish an epoch—specifically, the epochal becoming of an occasion of experience—as the site where novelty bursts into the world. Both the experiential immediacy of becoming (its process, or decision *for itself*) and its residuum of 'stubborn fact' (its objective immortality, or decision *for others*) are novel.

There is much in the previous paragraph that requires explication. I propose, first, to use William James to help expand on the notion of 'decision,' and, second, to discuss continuity as created by decisions. Then I shall return to the relationship between atomism, novelty, and transcendence. We shall then understand the importance of the 'epoch' in the

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it" (Whitehead, *Process and Reality*, 154). Immanent decision thereby swings into transcendent decision: "The real internal constitution of an actual entity progressively constitutes a decision conditioning the creativity which transcends that actuality" (Whitehead, *Process and Reality*, 43). Transcendent decision, as relating occasions to one another—creating overlap, or compenetration—can thus be conceived as either 'received' or 'transmitted' (See Whitehead, *Process and Reality*, 150). The decision received, the decision *for* that occasion, is its 'datum'—its actual world as *given*. The decision transmitted, the decision *for others*, "adds a determinate condition to the settlement for the future beyond itself" (Whitehead, *Process and Reality*, 150). Between reception and transmission is immediate decision, whereby "[t]he actual entity, in becoming itself, also solves the question as to *what* it is to be" (Whitehead, *Process and Reality*, 150).

[274] Cf. Whitehead, *Process and Reality*, 27-28 (Categoreal Obligation IX, The Category of Freedom and Determination). For "immanent decision," see the immediately preceding footnote as well as *Process and Reality*, 164.

[275] Whitehead, *Process and Reality*, 284.

epochal theory of time and the way it reconciles the continuous and atomic features of the world. In the following discussions, we should bear in mind, as an important synoptic statement, "that *experience* involves a *becoming*, that *becoming* means that *something becomes*, and that *what becomes* involves *repetition* transformed into *novel immediacy*."[276]

The primary thing to note is that, for Whitehead, decisions are the reasons for the course actuality takes; the flow of experience and the passage of nature can be characterized as the result of numerous decisions: "The Castle Rock at Edinburgh exists from moment to moment, and from century to century, by reason of the decision effected by its own historic route of antecedent occasions."[277] We must recall that decisions are not fundamentally a conscious phenomenon, but are ultimately a resolution of infinite possibility into the finite concreteness of actuality. Though this resolution is "internally determined," it is "externally free."[278] This external freedom constitutes the transcendence of the actual occasion, and it makes the occasion what James calls a 'chance-thing.' In his essay "The Dilemma of Determinism," James writes that chance "is a purely negative and relative term, giving us no information about that of which it is predicated, except that it happens to be disconnected with something else—not controlled, secured, or necessitated by other things in advance of its own actual presence."[279] This character of chance, of external freedom or transcendence, does not throw the very possibility of stable order out

[276] Whitehead, *Process and Reality*, 136-137.
[277] Whitehead, *Process and Reality*, 43.
[278] Whitehead, *Process and Reality*, 27-28.
[279] James, *Works: The Will to Believe*, 120. After the word "term" in the text above, James places a helpful footnote: "Speaking technically, it [chance] is a word with a positive denotation, but a connotation that is negative. Other things must be silent about *what* it is: it alone can decide that point at the moment in which it reveals itself." This last sentence resonates strongly with what I have been saying about Whitehead. As merely one example, consider the following text from Whitehead: "The actual entity, in becoming itself, also solves the question as to *what* it is to be" (Whitehead, *Process and Reality*, 150).

the window; the choice is not rigid determinism or utter chaos. Consider, first, that from what we have said about Whitehead, we know that the past lays conditions of 'stubborn fact' upon the becoming of the present occasion. Second, as James acknowledges and clarifies:

> [A chance thing] may be lucidity, transparency, fitness incarnate, matching the whole system of other things, when it has once befallen, in an unimaginably perfect way. All you mean by calling it "chance" is that this is not guaranteed, that it may also fall out otherwise. … Its origin is in a certain fashion negative: it escapes, and says, Hands off! coming, when it comes, as a free gift, or not at all.[280]

That is, what counts when calling a thing 'chance' is that possibilities are still in play, and that the chance-thing enters the community of the world 'on its own'—"[o]ther things must be silent about *what* it is: it alone can decide that point at the moment in which it reveals itself."[281] Whitehead's claim is that this "moment in which it reveals itself" is not an instant but an epoch, and that during this epoch the deciding-thing transcends the world—"Hands off!"

These points about chance are further clarified by James's discussion of 'decision,' which also sheds light on Whitehead's characterization of actual occasions as "internally determined." I shall be quoting James at length here, due to the tremendous importance of the following texts. Still considering the chance-thing, James writes:

[280] James, *Works: The Will to Believe*, 120.
[281] James, *Works: The Will to Believe*, 120 fn. 4.

> This negativeness, however, and this opacity of the chance-thing when thus considered *ab extra*, or from the point of view of previous things or distant things, do not preclude its having any amount of positiveness and luminosity from within, and at its own place and moment. All that its chance-character asserts about it is that there is something in it really of its own, something that is not the unconditional property of the whole.[282]

This "luminosity from within" is provided by the decision of the becoming occasion, and the progressive constitution of this decision is the 'internal determination' of that occasion.[283] Thus the decision is that in an occasion which is "really of its own," making it an individual, an atom. It is because an occasion's decision is really its own that its decisiveness, its *becoming* that occasion which it is, appears "opaque" from the vantage of "previous things or distant things." With decision comes transcendence. But this decision also grounds the occasion's continuity with the world, creating and maintaining various modes of order, though there is room for modification and deviation. James outlines the character of decisions in the following text:

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[282] James, *Works: The Will to Believe*, 120.

[283] The idea of luminosity is complicated, even treacherous, as it is not bathed in the self-evidence the word itself suggests. There is indeed luminosity within the activity of deciding, in the sense that the activity is immediately lived and felt, but there are also shadows in this activity keeping contributory factors of decisions, or even entire decisions, out of human consciousness and awareness. Decisions can be impulsive, motivations hidden. But this is always from the vantage point of a reflective consciousness. This fact of life is richly explored by Nietzsche, Freud, and the depth psychologists, among others. My point is, that decisions are indeed luminous from within—they are lived and felt as living activity in a way that *external* activities are not—but that we cannot confuse luminosity with complete clarity, especially as time goes on and the luminosity of the decision fades. By saying that decisions are self-luminous, James is not in any way trying to banish the vague aspects of our mental life; indeed, James seeks "the re-instatement of the vague to its proper place in our mental life" (James, *Works: Principles of Psychology*, vol. I, 246). What he is trying to do is impress upon us the difference, the felt, experiential difference, between *making a decision* and observing a decision from without. To do this, he uses the language of luminosity and opacity.

> To *yourselves*, it is true, those very acts of choice, which to me are so blind, opaque, and external, are the opposites of this, for you are within them and effect them. To you they appear as decisions; and decisions, for him who makes them, are altogether peculiar psychic facts. Self-luminous and self-justifying at the living moment at which they occur, they appeal to no outside moment to put its stamp upon them or make them continuous with the rest of nature. Themselves it is rather who seem to make nature continuous; and in their strange and intense function of granting consent to one possibility and withholding it from another, to transform an equivocal and double future into an inalterable and simple past.[284]

This text brims with metaphysical potential, and Whitehead makes good on this potential by making decision characteristic of actuality, generically. Though every line here says something significant about decision, it is in the last sentence that James lays hold of the deepest insight. The "strange and intense function" of decision links it at once to both possibility and temporality. What is essential about decision, as Whitehead renders it, is the resolution of the boundless welter of possibility into a finite, actual occasion.[285] When I make a decision—for example, to have eggs for breakfast—the swirl of possibilities is "reduced" to a concrete path of activity. Possibilities are 'cut off' (*decidere*), excluded from realization, and potentialities for feeling are brought to living, vivid immediacy. A

[284] James, *Works: The Will to Believe*, 123.
[285] Cf. Whitehead, *Process and Reality*, 42-43, and *passim*. On page 43 Whitehead writes: "Just as 'potentiality for process' is the meaning of the more general term 'entity,' or 'thing'; so 'decision' is the additional meaning imported by the word 'actual' into the phrase 'actual entity.' 'Actuality' is the decision amid 'potentiality.' It represents stubborn fact which cannot be evaded. The real internal constitution of an actual entity progressively constitutes a decision conditioning the creativity which transcends that actuality."

decision being a "psychic fact," a conscious activity, as when I choose to have eggs for breakfast, is unessential.[286] Decision marks the active, metaphysical elimination of possibilities and the filling out of *a way to be* into actual *being*. True decision is the activity itself, the eating of the eggs. Before the activity, the "decision" is not genuinely such; it is merely a proposition, a lure for feeling.[287] The activity of decid*ing* fills and constitutes an epoch.

This activity 'transforms the open future into an inalterable past.' Thus decisions cannot be extricated from the context of temporality. A fairly subtle but important distinction must be made here. Decisions are not made *in* time; rather, it is decisions that *make* time. Deciding is temporalizing. What does this mean? A decision is not "in time" in the sense that time is something other than and apart from the decisive act.[288] In other words, time is not a transcendental condition of the possibility of decision, for it is decisions that create time. We must tread carefully here, linguistically, for there is a reciprocal relationship between decisions and the resultant flow of time, with the temporal order of settled fact entering into and informing incipient decisions. But it remains the case that, for Whitehead, the engine of time, so to speak, is the becoming of an actual occasion, which is a decisive process. Decisions "move" the future into the past through their function of resolving possibility into actuality. They are transitional activities,

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[286] Cf. Whitehead, *Process and Reality*, 43: "The word 'decision' does not here imply conscious judgment, though in some 'decisions' consciousness will be a factor. The word is used in its root sense of a 'cutting off.'" This text was previously cited in footnote 252.

[287] A lure for feeling, as we know from our discussion earlier in this chapter, is itself felt and plays an important, efficacious role in an actual occasion.

[288] This idea of time as a "medium of fluency" is, roughly, Newtonian absolute time, an independent existent which flows and flows and flows without regard to what, if anything, is "in" it. Where, or rather, when, objects exist in time and the adventures they pursue over time are accidental features of these objects, whose essences can be described without invoking the notion of time at all. This picture of a world of things "in time" is denied by Whitehead in favor of a world of happenings.

transformative relational processes that take the potentiality and suggestiveness provided by the universe and create a novel actuality, a new moment of time.

The movement of deciding, as well as constituting the *flow* of time, is the stitching that creates the continuity of nature. Decisions "make nature continuous," to cite James from the text above, because in adding to the world they carry the efficaciousness of the past with them, preserving it, transmuting it, and transmitting it. Changes are made, novelty introduced, but upon a background of repetition. In *Religion in the Making*, Whitehead uses the phrase "contrast under identity" to point to the continuous yet differentiating character of experience.[289] Novelty indeed requires separation or transcendence in order to occur, but neither the separation nor the novelty is absolute, in the sense of completely shrugging off the influence of inheritance. That is, decisions and their results are always engagements within various contexts. Think back to the example of the performing musician; the wildest improvisation is built squarely on many hours of work, both haptic and aural. Its novelty occurs within a milieu of practices and expectations, and requires these practices and expectations in order to be expressed and experienced as novel. The *fact*, or the *occurrence*, of novelty is absolute, but its *existence* is wholly relational. The "weight of repetition" cannot be avoided in a novel experience of any lasting importance, for a contrast with this element of repetition or identity is required for novelty to have any intensity or meaning.[290] "Repetition" here signifies the immanence

[289] Whitehead, *Religion in the Making*, 115.
[290] Whitehead, *Process and Reality*, 279. And cf. Whitehead, *Process and Reality*, 136: "Tear 'repetition' out of 'experience,' and there is nothing left. On the other hand, 'immediacy,' or 'first-handedness,' is another element in experience. Feeling overwhelms repetition; and there remains the immediate, first-handed fact, which is the actual world in an immediate complex unity of feeling." This "immediate complex unity of feeling" which "overwhelms repetition" is the novel experience, a *new* moment of time, a *new* instance of the

of the past in the present and thus the transition or "reenactment" of a pattern of affective energy.[291] Thus a decision is not a *purely* transcendent, autonomous act, but rather represents, and effects, the growth of the world.

togetherness of the world. As Whitehead writes in *Religion in the Making*, 113: "The birth of a new instance is the passage into novelty." Both repetition and novel immediacy are essential elements of experience, and they require each other. Novelty emerges upon a background of repetition, and repetition is only recognized as such because it is united to novelty (or difference) and thus is not pure, undifferentiated sameness.

[291] "Reenactment" can also be thought of as "continuance" or "imposition of conformation." Which language is preferred depends on what aspects of the process of transition one wishes to draw attention to, as well as, frankly, personal preference.

CHAPTER V

TIME, POSSIBILITY, AND PROCESS: PART II

Continuity and Extension

The idea of decision can now be seen as the fulcrum in the reconciliation between atomism and continuity as features of temporality. Decision plays this role because the activity of deciding both (i) has an atomic, autonomous character that fills an epoch and (ii) creates the continuity of the world.[292] In *Process and Reality* the atomic character of actuality is prominently addressed, and thus many interpreters of Whitehead emphasize his atomism, often at the expense of the importance of continuity.[293] Some additional remarks about continuity will help clarify what Whitehead means, and what he does *not* mean, when he says that his theory of time is epochal, and actuality atomic.

It is crucial to be aware that when Whitehead claims that "there can be no continuity of becoming," he means that there is no continuity in the *mathematical* sense that "every act of becoming is divisible into earlier and later sections which are themselves acts of becoming."[294] There is, however, another sense of continuity according to which a series of becomings form a continuous stream, as I shall explain shortly. The reason for

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[292] I am using "activity of deciding" as a descriptive phrase for what Whitehead calls "concrescence" in *Process and Reality*.

[293] See, for example, the following article by Sandra Rosenthal, where she argues that Whitehead's atomism, especially as applied to time, is opposed to continuity: Sandra B. Rosenthal, "Continuity, Contingency, and Time: The Divergent Intuitions of Whitehead and Pragmatism," *Transactions of the Charles S. Peirce Society* 32, no. 4 (Fall 1996): 542–67. As I shall argue in what follows, I think both continuity and atomism have their place in Whitehead's philosophy of time and need not be pitted against each other. In this I agree with Chris van Haeften. See Chris van Haeften, "Extension and Epoch: Continuity and Discontinuity in the Philosophy of A.N. Whitehead," *Transactions of the Charles S. Peirce Society* 37, no. 1 (Winter 2001): 59–79.

[294] Whitehead, *Process and Reality*, 35 (first text), 68 (second text).

Whitehead's denial of the (mathematical) continuity of becoming—that is, his *atomization* of becoming—can be given by reformulating Zeno's paradoxes, in addition to the fundamental integrity of decision, as will be discussed shortly. Whitehead's concern with Zeno is telling, and I shall focus on it here rather than give a full rehearsal of his argument from Zeno.[295] What worries Whitehead is that, if every becoming of an actual occasion were divisible into other acts of becoming, then no act of becoming would have any immediate neighbors and thus there would be nothing "*to effect a transition*" into any given occasion, or into a subsequent becoming.[296] In other words, if acts of becoming were mathematically continuous, then we are drawn down to 'infinitesimal' acts of becoming—non-extensive instants. As there is no real number (a member of $\mathbb{R}$) immediately next to any other, from such non-extensive instants there would be "no next instant at which

[295] For Whitehead's discussion of Zeno's paradoxes, see Whitehead, *Process and Reality*, 67-70. The core of Whitehead's reconstruction of Zeno's argument is given on page 68, and I reproduce it here: "The argument, so far as it is valid, elicits a contradiction from the two premises: (i) that in a becoming something (*res vera*) becomes, and (ii) that every act of becoming is divisible into earlier and later sections which are themselves acts of becoming. Consider, for example, an act of becoming during one second. The act is divisible into two acts, one during the earlier half of the second, the other during the later half of the second. Thus that which becomes during the whole second presupposes that which becomes during the first half-second. Analogously, that which becomes during the first half-second presupposes that which becomes during the first quarter-second, and so on indefinitely. Thus if we consider the process of becoming up to the beginning of the second in question, and ask what then becomes, no answer can be given. For, whatever creature we indicate presupposes an earlier creature which became after the beginning of the second and antecedently to the indicated creature. Therefore there is nothing which becomes, so as to effect a transition into the second in question."

[296] For the cited text, see Whitehead, *Process and Reality*, 68 [emphasis mine]. The full sentence from which I have extracted this phrase reads: "Therefore there is nothing which becomes, so as to effect a transition into the second in question." This is the conclusion of Whitehead's reformulation of Zeno's argument, which he takes to be valid.

Regarding the lack of immediate neighbors in a mathematical continuum, consider the real numbers. "What comes immediately after one?" "Two." "Well, what about one and a half?" "Okay then, one and a half." "But isn't the square root of two closer to one than one and a half?" "Yes it is." "What about one and a quarter?" This line of questioning will continue forever, for if we take the numbers to be continuous, then there is no number that comes right after one. Whatever number we indicate, there is always another number that is a little closer. Thus there is no smallest step out of one into a number right next to one. One has no *immediate* neighbors.

something can become."[297] Becoming, far from being an occurrence or a process, would effectively 'halt' and nothing would become. There would be no transition from next to next and thus no growth, no becoming. But one occasion does give way to another; things do happen; times does flow; and so an act of becoming cannot be decomposed into other, actual acts of becoming. Nothing can *happen* at an instant, nothing is *decided* at an instant; becoming, deciding, requires an epoch. And for one act of becoming to 'effect a transition' into another is for the two to be connected—to interpenetrate—and for one to succeed the other. Put shortly, all acts of becoming have "girth" and they lead directly into other acts of becoming. In this sense of "leading directly into another," the flowing succession of becomings is continuous.

Whitehead's conclusion concerning the continuity of becoming echoes that of William James, who held that we ought to "treat real processes of change no longer as being continuous, but as taking place by finite, not infinitesimal steps, like the successive drops by which a cask of water is filled, when whole drops fall into it at once or nothing. This is the radically pluralist, empiricist, or perceptualist position…."[298] James contends that such a view of finite, discontinuous becomings makes possible belief in "absolute novelties, unmediated beginnings, gifts, chance, freedom, and acts of faith."[299] Novelty, freedom, chance; we have seen in the previous chapter that all of these are linked to the activity of deciding, and that this activity is atomic, in Whitehead's sense of 'uncut.' One might think it strange that James, champion of the stream of experience, would adopt an atomic view of any sort. But James, like Whitehead, positions the view of discontinuous

[297] Whitehead, *Process and Reality*, 68.
[298] James, *Works: Some Problems of Philosophy*, 88.
[299] James, *Works: Some Problems of Philosophy*, 85.

becoming against the *mathematical* idea of continuity. Both thinkers accept the active continuity of compenetration, or transition.

In this vein, we may state the upshot of Whitehead's consideration of Zeno as follows. Whitehead denies the mathematical continuity of becoming in order that there can be *transition* from occasion to occasion, and this transition requires that "every act of becoming must have an immediate successor."[300] If there were no immediate successor, a becoming would lead nowhere, effect nothing; there would be no transition, no passage, no flow; the questions 'what became of that?' and 'what happened?' would have no answers.[301] That is, Whitehead contends that "actuality is incurably atomic" precisely to *preserve* the continuity of efficacious flow, whereby things pass into one another and past occasions may serve as the ground for present ones.[302] In this way, Whiteheadian atoms, characterized by decision, do indeed "make nature continuous," to use James's phrase referenced in the previous chapter.

Note that there are two senses of continuity in play in our discussion. There is the mathematical sense that is denied by Whitehead to apply to acts of becoming, and there is the 'continuity of efficacious flow' preserved by Whitehead's denial of the former. The latter continuity is of the sort that James called "perceptual," by which he means that

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[300] Whitehead, *Process and Reality*, 69.

[301] The idea of an "immediate successor" is how Whitehead thinks Zeno's 'Achilles and the Tortoise' paradox, for example, is overcome. So long as every act of becoming in a series of such acts has an immediate successor, there can be a *transition* from act to act, and an infinite series can be completed if it is convergent. Thus if we take Achilles's approach to the tortoise to take one second, supposing that this approach is composed of an infinite series of acts of becoming of the pattern, 1/2, 1/4, 1/8, 1/16, etc., where the fractions refer to the portion of the second taken up by the acts of becoming and each immediately follows the previous, then arithmetic assures us that the whole series will be completed in one second, after which Achilles will overtake the tortoise. The problem arises when each act of becoming can be decomposed into other acts of becoming, rendering the idea of an immediate successor and thus of 'transition into a next' nonsensical.

[302] Whitehead, *Process and Reality*, 61.

"anything is continuous when its parts appear as immediate next neighbors, with absolutely nothing between."[303] For James, the perceptual notion of continuity is primary, and it is enhanced by recognizing that in the stream of experience "immediate next neighbors" not only have "absolutely nothing between" them, but interpenetrate—"All real units of experience *overlap*."[304] This is the appropriation of one experience, one atom, by another; this is mutual immanence, where experiences "are not separate from their own others;" this is prehension of the past and its continued life in the present; this is the 'dynamic union of time' as described in the previous chapter.[305] It is this Jamesean, interpenetrative sense of continuity that applies to Whiteheadian atomism, for the "completion" of an atom, the perishing of its living immediacy, is the fluid transition into the creation of another atom, another occasion of experience. This transition does not represent a static, solid boundary, but rather another mode of activity, namely, that of a decision *for* the future, or objective immortality. The demarcation of an atom, insofar as it has a discernable demarcation, is a result of a rhythm between the two fundamental types of fluency, concrescence and transition, immanent decision and transcendent decision.

Thus when Whitehead writes that "[t]here is a becoming of continuity, but no continuity of becoming," he is referring to continuity in its mathematical sense, and particularly to the property of being indefinitely divisible.[306] The becoming of an actuality is atomic, but once perished, once the immediacy of the experience has faded, the actuality

[303] James, *Works: Some Problems of Philosophy*, 95.
[304] James, *Works: A Pluralistic Universe*, 130.
[305] James, *Works: A Pluralistic Universe*, 130.
[306] Whitehead, *Process and Reality*, 35; cf. Whitehead, "Time," 64. As a rule, when Whitehead uses the word "continuity" he means mathematical continuity. Given his background as a mathematician, this makes sense. See Whitehead, *Process and Reality*, 66, for the importance of indefinite divisibility to the notion of a continuum.

that has become, the final decision, is divisible.[307] The "creation of continuity" is the creation of a divisible world, and this is significant because divisibility is the ground of potentiality and objectification and is a general condition of analysis.[308] Consider the following rough example. Say you attend a performance of the musician discussed earlier. The experience is enjoyable, but, alas, it ends and you return home. Still pleased, you turn the performance around in your mind, recalling to yourself the most striking moments, the most delicate moments, and the moments that struck you as 'off.' The performance *in its concrete wholeness and immediacy* is gone, perished, never to return or recur. The event that is the performance is atomic in that the *actual* performance cannot be other than it is without destroying the actuality of *this* performance. As atomic, the performance-event is irreducible, an organic whole that "is at once a process, and is atomic; so that in no sense is it the sum of its parts."[309] The performance *has happened* and is now a stubborn fact.[310] There is no *actual* dividing of the event, meaning, no dividing it in a way that alters the actual fact of its occurrence as *that* performance. But you can think about the first movement; the second; the motions of the performer independent of the sounds of the performance, or vice versa; even the sounds, activities, and appearance of the audience entirely apart from the performance. In other words, the performance is capable of being objectified in many ways and thus is influential beyond its immediate occurrence. This is

[307] "Satisfaction" is the term Whitehead uses for the phase or aspect of an actual occasion that completes the act of becoming and represents the objective immortality of the occasion. Thus it is the 'satisfaction' that *has become* and is divisible. For Whitehead's description of what he means by satisfaction, see Whitehead, *Process and Reality*, 84. The first sentence of Whitehead's helpful discussion is: "The notion of 'satisfaction' is the notion of the 'entity as concrete' abstracted from the 'process of concrescence'; it is the outcome separated from the process, thereby losing the actuality of the atomic entity, which is both process and outcome."
[308] For the text in quotes, see Whitehead, *Process and Reality*, 35.
[309] Whitehead, *Process and Reality*, 140; also cf. Auxier and Herstein, *The Quantum of Explanation*, 87-88.
[310] Recall that James characterized fact using both the words "irreducible" and "stubborn."

the divisibility of the event, and it concerns the potentiality of the event, or its modes of expression beyond itself. That an event *can be divided* constitutes the possibility of its being objectified, that is, of its transcending itself and being taken up within another occurrence, another experience.[311] Once the immediacy of an experience, its felt and living wholeness, fades, the only way it can participate in the ongoing activity of the world is through aspects of itself functioning objectively in other experiences. Divisibility allows for the 'reduction' of a thing into aspects, for it to offer *perspectives* of itself and to be taken up according to these perspectives. Divisibility allows for occasions of experience to become objectively immortal, to transcend their immediate activities and condition future creativity. Without divisibility there would be no retention, no appropriation or prehension, no ground for future decisions.

The above example illustrates the metaphysical importance of the principle of divisibility.[312] Since the functioning of objective immortality is how actual occasions

[311] Cf. Whitehead, *Process and Reality*, 227: "The actual entity is divisible; but is in fact undivided. The divisibility can thus only refer to its objectifications in which it transcends itself."

[312] Whitehead recognizes two different kinds of division as applicable to an actual entity, 'genetic' and 'coordinate.' I shall adumbrate the important distinction between them, though I do not think my eliding the two under the generic umbrella of 'division' in the main text detracts at all from the point I am there making. Whitehead writes: "There are two distinct ways of 'dividing' the satisfaction of an actual entity into component feelings, genetically and coordinately. Genetic division is division of the concrescence; coordinate division is division of the concrete. In the 'genetic' mode, the prehensions are exhibited in their genetic relationship to teach other. The actual entity is seen as a process; there is growth from phase to phase; there are processes of integration and of reintegration" (Whitehead, *Process and Reality*, 283). Genetic division is virtual or hypothetical, a reconstruction of the atomic act of becoming (the concrescence) on the basis of what has become and remains for future feeling. Through genetic division we tell a story, construct a narrative, about how an occasion of experience came to be what it is. Whitehead goes on to write: "When we divide the satisfaction coordinately, we do not find feelings which *are* separate, but feelings which *might be* separate" (Whitehead, *Process and Reality*, 284). That is, in coordinate division the prehensions (feelings) are not exhibited in their interrelations, which they, in actuality, exhibit in an atomic (uncut) manner. Rather the various prehensions are exhibited *as if* separate, as potentially separate, as things that *could be* felt on their own. The *potentiality* or, what amounts to the same thing, the *potential objectifications* of the entity are here considered. Think about the example I gave in the main text about a performance. The event is itself, a dynamic whole, but in retrospect we can talk about the first half and the second half, and numerous other divisions of the performance, *as if* they had occurred separately. That is, we can consider the parts (or

influence one another, how one occasion becomes present within another, the *power* of an actual entity is tied to its divisibility. Its divisibility is expressive of its potentiality, its potency. There are many expressions of what an actual entity is, many ways for it to be taken up and many ways for it to influence future becomings. The fact of "many expressions" means that the entity in its completion—what Whitehead calls its satisfaction—is divisible. There is no potentiality, no influence, no power, without divisibility.[313] The divisibility of an actual occasion into 'separate' aspects of itself that can be rendered as prehensions (appropriations) of other, select entities, constitutes the extensiveness of the occasion.[314] These aspects can, in turn, be prehended (felt) by other actual occasions, thus constituting the perspectival expressions of that occasion's power, or being. The actual occasion that is your experience of the performance can be rendered as prehensions of the performer, the room, the sounds, the audience, the thoughts flashing through your mind, the itch behind your ear, and on and on. A later occasion can prehend

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aspects) of the whole performance on their own, as if they were isolated. In fact, to have "aspects," or to be able to be considered under a perspective, is to be coordinately divisible. As this should make clear, in the main text I am here concerned primarily with coordinate divisibility, which is the divisibility that constitutes the extensiveness of an actual occasion. To be extensive is to admit of such piecemeal, perspectival, or 'partial' analysis. As a final note, I should point out that Whitehead thinks the two kinds of divisibility, genetic and coordinate, are related to one another—there is a link between the way a becoming can be analyzed or divided (genetic division) and the coordinate divisibility of the final satisfaction. That is, becoming and being are linked, and the being of an actual entity reflects its act of becoming (Cf. Whitehead, *Process and Reality*, 288-289; also see Category of Explanation (ix) on page 22: "That *how* an actual entity *becomes* constitutes *what* that actual entity *is*; so that the two descriptions of an actual entity are not independent. Its 'being' is constituted by its 'becoming.' This is the 'principle of process.'").

[313] Think here back to our discussion of power in my first chapter on James's radical empiricism. The *being* of something is nothing other than its *power*, as the Platonic suggestion goes. The efficacy of experience beyond the immediacy of its occurrence is crucial to what that experience is, and is a widely and readily observable fact. Since the experience *in toto* is not present (and thus efficacious) in other experiences, it is an aspect or expression that is so present, and this implies the divisibility of that experience into various 'regions' or 'perspectives.' Experiences *overlap*, to use a Jamesean image, but are not subsumed entirely. Pure and complete subsumption would lead to monism, thus abandoning the radically empirical doctrine of pluralism. This ability of experiences to be taken up *partially* or *perspectivally*, is their divisibility.

[314] Whitehead, *Process and Reality*, 69. Here Whitehead writes: "The *res vera* [i.e. the actual entity], in its character of concrete satisfaction, is divisible into prehensions which concern its first temporal half and into prehensions which concern its second temporal half. This divisibility is what constitutes its extensiveness."

the performance-experience under any number of these aspects. Perhaps the later experience prehends into conscious awareness the loveliness of the performance space but little about the performance itself, contributing to this later occasion a feeling of fond reminiscence and spurring a desire to see a different performance in that space. The 'generic trait' of experience that makes this interweaving and influence possible is 'extension'—the undivided divisibility of experience.[315]

We have now come upon the notion of extension, which is an essential component of Whitehead's metaphysics. This notion has been presupposed since the very beginning of our discussion, including the chapters on radical empiricism. It is closely allied with the idea of continuity and will help us give meaning to the idea of 'physical time.' A few words about it here will set the stage for the final leg of our discussion of atomism and the epochal theory of time. A note of caution: the idea of extension is an abstract idea—perhaps *the* most abstract idea in Whitehead's philosophy. Its importance to our discussion stems from the fact that it is the condition for the connectivity and relationality of experience. All relations, if they are to be experienced by us in any way, and no matter their other features or characteristics, conform to the character of extension.[316]

Extension, naming the divisibility of an actual occasion, is a concept dealing with the relationality of experience. The divisions of an actual occasion signify the relationships

[315] For the idea of extension as undivided divisibility, see Whitehead, *Process and Reality*, 67. Also see Auxier and Herstein, *The Quantum of Explanation*, 36, 129-130. Whitehead does not use the phrase "undivided divisibility," but instead "merely the potentiality for division." Auxier and Herstein use the shorter "undivided divisibility."

[316] We may say that, for Whitehead, extension is roughly analogous to the 'form of intuition' in Kant, whereby all that appears to a subject does so in space and time. For Whitehead, all that is prehended is so as extended (though bare extension is more general than both space and time). But, unlike Kant's form of intuition, extension is not 'pure,' meaning encountered *a priori*, without engagement with what is external. Rather, the scheme of extension is "derived from the world *qua datum*" (Whitehead, *Process and Reality*, 72). See Kant, *Critique of Pure Reason*, 172-173 (B33-B35).

of that occasion with other occasions, including those others that contribute to the occasion and those that take up the occasion as a component in their own immediacies. As I outlined above, divisibility has to do with ways of appropriating or prehending an occasion, that is, with ways of relating. Potential divisions are ways of signifying possible relations, and thus extension names the generic possibility of relationships between diverse entities. Accordingly, the most fundamental extensive relationship is simply 'connection.'[317] This means that, for Whitehead, division and connection are interrelated, counterintuitive though this link may seem. From the basis of the ubiquity of potential (and actual) connectivity, Whitehead contends: "Extension is the most general scheme of real potentiality, providing the background for *all other organic relations*."[318] This includes "the capacity that many objects can be welded into the real unity of one experience."[319] Such welding is at the heart of Whitehead's account of experience and his notion of 'creative advance.'[320] Thus we see that extension is central to the radically empirical rendering of experience, as described in Chapters II and III—experience as ever flowing, relating, and novel.[321] And since concrete relations are efficacious transitions of affective

[317] See Whitehead, *Process and Reality*, 287; also see Part IV, Ch. II. In this chapter of *Process and Reality*, other relations, such as those of part to whole and of overlap, are defined in terms of extensive connection. This scheme of relations, in turn, "is that general relational element in experience whereby the actual entities experienced, and that unit experience itself, are united in the solidarity of one common world" (Whitehead, *Process and Reality*, 72). Whitehead's treatment of extension in Part IV of *Process and Reality* is broadly geometric in form. But the applicability of extension, as Whitehead conceives of it, goes far beyond the study of space and contributes something important to how we understand the dynamism of retention and creation. It is this side of extension, its importance to process, that I endeavor to highlight in the main text. Thus do not let the mental imagery of spatial volumes distract you from the full meaning of Whitehead's idea, though I admit such imagery is the readiest and perhaps most helpful way of visualizing and approaching the concept of extension.
[318] Whitehead, *Process and Reality*, 67 [emphasis mine].
[319] Whitehead, *Process and Reality*, 67; and cf. Whitehead, *Process and Reality*, 308.
[320] Cf. Whitehead, *Process and Reality*, 288-289.
[321] According to Whitehead, extension is a generic feature of actual experience that makes a Jamesean interpenetrative, efficacious, flowing world—full of hints, hunches, and leadings—possible. Extension,

energy (or potential), extension is also the basic condition for expressing the potency or power of an occasion. There would be no compenetration, no mutual immanence, no community or 'pluralistic universe' without extension. Thus Whitehead writes that, "for our epoch, extensive connection with its various characteristics is the fundamental organic relationship whereby the physical world is properly described as a community."[322] For a pluralistic world to be a world at all the many things must 'hang together,' must stand in solidarity with one another. The "solidarity of one common world," as actual, is forged dynamically through activities of relating and connecting, appropriating and prehending.[323] Extension—that is, the extensiveness of actual occasions—affords the possibility of this solidarity, this unity.

The community of the world, considered merely with regard to its basic, extensive relations, forms an 'extensive continuum.'[324] This continuum is derived from the actual world and concerns the actual world in its basic potentiality for division—i.e. its potentiality for relationships beyond itself. In other words, the extensive continuum, when considered in abstraction from the creative advance, represents the potentiality for novelty

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denoting divisibility and the (potential) connexity between (potential) divisions, is also what renders mathematics, or mathematical thought, applicable to the description of experience. This connection between the possibility of interpenetration, of concrescence and the emergence of novelty, and the applicability of mathematical modes of thought to experience is a significant connection, though one that cannot be fruitfully explored here. But it does provide a window into understanding Whitehead's interpretation of mathematics as concerned with "forms of process" (Whitehead, *Modes of Thought*, 92; also see my brief discussion of mathematics in Chapter III, on pages 68-71). Extension provides the basic relational scheme though which we can understand the transmission and transformation of affective energy (the rhythm and flow of transition and concrescence).

[322] Whitehead, *Process and Reality*, 288. Two brief comments on this text. First, the phrase "for our epoch" refers to Whitehead's idea of 'cosmic epochs' and not to the idea of epoch that plays a role in his theory of time. In saying "for our epoch," Whitehead is acknowledging our limitations into discerning the ultimate nature of things. See footnote 256, above, for an extended discussion of the idea of cosmic epochs. Second, the "various characteristics" of extensive connection are explored in Part IV of *Process and Reality* and include the other extensive relations that can be derived from "connection."

[323] Whitehead, *Process and Reality*, 72.

[324] See Whitehead, *Process and Reality*, Part II, Ch. II.

harbored within actuality.[325] The world has 'patience for novelty,' 'patience for addition'—the world does *not* form a unity complete unto itself. But *in itself,* the extensive continuum is not actual, meaning that it does not exist apart from the atomic actualities that comprise it. It is expressive of potentiality. Thus, we may think of the extensive continuum as part of Whitehead's cosmological rendering of James's contention that experienced actuality "is continuously one with possibles not yet in our present sight."[326] Describing the extensive continuum within the context of the process of creative advance will help clarify this rather abstract notion.

Above we characterized the becoming of an actual occasion as an activity of deciding, whereby there is a resolution of potentiality into actuality. We have also characterized an actual occasion as a synthetic or compositional unity of many things felt together. In deciding, an actual entity synthesizes the given world in its potentiality and 'resolves' this potentiality for feeling into a new experient occasion that *enters* the world, is *of* the world, and contributes *to* the world. The world 'in its potentiality' is all of its possible objectifications, or divisions—the indefinite number of ways it may contribute to the creation of a new subjective immediacy. Precisely *what* these divisions are is indeterminate; there is no division until one is actuality made (decided) by an actual occasion. The bare form of this divisibility is called extension, and the interrelated

[325] Cf. Whitehead, *Process and Reality*, 66. In discussing the reality of the extensive continuum, Whitehead writes: "It is the reality of what is potential, in its character of a real component of what is actual." We must not conflate the ideas of "real" and "actual" here. What is actual is an actual occasion, or a pulse of experience. Anything that contributes to or finds a place within experience is real, or has reality. This should remind us of our early discussion of James's radical empiricism in Chapter II.
[326] James, *Works: A Pluralistic Universe*, 131.

extensions of the many actual occasions make of the world an extensive continuum.[327] Since the possibility of division corresponds to potential relations (that is, potential prehensions, potential objectifications; or, more generally, the power to affect), the world's divisibility forming a continuum points to the infinite fecundity inherent in nature. The possibilities for growth are innumerable.

When an actual occasion makes its objectifications of the world the ground of its own immediacy, it makes a 'cut' or 'divide' in the continuum. The potentiality of the world is brought into an occasion as the 'datum' of its becoming and something is made of this potentiality, a decision is reached. There is actuality, activity, novelty, where before was only the vaguest, simmering possibility. And this decisive activity, in making a certain relational unity actual, thereby cuts off the alternatives from realization. That is to say, the new experience 'takes its place' in relation to the rest of the world—it has a context, an environment. Experiences do not occur 'nowhere,' but by the stove or at the store. This context is an experience's 'standpoint' in the world, the locus through which it is in relation to everything else. In deciding, an actual occasion 'takes a position,' 'occupies a

[327] Cf. Whitehead, *Process and Reality*, 66. Here Whitehead writes that the extensive continuum "expresses the solidarity of all possible standpoints throughout the whole process of the world." The idea here is that nothing can be *of* the world without being related to it, or connected to it. The promulgation of this requirement—the requirement of connectivity or relationality—to all possible experiences, if they are to be experiences *in* and *of* our world, relevant to it and efficacious within it, is what it meant by the extensive continuum. That is, all the real possibilities for the world are anchored to the actuality of the world in the making. This is because incipient actualities draw upon the settled world as the source of its potentialities for what it may become. The extensive continuum represents the most general limit or boundary placed on *pure* possibility—that *the new* be connected to, or bear some relation to, *the old*—and thus transforms such pure possibility into possibilities *for* the world, or possible experiences in and of the world. We can say, then, that the extensive continuum "contains" all the possibilities that are in any way relatable to the world that has already become. This image of containing is nonliteral, of course. Possibilities are not like marbles that can be kept in a jar; they are luring but vague ways or manners of being. Whitehead's point, put shortly, is that all possibilities, in so far as they are possibilities for our world, must conform to extension or satisfy the conditions of extensive connection. That is, to be relevant to the world, possibilities must take account of the relational structure already made actual.

standpoint,' effects a division of the extensive continuum. When it does so, it joins the community contributing its character as potential for subsequent occasions. To 'step into relation with the rest of things' is to 'atomize' the extensive continuum.[328] The infinite whirl of potential relations symbolized by a standpoint in the extensive continuum has been resolved to the actual occurring of experiential, relational activity. This occasion—decisive—is the cutter and, as decisive, as actual, is uncut, atomic.[329]

As I indicated above, the extensive continuum is an abstract notion, and precisely as an abstraction it is a way of thinking about the operation of possibility in the world and the conditions laid upon pure possibility by the actual things that form the world. The language of place and occupation may suggest, wrongly, that the extensive continuum is an actual existent *in which* experiences occur. Do not think of the extensive continuum as a thing or as a substratum, as something separate from actual occasions which they then occupy. It is real, but real as a conditioning factor within experience, provided by other experiences. The extensive continuum is a way of conceiving of possibility in its most general relationship with actuality; namely, that every novel actuality must take account of the world that has come before.[330] We may express this point by recalling Dewey's

[328] Cf. Whitehead., *Process and Reality*, 62.

[329] There are many possible expressions (divisions) of an actual occasion's potentiality, or power, but *as an actuality*, as something that *has happened* and *has entered the world with definitive relations*, it remains forever what it is, uncut—an 'irreducible, stubborn fact.'

[330] Cf. Whitehead, *Process and Reality*, 66: "All actual entities are related according to the determinations of this continuum; and all possible actual entities in the future must exemplify these determinations in their relations with the already actual world." It is by reason of what Whitehead calls "the principle of relativity" that the extensive continuum takes form and holds this pervasive influence, including over future occasions. The principle of relativity states that "it belongs to the nature of a 'being' that it is a potential for every 'becoming'" (Whitehead, *Process and Reality*, 22). This principle embodies Whitehead's view that the world, and everything in it, is pervasively relational and constituted by its relations. All things are related to, and thus a potential for, every becoming of a new thing. This is "the one general metaphysical character attaching to all entities, actual and non-actual" (Whitehead., *Process and Reality*, 22). Everything—the

contention that "experience is *of* as well as *in* nature;" experience is part of a world, a community, and it *concerns* that world and community.[331] And thus when experience grows, it does so "by its edges," drawing nutriment from the whole and adding to that whole.[332] The basic relations by which things can *be together* is what Whitehead calls extension. It is the most general relational scheme through which we can think of experiences affecting one another. It is the basic form of the publicity of the world, conditioning all expressions of actuality. Thus extension, along with the creative advance into novelty, is the other great notion at the basis of Whitehead's rendering of experience into a metaphysical system.[333]

These two ideas, extension and creative advance, correspond closely with the two types of continuity distinguished above; namely, the mathematical continuity of indefinite divisibility and the perceptual, interpenetrative continuity of transition from occasion to

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whole universe—feeds into an incipient occasion, or moment of experience. As Whitehead puts it in *Science and the Modern World*, nature exhibits itself as full of "entwined prehensive unities, each suffused with modal presences of others" (Whitehead, *Science and the Modern World*, 84). Thus, because these many entwined prehensive unities form an extensive continuum, and because these beings form the potentiality out of which new actualities grow, future actualities will join the extant extensive community. Stated conversely, every occasion, as it comes to be, must take into account the conditions laid by what has come before, including those of extensive connection. Thus by the universality of relativity, future occasions must conform to and join the extensive continuum.

[331] Dewey, *Later Works: Experience and Nature*, 12.

[332] James, *Works: Essays in Radical Empiricism*, 42.

[333] Though Whitehead's theory of extension is a crucial aspect of his philosophy, it is, on the whole, traversed rather quickly by many commentators and interpreters. I suspect that this is because the theory of extension is where Whitehead's philosophy is most mathematical. I myself have only covered fragments of the theory, quickly and without any mathematical detail, and thus I cannot claim to be exceptional in that regard. But it is still valuable to properly orient the idea of extension within Whitehead's philosophy. What I have discussed pertains to the grounding of extension in actual occasions and the relationship of extension to potentiality and thus to the growth of the world, or the creative advance into novelty. I have tried to elucidate the philosophical foundation of extension in its relation to process, and this work is necessary if Whitehead's views on continuity and atomism are to be properly understood rather than misconstrued. The following works are notable for their focus on the notion of extension, the depth of their treatment, and for giving the notion of extension its due within Whitehead's larger project: Jorge Luis Nobo, *Whitehead's Metaphysics of Extension and Solidarity* (Albany: State University of New York Press, 1986); and Auxier and Herstein, *The Quantum of Explanation*, which has already been referenced. I have found both of these works to be helpful in framing my thoughts for this discussion.

occasion. I here propose calling them static and active continuity, respectively.[334] Both types are required to understand time. Active continuity, which is the continuity of actual, atomic things, is the continuity of flow or passage. Though acts of becoming are atomic, their atomicity includes the transition from the settled world to the new and thus the connections of that act of becoming with other occasions of experience. That is, past and future are immanent to an act of becoming, as described in Chapter IV, and this act is itself passage from past to future, without gap or break. This active continuity represents the concrete togetherness of actualities and thus it is incapable of being divided while preserving the actual character of the occasions so connected. Any division of active continuity would yield only *potential* connections—connections 'incomplete' on their own, but suggestive of other ways of relating and transitioning—not *actual* connections, parts, or transitions. Taken to the highest generality, this potentiality is extension.

Static continuity, characterized by the potentiality for division, is the continuity of what has become but not of its becoming. What has become is an occasion with meaning, potentiality, and influence that transcends the immediacy of its occurrence. This excessive expression of potentiality is captured in the notion of extension. Thus extension and the extensive continuum exhibit this static continuity. Since both types of continuity, active and static, are required to make sense of the full meaning of time, the two continuities are reciprocally related; each has its applicability in the constitution of an actual occasion.

Within the context of creative process, static continuity is derived from active continuity. The actual flow of things can be 'decomposed' into aspects, perspectives, or

[334] There is a strong parallel between what I distinguish as static and active continuity and what James calls the standing and growing varieties of infinity. See James, *Works: Some Problems of Philosophy*, 86.

objectifications that express the potentiality and relationality—the power—of this flow in reaching and speaking beyond its immediacy.[335] The 'decomposition' of the active continuity of flow or transition into the static continuity of indefinitely divisible extension provides the fuel, so to speak, for the continuance of the active, creative process. Every occasion of experience throws itself into the future, and every incipient occasion catches what was thrown, appropriating it, fashioning it anew, fashioning itself, and continuing the throw into the future. Such throwing and catching requires that what is actually undivided be divisible *in the mode of expressing potentiality*. Both an occasion's derivation from its past and its influence on the future requires this divisibility, this static continuity. Thus the two continuities require each other.

This requirement takes the following form: static continuity derives from active continuity and lays the ground for the continuance of the active, as extension is created through the creative advance and is required for successive occurrences of the creative advance. This mutual dependence is an aspect of what Whitehead calls "the principle of process," whereby "*how* an actual entity *becomes* constitutes *what* that actual entity *is*."[336] What an actual entity *is*, its *being*, is "its potentiality for 'objectification' in the becoming

[335] The view that static, divisible continuity derives from the actual, unbroken continuity of flow or becoming is also found in the work of Henri Bergson. For example, Bergson writes that "movement, *once effected*, has laid along its course a motionless trajectory on which we can count as many immobilities as we will. From this we can conclude that the movement, *whilst being effected*, lays at each instant beneath it a position with which it coincides." This trajectory "is created in one stroke, although a certain time is required for it; and that though we can divide at will the trajectory once created, we cannot divide its creation, which is an act in progress and not a thing." There is an atomic quality to creation, though what is created reveals its divisibility in the mode of potentiality. Active continuity begets static continuity; undivided acts or movements lay out a divisible world. Whitehead contends that this divisibility means that the world is full of potentiality for growth. The above texts are from Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: The Modern Library, 1944 [1907, original French; 1911, English translation]), 336.
[336] Whitehead, *Process and Reality*, 23.

of other actual entities."[337] Whether we describe an occasion's becoming or its being, "the two descriptions of an actual entity are not independent."[338] Active continuity is part of the description of becoming, static continuity part of the description of being. Becoming constitutes being, and being provides the 'material' for becoming. As ideas, the two types of continuity are distinct, but both are part of the fabric of creativity and thus neither is more fundamental than the other.

Considering its place within creative process, static continuity is not really static in the sense that it sits there, inactive. Rather, the divisibility of an actual occasion represents the burgeoning potential of an occasion to feed into and inform process, and divisibility can also be revelatory of where a particular occasion came from, that is, revelatory of its influences.[339] Static continuity, or the continuity of what is potential, is always in the making—"extensiveness becomes."[340] This means that the field of potentialities relevant for, and available to, the temporal, historical world is always changing shape, some possibilities fading from view, others coming into view; some gain or lose urgency; some become idle dreams and yet others approximate the character of necessity. In this way the word "static" is a misnomer; yet I use it because this continuity is capable of mathematical representation. It also signals the fact that something important about the flow of experience is left out in this static or mathematical representation, namely, its character of passage or transition, as well as the appetite, aim, purpose, or intention which lends atomic

[337] Whitehead, *Process and Reality*, 23.
[338] Whitehead, *Process and Reality*, 23.
[339] Just to be clearer regarding Whitehead's terminology, the first "divisibility" in this sentence refers to coordinate divisibility and the second to genetic divisibility. See my note 312, above, for more on this distinction.
[340] Whitehead, *Process and Reality*, 35.

character to the flow. The static continuity of extension brings into focus the infinite density of possibility within the flow of experience, rather than modeling the flow itself. The actual flow and relationality of experience is fringed by possibilities that exceed the bounds of our imaginative powers.

The two types of continuity, active and static, are relevant to our coming to understand time, specifically as they meet in the experience of succession. Our sense of succession, of something following upon another, and consequently our notions of earlier and later—all so crucial to the notion of time—are derived from the sense of derivation and influence, of transition and conformation, in the active continuity of our experience. The idea of *pure* succession, of simple order according to earlier and later, is the reflection of the always particular and concrete transitions of active continuity into static continuity. Whitehead calls this idea of pure successive order 'physical time.' The fact of this succession in the world is real, and so physical time, or the physical aspect of time, is real, but it does not tell the whole story of temporality. In the physical account of time there is abstraction from the passage or transition so integral to the experience of time. This brief sketch will be filled out in the following section.

Epochs and Atoms

Let us begin to pull together our several discussions of epochs, atoms, extension, and continuity under the canopy of temporal process. We shall move from extension and continuity to the related ideas of physical time and succession, then return to the contrasting non-extensive or atomic character of time and elaborate its connection to physical time. The basic form of the reconciliation has already been given above in the discussion of active and static continuity, though more remains to be said. Through this

line of inquiry, the nature of Whitehead's atomism, and its distance from traditional ideas of atomism, will come into sharper focus. Since Whitehead's atoms are systems of all things, what is it that holds them together and instigates the passage into a novel future?

The foregoing makes clear that, for Whitehead, extension is not synonymous with space. Extension denotes the divisibility of an occasion, that is, the potentiality of an occasion to go beyond itself and contribute to the future. The 'public form' of an occasion, we might say, is extensive. As a generic form, extension "does not involve shapes, dimensions, or measurability; these are additional determinations of real potentiality arising from our cosmic epoch."[341] This text underscores two related points. First, that the ordering of extensive relationships is not itself determined by extension *qua* divisibility. Rather, the communal order or structure of the world is a result of the actual things that have happened and are happening—the actual decisions and divisions. And second, that the orderings that do in fact dominate the world of our experience are created—are won through effort, or are 'in the making.'[342] That is, specific extensive orderings could be, and perhaps someday might be, different. They are not metaphysically necessary or fixed. Space and time are the dominating characteristics of extensive order so far as our experience goes, but Whitehead is clear that "extension does not in itself determine the special facts which are true respecting physical time and physical space."[343] This moderate

[341] Whitehead, *Process and Reality*, 66.
[342] Cf. the following text from a letter from William James to François Pillon, dated June 12, 1904: "My philosophy is what I call a radical empiricism, a pluralism, a "tychism," which represents order as being gradually won and always in the making." In Ignas K. Skrupskelis and Elizabeth M. Berkeley, eds., *The Correspondence of William James: Volume 10: 1902 - March 1905* (Charlottesville: University of Virginia Press, 2002), 410.
[343] Whitehead, *Process and Reality*, 289. Here are two examples of such "special facts," one concerning time and one concerning space: (i) whether there is a single, uniform linear succession of time holding for the whole universe, or whether there are multiple time-systems (in the latter case, there is no absolute meaning

statement partially conceals Whitehead's much stronger position, namely, that space and time are not 'built in' to the fabric of extension. Rather, "[t]he extensiveness of space is really the spatialization of extension; and the extensiveness of time is really the temporalization of extension."[344] It is actual occasions, in their character as concrete, atomic becomings, that spatialize and temporalize. Actual occasions actively *time* and *space* the world through the activity of deciding; they are not *in* space and time. Their happening, and the mutually constructed structure of their happenings, provide the "additional determinations" of extension that constitute the spatial and temporal orders of the world of our experience. More plainly, the structure of space-time is created by the interlocking occurrence of occasions of experience, which structured pattern of occasions in turn conditions the creation of further occasions of experience. Actual time and space are *created*, bit by bit—"reality is created temporally day by day."[345]

Both James and Whitehead understood this view—that physical time and space are not themselves independent actualities but aspects of the relational happenings of the actual things that comprise the world—to be a philosophical expression of common, everyday experience. Whitehead writes that this view "has merely given a modern shape to the oldest of European philosophic doctrines. But as a doctrine of common sense, it is older still—as old as consciousness itself."[346] As James describes it: "Everything that happens to us brings its own duration and extension [i.e. space], and both are vaguely surrounded by a marginal 'more' that runs into the duration and extension of the next thing

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for the word "now"—the meaning is determined relative to some particular time-system); (ii) how many dimensions of space there are. Answers to these questions are not inherent in the nature of extension.

[344] Whitehead, *Process and Reality*, 289.

[345] James, *Works: Some Problems of Philosophy*, 55.

[346] Whitehead, *Process and Reality*, 70.

that comes. […] Cosmic space and cosmic time, so far from being the intuitions that Kant said they were, are constructions as patently artificial as any that science can show. The great majority of the human race never use these notions, but live in plural times and spaces, interpenetrant and *durcheinander*."[347] James's description is extremely important. Happenings and events bring their own, self-made spatiality and temporality with them, into the mixed and overlapping world of our experience. From the local comes the cosmic. Absolute space-time is a simplified and abstract way of rendering this complex situation.[348]

What this 'common sense' view means in Whiteheadian terms is that physical time and space are orderings of occasions within the extensive continuum, with "physical" denoting the fact that these coordinated orderings of actual occasions are propagated from

[347] James, *Works: Pragmatism*, 87. The word "extension" as James uses it in this text is synonymous with "space;" it is not Whitehead's more general notion of undivided divisibility. Also, it is worth setting down in full the entire text from which the three sentences above are taken. It is an important text, worthy of reflection in light of our ongoing discussion: "That one Time which we all believe in and in which each event has its definite date, that one Space in which each thing has its position, these abstract notions unify the world incomparably; but in their finished shape as concepts how different they are from the loose unordered time-and-space experiences of natural men! Everything that happens to us brings its own duration and extension, and both are vaguely surrounded by a marginal 'more' that runs into the duration and extension of the next thing that comes. But we soon lose all our definite bearings; and not only do our children make no distinction between yesterday and the day before yesterday, the whole past being churned up together, but we adults still do so whenever the times are large. It is the same with spaces. On a map I can distinctly see the relation of London, Constantinople, and Pekin to the place where I am; in reality I utterly fail to *feel* the facts which the map symbolizes. The directions and distances are vague, confused and mixed. Cosmic space and cosmic time, so far from being the intuitions that Kant said they were, are constructions as patently artificial as any that science can show. The great majority of the human race never use these notions, but live in plural times and spaces, interpenetrant and *durcheinander*."

[348] Insofar as the physical theory of relativity treats time as, roughly, a fourth dimension of space, it is still a simplified and abstract way of rendering the temporality of experience and the experience of a temporal world. The creative and decisive character of time is left out, leading us back to a 'block universe' despite the abolition of the notions of an absolute moment in time and point in space. Whitehead's view of time and space embraces relativity, but a version of it that avoids deterministic implications. For more on the relation between Whitehead's philosophy and the idea of relativity in modern physics, see Gary L. Herstein, *Whitehead and the Measurement Problem of Cosmology* (Frankfurt am Main: Ontos Verlag, 2006); also see Auxier and Herstein, *The Quantum of Explanation*, Ch. 6.

actuality to actuality, imposing conformation and reproduction.[349] In other words, space and time are public; they are general systems of relationality through which various happenings can be coordinated, and that condition more specific types of relationships, such as magnetic attraction, the price of goods, and friendship. Common forms of spatiality are studied by geometry. Physical time, as a form of order, is characterized by succession, by divisibility into earlier and later. The matter of time, though, is more nuanced and thorny than is that of space. This is because there is a sense in which time "extends beyond the spatio-temporal continuum of nature."[350] This is time as essential to the creative advance into novelty, where the three modes of time (past, present, and future) exist in 'dynamic union,' that is, *atomically*, within the epoch of an occasion's becoming, informing its decisive activity; this is time as passage, as unrest, as a marker of that incompleteness that pervades the actual world; this is time as *lived*, time within the immediacy of experience. Physical time is a public form of order; lived time is movement, passage, flow experienced privately. Yet we refer to both as time, for both 'physical time' and 'lived time' are interrelated, mutually influential aspects or expressions of the concrete passage of time. Neither 'lived' nor 'physical' time can be what it is divorced from the other, and the 'concrete passage of time' is nothing other than the 'creative advance into novelty.' This distinction between physical and lived time will gain clarity with further

[349] For Whitehead, a physical feeling is the feeling of another particular actuality. That is, a physical feeling is when one actual entity feels another. Such feelings are heavy with the obligation of conformation. The distinction here is with conceptual feeling, where what is felt is abstract and the feeling is less determinate, meaning the obligation to conform is weaker and the suggestiveness of alternative possibilities is stronger. Pertaining to my point above, to say that time and space are physical is to say that these relational schemes are felt as deriving from, and as pertaining to, the actual world of happenings and events (and not necessarily to the abstract worlds of ideas and fantasies). Since the whole world participates in the spatiotemporal scheme, the obligation to conform is nigh inescapable.

[350] Whitehead, *Science and the Modern World*, 124. And cf. Whitehead, *Process and Reality*, 289; and Alfred North Whitehead, *The Concept of Nature* (Cambridge: Cambridge University Press, 1920), 34-35.

discussion, and will aid us in understanding the atomic character of becoming, its relationship to continuity, and thus Whitehead's epochal theory of time.

The first thing to consider is how physical time is related to the creative advance. In the vein of radical empiricism, we should begin by looking at our experience. At the outset of this exploration of time I stated that Whitehead describes experience as a creative advance into novelty, whereby a new experience takes up the settled world, feels its potentiality, and makes something new of this potentiality, adding to the world, joining it. There is a transition *from* the world as it is now *to* something new. There is perishing and creation. The notion of succession is embedded in this idea of creative advance: the new comes and succeeds the old; the later succeeds the earlier. Thus the idea of physical time has its roots in the creative advance.[351] But there is no pure succession in our experience. What we experience, rather, is derivation and conformation, influence and transition.[352] What we are *now* is derived from, influenced by, and to a degree conforms to, what came

[351] Because the creative advance is central to Whitehead's description of reality, we may say that time is the first or primary determination of the extensive continuum. That is, though the extensive continuum *in itself* (which is a high abstraction) is neither temporal nor spatial, the very notion of process involves and generates successiveness—old to new, earlier to later. Thus, in a processive world, the extensive continuum is always already being temporalized, that is, subject to temporal order. The first determination of the potentiality qualifying the world is temporal. Spatial determination is secondary, as "the extension of space is the ghost of transition" (Whitehead, *Modes of Thought*, 96).

[352] As F.B. Wallack states rather clearly: "The Whiteheadian account is, then, that we do not experience physical time, but transition and becoming. Our experience is of a transition of other occasions effecting our present being, a present which reveals upon examination the other occasions to be supersessions of antecedents, that is, it reveals the other occasions to be our past. Transition or passage is not experienced in temporal order or as continuous time but as present becoming: it is retrospection that sees the efficacious occasions as past and that discriminates the temporal order of successions of past occasions" (Wallack, *The Epochal Nature of Process in Whitehead's Metaphysics*, 284-285). Here, when Wallack says "continuous time," we should interpret her as talking about physical time, which exhibits static or mathematical continuity. Also note that retrospection is itself an experiential act, meaning, an occurrence within "present becoming." Thus temporal order is felt within an actual occasion as qualifying the world; the world is experienced as in time. But the conscious discrimination of temporal order is not necessary for the *feeling* of temporal order. The feeling (prehension) of other efficacious occasions grounds the feeling of time, though this feeling of time is and remains vague without retrospective activity. I briefly discuss retrospection in the main text, below, pp. 170-171.

before. As James says, our experiences form a *stream*. From the movement of this stream, full of feelings of influence, derivation, tendency, and transition, we abstract the idea of *pure* succession. As Whitehead writes, "pure succession is an abstraction from the irreversible relationship of settled past to derivative present."[353] What this abstraction omits is derivation and influence, or the *transition* between the things succeeding one another. All it retains is the idea of order according to earlier and later. Such order is a form of divisibility, that is, of extension. Succession, then, is a determination of the extensive continuum and thus conditions how actual occasions relate to one another. When occasions occur, it is before, after, or contemporaneous with other occasions.[354] But *as a form of order*, physical time can be represented spatially, that is, all at once, as along a number line. Indeed, physical time is often represented numerically—seconds, minutes, hours, days, years, centuries—with the succession of numbers corresponding to the succession of time. Time, though, is not given all at once. The passage of time *takes time*.

Thus "pure succession is an abstraction…omitting the temporal character of time."[355] Succession is real but is never pure. It is always the succession of some particular, actual occasion by another, with the specific character of the particular

[353] Whitehead, *Symbolism*, 35.
[354] This scheme of 'before, after, or contemporaneous' is determined relative to 'position' within the extensive continuum, meaning one occasion may be before (or after) another and yet both be contemporaneous to a third. That is, temporal succession need not be uniquely serial. This is the entry point for the relativistic findings of modern physics. Cf. Whitehead, *Science and the Modern World*, 124: "There is no necessity that temporal process…should be constituted by one single series of linear succession. Accordingly, in order to satisfy the demands of scientific hypothesis, we introduce the metaphysical hypothesis that this is not the case." Also cf. Whitehead, *Process and Reality*, 35: "There is a prevalent misconception that 'becoming' involves the notion of a unique seriality for its advance into novelty. This is the classic notion of 'time,' which philosophy took over from common sense. Mankind made an unfortunate generalization from its experience of enduring objects. Recently physical science has abandoned this notion. Accordingly we should now purge cosmology of a point of view which it ought never to have adopted as an ultimate metaphysical principle. In these lectures the term 'creative advance' is not to be construed in the sense of a uniquely serial advance."
[355] Whitehead, *Symbolism*, 35.

influence, derivation, and conformation of *that* relationship. But distilling temporal succession from the concrete process of creative advance, we get the idea of physical time as a type of divisibility, specifically, divisibility into earlier and later. Since there has been abstraction from the actual way in which specific occasions succeed one another, the divisibility of physical time can be continued indefinitely. No matter what duration you indicate, you may always indicate a smaller duration, just as, when you divide a number, there is always a smaller division. This is merely to say that physical time is an aspect of the extensive continuum and therefore is a way of describing how actual occasions can and do relate to one another. Thus physical time is real, but is also abstract. It does not tell the whole story of temporality.

The "temporal character of time" gains its meaning *within* the atomic becoming of an actual occasion, through the activity of deciding, where there is the resolution of possibility into actuality. This is time "beyond the spatio-temporal continuum of nature." By saying that time exists beyond the spatiotemporal continuum, Whitehead is saying that time transcends the extensive continuum, for physical time and space are the basic determinations of the extensive continuum, the basic modes of public order to which all actual occasions conform. No matter what an experience is of, no matter its character, it happens at some place and time in relation to the rest of things. For time to go beyond the extensive continuum means that time goes beyond divisibility and publicity; time has an indivisible and private quality. This is time as becoming, as a transcendent epoch of deciding, as a dynamic union where past and future are active in the creation of the present. Since an act of becoming is not divisible into other becomings, an act of becoming *itself* has no potential for others until it is complete, exhausted, or, in Whitehead's language,

satisfied. That is, the becoming *itself* has no publicity but instead is private, individual, opaque. I have endeavored to describe this character of time in the earlier sections of this chapter and in the previous chapter. Here time touches the heart of the creative advance into novelty.

There is an experiential primacy about this private, indivisible temporality, which is why I called it 'lived time' above. The experience of time as lived includes a sense of succession. But the sense of succession is derivative from the felt dynamic and atomic unity of present immediacy. The *being felt together*, or dynamic union, of past, present, and future is a condition of the experience of successiveness. If past, present, and future were not felt together, in a unified experience, then we also could not feel derivation, perishing, and hence succession. For there would be nothing from which a given experience could feel derived and no sense of what the experient occasion might lead to; there would be no sense of having come after anything or of coming before an uncertain future. An occasion emptied of past and future is an empty husk in solipsistic isolation, which is really to say, a nonentity. The experience of succession requires that occasions of experience be immanent to one another in the immediacy of becoming.

But just as becoming yields extension, so time as undivided and non-successive begets successive order through the perpetual perishing of the undivided present. Our experience of the lived and immediate present, of the flow through which the present perishes and the future comes to be, is, as James says in the *Principles of Psychology*, "from the outset a synthetic datum, not a simple one; and to sensible perception its elements are inseparable, although attention looking back may easily decompose the

experience, and distinguish its beginning from its end."[356] This 'decomposition' is the experience becoming extensive in its perishing. Note that reflecting on an experience to examine its extensive relations, "looking back" at it, is itself an experiential activity of a separate, and subsequent, occasion of experience. This means that the perished occasion, with its extensive relations, has been taken up within, or appropriated by, the reflective experience.[357] Extension and extensive relations (such as the order of succession) are experienced as qualifying the world, *but that very fact of experiencing extension as such* itself occurs as part of a living, immediate experience that is, in its own immediacy of becoming, non-extensive. Extension and temporal order, or physical time, is an aspect of the world disclosed in reflective experience but that does not qualify the immediate act of experiencing. That is, extension does not qualify the immediate act until that act 'enters the world,' becoming public and interacting with it, thereby losing its immediacy. This means that the extension never qualifies the act as *immediate*, only the act as *perished*.

I hasten to point out that conscious reflection merely helps disclose and articulate the extensive connectivity within the constitution of experience. Conscious reflection is not required to experience or feel the extensive structure of the world, and it is not *creative* of extensive order.[358] The appropriation or prehension of the world into the constitution of an atomic occasion of experience, as the ground of that experience, requires, realizes, and pulls the extensive structure of that world into that experience. The feeling of present immediacy *as an act of becoming* has no extensive content; it is incapable of division. As

[356] James, *Works: Principles of Psychology*, vol. I, 574-575.
[357] Cf. Whitehead, *Process and Reality*, 67.
[358] It is not creative of *past* extensive order, though reflection can help create the shape of *future* extensive order. For reflective activity, as part of present experience, helps shape that experience and thus all subsequent experiences.

James says, its elements are inseparable. But when reflective activity turns the eye of attention to the ground of its immediate activity, to the others from which it is derived and that are immanent in its activity, it meets with an extensive world. Feelings of derivation or external efficaciousness carry with them the sense of extensive order (which we make more explicit with the operations of consciousness). It is here, looking at the sources of present feeling and thus 'retrospectively,' that we make determinations of extensive order, such as earlier and later. For instance, I can see that my previous acts of experience form a biographical order, with last week coming before yesterday, though this whole order is effective within and immanent to my present experience (else there would be nothing for me to discriminate). The feeling of derivation from an earlier stream of feeling is primary, and the discrimination of order is secondary or 'retrospective,' even though the results of reflection are themselves felt components of immediate experience. The shorthand for all of this is: experienc*ing*, as a process, is not extensive (divisible), but *an experience*, as concrete and as experienced, is extensive.

The experience of extensiveness qualifies the future and the present as well as the past. Recall that, in Chapter IV, I said that anticipations of the future involve a sense of present and past activity as conditioning that future. Thus in anticipating the future, an occasion of experience has a sense of its own perishing and what it will mean for the future. In other words, an occasion includes an anticipatory feeling of its own objective immortality, that is, of its power—its potentiality, its divisibility, its extensiveness.[359] By feeling its own soon-to-be perishing, an actual occasion has a vague and inchoate sense of

[359] Cf. Whitehead, *Process and Reality*, 278: "But one element in the immediate feelings of the concrescent subject is comprised of the anticipatory feelings of the transcendent future in its relation to immediate fact. This is the feeling of the objective immortality inherent in the nature of actuality."

its own extensive character before that character is realized. An actual occasion is, as Whitehead writes, "the enjoyment of a certain quantum of physical time."[360] This is an aspect of an actual occasion's 'taking a place' or 'occupying a standpoint' in relation to the rest of things; an actual occasion makes a cut in the extensive continuum and 'enjoys' the region it fills. The becoming of an occasion, drawing on a world that exhibits the structure of physical time, feels itself as taking place within or as part of that structure. It 'enjoys' physical time as it becomes; it feels physical time as an influential component in its becoming. That is, the temporal order of the world is important to what an occasion can and will be. But the extensive content of its own standpoint, its own 'quantum of extension,' can only be determined once that occasion has become and perished, and thus is past. Becoming is a fill*ing*, and for the amount of time filled to have any meaning for the wider world, the filling must have happened.

The becoming of an actual occasion—its "genetic process" or concrescence—fills its epoch atomically, meaning that it is not *in* physical time and thus does not exhibit temporal succession in the sense of having actually divisible parts.[361] The occasion 'enjoys' physical time in the sense that it draws potentialities from occasions prior to itself, harbors indefinite potentialities for creativity beyond itself, and *feels this to be the case*. It feels itself as a press into the future. An actual occasion will express power beyond itself and thus will be divisible in the mode of potentiality, with some of these divisions breaking the occasion into earlier and later sections. Thus we can say that the becoming of an occasion fills a duration or an epoch of physical time. For example, your acts of experience

[360] Whitehead, *Process and Reality*, 283.
[361] See Whitehead, *Process and Reality*, 283.

form part of the world from which I weave my own experience, and I experience them as *in time*, as themselves pressing forward from past to future within an environing situation. When I look at your acts of experience I am able to see the successive order of physical time in them. I see that your actions and activities *take time*. The same is true if I look back at my own past activities. But from inside an occasion as a process, from inside my own immediate experience, the act of becoming is felt as an organic whole that "is not realised *via* its *successive* divisible parts, but is given *with* its parts."[362] In anticipating these parts, an occasion 'enjoys' its own temporality.

Therefore, an actual occasion can have a sense of the quantum of extension it fills in its perishing without that act of 'filling' or 'enjoying' itself being extensive. The quantum of physical time enjoyed is the occasion's epoch, and the becoming of the occasion is epochal and atomic because it fills an epoch without allowing that epoch to be divided. The extent of the epoch is only determinable in retrospect, once the occasion has become, but the filling of the epoch, the taking of time, is felt, 'enjoyed.' This enjoyment is the feeling of deciding, of resolving possibility into actuality. Reaching a decision, or resolving possibility into actuality, is the sense of *passage*, of *lapse*, within experience. It is the original of what we mean when we recognize that something "takes time." Physical time expresses some features of this passage, but it neither explains nor exhausts passage.[363]

Let us bring this discussion of lived time and physical time more directly into the context of our experience. Here is one way of conveying the contrast between the two. We

[362] Whitehead, *Science and the Modern World*, 125.
[363] See Whitehead, *Process and Reality*, 283.

experience the world within the relational scheme of physical time, though our own immediate acts of experiencing do not quite "line up" with that scheme. For example, when we are absorbed in considering a difficult problem our sense of place within physical time diminishes; I might be startled to learn how little time has passed, or how much time has passed, when I return from my reverie. That is, acts of experience *in their immediacy* cannot be described by physical time. Immediacy has a private character; felt passage or transition is opaque from without; what *passes* in the privacy of lived time is transcendent of the considerations defining physical time. Rather, recognition of the physical time enjoyed by an occasion of experience involves the relationality between and the public coordination of many such occasions. Whatever is passing in the privacy of *my present experience*, other, external things continue to happen against which I shall be able to make temporal comparisons. To know how much time has passed in relation to the rest of things while I was lost in thought, I look up at a clock, that mundane yet controversial device that embodies our attempts at a collective coordination of time.[364]

Yet physical time and lived time interpenetrate, each finding its reflection in the other—the perishing of lived time yields divisibility and successive order (we can retrospectively describe ourselves as having deliberated for three minutes, and to have thought about *this* aspect of the problem before *that* aspect), and the structures of physical time are reproduced within and condition lived time (we can consider a problem only *after*

[364] The coordination of time might seem like a straightforward task, but this is far from the truth. See Jimena Canales, *A Tenth of a Second: A History* (Chicago: University of Chicago Press, 2009); Jimena Canales, *The Physicist & The Philosopher: Einstein, Bergson, and the Debate That Changed Our Understanding of Time* (Princeton: Princeton University Press, 2015); Peter Galison, "Einstein's Clocks: The Place of Time," *Critical Inquiry* 26, no. 2 (2000): 355–89; Peter Galison, *Einstein's Clocks, Poincaré's Maps: Empires of Time* (New York: W.W. Norton, 2003).

it arises).[365] Time straddles the undivided and the divisible, the atomic and the extensive. Atomic occasions become and perish and are succeeded by yet others, with no gap in between. This flow of life is given to us in experience and is the basis of successive order.

Since immediate atomicity (undividedness) and subsequent extension (divisibility) are so entwined in human experience—not just as a rhythmic pattern, but also in that extension is experienced within atomic becoming—it is exceedingly difficult to point to *just that* experience as illustrative of the distinction. Rather, general examples can be given and individual introspection and intuition must pick up from there. Concerning the atomicity of experience, consider the examples given earlier of the dynamic union of time, such as playing a musical instrument, where past and future are inseparably implicated in the formation of the present. Or think of any experience in which you are "in the zone," absorbed in your activity and oblivious to what is external to your activity. Here we lose our sense of time, only recognizing how much time has passed once reflection erupts onto the scene, breaking the flow of activity. Being absorbed in a task is perhaps the best example that experience in its immediacy is at once undivided and a flow.[366] And more generally, consider that no aspect of your experience can be wholly separated off from the rest and still be *your* experience. If something is not *with* your experience, then you do not

[365] Regarding the reproduction of the structures of physical time within our immediate experience, especially the past, cf. John Dewey, "The Postulate of Immediate Empiricism" (1905) in John Dewey, *Essays on the New Empiricism: 1903-1906*, ed. Jo Ann Boydston, vol. 3, John Dewey: The Middle Works, 1899-1924 (Carbondale: Southern Illinois University Press, 1977), 167: "we experience most things *as* temporally prior to our experiencing of them."

[366] In the field of psychology, the concept based on the fact of total, immersive engagement and a separation from a definite sense of time is called "flow experience." It was developed in the work of Mihály Csíkszentmihályi. Dubbing the experience "flow" is important, for it links undividedness with a sense of passage or flow, thereby suggesting that the inherent divisibility of physical time is not a feature of flow as it is immediately experienced or undergone. See Mihály Csíkszentmihályi, *Beyond Boredom and Anxiety: Experiencing Flow in Work and Play* (San Francisco: Jossey-Bass, 1975); Mihály Csíkszentmihályi, *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990).

experience it. The actual undivided togetherness of many things is part and parcel of what experience *is*.[367]

The extensiveness of experience is illustrated by every act of reflection and of conscious attention, as each such act teases apart and analyzes what is felt in dynamic union.[368] Since various forms of reflection, practical and theoretical, conscious and unconscious, are ubiquitous in human life and lay bare the divisibility of experience, it is more difficult for us to imagine and especially comprehend experience's atomicity. Efforts to *analyze* the atomicity of experience belie the point in question; nevertheless, experiential togetherness permeates our affective lives, grounding and leaking into reflective activity. According to Whitehead, we can make headway in rationally recognizing and understanding the "prehensive unity" of and within experience.[369] In this context the activity of reason works in the opposite direction than does analysis, and so should not be confused with it. Whitehead conceives of the activity of reason, or "the process of rationalization," as "the recognition of the essential connection within the apparent isolation of abstracted details. Thus rationalization is the reverse of abstraction, so far as abstraction can be reversed within the area of consciousness."[370] Rational thought can

[367] Undivided togetherness does not imply harmony; the many factors within experience may cause conflict and strife, anxiety and pain. It simply implies that this particular whole is this particular togetherness. The effort to put experience together in such a way that augments intensity and possibility, and avoids inhibition and leveling, is one of the key dimensions to the aesthetic aspect of Whitehead's philosophy.
[368] Cf. John Dewey, "Experience and Objective Idealism" (1906) in Dewey, *Middle Works: Essays on the New Empiricism: 1903-1906*, 141-142: "Dis-membering is a positively necessary part of remembering. But the resulting *disjecta membra* are in no sense experience as it was or is; they are simply elements held apart, and yet tentatively implicated together, in present experience for the sake of its most favorable evolution; evolution in the direction of the most excellent meaning of value conceived."
[369] Cf. Whitehead, *Science and the Modern World*, 83.
[370] Whitehead, *Modes of Thought*, 124. For Whitehead, rationalization, or the activity of reason, also changes experience and thereby the world. The initial welter of feeling that lies at the base of experience is vague and massive, ill-defined and imposing—this is James's "blooming, buzzing confusion" that he suggests

move us towards the concrete—as Whitehead's argument from Zeno directs us towards the atomic character of becoming—but the concrete itself is simply experience in its full richness and depth. For this reason, Whitehead calls true understanding "self-evidence" and hyperbolically labels the use of a rational or logical proof, despite its helpfulness and its frequent necessity, an "indignity."[371] Proof helps us reach understanding, or see self-evidence, and aids us in disabusing ourselves of our mistakes, as when we take an abstraction to "self-evidently" be the concrete (Whitehead's fallacy of misplaced concreteness). But nothing can replace self-evidence, or the grasp of intuition. Applied to the topic at hand—explaining the immediate atomicity and subsequent extension of experience—the upshot of these considerations is that the atomicity and epochal transcendence that characterize experience *in its immediacy* are, in the end, revealed by feeling, not by pure analysis. But rational activity sensitive to the limitations of analysis can help us articulate what conditions and grounds analysis, namely, the felt togetherness of experience—its dynamic union, its atomicity.

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characterizes infant experience and that we may perhaps approximate though inebriation (James, *Works: Principles of Psychology*, vol. I, 462). The very process of finite experience requires winnowing, selection, omission, abstraction; without limitation, there is no finitude, no focal point, and thus nothing worthy of the name experience. Limitation and definition are also the means by which an experience is able to inject something of its own into the ongoing flow and not merely be at the whim of the vague mass of influences pressing upon it. Space is created for self-expression. Consciousness is the pinnacle of such selective limitation, omission, and emphasis—in a word, of abstraction. Rationality is the activity of reconstituting and reconstructing the connectivity between the abstracted details, but without allowing the details to sink back into obscurity and unimportance. In this way the abstractions that make experience—especially conscious experience—possible are not left to become too narrow, barren, and thus dangerous; rather, the task of reason is to make the necessary finitude of experience as rich, full, thick, and intense as its environment and the conditions of its genesis allow. This involves the critique and modification of our abstractions. In short, the vague mass of feelings becomes more articulate and intelligible. Feeling is no longer quite as vague, quite as uncontrolled. By degrees, groping is replaced by resolute action. Experience gains depth and width of vision. More of the past and future are open to it. Order is created and promulgated. The function of reason is to heighten and vivify experience, and this is fundamentally an aesthetic project. Cf. Alfred North Whitehead, *The Function of Reason* (Boston: Beacon Press, 1958 [1929]).

[371] Whitehead, *Modes of Thought*, 47.

CHAPTER VI

TIME, POSSIBILITY, AND PROCESS: PART III

Atomism and Possibility

The following analogy may prove illuminating considering the difficulty of recognizing the atomicity of experience, its meaning, and the scope of its application within a metaphysics of experience. It will also help us synthesize and conclude our discussion of Whitehead's atomism and how it pertains to his theory of time.

The atomicity of an occasion of experience is like that of a song. There is certainly something happening—dynamism and movement—as a song is played; time is filled, a duration elapses, the world is different after the song-performance than it was before. The song-performance can be reflected upon and analyzed into its movements, melodies, and notes; but there is no song without the entire occurrence of its playing covering the whole duration. The song is the complete movement of its playing and none of its parts. It cannot be reduced to or described as anything less than its entire performance. Half of the song is not the song, nor are the last four measures, nor are the first two notes. The song, as a whole, is a dynamic union of its parts. The melodies and rhythms are held together by the relationality of what came before and what will come after within the context of the whole song. But the individual notes of the song, as well as any measure or, in the case of an ensemble performance, any individual part, can be separated out by reflection, and each *could be* played on its own. That is, the individual notes and melodies are *potentially* divisible from the song, and *could be* a performed on their own on another occasion, or they could be taken up and used within another, larger composition. A listening composer

might find a specific melody within the song alluring and incorporate a modified version of it in her own composition. This composer is analogous to a later occasion of experience objectifying and prehending into its own constitution an aspect of an earlier occasion. *In actual fact*, the individual notes and melodies of the song-performance are inseparable from that performance. The song is divisible only in the mode of potentiality, through which its diverse parts or aspects can influence listeners, shaping their future experiences and activities. Whitehead's atoms—his actual occasions—are like this; they are both a process and atomic, incapable of being reduced to less than they are.

This analogy is helpful but has its limitations. A song, as ordinarily thought of, is an abstraction from the wider, thicker occasions of experience in which it occurs. It is an *object* in an experience; it is not itself a full, concrete experience (or synthesis of the universe). Thus, in a song, aspects or qualities of experience are omitted despite the helpful structural analogies between songs and actual occasions. For example, the song analogy does not capture particularly well the feeling of possibility as appetite, aim, or ideal, at once holding an occasion together as an undivided or atomic unity as well as marking the incompleteness of the occasion (the necessity of its perishing and subsequent supersession). It is easiest for us to recognize this feeling of possibility as aim when we consider the experience of the musician performing the song, holding the song before her as an object to be realized, to be played, rather than simply considering the song as experienced.

We can bring out this omission of the song analogy and shift our emphasis to the importance of possibilities as appetitive objects by considering the following text from *Science and the Modern World*: "The epochal duration is not realised *via* its *successive*

divisible parts, but is given *with* its parts."[372] I think we can say that a song as a whole is "given *with* its parts" without much strain on common sense. But considering a song as an *object* of our experience, it is in fact realized via its successive temporal parts—note follows note, until the end. The temporal succession of notes builds the song; objects, generally, are realized in experience through temporal succession. But such realization is precisely what Whitehead denies of atomic occasions themselves.[373] To understand what Whitehead means, we must consider that his actual occasions are atomic because they are organisms. Actual occasions have an organic togetherness where each part—and this includes its temporal parts (its parts according to the order of physical time)—presupposes and depends on the whole. This is the idea of the dynamic union of time.

There are a couple of things to disentangle here. First, when Whitehead says that an epochal duration, which here stands in for the actual occasion whose becoming *creates* the time of the epochal duration, is "given *with* its parts," he is pointing to the fact that an actual occasion is realized in privacy. This is the transcendent and opaque quality of becoming discussed earlier. When the occasion is given to the world, when it becomes public, the whole atomic organism is given. This organism is still felt by others as a process; it is felt as something derived from its past and as working towards and

[372] Whitehead, *Science and the Modern World*, 125.

[373] I maintain that the analogy between an actual occasion and a song is, on the whole, a good one, but that there are limitations to the analogy in understanding the structure of the temporality of an actual occasion, which straddles the extensive and non-extensive, the public and the private, the objective and the subjective. I do think that the performance of a song can be understood as a Whiteheadian actual occasion, that is, as an organic occurrence. But my point here is that, on the face of it, the organic unity of an actual occasion is lacking from a song simply considered as an object of experience. That is, the analogy between an actual occasion and a song does not illuminate the temporal organicity of the actual occasion; rather, it is the temporal organicity of the song that requires illumination.

transitioning into its transcendent future.[374] But the *whole* organism is given for feeling. When we derive feeling from the world, *something* is felt, and these somethings are whole organisms, felt objectively. Another way of saying this is: actuality is fundamentally organic, meaning there is no *thing* "smaller" than an organism from which to derive feeling. The creation of an actual occasion is thus very *unlike* a scene of creation as described by Milton in *Paradise Lost*, where he presents us with the fantastical image of a lion half created, half not: "…now half appear'd / The tawny lion, pawing to get free / His hinder parts, …."[375] Actual occasions do not spring into the world half formed, still working on their later halves; rather, they are organisms "bursting into being 'at a stroke.'"[376]

Second, all of the 'parts'—all the 'feelings,' and all the 'phases'—within the epochal becoming of an occasion, where the occasion is burst*ing* rather than *burst*, are held together by their presupposition of the whole occasion, of what that occasion is to be. Due to every part presupposing the whole, there is no succession within an occasion in the sense of divisible, fundamentally independent parts whose accumulation creates the whole; rather, the parts are simply articulations and contours of the whole. The parts are what they are because they are parts of *that* occasion, *that* whole. The first temporal "part" of an occasion, the "beginning" of its becoming, presupposes the whole occasion of which it is a

[374] Cf. Whitehead, *Process and Reality*, 227: "Each actual entity is a cell with atomic unity. But in analysis it can only be understood as a process; it can only be felt as a process, that is to say, as in passage."
[375] John Milton, *Paradise Lost*, ed. David Hawkes (New York: Barnes & Noble Classics, 2004 [1674, second edition]), 227 (Book VII, lines 463-465). See Alfred North Whitehead, *The Interpretation of Science: Selected Essays*, ed. A.H. Johnson, The Library of Liberal Arts (Indianapolis: Bobbs-Merrill, 1961), 146.
[376] James, *Works: Some Problems of Philosophy*, 80. Cf. Bergson, *Creative Evolution*, 336: Bergson holds that an act of creation occurs "in one stroke, although a certain time is required for it." This statement on its own is an excellent summary of Whitehead's view on the creation of an actual occasion.

part and thus all of the whole's parts, meaning that the first temporal part cannot "precede" the whole of which it is a part. Succinctly, what the occasion *will be* influences how it *becomes*. Earlier I expressed this by saying that the anticipated future guides the influence of the past in the creation of the present. We have now come full circle with the theme of dynamic union. The importance of what an occasion *will be* to its becoming lies in the ineliminable role of possibility as lure or final cause in the act of becoming. I shall now emphasize and articulate the role of possibility in making the becoming of actual occasions atomic.

What an occasion *will be*, while it becomes, is partially indeterminate. The task set before an occasion in its becoming is the determination of what it is to be, both for itself and for the wider world: "[t]he actual entity, in becoming itself, also solves the question as to *what* it is to be."[377] Therefore an occasion does not preexist itself; there is no finished product "waiting in the wings" that orchestrates its eventual appearance on the stage. This way lies a block universe that makes a farce of time. How, then, does what an occasion will be influence its becoming? Since an incipient occasion is not yet what it will be, but only becoming that, this 'what it will be' is an anticipation, an ideal. It is the appetitive feeling of possibility as an aim, around which the becoming of an occasion is organized. This feeling may range from the unconscious and blind impulse of appetite to starry-eyed vision.[378] There is an 'arrest' or 'epoch' around this aim and a surge towards making actual and concrete what is only an ideal.[379]

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[377] Whitehead, *Process and Reality*, 150.
[378] Cf. Whitehead, *Process and Reality*, 32-34.
[379] I here note in passing that this means that an epoch can be defined by the ideals (often assumed and unspoken) that dominate that stretch of time. This is close to the ordinary meaning of the word, where an

Conscious selection may occasionally be operative in the feeling of an aim or ideal, but this is not necessary. The basic picture is as follows. There is a welter of incoming feeling from settled fact, and the lure of possibility guides the formation and creation (the concrescence) of a new occasion of experience from this welter. What possibility is held up as an ideal, as an end or aim, shapes what the becoming actuality *will be*. The ideal, the felt possibility, permeates the entire act of becoming and is the *reason* that the many feelings coalesce and integrate into a new occasion the way that they do.[380] No part or phase of the becoming would be what it is in absence of the feeling of the ideal, or future-oriented possibility, meaning that these feelings cannot be divided or separated from *that* act of becoming.[381] The becoming is atomic. In other words, according to Whitehead, "final causation and atomism are interconnected philosophical principles."[382] And it is the allure of the possible, or possibility functioning as a final cause, that serves as an occasion's "internal principle of unrest," drawing immediate experience towards the

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epoch is defined by a certain dominating character. Thus we can see one reason why Whitehead's choice of the term "epochal" for his theory of time is felicitous. The becoming of every temporal occasion, on its own scale, defines an epoch.

[380] Whitehead calls the possibility felt as an aim or ideal the "subjective aim" of an actual occasion. See Whitehead, *Process and Reality*, 24-25 (Category of Explanation xviii). The entire category is helpful, but a key sentence is: "The 'subjective aim,' which controls the becoming of a subject, is that subject feeling a proposition with the subjective form of purpose to realize it in that process of self-creation." Recall that propositions are possibilities functioning as lures for feeling.

[381] The word "ideal" is here used to signify future-oriented possibility, as suggested in the sentence above. The connotations of indefinite and non-actual are the operative ones here. No moral connotation is to be imported at this level of description and analysis. Whether one judges an ideal to be better or worse, good or bad, does not alter the function of the ideal as a guide and lure for an act of becoming. Evil can be as tempting, if not more so, than the good. But in pursuing an ideal, one makes a claim that it is *worth pursuing*. Value is asserted, and the rest of the community now determines what to do with it (encourage it, discourage it, shun it, rally around it, ignore it, and so on).

[382] Whitehead, *Process and Reality*, 19.

possible and the new.[383] Thus, it is the feeling and activity of possibility within experience that holds Whitehead's atoms together and instigates the passage into a novel future.

I have several times noted that an actual occasion feels, anticipatorily, its own perishing, or supersession. Recall that this means that the occasion has a sense of its own influence on the future, of what it will mean for the future, of its real potentiality to affect things beyond its own immediacy—in short, of *what it will be*. What an occasion *is* (its being) cannot be disentangled from what the occasion means beyond itself. This is a cornerstone of a thoroughly relational worldview. Thus, an occasion in the immediacy of its own becoming is incomplete. It holds within itself possibilities that it *is not* but *could be*. But an occasion feels its own inherent incompleteness in the form of appetitively anticipating the future beyond itself. The occasion feels its own finitude. This is what it means to say that the future is immanent in the present.[384]

There are two dimensions to the incompleteness of an actual occasion. First, in the immediacy of becoming, an occasion is not yet what it will be and thus is incomplete. Immediate feeling is always a feeling of being *in the making*. An incipient occasion holds an ideal before itself as an object of its feeling and towards which it works but has not yet achieved. It intends the ideal.[385] Second, the ideal towards which the becoming moves is incomplete in that it is an inchoate possibility and not a realized, concrete actuality.

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[383] Whitehead, *Process and Reality*, 29.

[384] Cf. Whitehead, "Time," 61: "Thus the category of incompleteness means that every occasion holds in itself its own future."

[385] Cf. van Haeften, "Extension and Epoch: Continuity and Discontinuity in the Philosophy of A.N. Whitehead"; and Chris van Haeften, "Atomicity and Extension," *Process Studies Supplement* 3 (2003): 1–47. Van Haeften makes the case that the intended object, in its role as being anticipated, is crucial to understanding the relationship between atomicity and extension, continuity and discontinuity, and internal and external successiveness in Whitehead's philosophy. The full implications of the epochal theory of time are only revealed through the role of the anticipated or intended object. I find this a compelling reading of Whitehead, and this is the general direction of the interpretation I offer, as well.

Possibilities always begin as vague feelings of alternatives to what is given.[386] What an occasion will be, then, is indefinite but motive. There is something of a false definiteness

[386] There is an important but technical point to be made here concerning possibility and novelty. As it stands, the sentence above ("Possibilities always begin as vague feelings of alternatives to what is given.") masks the different ways in which possibilities come to infuse a becoming occasion. Whitehead provides a more detailed account of the origin of feelings of possible alternatives that highlights the genesis of novelty in an occasion. Here is an adumbration of that account. An actual occasion, at the initiation of its becoming, feels its given world as datum. The objectification of this datum, its division or 'analysis,' into potentialities *for* the incipient occasion, reveals a plethora of realized potentialities. That is, the initial experience of possibility is of possibilities realized. I experience a brown cat, and browness, catness, furriness, indifference, or perhaps fright or affection, and so on, are all possible ways of being derived from my experience of a cat. If the possibilities available to my present act of becoming were all derived directly from the world as given, there would be novelty in the sense that a new occasion, a new synthetic experience, would break upon the world, perhaps doing new things with old possibilities, but there would be no possibilities unforeseen and as yet unrealized in the actual world. There would be no 'possibilities extant not yet in our present sight.' Thus there would be no explosions into actuality of radical departures from existing ways of being. But, according to Whitehead, there is another way possibility leaks into an incipient occasion other than direct derivation from physical feeling. He calls this way "conceptual reversion," and he associates it with the mentality of an occasion (consciousness is not necessary for reversion; really, the term "mentality" indicates the basic experiential function from out of which more familiar kinds of mentality emerge). In reversion, there is a movement from realized possibilities to unrealized possibilities. The incipient occasion feels realized possibilities and finds them suggestive of "proximate" or "related" possibilities—as the color brown can be suggestive of another color, if not necessarily a specific other color—though this move towards the unrealized requires something in the way of 'imagination' or 'creativity.' (That possibilities can be "proximate" to one another requires the 'realm' of possibility to have some structure, and to move within this structure departing from what is given in actuality requires speculation and imagination.) These related possibilities are alternatives to what is given and need not themselves have any ground in the given world. As Jorge Nobo summarizes: "in its phase of conceptual reversion, the new subject is for the first time experiencing something which is truly *novel* in relation to the temporal world given for it. The strangle-hold of repetition has been broken, though only at the conceptual level" (Nobo, *Whitehead's Metaphysics of Extension and Solidarity*, 86). From the "conceptual level"—that is, from the feeling of possibility—these novel possibilities can be made concrete through the becoming of the occasion which feels them, provided that occasion admits them to efficacy. Then, as a new actuality enters the world, its activity exhibits a new way of being in the world, bringing with it potentiality of a different character than typically encountered. The richness of real potentiality grows; the variety of actuality has increased. As Whitehead writes: "A novelty has emerged into creation. The novelty may promote or destroy order; it may be good or bad. But it is new, a new type of individual, and not merely a new intensity of individual feeling. That member of the locus has introduced a new form into the actual world; or, at least, an old form in a new function" (Whitehead, *Process and Reality*, 187).

As a starting point for exploring the idea of reversion, see Whitehead, *Process and Reality*, 26, 249-250; Whitehead, *Religion in the Making*, 116-117. Cf. Auxier and Herstein, *The Quantum of Explanation*, 226-227.

The upshot of this discussion of 'conceptual reversion' can be summarized by this text from John Dewey: "reverie and desire are pertinent for a philosophic theory of the true nature of things; the possibilities present in imagination that are not found in observation, are something to be taken into account" (Dewey, *Later Works: Experience and Nature*, 27).

Given the above, I do not find my formulation in the main text problematic with regard to my aim of explaining the incompleteness of an actual occasion. But I did elide the complexities of the ways in which possibilities enter and suffuse actual occasions. This omission is now partially addressed.

about the phrase, "what it will be." It is not decided in advance what an occasion will be, whether it holds true to one of the paths laid out by the past or whether it embarks on a novel journey; this is James's point about the chance-thing, discussed above. But the occasion holds within itself possibilities for what it will be. In finally making what it will be definite, in *deciding* what it is to be, the occasion both 'completes' its becoming and 'completes' the ideal in the sense of realizing, in some way or another, the possibility decided upon. The occasion now *is* something for the rest of the world, the decision reached conditioning all future decisions.

It is by reason of its incompleteness that an occasion is temporal, as Whitehead clearly states: "Each occasion is temporal because it is incomplete."[387] As we just saw, the incompleteness of an occasion is tied to the indeterminacy of what it is to be. There are many possibilities around which an occasion may organize itself (many possible aims or ideals), and each possibility is itself indeterminate as to its concrete realization. Indecision lingers around what an occasion is to be, an indecision that is only resolved through the process of deciding, that is, through the becoming of the occasion. Whitehead expresses the interweaving of incompleteness, indeterminacy, and final causality in the following text.

> The determinate unity of an actual entity is bound together by the final causation towards an ideal progressively defined by its progressive relation to the determinations and indeterminations of the datum. The ideal, itself

[387] Whitehead, "Time," 61.

> felt, defines what 'self' shall arise from the datum; and the ideal is also an element in the self which thus arises.[388]

Let us go slowly through this text. The "determinate unity" of an actual occasion is its atomicity, its organic individuality in which parts and whole are inextricably intertwined. Striving towards a possibility, towards a projected end, is the reason for this unity. Final causality has been asserted. So far, so good. The crux of the text lies in the assertion that an ideal is "progressively defined." There are two things to note. First, the ideal requires definition, meaning it is, initially, indefinite. The word indefinite could be replaced with vague or inchoate. Consider that "justice," "survival," and "a job," functioning as ideals, require elaboration. The idea is that, since the ideal is indefinite, there are many possibilities for what an occasion might be; "a" possibility, or "an" ideal, is always an indefinite field of possibilities. There are an indefinite number of paths of action that would satisfy the selected aim of finding a job, and no one concrete enaction of finding a job exhausts the wealth of that possibility.[389] The ideal merely as an ideal does not determine actuality; the task of becoming is to decide how some selected possibility available to the incipient occasion is to be realized, given the conditions of its actual world.

Second, we should here understand 'progressive definition' as a gain in concreteness, a process which takes time. The ideal comes closer to being actual; there is concrescence around the ideal. In this process, the ideal's relationships to the given factors of experience also become more concrete. The ideal aimed at, the lure of possibility, starts as vague and gains definition as the process of becoming continues. My desire for a job is

[388] Whitehead, *Process and Reality*, 151.
[389] Cf. Whitehead, *Science and the Modern World*, 163.

refined into a desire to be a university professor, and I soon begin to submit applications. With definition comes concreteness, but also compromise with what is given by the actual world of the occasion. Sometimes the ideal as initially felt turns out to be incompatible with the given world and must be modified in the course of its definition. There are few available jobs as a university professor, so in response to the facts of my world I might modify my aim to 'teacher' without ruling out university professor. This is the "progressive relation" of the ideal "to the determinations and indeterminations of the datum." A chosen ideal or aim often simply cannot be realized in its initial, vague form. It must be 'brought down to earth' over the course of the becoming. Additionally, the frustrations and roadblocks of stubborn fact cannot be entirely anticipated. Thus the progressive definition of the ideal is both an aesthetic and a pragmatic process; the work of becoming is to lift the occasion to the ideal, marshalling the many feelings into the best form for this aim, but it is also inherently filled with indeterminacy and indecision that can only be resolved through the process itself, hand over hand. In the process of becoming, there is searching for a way to resolve the indeterminacies of possibility into the concrete definiteness of actuality with meaning beyond itself. Following Bergson, we say that there is "no searching without groping. Time is this very hesitation, or it is nothing."[390] The incompleteness of an occasion, its indeterminacy as to what it is to be, is the reason there is time. Indeed, "[w]ould not time be that indetermination in itself?"[391] It is difficult to express this in any other way than saying that creativity, that reaching a decision, *takes time*.

[390] Bergson, *The Creative Mind*, 93.
[391] Bergson, *The Creative Mind*, 93.

Concluding our reading of the above text from *Process and Reality*, we can most easily explain the last sentence, which indicates that the felt ideal both defines the occasion (the self) that *will be* and is an element of that very occasion upon its completion, by reference to the course of human experience. In our various processes of selving, we define ourselves by our projects and by what we have done. The creation and submission of a resumé—or, in an academic context, a CV—illustrates this fact succinctly. We seek something, we have activities and projects ongoing in the present, and we maintain that our past accomplishments reflect and are part of who we are, and thus that they support, in one way or another, our current aim. An incipient occasion feels its aim as an intended object in the self-creation of its constitution. The aim is vital in determining what the occasion is to be and, once the occasion has occurred and is concrete (rather than concrescing), is forever implanted in what that occasion is. This is the stubbornness of fact; once an action is taken, it cannot be revoked, and this includes the motive or impulse behind the action. The perishing of concrescent immediacy is the assumption of objective immortality.

Since possibility functioning as final cause shapes what an actual occasion will become, only a short step is required to see that the world takes shape through the projects, aims, and ends the multiplicity of actual occasions hold before themselves and with which they engage. Final causality is the mode of efficacy of ideality or, more broadly, of possibility. Accordingly, our own projects, aims, and possibilities shape who we become and contribute to what our shared world becomes. This is as true of our mundane, daily goals as it is of our more far-reaching hopes and aspirations, if not more so. Our engagement with possibility, both our discernment and appreciation of the entire field and the wisdom with which we pursue selected ideals, shapes reality.

The efficacy of ideality can be elaborated further. Since possibility as the organizational principle of an atomic pulse of experience implies that possibility shapes reality, we may also say that theories and models of reality are efficacious within and contribute to the self-creation of an occasion of experience. That is, how an actual occasion "sees" and "understands" its world affects what it will be, and hence the future course of things. A woeful misunderstanding of things, and especially willful ignorance, is not benign. Theories and models are idealizations born from characterizations of our experience. But, staying true to radical empiricism, nothing falls outside of experience. Thus theories and models are both about experience and are themselves experienced (if they were not experienced or experienceable, they would be nothing). According to Whitehead, theories are experienced as lures for feeling, as ways that things *could* or *might* be.[392] Theories and models express possibilities, and as such they can guide and help unify incipient occasions of experience. To experience a theory is to potentially alter or change how your experience is organized. A Newtonian experiences the world differently than does an Aristotelian, and different clusters of possibility are available to each. An

[392] Whitehead also calls theories 'propositions.' In a theory or proposition, possibilities are not considered simply as possibilities, but as possibilities within a certain context of actuality. For example, a possibility for *my life* is not a pure possibility but one *for* my life, taking into account the context and environment in which I live, and thus it is a proposition. Scientific theories are meaningful in the context of observations of nature. Our concern with possibility almost always has to do with its connection to a specific context of actualities. Thus virtually all of our engagement with possibility within human experience concerns propositions. See Whitehead, *Process and Reality*, 22; also, Part II, Ch. IX and Part III, Ch. IV.

Whitehead is well aware that his account of propositions is very unlike the account contemporaneously developed in what will become the analytic philosophical tradition. He does maintain that propositions are the sorts of things that can be true or false, but he contends that their primary and most important function is to be interesting, that is, to be lures for feeling. "The conception of propositions as merely material for judgments is fatal to any understanding of their role in the universe" (Whitehead, *Process and Reality*, 187). Though truth often adds much interest to a proposition, interest is not solely the province of truth. False propositions, in their "purely logical aspect" of being non-conformal with the realities of the wider world, "are merely wrong, and therefore worse than useless. But in their primary role, they pave the way along which the world advances into novelty. Error is the price which we pay for progress" (Whitehead, *Process and Reality*, 187).

Aristotelian simply would not think of applying mathematics to the study of nature in way that a Newtonian would. You *feel* and *act* differently based on the theories you incorporate into your living.

As human beings, we act on the basis of how we think the world is, that is, on the basis of some theory or model of it. The theory need not be systematic or even articulated; only the presupposition that the world has some general character or another is required. For example, *homo economicus* is an idealization of humanity—arguably an impoverished idealization, but an idealization nonetheless.[393] Accepting this ideal, incorporating it into your experience, has consequences in the development and unfolding of human society regardless of whether or not you "know" or can articulate this theory. (With articulation, though, comes the increased vitality and intensity of the theory in your experience.) Your interactions with others and interpretations of their actions will be affected. You will read your experiences through the lens of the theory. Moreover, your very actions help bring *homo economicus* about, in yourself and in others; your narrow self-interest plants the seed of *homo economicus* in those with whom you interact. They have an idea, even if an inchoate and inarticulate one. Just as you are in the making, so, too, is "human nature" in the making. The ideals and theories we hold play a part in how this living drama of *deciding what we are to be* plays out.

The lure of possibility is thus the initiating step towards practical change and action. The weight of obligation derived from the past pushes for conformation and

[393] Cf. Dewey, *Later Works: Experience and Nature*, 57: "A particular ideal may be an illusion, but having ideals is no illusion. It embodies features of existence. Although imagination is often fantastic it is also an organ of nature; for it is the appropriate phase of indeterminate events moving towards eventualities that are now but possibilities."

repetition. This weight is also called efficient causation. The novelty achieved in any occasion begins with the incipient occasion's entertainment of possibility and with the effectiveness of possibility in functioning as a final cause. It is the glimmer of an idea, no matter how vague, fleeting, and removed from consciousness, that sparks alteration in the course of experience. As Whitehead says of the power of ideas, "the spiritual precedes the material."[394] Here we must understand "idea," as with "ideal," "ideality," and "theory," to be names for our complex experiential transaction with possibility. Ideas can be liberating, and also dangerous; they can be banal or riveting, portentous or whimsical, inspiring or infuriating, and much else. They spur actuality towards novelty, holding the promise of what *is not* but *might be*. But ideas are always indeterminate with regard to how they will be enacted, or concretely 'resolved' within an occasion's act of becoming. Thus we may think of novelty beginning, inchoate, in the vagueness of ideality, erupting into actuality through the becoming of an actual occasion. In this way we are able to make sense of the following remark by Whitehead: "In the most literal sense the lapse of time is the renovation of the world with ideas."[395] The taking of time is the concrete realization of possibility, or ideality. In time, the possible becomes actual. For Whitehead, a full and concrete understanding of both time and possibility requires one to grasp their essential involvement with one another in the creative process of experience.

A word of caution concerning the efficacy of ideas: we must remember and account for the stubborn efficacy of facts. The nature of reality is not merely at the whim of the ideas we set before ourselves, individually. Rather, the nature of reality is decided by, and

[394] Whitehead, *Science and the Modern World*, viii.
[395] Whitehead, *Religion in the Making*, 114.

is the outcome of, its infinite participants. And those in the past continue to exert influence on the present and the future. Thus, just as the power and importance of final causality should not be ignored, neither should the reach of any single action towards an ideal be overstated. The consequences and impact of final causality are much more pronounced in our local environments, above all in our own individual lives, and, more broadly, in human society and culture. The inertia of the society of nature is virtually impervious to the errant thoughts of human beings. The effects of global warming are the best examples of a pervasive model of reality (global consumerism and extractive capitalism) transforming the natural reality in which we find ourselves. This ongoing transformation has put much of earthly life in great peril, though from a cosmic scale even this perturbance is quite local and small.[396] In sum, final causality—appetition, aim, or vision—binds occasions of experience into the atomic, epochal occurrences that they are, but we must not forget that perished occasions exert the conformal influence of efficient causality on those now coming to be. Both final causality and efficient causality—or, idealization and conformal derivation, future and past—are necessary for the present to be what it is: a novel achievement of value and an immediacy in transition.[397]

[396] The invocation of a "cosmic scale" is not meant in a defeatist or quietist vein. Its purpose is to stir an intuition regarding the incomprehensible massiveness and resiliency of some impulses towards conformation. And yet local ideals work their local effects within the background of broad conformation, creating change in their surrounding environment and perhaps planting the seeds for wider change.

[397] Cf. John Dewey, "Experience and Objective Idealism" (1906), in Dewey, *Middle Works: Essays on the New Empiricism: 1903-1906*, 142-143: "Without idealization, that is, without conception of the favorable issue that the present, defined in terms of precedents, may portend in its transition, the recollection of precedents and the formulation of tentative rules are nonsense. But without the identification of the present in terms of elements suggested by the past, without recognition, the ideal, the value projected as end, remains inert, helpless, sentimental, without means of realization."

Atomism and Time: Final Interpretation

Since Whitehead's atomism is interconnected with the notion of final causality, when he writes that "actuality is incurably atomic" and "the ultimate metaphysical truth is atomism," he is affirming in the strongest terms that there is intentionality, directionality, unrest, striving, and novelty within the flow of experience.[398] He is affirming a growing and interpenetrative pluralism suffused with innumerable possibilities and projects. Thus Whitehead's contention of incurable atomicity is a stunning rebuke of scientific materialism, its attendant emphasis on efficient causality alone, and its tendencies towards reductionism and determinism. Lamentably, these propensities of scientific thought persist through the present day, primarily in the natural or "hard" sciences, in large part because a thorough and widespread examination of their philosophical foundations has not taken place.[399] Insofar as there is philosophical engagement within the sciences and academic philosophy regarding the interpretation of scientific practices, the basis of this engagement does not involve Whitehead's ideas.[400]

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[398] Whitehead, *Process and Reality*, 61 (first text), 35 (second text).

[399] This is a sweeping claim that I shall not attempt to justify here. But this situation, which I suspect will ring true to you, casts negative light on both the sciences and philosophy. The necessity, or even the desirability, for philosophical critique is not widely recognized within the sciences, and a widespread idolization of the sciences within philosophy curtails critiquing and reimagining the bases and scopes of the various scientific disciplines. Of course there has been and is work being done in this direction, even very good work, but there is as yet no cultural shift with regard to understanding the place and role of the sciences in human knowing and living. "Science" either seems to be accepted as a sacred cow, as within educational institutions, or rejected, called 'fake news,' or perhaps ignored. Admitting both the importance and the limitations of the sciences, and discerning those limitations within the sphere of human experience, is a project far from completion. Cf. Anthony Standen, *Science Is a Sacred Cow* (New York: Dutton, 1950), and C.P. Snow, *The Two Cultures: And A Second Look* (New York: Mentor, 1963). We have yet to overcome many of the issues outlined in these two books.

[400] I do not here mean to suggest that Whitehead's philosophy is the only way to properly orient scientific practice. However, Whitehead does offer a robust, informed, thorough, and rich foundation upon which the integration of scientific and humanistic concerns could take place, as well as a model for how scientific and philosophic thought can interact. If this is so, then overlooking Whitehead is to cast aside a helpful resource for approaching current problems and questions.

I bring up the clash between Whitehead's atomism and dominant, widespread interpretations of scientific thought because "atom" is a scientific term generally employed and understood in a very different way than Whitehead uses it. To be blunt, Whitehead and modern science simply are not talking about the same thing when they talk about atoms.[401] Speaking broadly, from Leucippus and Democritus right down to modern atomic theory, atomism has been associated with separate and tiny material particles, individually insensible to unaided perception. It is this sense of atomism, so available and intuitive to the modern mind, that misleads and hinders one on the way to understanding and appreciating Whitehead's atomism. We must not slip into this common understanding of atoms or its presuppositions when interpreting Whitehead.

The root divergence between the ordinary way of thinking of atoms and Whitehead's way lies in the fact that the ordinary way presupposes a metaphysics of things in space and time, rather than one of events or happenings in process.[402] Whitehead's atomism, taking up the latter metaphysical position, shuns the ideas of fundamental separation, self-contained sufficiency (substantiality), and internal uniformity and stasis that shroud the common understanding of atomism.[403] The sense of an atom being 'uncut'

[401] To be precise, Whitehead talks about atomism, the atomic character of actual occasions, and atomic actual entities. To the best of my knowledge, he nowhere calls an actual occasion an "atom." (The closest he comes is *Process and Reality*, 286.) When Whitehead does talk about atoms using that word, it is in the context of what scientists call atoms—e.g. an atom of hydrogen.

[402] Cf. Whitehead, *Process and Reality*, 77-79.

[403] The atoms of modern physics and chemistry are not atomic in the definitive sense of the word (uncut), for they can be split. And these sciences have shown that a great deal of activity goes into holding atoms together; there is dynamism within the particles dubbed "atoms" in the physical sciences. Indeed, at the foundational level of physics, "atoms" are characterized as wells or clusters of fields and events, rather than as particles. The quantum conditions used by physicists in characterizing these fundamental physical descriptions better represent the modern incarnation of the idea of atomicity than do the atoms of the periodic table of the elements. The shift to fields and events is all salutary from a Whiteheadian point of view, but it does not mean that the interpretation of these micro-events is free from the problematic presuppositions that

and of an atom as a 'final reality' are retained in Whitehead's philosophy, but almost all else is different. We have been discussing and accumulating these differences over the course of this and the previous two chapters, but as I just mentioned, the most significant is the grounding of atomicity in the experiential operation of final causality.

By reintroducing final causality into our metaphysical understanding of nature, Whitehead is asserting that any adequate explanation of the world, or of any actuality, must include the efficacy of ideality, or the motive power of projects and aims. Final causality comes about from engagement with possibility within the process of self-realization. The strength of this engagement comes in degrees; the lure of the possible may exert more or less influence within an occasion's becoming relative to the compulsion of fact. In an occasion where the influence of possibility is heavily canalized or even negligible, the forces of external compulsion are overwhelming and that occasion merely transmits energy and purpose that originated elsewhere.[404] Such an occasion is like a copper wire. Whitehead calls such occasions "translucent so far as transmission is concerned."[405] The past is preserved, but at the expense of the weight of the present.

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have been lingering in scientific practice for centuries. Whitehead tried to point out and revise or replace these presuppositions for much of his intellectual career, but with limited mainstream success.

[404] The negligibility of possibility is the extreme instance of its canalization; namely, one possibility is felt as a live option within the occasion of experience—pure repetition of the contours and elements of fact as given by its actual world. Canalization is necessary for experience—to have an aim or a goal towards which an act of becoming is directed is to canalize possibility, and this directional limitation is required by the finite constitution of an actual occasion—but too much canalization spells doom for the endurance of particular patterns of possibility or value within a shifting, changing world. We may think here of overly specialized biological organisms. Their actions are highly constrained and are conducive to life only within a narrow environment. As the environment changes shape, the rigid organism dies. The possibilities with real efficacy (potentiality) for it were too constrained. Cf. Dewey, *Later Works: Art as Experience*, 19-20: "Life itself consists of phases in which the organism falls out of step with the march of surrounding things and then recovers unison with it—either through effort or by some happy chance. And, in a growing life, the recovery is never mere return to a prior state, for it is enriched by the state of disparity and resistance through which it has successfully passed. If the gap between organism and environment is too wide, the creature dies."

[405] Whitehead, *Process and Reality*, 341.

The more deeply infused an actual occasion is with the richness of possibility, the stronger the influence of final causality and the greater its power of origination and novelty.[406] The thick, intense immediacy that results from this organized efficacy of possibility makes it 'opaque' with regard to transmission, meaning that more of the past is lost in these occasions, swallowed by the vividness of present immediacy.[407] As Whitehead puts it, "it is the empirical fact that process entails loss."[408] But it is loss due to newness. The past is not lost in the sense of annihilated—it is objectively immortal—and neither is it ineffective, but the novelty inherent in the immediacy of an occasion of experience refuses the pure repetition of past feeling. What is lost is the immediacy of achieved or 'satisfied' feeling: "Completion is the perishing of immediacy: 'It never really is.'"[409] There is loss because the possibilities that stimulate an originating present, goading it into a novel future, "impose upon vivid immediacy the obligation that it fade into night."[410] The orientation and movement of experience is that of a press forward, into possibility, into the future. As John Dewey well expresses, "experience in its vital form is experimental, an effort to change the given; it is characterized by projection, by reaching forward into the

[406] In Whitehead's technical vocabulary, what I am referring to as the strength of engagement with possibility, he would say is the strength of the phase of reversion, whereby possibilities unrealized in the actual world of the occasion come to have influence upon it. The strength of this phase is correlated with the mental energy of an occasion, as well as its capacity for original and novel realization. See fn. 386 for more on reversion.
[407] Human mentality and consciousness are acute forms of this opacity, as possibility thoroughly colors all of our perceptions and forgetfulness is a common scourge of everyday life. Put more positively, we are highly selective, discerning, and yet adaptable organisms.
[408] Whitehead, *Process and Reality*, 340.
[409] Whitehead, *Process and Reality*, 85. Cf. Plato, *Timaeus*, 28a (in Cooper, *Plato: Complete Works*, 1234).
[410] Whitehead, *Process and Reality*, 341.

unknown; connection with the future is its salient trait."[411] The very temporal character of experience, its orienting concern with possibility and its effort to "change the given," is the reason for both novelty and loss. Thus the past is always somewhat opaque to the present; there is always vagueness and limitation to present feeling. For the past is experienced in its objective relevance for the present becoming as a projection into the future, and not in its own, now perished, immediacy.[412] The relevance of final causality to experience is the relevance of the future.

The relevance of the future to present experience is the relevance of possibility. Its importance lies in its openness. Whitehead's idea of final causality, grounded in the operation of possibility within experience, first and foremost affirms a measure of indeterminacy, chance, or freedom in the world. This is to be found in the selection or

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[411] John Dewey, "The Need for a Recovery of Philosophy" (1917) in John Dewey, *Essays on Philosophy and Education: 1916-1917*, ed. Jo Ann Boydston, vol. 10, John Dewey: The Middle Works, 1899-1924 (Carbondale: Southern Illinois University Press, 1980), 6.

[412] Cf. Dewey, "The Need for a Recovery of Philosophy" (1917) in Dewey, *Middle Works: Essays on Philosophy and Education: 1916-1917*, 10: "The finished and done with is of import as affecting the future, not on its own account: in short, because it is not, really, done with." Its "affecting the future" is, in Whitehead's language, its objective immortality.

Also see a Dewey text referenced earlier (fn. 368), from "Experience and Objective Idealism" (1906): "Dis-membering is a positively necessary part of remembering. But the resulting *disjecta membra* are in no sense experience as it was or is; they are simply elements held apart, and yet tentatively implicated together, in present experience for the sake of its most favorable evolution; evolution in the direction of the most excellent meaning of value conceived." In Dewey, *Middle Works: Essays on the New Empiricism: 1903-1906*, 141-142.

These texts from Dewey are in general, almost precise, accord with Whitehead's thought. But the tone of Dewey's texts, specifically in the almost dismissive attitude they exhibit towards the past, does not cohere with Whitehead's attitude as well as do the words of his statements. This is a subtle claim. I think Whitehead was more reverential towards the past than was Dewey. But Whitehead's reverence was grounded in the way the past offers suggestions and possibilities to the present, in the way history shapes the future. His reverence was not eulogistic. Thus I see a difference of emphasis or expression here, not a difference in substance. Climbing onto a limb of speculation, I suspect that Whitehead derived more awe from the past than did Dewey. In other words, I think Whitehead would agree with the above texts from Dewey in their spirit and philosophical meaning, but rather than grant unqualified endorsement, he may have wanted to elaborate upon the role of the past. For a general image of how Whitehead treats the past and future with regard to human affairs, see the following articles: Alfred North Whitehead, "The Study of the Past—Its Uses and Its Dangers," *Harvard Business Review* 11, no. 4 (July 1933): 436–44; Alfred North Whitehead, "Harvard: The Future," *The Atlantic Monthly*, September 1936, 260–70.

rejection of available possibilities as efficacious ideals and especially in the way a possibility is concretely resolved or realized. Final causality also provides the reason for the concrete individuality of things, in the sense that things come together, or there is concrescence, because there is an aim, an end, a project. Final causality does not provide an *ultimate* reason for why there is something rather than nothing—there is no such reason—but it allows us to say that things are the way that they are, and will be as they will be, because there was decision in this or that direction. Whitehead, in his general philosophical orientation, does not look back to ultimate origins, but rather forward, into the unknown future. The question final causality helps us answer is, how is there something new?

Whitehead's revival of the idea of final causality as important to any adequate understanding of our world, including scientific understanding, frames the world as one of projects—conflicting and competing because plural, but also with degrees of layering, mutual reinforcement, sympathy, and help. These projects or ends emerge through and give shape to historical development; they are not fixed within or by the order of nature. This applies even to the laws of nature, which Whitehead regards as habits reenacted again and again in the many occasions engaged in self-realization.[413] Purposes, aims, and values may be inherited and reenacted habitually, but habit is not to be confused with static finality, necessity, or ultimate moral value.[414] In short, there is no natural place, eternal and unchanging, for *anything* in the world. All places, all natures, are in the making; all are

[413] See Whitehead, *Adventures of Ideas*, 131-151 (Ch. VII, Laws of Nature). Cf. Whitehead, *Process and Reality*, 83-109 (Part II, Ch. III, The Order of Nature).
[414] Cf. Whitehead, *Modes of Thought*, 13: "The notion of the unqualified stability of particular laws of nature and of particular moral codes is a primary illusion which has vitiated much philosophy."

projects actively trying to fit themselves into an evolving world. Thus, Whitehead's reintroduction of final causality is not a reintroduction of Aristotelian natural teleology. There is no grand purpose within nature, universal and timeless, towards which everything moves, and there is no fixed end or determinate excellence specific to humanity and another specific to the wren toward which each type of creature strives. Darwin's banishment of a rigid natural telos is not subverted. In more Whiteheadian language, the creative advance and evolution of nature is an adventure, not the unfolding of forms and ends laid out in advance.

The thrust of the above considerations is that particular aims and ideals have local, and not universal, applicability. There are no ultimate, given ideals within the natural world, but only local, created ideals and patterns of activity. This statement applies to specific possibilities felt as lures within occasions of experience, whereby the occasions are the finite, atomic activities or processes that they are. No possibility or cluster of possibilities—no specific way of life or way of being—is given to us as the aim we ought to pursue or ideal to which we ought to aspire, without qualification. In other words, there is no bare Ideal, but only specific ideals, the pursuance of which defines the characters of the experiences in which they are felt.[415]

But the process of pursuing and realizing an ideal (concrescence), no matter what ideal it may be, has a generic character or aim. This aim is at intensity of feeling.[416] In a

[415] I here use a capital "I" for Ideal in order to suggest the absolute and supreme value of some fixed ideal.
[416] See Whitehead, *Process and Reality*, 27 (Category of Subjective Intensity). The most thorough study of the idea of intensity and its central role in Whitehead's metaphysics is by Judith Jones. See Judith Jones, *Intensity: An Essay in Whiteheadian Ontology* (Nashville: Vanderbilt University Press, 1998). See Judith Jones, "Intensity and Subjectivity," in *Handbook of Whiteheadian Process Thought*, ed. Michel Weber and

sense, then, there is a universal aim or purpose within the world of experience, within creative process. But aim at intensity is universal in the sense that it attaches to all ideals, not in the sense that there is a single, convergent point to which all paths seeking intensity lead.[417] The aim at intensity does not in itself say anything about the quality or character of the experiences fostered by any ideal. As above I said there is no bare Ideal, but only specific ideals, so too is there no bare intensity, but always intensity of some specific qualitative character and strength. Possibilities are alluring because they promise some qualitative intensity of feeling. To realize a possibility, to act through the possibility, resolving its indeterminacies and making it actual, is to experience it with an immediate intensity of feeling. When I drink water and am slaking my thirst, this act has a subjective immediacy or intensity definitive of the present occasion of experience. The immediacy of experience, its nature constituting the living present, is immediate because it has intensity. There is no experience, no actuality, without intensity. As Whitehead writes: "The zero of intensiveness means the collapse of actuality."[418] The task confronting an occasion of experience, during the epoch of its self-realization, is to achieve that measure of intensity of which it is capable, given the situation and environment in which it finds itself.

This idea of intensity of experience is crucial in framing an overall interpretation of Whitehead's metaphysics. I have gestured towards it at various points throughout this and

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Will Desmond, vol. I, 2 vols. (Frankfurt: Ontos Verlag, 2008), 279–90, for a much more condensed description and analysis of the concept of intensity.

[417] One way Whitehead makes this point uses the language of perfection, where perfection is to be understood as the height of achievement of an ideal within the context in which the ideal is pursued. Whitehead writes: "There are perfections beyond perfections. All realization is finite, and there is no perfection which is the infinitude of all perfections. Perfections of diverse types are among themselves discordant" (Whitehead, *Adventures of Ideas,* 330). Perfection qualifies activities and ideals relatively and contextually, not absolutely.

[418] Whitehead, *Religion in the Making*, 103.

previous chapters using the language of vivacity, thickness, weight, and depth. Intensity characterizes present feeling in the presentness of its creative process. Most recently, a few paragraphs above I mentioned that an occasion may be more or less 'translucent' depending on the strength of its engagement with possibility. This is one way of rendering the intensity of an experience, an 'external' way. It is difficult to say directly what intensity is, as this word and the others I use circle around the immediate experiential quality in question without adequately revealing it to language. Our field of insight into this general character is also limited to our own personal experiences. But there are other ways in which Whitehead describes this intensive aspect of experience, and I think they will be helpful here.

I am deliberately unpacking Whitehead's use of the term "intensity," even though it has some limitations. Intensity is a good word because it conjures the feelings of vividness and living immediacy that characterize experience. But it is also limited in that aiming at high levels of intensity might suggest the hyper alertness of an adrenaline rush and the rolling accumulation and expression of activity, energy, and power without regard to subtlety or detail. Here the connotations of the word run to an extreme that is unhelpful if not guarded against. In a corrective vein, Whitehead also uses the words 'importance' and 'greatness' to describe the generic aim of occasions of experience. For example, he writes: "The generic aim of process is the attainment of importance, in that species and to that extent which in that instance is possible."[419] Whitehead says that this aim "is the aim at greatness of experience in the various dimensions belonging to it," then adding that "[t]his

[419] Whitehead, *Modes of Thought*, 12.

notion of the dimensions of experience, and of its importance in each dimension and of its final unity of importance, is difficult and hard to understand."[420] Notice the sensitivity to particularity and context in these texts: "which in *that instance* is possible," "various dimensions *belonging to it*." Realizing importance or greatness is deeply dependent upon the environment and its provisions, which includes history. Yet the desire for importance is the motive agitation of all experience. The aim of an occasion is to be as important, as intense, as great, as its world allows; the goal is the "perfection of importance for that occasion."[421] But there is no prescribed path to greatness for finite creatures. To be important or great involves the expression of character and not merely its subjective enjoyment. Importance and greatness are public, social ideas; intensity leans to the private, subjective side. Whitehead is right that these ideas are difficult to articulate, yet they do capture something essential about experience. The engagement with possibility, the drive of actuality, is all *for* achieving importance or greatness of some kind and degree. Thickness of possibility enriches experience and heightens the sense of and capacity for importance. All occasions achieve some measure of importance. This is memorialized in an occasion's objective immortality—its expressions of power, its influence, its transition into other occasions of experience. There is no getting behind intensity or importance; these ideas touch upon the core meaning of actuality.

These various words—intensity, importance, greatness—attempt to convey that in experience which is self-justifying, or valuable for its own sake; they convey the reality that experience is not a hollow act or puppet show but is felt as pursuing and achieving

[420] Whitehead, *Modes of Thought*, 14 (both texts).
[421] Whitehead, *Modes of Thought*, 14.

value. There is something valuable about experience, about experiencing. Indeed, value cannot be extricated from actuality. Experience is inherently value-experience; to be actual is to be valuable. To have value is to bear some intensity of immediate feeling, and the value of an occasion of experience is created through the process of resolving possibility into lived, active actuality. Deciding is valuating.

Achieving importance, intensity of feeling, actuality as the achievement of meaning or value—these are aesthetic ideas, and they are more properly the subject of the following chapter. The important point at this moment is the trajectory that led us here: from atomicity to final causality, from final causality to the aim at intensity or importance. The formation, or self-realization, of an occasion of experience, bringing the anticipated future and given past to bear on one another in the creative expression of the present, is an aesthetic process. To feel the infinite universe, its actualities and possibilities, within a finite pulse of experience requires limitation, selection, adjustment, and composition. The creation of atomicity is an aesthetic process; the unity of Whitehead's atomic occasions is an aesthetic unity, an irreducible emergence of value. A finite occasion is akin to a work of art, as alluded to in the song analogy, above. For Whitehead, the study of aesthetic forms in human cultures and the natural world offers the most penetrating ways for understanding and describing the creative process that constitutes experience, or actuality.[422] In Whitehead's philosophy, the realization of experience, of value, is fundamentally an aesthetic achievement.

[422] Cf. Whitehead, *Process and Reality*, 317: "The canons of art are merely the expression, in specialized forms, of the requisites for depth of experience."

We shall return to these themes in the next chapter. The line we have drawn from possibility and final causality through to intensity of experience helps us put Whitehead's metaphysics into perspective. His atomic occasions are living expressions of value, pulsational interweavings of the cosmos that create and impel time. Even more broadly than this, Whitehead's theory of atomic actual occasions offers the 'structural minimum' required in order that there be actuality or experience. As radical empiricism is the metaphysical point of departure for Whitehead's metaphysical speculations, the theory of actual occasions is first of all a theory of experience, encompassing both actual and possible experience. In *Process and Reality*, Whitehead's metaphysical scheme is developed with an eye towards creating an adequate cosmology for modern science and the contemporary age, that is, it is developed in the context of natural philosophy.[423] Returning to my calling an actual occasion a 'structural minimum,' this means that the concept of the actual occasion outlines the generic features required for something to be a novel actuality, or occasion of experience. This structural minimum includes prehensive or appropriative relations with the whole universe, the dynamic union of the modes of time filling an epoch, extension, some engagement with possibility, aim at intensity or importance, a process of deciding (of resolving indeterminacies), and an activity of organic self-realization that is atomic in character. We have been engaged in elucidating this structure throughout this and the previous two chapters, taking the ideas of time and possibility as our points of orientation.

[423] Whitehead's focus on the philosophy of nature and of natural science is just one more indication that the theory of experience developed by Whitehead attempts to correct what John Dewey calls "the fundamental mis-statement of experience," namely, "the conception of experience as directly and primarily "inner" and psychical" (Dewey, "The Need for a Recovery of Philosophy" (1917), in Dewey, *Middle Works: Essays on Philosophy and Education: 1916-1917*, 13n).

In giving a general theory of experience, and thus of reality, Whitehead is careful to make sure that the diversity and plurality of the experienced world is preserved. Whitehead's pluralism affirms variety in types of things and relations; it is not merely a plurality of occasions of experience, if this is understood in a reductive sense. As Whitehead wrote to Norman Kemp Smith in 1924, in response to an essay Kemp Smith had written about Whitehead's philosophy: "what you have very rightly insisted on is that I conceive the world to be infinitely fuller and richer in different types of entities (not merely in different entities) and types of relations among entities than (as it appears to me) current philosophy allows."[424] There are an unbounded variety of types or species of actual occasions; there is no "standard" actual occasion in terms of quality, dimensions, and character. The lightning shift of an electron from orbit to orbit, the budding of a flower, and a musician playing her instrument are alike in actuality. In this way, Whitehead's philosophy is amenable to the thinking of difference and otherness as it permeates our world. This amenability to difference within a philosophical scheme that contends that all actualities have the character of occasions of experience will become clearer as we proceed.

Through his concept of an actual occasion (or entity), Whitehead outlines a modern version of the doctrine of the 'univocity of being,' an idea perhaps most famously associated with John Duns Scotus (c. 1266 – 1308 CE). Whitehead's version would better be called the univocity of actuality, though he never invokes the concept of univocity or the name of Scotus in his writings. Indeed, the entire project of radical empiricism, in its

[424] Alfred North Whitehead, "Unpublished Letter from Whitehead to Kemp Smith—Jan. 24, 1924," *Southern Journal of Philosophy* 7, no. 4 (Winter 1969): 339–40.

commitment to rendering intelligible and workable a world of pure experience, requires some idea of univocity. Whitehead's idea is best captured in the following passage:

> For the philosophy of organism, the percipient occasion is its own standard of actuality. If in its knowledge other actual entities appear, it can only be because they conform to its standard of actuality. There can only be evidence of a world of actual entities, if the immediate actual entity discloses them as essential to its own composition.[425]

The first two sentences establish the idea of univocal standard of actuality, one based upon the experiential immediacy of an actual occasion. As I laid out in the radical empiricism chapters, the idea of actuality is based upon that actuality with which we are each individually most intimate, namely, our own experience and its flow. The *concept* of the actual entity and its atomic structure is Whitehead's rendering of this univocal standard, derived from experience.

The final sentence of the above text tells us that if an occasion of experience is to be in an actual world at all, that world must be experienced, and experienced as actual according to the standard stemming from that occasion. Thus the concept of the actual occasion as a 'structural minimum' is not just a rendering of what is required for actuality, but also of what is required for being an actuality *in an actual world*. That is, the doctrine of the univocity of actuality names that in experience which enables us to avoid what

[425] Whitehead, *Process and Reality*, 145. And cf. *Process and Reality*, 18: "…though there are gradations of importance, and diversities of function, yet in the principles which actuality exemplifies all [actual entities] are on the same level. The final facts are, all alike, actual entities; and these actual entities are drops of experience, complex and interdependent."

George Santayana calls the "solipsism of the present moment."[426] An actual occasion can, and does, experience itself as merely one among many within a rich and varied world. There are other occasions beyond the immediately present occasion, and the actuality of these others obtrudes upon the present. This obtrusion, specifically the obtrusion of others as *actual*, places an actual occasion within an actual world, a world from which the present is derived. This is what the univocity of actuality answers to in experience.[427] Actuality is derived from actuality. The experience of other occasions as actual in their own right requires that they meet the standard inherent in the present occasion, namely, the actuality of that occasion itself. In other words, a doctrine of actuality that applies univocally to all that is actual is required. If there was no univocity, all hopes and memories and ideas of pattern and order would be illusions. There would be no diverse or growing world, for there would be no *actual* difference or otherness. Univocity lays the foundation for a world of interconnected difference.

I have made constant use of the Whiteheadian version of the doctrine of univocity throughout this manuscript, though without naming it. For example, the "panpsychic" or panexperiential hypothesis discussed at the end of Chapter II is interconnected with the idea of univocity. Whitehead develops and outlines the univocal structure of actuality in the concept of an actual entity. This structure is a pattern of synthesis constituting a dynamic union of the universe through the modes of time. Above I said that the concept of

[426] See George Santayana, *Scepticism and Animal Faith* (New York: Dover Publications, Inc., 1955 [1923]), 13-18. Cf. Whitehead, *Process and Reality*, 81, 158.

[427] For Whitehead, the primary field of this 'obtrusion of actuality' in human life is the body. Cf. Whitehead, *Process and Reality*, 81: "But we must—to avoid 'solipsism of the present moment'—include in direct perception something more than presentational immediacy. For the organic theory, the most primitive perception is 'feeling the body as functioning.' This is a feeling of the world in the past; it is the inheritance of the world as a complex of feeling; namely, it is the feeling of derived feelings."

the actual entity is a 'structural minimum' for actuality. We may equally well call the actual entity the structure of irreducibility. This is merely another way of rendering the atomic character of actual occasions. What is actual cannot be reduced or 'cut' into less than it is, if its actuality is to remain intact. The whole dynamic union, absorbing the past as oriented towards a possible or ideal future, constitutes the actuality of the occasion. As a concept of understanding or explanation, the phrase "actual occasion" or "actual entity" applies precisely to what is irreducible, or incapable of complete explanation in terms other than itself. Metaphysically speaking, anything irreducible has an organic or atomic structure, that is, the structure of an actual occasion. This structure is through-and-through temporal and suffused with the activity of possibility.

Thus the univocity of actuality guarantees difference, or a fecund plurality of types, in a Whiteheadian cosmos. From univocity comes difference, specifically the affirmation of difference as actual. We may say generically of all actualities, that every individual actuality is irreducibly itself and thus different than any other occurrence that ever was or will be. The world cannot be collapsed into a supreme actuality, a single substance, or reduced to a "primary" level that is real in a superlative sense. Here again the contrast with a reductionist, physicalist version of atomism is shown to be stark. There is no reduction *to* Whiteheadian atomism, as Whitehead's atomism gives voice to the irreducibility of events within their contexts or environments. Even though the concept of the actual occasion serves as a "standard" for actuality, there is no standard actual occasion. For example, there is no standard extensive standpoint occupied by an actual occasion; there is no

standard duration or spatial volume to an event.[428] The quantum of space and time filled or created through the becoming of an actual occasion depends upon the aim or ideal of that particular occasion and the region decided upon within its becoming. Comparatively, two different occasions may fill durations of different magnitude. It seems reasonable to suggest that occasions of human consciousness fill greater—much greater—durations than do occasions of particle decay. Thus "the present" has no absolute durational length. Efforts to equate actual occasions and the genuinely fundamental and minimal quanta of physics are misguided and, frankly, serve to impose materialistic and reductionist suppositions on Whitehead's metaphysics that he has been at pains to repudiate.[429] The potential variety of kinds of actual occasions is endless and shall only be revealed (though always incompletely) through the continued growth of the world and our empirical exploration of it.

Since the atomicity of Whitehead's actual occasions is bound up with the efficacy of ideality, and since this ideal aim is subjectively felt, or internal to the becoming of the occasion in question, we must say that the *atomicity* of actual occasions is *lived* and is not to be found in a solely objective analysis of experience. This means several things. First, atomicity characterizes becoming, and becoming is private, 'transcendent,' subjective. In

[428] Cf. Whitehead, *Process and Reality*, 67: "For each process of concrescence a regional standpoint in the world, defining a limited potentiality for objectifications, has been adopted. In the mere extensive continuum there is no principle to determine what regional quanta shall be atomized, so as to form the real perspective standpoint for the primary data constituting the basic phase in the concrescence of an actual entity." See also *Process and Reality*, 284, where Whitehead writes that there is "indecision as to the particular quantum of extension to be chosen for the basis of the novel concrescence."

[429] F. B. Wallack makes opposition to reductive, materialistic interpretations of Whitehead's metaphysics a central foil throughout *The Epochal Nature of Process in Whitehead's Metaphysics*. Her work is very helpful and worth reviewing in this regard. Though there are many exciting applications and implications of Whitehead's philosophy for physics, we must resist the temptation to restrict actual occasions to the world of microscopic quantum events. See Wallack, *The Epochal Nature of Process in Whitehead's Metaphysics*, passim.

other words, an actuality is 'formally' atomic; atomicity applies to the process that is an occasion's 'real internal constitution.'[430] Now recall that Whitehead's theory of actual occasions is an attempt to adequately and concretely theorize experience.[431] The subjective quality of atomicity is the organization of living and ongoing experience around intentions, desires, appetites, and aims. Around these the vast whirl of experiential data congeals into an actual occasion, singular, efficacious, and irrevocable. What is atomic is immediate experience as lived.

Second, in our experience of the actual world we experience particularity and actuality, but there is always vagueness as to precise definition. As Whitehead writes, "we are not conscious of any clear-cut complete analysis of immediate experience, in terms of the various details which comprise its definiteness."[432] We experience "vaguely finite units of fact."[433] Whitehead's actual occasions, vaguely finite, lack the sort of clean and exactly discernable boundaries desired by the abstractive intellect. This is because, 'objectively,' every actual occasion "pervades the [extensive] continuum."[434] Each atomic occasion is, as previously noted, "a system of all things."[435] Recall that in Whitehead's language, the objective character of an actual occasion is its public character; an actual occasion functions as an object when it enters into occasions other than itself, thus intervening in or contributing to another formally atomic occasion.[436] Consequently, the disclosure of other

[430] Cf. Whitehead, *Process and Reality*, 219.
[431] Cf. Whitehead, *Process and Reality*, 4: "The elucidation of immediate experience is the sole justification for any thought; and the starting-point for thought is the analytic observation of components of this experience."
[432] Whitehead, *Process and Reality*, 4.
[433] Whitehead, *Modes of Thought*, 88.
[434] Whitehead, *Process and Reality*, 67.
[435] Whitehead, *Process and Reality*, 36.
[436] Cf. Whitehead, *Process and Reality*, 220.

actualities through present experience—which is our sole basis for any discussion of actuality—is the disclosure of objectified entities. But as objects, actual occasions transcend themselves. An actual occasion is not simply here or there, now or then. It has both a focal or formal character, influenced by the whole universe, and an effective or objective character, influencing the whole universe.

Actual occasions functioning as objects are prehended or appropriated into the formal or subjective constitution of other occasions. Thus actual occasions are inextricably intertwined with one another, formally and objectively. An actual occasion can never be disentangled from its actual world or from its transition into a consequent occasion as a source of influence. This essential fusion of occasion and world, in and through time, is what I earlier called active continuity. An occasion is constituted by its active relatings with everything else, transitioning immediately into its playing a formative (objective) role within other occasions. Consequently, actual occasions "are not separate from their own others."[437] This is why James characterizes our experience as a stream, and why in works other than *Process and Reality* Whitehead favors the language of pulses and rhythms to that of atomism.

To suppose that actual occasions are separated from one another within our experience is to consider the occasions abstractly and not as experienced.[438] The objectification or prehension of one occasion by another indeed means feeling *that* occasion as a source of present feeling. This prehension of another occasion is *particular,*

[437] James, *Works: A Pluralistic Universe*, 130.
[438] In many cases the abstraction of separate or isolated actual occasions does no harm, though it does eventually lead to the myth of substantiality.

and this occasion's particularity is felt as a locus of efficaciousness.[439] But this prehension is also integrated or fused with other prehensions within the experient occasion. That is, the prehension of an actual occasion is not independent from the experient occasion's prehensions of yet other actualities.[440] Things blur and run together in experience. The concrete individuality of prehended occasions is felt even if it cannot be strictly defined by the prehending occasion. This is because, within immediate experience, other actualities are experienced objectively. An actual occasion, objectively felt, is divisible—extensive. It bears within itself both realized and potential connections. We experience actualities through their potentialities for division, that is, through their efficaciousness and their power to affect, and thus in their continuity with things. One actual occasion experiences others as constituted through their extensive relations, that is, in their ordered, efficacious connectivity and groupings and in their potentiality to affect the world. The feeling of many occasions is 'transmuted' into the feeling of a community with rough or vague edges.[441] Community overlaps community; we experience an integrated world. This is the primary phenomenological fact of human experience.[442]

Thus an actual occasion *as a precisely demarcated atom* is not to be found *objectively* within experience. The experiential present *as a whole*—distinct focus and vague fringe, derived from without and pressing forward beyond its bounds—is atomic; for, again, atomism is lived. Consequently, the atomicity of an actual entity is not the sort

[439] See Whitehead, *Process and Reality*, 221. We are here broaching an important but complicated topic, namely, the character of prehensions, or how actual occasions experience others. The whole of Part III of *Process and Reality* is devoted to developing the theory of prehensions. I here touch on select but key aspects of the theory, leaving aside a great deal of Whitehead's technical detail.
[440] See Whitehead, *Process and Reality*, 235.
[441] See Whitehead, *Process and Reality*, 251-253.
[442] Cf. Whitehead, *Process and Reality*, 253.

of thing that will be revealed to us by ever more precise observation through scientific apparatuses. An actual occasion will not be "discovered" as subatomic particles are discovered in a particle accelerator, or as new forms of life are discovered by exploring distant or extreme environments. Thinking that actual occasions can be "found" in these ways is to misunderstand what an actual occasion is. Atomicity, or the activity of self-definition through engagement with and movement towards ends, is the lived privacy constituting the streaming of experience. In this streaming, our experience presents us with a curious, almost paradoxical, mix of stubborn particularity and ineluctable connectivity, or continuity, both active and static. There is no isolated atomicity of actual occasions. We do not experience a punctiform world. The actual world of an actual occasion is extensively continuous, meaning that the divisibility (or potentiality) of the world is perceptually salient. The world is experienced as full of possibility, with alternative divisions always present and suggestive.

For example, the physical constants of the natural sciences forever carry an air of arbitrariness about them because their numerical representations can easily be altered. Physicists hold a "Planck length" to be the smallest span of space that has physical meaning. Whether or not this holds true of our cosmic epoch, why is that number not half of what it is, or double? Or, within the realm of everyday experiences, an action might fill a second, but the possibility of the action ceasing after a lesser or greater amount of time is always and easily imaginable. Determining actual divisions from potential divisions is not an easy task. When and where does X end and Y begin? This question plagues even those actualities with which I am most familiar, namely, those of my own life history. If I cannot definitively tell when a past occasion of my own life passes into the present one, what is

the chance I can truly pick out the actual occasions that constitute the actual world?[443] I have not discussed Whitehead's theories of symbolic reference or perception in any detail—and I shall not—but suffice it to say that, given the transient and interpenetrative character of actual occasions, a *precise* and *certain* demarcation of actual occasions is an impossible task for a finite intellect. For the entire universe is implicated in the constitution of any atomic occasion. As we have discussed many times over the course of this manuscript, feelings are vague but pressing. We feel actuality bearing down upon us, but the precise characters and localities of these actualities are not so easily discerned. As Whitehead writes, we are always "prey to vague feelings of influence," and such feelings "are always vague as to spatial and temporal definition."[444] Boundaries are blurry. The method of discernment is pragmatic and our conclusions tentative.

The above considerations tell us that the task of objectively picking out atomic occasions from within experience is a fruitless task. What, then, is the use of talking about actual occasions? The actual occasion *as a philosophical concept* serves as a concept of explanation.[445] An event occurs. What's going on? What was that? What happened? The most complete answer we can give to these questions will mirror the processual pattern of

[443] The inability to tell precisely when one occasion ends and another begins is exactly the point of saying that passage or transition exhibits active continuity. Boundaries in a world of process are not sharp cut affairs. Indeed, if an actual occasion is a 'system of all things,' as Whitehead holds, in what sense can we even talk about demarcation and boundaries? We have been dancing around this issue of 'picking out' an actual occasion throughout this manuscript.

[444] Whitehead, *Process and Reality*, 176.

[445] I understand my interpretation of an actual entity or occasion, as presented here, to be consonant with that developed by Auxier and Herstein in *The Quantum of Explanation*. Indeed, their work has helped me give voice to the ideas I am discussing in the above paragraph. Auxier and Herstein call the concept of the actual occasion "the quantum of explanation" to illustrate its fundamental use in philosophical explanation. As they point out in their book, many readers of Whitehead are prone to interpret the actual entity in a traditional ontological sense. But the explicit openness and fallibility of Whitehead's radically empirical approach to philosophical inquiry precludes firm ontological claims. Thus Whitehead's system becomes a way of seeing and interpreting the world, rather than an infallible outline of the true nature of reality. This, I believe, is clear enough in Whitehead's writings, though this fact is no sure defense against misinterpretation.

an actual entity. A full account of what some occurrence is, and of the reasons for its happening the way it happens, will include that occurrence's derivation from its past, its projection into and influence on the future, its perspectival relationality with all other things, as well as the possibilities that inform and those that contrast with its activity. There is much more detail that could be included in this list; Whitehead's 'Categoreal Scheme' in *Process and Reality* outlines the basic principles governing a philosophical approach to explaining actuality. The succinct version of all of this is, "no actual entity, then no reason."[446] Elaborating slightly, Whitehead contends that "actual entities are the only *reasons*; so that to search for a *reason* is to search for one or more actual entities," and that "the reasons for things are always to be found in the composite nature of definite actual entities."[447] For finite intellects like our own, explanations *in terms of* actual occasions are the best and most complete explanations because the theory of actual occasions is the closest thing we've got to an adequate and general conception of experience. At least, such a conception is what Whitehead aims to provide. Whitehead nowhere claims that his scheme is perfect, and in fact he knows it will have to be revised and refined as new insights into the types and possibilities of experience emerge. But he does hold that the speculative metaphysical system he develops is "the right way of looking at things."[448]

The adjective speculative is important, for it implies that no part of Whitehead's philosophy is an assertion of certain, ontological knowledge. Yes, Whitehead does claim some insight into the nature of actuality, for in order that an explanation be a good one, it

[446] Whitehead, *Process and Reality*, 19.
[447] Whitehead, *Process and Reality*, 24 (first text), 19 (second text).
[448] Victor Lowe, *Alfred North Whitehead: The Man and His Work*, ed. J. B. Schneewind, vol. II: 1910-1947, 2 vols. (Baltimore: Johns Hopkins University Press, 1990), 298. This text is in a letter from Whitehead to his son North, dated Nov. 23, 1924.

must touch on or get something right about how the world is, or at least approximate it. But Whitehead's metaphysics is explicitly framed as a hypothesis, where "[t]he ultimate test is always widespread, recurrent experience."[449] His aim is to provide a suitable basis for interpreting and critically reflecting upon experience, such that the various specialized studies of dimensions of experience can be adequately coordinated and understood *as dimensions* of the same reality, namely, experiential reality.[450] As Whitehead writes: "Philosophy is the welding of imagination and common sense into a restraint upon specialists, and also into an enlargement of their imaginations. By providing the generic notions philosophy should make it easier to conceive the infinite variety of specific instances which rest unrealized in the womb of nature."[451] Whitehead's metaphysics of experience does an extraordinarily good job at laying the foundation for a radically empirical interpretation of our world. I contend he gets much right about how our experience goes.

Here, then, is the thrust of this last stretch of interpreting Whitehead's thought. The concept of the actual occasion, along with the other notions Whitehead develops in his philosophy, helps us read and interpret our experiences. It can help us interpret experience at both large and small scales; we can think of physical particles and of human societies as actual occasions. If one is inclined to think of different levels or strata of actuality, we may

[449] Whitehead, *Process and Reality*, 17.
[450] Cf. Whitehead, *Science and the Modern World*, vii: "Philosophy, in one of its functions, is the critic of cosmologies. It is its function to harmonise, re-fashion, and justify divergent intuitions as to the nature of things. It has to insist on the scrutiny of the ultimate ideas, and on the retention of the whole of the evidence in shaping our cosmological scheme. Its business is to render explicit, and—so far as may be—efficient, a process which is unconsciously performed without rational tests."
[451] Whitehead, *Process and Reality*, 17.

say that the concept of the actual occasion applies equally well across all strata.[452] What I mean is, the actual occasion is not only a helpful interpretive tool when applied to a particular type of occurrence or event, but it can help us interpret all manner of events and experiences. As I said above, the concept of the actual occasion can be thought of as the structure of irreducibility, and so whatever exhibits some form of organic or irreducible structure can be interpreted as an actual occasion. Consider the following text, where Whitehead acknowledges the usefulness of treating different 'levels' of things as actual occasions:

> [J]ust as, for some purposes, one atomic actuality can be treated as though it were many coordinate actualities, in the same way, for other purposes, a nexus of many actualities can be treated as though it were one actuality. This is what we habitually do in the case of the span of life of a molecule, or of a piece of rock, or of a human body.[453]

Here Whitehead affirms what I described above; namely, that the world of our experience is indeed a world of actualities, but also that our ascription of actuality can and does apply to things of varying levels of complexity. The point I insist on, and that does not come out clearly in this specific text, is that 'picking out' something as a single, well-defined actual entity is an impossible and fruitless task. There is no way for us to say *with certitude*, that *that* there is, without doubt, the true actual occasion, while that other thing is merely a

[452] In a letter to his son North, dated March 7, 1928, Whitehead describes his approach to philosophy in *Process and Reality* as follows: "It seems to me that this new way deals much less in abstractions than does the old way. Philosophers seem to me to be playing about with a "book" tradition, and not trying to express the fact directly observed. *I am trying to evolve one way of speaking which applies equally to physics, physiology, psychology, and to our aesthetic experiences. The ordinary philosophic abstractions won't do this.*" In Lowe, *Alfred North Whitehead: The Man and His Work*, vol. II, 333 [emphasis added].
[453] Whitehead, *Process and Reality*, 287.

potential division or aggregation of actualities. The concept of an actual occasion helps us make sense of various situations, events, and experiences; our purpose is not to go out and "find" them, objectively.

Notice that Whitehead's examples of "a nexus of many actualities" that can be treated as a single actuality all involve the "span of life." An actuality absorbs its past and anticipates its future within the immediacy of its moving present. The intimate relationship between actuality and the activity of the immediate and creative present suggests that what falls outside of the immediate present belongs to a different actuality. This again points us to my earlier contention that atomicity is lived rather than objectively ascribed. For how is the immediate present to be defined other than subjectively, by the one living that present? One shorthand way of thinking about an atomic actuality, helpful for guiding thought, is as 'a moment in the life' of something.[454] The definition of the present is bound up with the definition of an atomic actuality.[455]

This connection between the lived present and the atomicity of an actual occasion brings us back to the topic of time. Throughout this and the previous two chapters, Whitehead's philosophical ideas have helped us interpret the phenomenon of time. The

[454] This way of thinking about an actual entity, though helpful, is inadequate insofar as it emphasizes the subjective aspect of the actual entity at the expense of its equally essential superjective activity, that is, its objectively immortal activity. All I suggest is that, if we think of an actual entity as 'a moment in the life' of something, we also remind ourselves that the actual entity is subject-superject, an immediacy that becomes objectively immortal.

[455] Cf. Whitehead, *Science and the Modern World,* 104-105. Here Whitehead connects the temporal duration of an actual occasion ("event" in this text) to the idea of the "specious present." Whitehead writes: "The total temporal duration of such an event bearing an enduring pattern, constitutes its specious present. Within this specious present the event realises itself as a totality, and also in so doing realises itself as grouping together a number of aspects of its own temporal parts." Whitehead's use of the idea of the specious present should be read in light of William James's discussion in Chapter 15 of the *Principles of Psychology* ("The Perception of Time," in vol. I). See my footnote 32 in Chapter II of this work for more on the meaning of the specious present; specifically, on how the specious present is "*the original paragon and prototype of all conceived times*" (James, *Works: Principles of Psychology*, vol. I, 594).

concept of the actual occasion, as well as the allied ideas of extension and possibility, have been widely employed in interpreting our temporal experience. Indeed, probing the issue of time has given us occasion to elaborate the fundamental points of Whitehead's metaphysics, if not its finer details. Returning to Augustine's question with which we began—"What then is time?"—we can give a three part answer based on the work we have done. Each part offers a characterization of time, and I shall order them from most abstract to most concrete. The three together should stand as an effective summary of the conclusions reached in this study of time. But remember Augustine's warning that the ultimate nature of time is for us an insuperable mystery. The most truthful answer to the question, 'what is time?,' is still 'I do not know.' These Whiteheadian answers, then, are given with a due measure of timorousness in light of the limitations of human insight.

First, the simplest answer to Augustine's question from a Whiteheadian point of view is that time is the order(s) of succession of actual occasions. This order, abstracted and considered simply as pure succession, is what Whitehead calls physical time. It makes its appearance in the mathematical equations of the sciences. It is characterized by extension, or indefinite divisibility, and static continuity. It omits the temporal character of time.

Second, this pure successiveness of physical time is an abstraction from what Whitehead calls 'the creative advance into novelty,' whereby particular occasion transitions into particular occasion. This makes of time a perpetual perishing and a perpetual becoming. Influence and derivation characterize concrete successiveness, and thus the occasions so connected cannot be disentangled from one another. The activity of the past lays conditions of conformation on the future, conditions active in the formation of

the present. The relations here are particular and concrete, rather than abstract. The concrete succession of occasion derived from occasion is characterized by active, rather than static, continuity.

The first two points concern the relations between diverse actual occasions. In the third we are concerned with the 'interior' of an actual occasion, that is, with the occasion in the subjective immediacy of its becoming. Each actual occasion is a process of deciding, or of resolving possibility into actuality. Such a process of deciding has an atomic, or uncut, character due to the efficacy of ideality as final cause (or as 'subjective aim'). I also call the atomicity of an actual occasion its 'dynamic union.' For during the epochal becoming of the incipient occasion, the past, present, and future are held together in a non-successive unity, whereby the past and the anticipated future codetermine one another in the self-creation of the present. The anticipated future, appetition, possibility, and ideality are all interconnected. The efficacy of ideality or of the anticipated future within becoming provides that internal unrest and hesitation that impels and fills, or creates, time—epoch by epoch. There is indeterminacy and incompleteness as to what the future, and thus the self-creating present, is to be. Consequently, a metaphysical description of time without possibility leaves time empty and meaningless. Because of the indeterminacy involved in resolving possibility into actuality, each atomic occasion enjoys a quantum of physical time and space. This quantum, in its temporal dimension, is the occasion's epoch, during which it transcends the world and decides what it is to be.

This 'becoming of time' or 'process of deciding' is time as lived and is the most concrete description of the creative advance into novelty. Thus we see that the 'temporal character of time' is derived from the entire creative process of experience, which process I

have been illuminating since the beginning of this manuscript. Time and possibility are essential to a thick metaphysical description of experience, life, and process.

A Note on Possibility

Possibility has been a major theme of this manuscript thus far. Its importance within a radically empirical worldview should be evident by now. This being said, there are two points concerning the way Whitehead discusses and theorizes possibility that we need to clarify before bringing this chapter to a close. As the preceding pages have made clear, possibility plays an essential role within Whitehead's epochal theory of time. Indeed, Whitehead uses the idea of possibility in order to make sense of the world's continual efflorescence of novelty and the atomicity of its occasions. But in order that time and novelty be real and not mere illusions, there are conditions that a theory of possibility must meet. I shall clarify what these conditions are first. The second point regards Whitehead's choice of the term "eternal objects" to stand for possibilities in his metaphysical system. This term has been off-putting to many commentators, as it suggests a realm of ideal entities merely waiting to become actual. But Whitehead's eternal objects do not make time illusory or novelty a farce. A full explication of these two points would require a complete presentation of the theory of possibility, which I shall not do here. Rather, I shall give a partial outline of a Whiteheadian theory of possibility, indicating the solutions to the above concerns. Thus, this short section on possibility is more of an appendix to what we have been discussing than its conclusion.

First, the contours of a radically empirical theory of possibility are given jointly by two essays: William James's "The Dilemma of Determinism" and Henri Bergson's "The

Possible and the Real."[456] Both essays are worth considering carefully, but their main points for my purposes are as follows. In "The Dilemma of Determinism," James teaches us that, unless we admit that "possibilities may be in excess of actualities," then time will simply be the brute, remorseless working of things and ours a 'block-universe'—that is, one without relational texture, without novelty or essential plurality.[457] For possibility to have any meaning at all, it must be in excess of simple matter of fact; otherwise, we are, quite frankly, stuck with what *is*. But in "The Possible and the Real," Bergson teaches us that a metaphysics where "the possibility of things precedes their existence" leads to a world in which there is no genuine novelty.[458] Here we approach a block-universe from the other direction. The existence of possibility in separation from actuality threatens to make the movement of time a mere unfolding of things which could already have been known in their completeness. The fullness of the universe is already *there,* complete, and time is merely the piecemeal revelation of details worked out from eternity.

Before we think ourselves trapped, since we seem required to both have and avoid possibility, I hasten to point out that Bergson is warning us against conceiving of possibility in a certain way, namely, as "possibles which would be realized by an acquisition of existence."[459] Such possibles are lacking only in existence, but otherwise are fully definite and determinate—substantialized, in other words. A possible is *like* its corresponding actuality, just not "here" yet. Bergson thinks it is common, including and perhaps especially in philosophy, to conceive of possibility in this manner. But to conceive

[456] See James, "The Dilemma of Determinism" (1884) in James, *Works: The Will to Believe*, 114-140; and Bergson, "The Possible and the Real," in Bergson, *The Creative Mind*, 91-106.
[457] James, *Works: The Will to Believe*, 118.
[458] Bergson, *The Creative Mind*, 99.
[459] Bergson, *The Creative Mind*, 101.

of possibility in this way, is to do so in the mold of actuality; and not even full actuality, but actuality reduced to mere matter of fact. We are not taking possibility on its own terms *as experienced*, and as soon as we do so, indeterminacy and incompleteness come to the fore.

In radical empiricism, everything is drawn back to experience, and the idea of possibility as "pre-existence under the form of an idea" has no basis in experience.[460] For example, to say that *Hamlet* was possible before Shakespeare wrote it does not mean that the complete *Hamlet* was "out there," somewhere, as an idea, already together and awaiting realization. *Hamlet* in all its detail is only complete once Shakespeare has set down his pen, and to think otherwise is to misconstrue what is contained in an idea or thought.[461] James is right that "[t]he great point is that the possibilities are really *here*."[462] Possibility is woven into the fabric of actuality, giving it its thickness; it is not separate from actuality in the sense of "pre-existing" in its own domain. And the way possibilities are "really *here*," in experience, involves indeterminacy becoming determinate such that "the issue is decided nowhere else than *here* and *now*."[463] Possibility is real and it is in excess of the determinations of fact, but it is so in the indeterminacy and allure of appetite and striving. The reality of novelty and time are preserved.

Whitehead's treatment of possibility follows what I have just sketched, as my interpretation of it in this manuscript makes clear. Whitehead does not treat possibilities as fully definite in the way Bergson decries, and he embraces the Jamesean excess that allows

[460] Bergson, *The Creative Mind*, 102.
[461] See Bergson, *The Creative Mind*, 102-103.
[462] James, *Works: The Will to Believe*, 140.
[463] James, *Works: The Will to Believe*, 140.

for chance and decision. The facts of experience are fringed by what Whitehead calls the "penumbral welter of alternatives."[464] This penumbral welter is essential to what an actuality is, meaning that "[t]he actual cannot be reduced to mere matter of fact in divorce from the potential."[465] Because of this, there is no map of the future according to Whitehead, no path or set of paths laid out in advance—that is, beyond the generalities discernable from the impetus of the past. Creative advance is an adventure, for good or ill. For Whitehead, possibility is best thought of as *potential ways*, *styles*, or *manners* of being, and the togetherness and complexity of various *ways* realized in a novel actuality are together there and nowhere else. Possibility lives within actuality, within experience.

This only begins to touch on the complex questions involved in thinking about possibility, but for now I go no further in terms of constructing a Whiteheadian theory of possibility as such. However, I must address the second point I mentioned above, namely, Whitehead's terminological choice for his theory of possibility.

Whitehead calls possibilities, considered in abstraction from actuality, "eternal objects."[466] This name makes sense within the system Whitehead develops in *Science and the Modern World* and *Process and Reality*, but I hold that it carries unfortunate

[464] Whitehead, *Process and Reality*, 187.
[465] Whitehead, *Process and Reality*, 227.
[466] See Whitehead, *Science and the Modern World*, 159: "the metaphysical status of an eternal object is that of a possibility for an actuality." In *Process and Reality*, Whitehead calls eternal objects "pure potentials" (see Whitehead, *Process and Reality*, 22). A few brief terminological points: Regarding our current interpretation of Whitehead's texts, we may treat "pure potentials" and "possibilities" as equivalent. Whitehead does not call possibilities conditioned by fact "eternal objects," but rather says that such conditioned possibilities (such as those expressed in propositions) *involve* eternal objects. Such conditioned possibilities are also called "impure potentials." The aspect of possibility in a conditioned possibility "comes from" an eternal object, while the aspect of conditioning is provided by stubborn fact. My point is that, for Whitehead, wherever there is possibility there are eternal objects, either "directly" if we think about possibility abstractly, or conditionally if we are considering possibility as it pertains to concrete situations. The theory of eternal objects constitutes Whitehead's theory of possibility.

connotations that engender misinterpretations of Whitehead's ideas.[467] Specifically, eternal objects are frequently thought to be precisely the pre-existent possibilities that Bergson argues against, though they are not.[468] An eternal object can be realized, or lived, in many

[467] Whitehead himself recognized the interpretive troubles that his discussions of eternal objects caused others. In a letter to Charles Hartshorne dated Jan. 2, 1936, Whitehead expresses admiration for Hartshorne's recent work interpreting his (Whitehead's) thought. But he goes on to write: "There is one point as to which you—and everyone—misconstrues me—obviously my usual faults of exposition are to blame. I mean my doctrine of *eternal objects*" (letter reproduced in Lowe, *Alfred North Whitehead: The Man and His Work*, vol. II, 345-347). Might one of these "faults of exposition" be the name itself?

As one example of such misconstrual and of the interpretive trouble surrounding eternal objects, I invoke Victor Lowe. A lifelong interpreter of Whitehead and a proponent of the insightfulness of Whitehead's approach to philosophy and metaphysics, Lowe was open about his misgivings concerning eternal objects. But in an essay published the year of his death (1988), Lowe wrote: "Until recently I balked at Whitehead's doctrine of the realm of eternal objects. Then I saw that I had been wrongly assuming the self-consistency of this realm" (Lowe, *Alfred North Whitehead: The Man and His Work*, vol. II, 269). As Whitehead writes, the realm of eternal objects contains "possibilities at once incompatible and unlimited with a fecundity beyond imagination" (Whitehead, "Process and Reality," in *Essays in Science and Philosophy*, 118). Lowe came to understand that there is no preordained set of consistent possibilities for our world. *Everything* is on the table, and any path set upon and every way of realizing possibility depends upon the actual things of the world and their decisions. While Lowe's realization is important, this is not the place to enter into an exposition of the theory of eternal objects. My point is that confusion surrounds the idea of eternal objects, capable of haunting even lifelong and sympathetic interpreters.

[468] This misinterpretation of eternal objects as ideal pre-existents that foreclose the possibility of novelty in the temporal world gains force when the whole interrelated realm of eternal objects is considered, which Whitehead calls the 'primordial nature of God' (to be discussed shortly in the main text). If the primordial nature of God includes all possibilities, does God not "know" or "foresee" all that might happen, and thus all that will happen? This line of thought is put clearly and succinctly by Peter A.Y. Gunter:

> The God of Leibniz can envision all possible worlds, even in their infinite complexity. Similarly, Whitehead's God is construed as containing the sum of all possibilities in his primordial nature.
>
> Those with a nodding acquaintance with logic will note the appearance here of the universal qualifier 'all.' All leaves no exceptions, accepts no equivocations. On Whitehead's terms (as on Leibniz's) there can be no characteristic of anything at any time, no matter how complex, which the deity does not behold prior to its appearance. It follows that there can be no novel entities. Creativity must be understood as a choice between pre-existing 'possibles.' (Peter Gunter, "Gilles Deleuze, Deleuze's Bergson and Bergson Himself," in *Deleuze, Whitehead, Bergson: Rhizomatic Connections*, ed. Keith Robinson (New York: Palgrave Macmillan, 2009), 167–80; 178-179.)

Gunter's text illustrates a common and ever-present concern about Whitehead's eternal objects and the primordial nature of God, a concern that is natural enough if you take the idea of God knowing all possibilities at face value. But this reading of Whitehead's possibilities and their interrelatedness in God's primordial nature leaps over the meanings of these terms within Whitehead's philosophy in its rush to a conclusion. Instead, this reading of Whitehead depends upon preconceptions as to what a possibility is and how possibilities are "contained" in the primordial nature of God. Specifically, it involves a involves a substantialization of possibility that accords an eternal object the role of something like an image, able to be

ways, and no eternal object can be realized in its full complexity in any one occasion.[469] That is, there is indecision as to how a possibility is to be acted out, and this indecision is resolved only through the becoming of an actual occasion. You will have noticed that throughout this manuscript I have been talking about possibility and possibilities instead of eternal objects. I did this for reasons of broader intelligibility, and because I am not too fond of the term "eternal objects" myself. But a substitution of eternal objects for possibilities could be effected throughout the parts of this manuscript concerning Whitehead without any loss. I mean to be talking about his eternal objects when I am talking about possibility. I mention all of this because, to readers familiar with Whitehead's writings, the absence of the phrase "eternal object(s)" in my discussions of time and possibility will have been conspicuous.

Another noticeable omission is that I have not mentioned God at all, specifically the 'primordial nature of God,' which is intimately tied to Whitehead's theory of eternal

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beheld beforehand and to be actualized in due time. But an eternal object is a *way*, or a *style*, of being, not something that is simply realized or "matched" during realization.

I shall not delve into further details here. But Jorge Nobo provides an excellent reply to the sort of view put forward by Gunter, by way of succinctly explaining how God feels eternal objects. Nobo writes that:

> …in God's primordial conceptual experience, eternal objects are isolated each from the others. Their capacity for joint physical ingression into the make-up of an actuality is prehended by God; but their conjoint ingression as immanent determinants is, for God's primordial nature, a pure possibility and in no way a realized fact. The primordial nature involves no feeling of eternal objects as really together. Thus, when two or more eternal objects are jointly ingressed, for the very first time in the universe, into the physical constitution of an actual occasion, something radically new has indeed emerged, something which has never been previously experienced, even by God. (Nobo, *Whitehead's Metaphysics of Extension and Solidarity*, 92.)

For a more detailed account from Nobo, see Chapter 4 of the above cited book. For Whitehead on the isolation of eternal objects—a very important principle in the theory of possibility—see Whitehead, *Science and the Modern World*, 165-169.

[469] Cf. Whitehead, *Science and the Modern World*, 163.

objects. For Whitehead, the primordial nature of God is the name for the reality of unbounded possibility and the graduated interrelatedness of possibilities (eternal objects) with one another, such that there is 'proximity' and 'exclusion' in the nature of possibility.[470] One example of this interrelatedness of possibility is the way that, given the conditions of our cosmic epoch, being square excludes being circular while it does not exclude being blue. Another is that the possibility of singing is more proximate, or relevant, to the possibility of speaking than it is to the possibility of being blue. Our intuition that some possibilities are more relevant to one another than to others, is based on insight into this infinite patterning of possibilities, according to Whitehead. This insight is severely limited by the finitude of our experience, including our finite powers of thought and imagination, and so knowledge into the nature and patterning of possibility, or into the primordial nature of God, is necessarily vague and highly speculative.

But our experiences and reflections teach us some things. The immanence of the primordial nature of God (or, of boundless possibility) in actual occasions ensures that "possibility which transcends realized temporal matter of fact has a real relevance to the creative advance."[471] As I have frequently cited James as saying, our experience is "continuously one with possibles not yet in our present sight."[472] This immanence and relevance of the thickness of possibility, of the primordial nature of God, in experience is expressed as the "urge towards the future based upon an appetite in the present."[473] The appetite for the new, for the unrealized, that dwells in every finite experience is what

[470] See Whitehead, *Process and Reality*, 31-34; and Whitehead, *Science and the Modern World*, 157-179 (Chapters 10 and 11).
[471] Whitehead, *Process and Reality*, 31.
[472] James, *Works: A Pluralistic Universe*, 131.
[473] Whitehead, *Process and Reality*, 32.

Whitehead calls the primordial nature of God. It is the Eros for creativity. Thus I have been talking about the primordial nature of God—or, at least functionally using it—throughout my discussion of time and possibility. The primordial nature serves as the 'somewhere' of possibility, whereby it gains efficiency, or reality.[474] This somewhere exists immanently within the flow of experience, in every occasion, as appetition. The primordial nature of God, boundless possibility, repeats itself in every actual occasion. It is an expression of the fact that actuality is forever incomplete, that there is always something beyond the finite achievements so far realized, and that there is yearning for this beyond.

Note that the primordial nature of God is a metaphysical notion; it is a 'God of the philosophers,' if you will, and not one straightforwardly available for religion. Whitehead writes: "The secularization of the concept of God's functions in the world is at least as urgent a requisite of thought as is the secularization of other elements in experience. The concept of God is certainly one essential element in religious feeling. But the converse is not true; the concept of religious feeling is not an essential element in the concept of God's function in the universe."[475] I do not engage in the task of drawing out the connection between Whitehead's God and religious feeling, as this has been and continues to be done by numerous other scholars.[476]

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[474] See Whitehead, *Process and Reality*, 46.
[475] Whitehead, *Process and Reality*, 207.
[476] There are many scholars I could mention here, as Whitehead's philosophy has been preserved and studied in the United States in large part by those with theological or religious interests. This situation itself owes a great deal to the influence of Charles Hartshorne, and it is to his work that I direct the interested reader. A good place to start is the following collection of essays: Hartshorne, *Whitehead's Philosophy: Selected Essays, 1935-1970*. The essays "Whitehead's Idea of God" and "Is Whitehead's God the God of Religion?" are particularly helpful with regard to the question of God. One might also look into the work done at the Center for Process Studies, housed at the Claremont School of Theology, and by the scholars associated with it, such as John B. Cobb, Jr.

Eternal objects and their ordered relations in (or as) the primordial nature of God are how Whitehead *theorizes* possibility, how he attempts to render the complexities of how what *might be* and what *might have been* infuse experience. Unless this theory is replaced, it cannot be jettisoned without causing Whitehead's whole system to collapse. My work here has shown the tremendous importance of possibility for Whitehead's philosophy and radical empiricism generally. Simply cutting out eternal objects, or possibilities, is untenable. How could we have a philosophy of process without any idea of possibility? How could a philosophy without possibility be a radical empiricism? There are doubtless many ways of theorizing possibility within a radically empirical framework. The theory of eternal objects is but one. This theory in all its specifics need not be kept, but if it is rejected, then some general account and theory of possibility will be required to replace it. It cannot simply be ignored.

Lastly, I have not been avoiding the terms 'eternal objects' and 'the primordial nature of God' to be intentionally misleading. I avoided names, not metaphysical ideas. This was a rhetorical move intended to create greater sympathy for and understanding of Whitehead's ideas. In my approach to Whitehead's philosophy, specifically in my aim to make its relevance *felt* to the readers, I have found these terms more distracting than helpful in elucidating experience.[477] I mention them in this Note for the sake of full disclosure as to their significance in Whitehead's philosophy.

[477] I should note that Whitehead does not use the terms "eternal objects" or "primordial nature of God" after *Process and Reality*, which is the main locus of their occurrence (and also *Science and the Modern World*, in the case of eternal objects). The ideas these terms signify continue to play a role in Whitehead's writings, but the phrases themselves do not. Whitehead did not find these terms indispensable for the exposition of his thought, generally, and apparently found other ways of expressing himself more suitable.

CHAPTER VII

EXISTENCE AS AESTHETIC: WHITEHEAD'S EXISTENTIAL SENSIBILITY

In the previous chapters on radical empiricism and on Whitehead's philosophy (as oriented by the matters of time and possibility), we have laid the groundwork for an explosive interpretation of the aesthetic in Whitehead's philosophy. An appreciation for the aesthetic dimensions of experience and existence is prominent in Whitehead's philosophical writings from *Science in the Modern World* (1925) to *Modes of Thought* (1938). No Whitehead scholar would dispute this. However, the organizing importance of Whitehead's aesthetic insight has been overshadowed by the technical accomplishment of *Process and Reality* (1929) and the subsequent technical discussion surrounding it. Thus, I take as my task here an elevation of the aesthetic as a central topic of discussion within Whitehead's metaphysics.

A full interpretation of the aesthetic in Whitehead's philosophy would take as extensive an effort as that expended on interpreting radical empiricism and the theory of time. As this is beyond my current purview, I limit myself to developing the aesthetic dimensions of Whitehead's metaphysics such that the existential sensibility latent within Whitehead's thought comes into view. Whitehead's philosophical system and outlook is indeed impressive, but it is not fully developed in all its facets. One area significantly underdeveloped concerns what Whitehead's philosophy has to offer in the way of helping us to understand and navigate the trials and tribulations of daily human life. Whitehead was not an existentialist in the typical understanding of that word in philosophy, but his

writings do harbor an existential sensibility.[478] Whitehead's discussions of religion and, especially, aesthetics, give us a way to that existential sensibility. The aesthetic, in turn, is an essential element in how Whitehead understands process, actuality, and existence. For Whitehead, metaphysics and an existential sensibility meet in aesthetics. The present task is to bring this into view. My next task, beyond this current work, is a full-fledged study of the role of the aesthetic in Whitehead's thought.

A great deal of the groundwork for appreciating the aesthetic dimension of Whitehead's philosophy and its attendant existential sensibility has already been done in the previous chapters. Consider, for example, our discussions of the importance of 'decision' to the meaning of actuality, of the role of possibility in the creative process, and of the way every occasion synthesizes the universe so as to achieve some greatness of feeling. This chapter is thus primarily synthetic in nature. Once I begin to discuss Whitehead's aesthetic ideas, I hope that they begin to naturally resonate with much of what has already been said. Our first task is to get a better sense of the background to Whitehead's understanding of the aesthetic, and I do this by discussing the emergence of existential sensibility in his time. Once this is done, I shall lay the foundations for reading an existential sensibility as present in Whitehead's philosophy and then discuss what "aesthetics" means in a Whiteheadian context.

Existential Sensibility

The 19th century, in one of its aspects, was the century of diagnosis. Thinkers such as Søren Kierkegaard and Friedrich Nietzsche worried about the "progress" of modern

[478] The only work of which I am aware that brings Whitehead into explicit, sustained conversation with existentialism is Yasuto Murata, ed., *Whitehead and Existentialism* (Kyoto: Koyo Shobo, 2008).

European civilization outstripping humanity's spiritual capabilities. The forces of modernity were, they saw, rending the human person apart and making impotent our inner energies, leading to a dispassionate and stagnating social situation. Kierkegaard, ever concerned with the inwardness of the individual, introduced the ideas of 'the public' and 'chatter' as leveling elements coming to dominate our present age.[479] Nietzsche detected a festering sickness of our inner being and a withering of our will to life and thereby calls for a 'revaluation of all values' to be enacted by those with the spiritual resources to do so.[480] And in the sphere of political economy, but of broad existential import, Karl Marx realized that the alienation of a person from his work "alienates from man his own body, as well as nature outside him, as well as his spiritual being, his *human* being."[481]

I hold that these diagnoses have only been complicated, not overturned, by the events of the 20th and 21st centuries. In the middle of the 20th century, many of the concerns mentioned above were absorbed into a new philosophical attitude that would come to be called 'existentialism.' Most closely associated with the work of Jean-Paul Sartre, and more contentiously with the work of others, existentialism is a philosophy of lived experience. A careful look at experience reveals two important aspects of the individual: freedom and self-creation. Acknowledging that we are not readymade, but self-

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[479] See Søren Kierkegaard, *A Literary Review*, trans. Alastair Hannay (New York: Penguin Books, 2001 [1846]).

The ideas of 'the public' and 'chatter' are later taken up by Martin Heidegger in *Being and Time* and are recast as 'the They' (*das Man*) and 'idle talk,' influences to which we 'fall prey' and thereby live inauthentically. See Heidegger, *Being and Time*, 161-173.

[480] See, for example, Friedrich Nietzsche, *On the Genealogy of Morals*, trans. Walter Kaufmann and R.J. Hollingdale (New York: Vintage Books, 1969 [1887]); Friedrich Nietzsche, *Ecce Homo*, trans. Walter Kaufmann (New York: Vintage Books, 1969 [written 1888; published 1908]). These two books are bound together in the Vintage Books edition.

[481] Karl Marx, "Economico-Philosophical Manuscripts of 1844: From the First Manuscript: 'Alienated Labour,'" in *The Portable Karl Marx*, ed. Eugene Kamenka, The Viking Portable Library (New York: Penguin Books, 1983), 131–46; 140.

created, opens the door for social, economic, and political forces to impose foreign values upon our lives, distorting the authentic realization of the projects we have chosen for ourselves. With the power to define the self come the dangers of self-deception, bad faith, and the leveling compulsion of the Public, the They. Yet it is our responsibility to choose ourselves and not fade into the crowd, for the fact of our existence is that we are a choice, a decision; though we appear in this world unbidden, what we *are* is what we make of ourselves given what is at hand, and to close one's eyes to this fact is to succumb to the whim of external forces. The danger, as Kierkegaard pointed out, is that one's individual life will be leveled, impoverished, robbed of vital intensity. The difficulty is remaining authentic to oneself through the trials, tragedies, enticements, and cornucopias that we experience throughout life.

Thinking through the idea of authenticity and the corresponding notion of inauthenticity is central to much existentialist thought. Other characterizing features of existentialism include stressing the finitude and temporality of our being and the anxiety that attends this finitude, acknowledging the irreconcilable fact that we are 'thrown' into a world with which we must come to terms, and emphasizing the role of possibility in establishing projects that transcend our present condition and situation. We are beings of ambiguity, characterized by immanence within the conditions of our existence and by the decision that transcends these conditions.

Recalling the earlier chapters of this manuscript, we will recognize that many of these 'existentialist themes' are prominent in Whitehead's philosophy as I have developed it. For example, Whitehead stresses that every actual entity is an individual act of self-creation and self-determination, *a creation of value*. Determination is a hallmark of

actuality, meaning that all actual occasions are inextricably finite. One aspect of this finitude is the temporality of an actuality, a temporality created with the entity and that characterizes the process of that entity's coming to be. Such temporality is impossible without constant transaction with possibility or ideality, a process that provokes the decisions that characterize actual occasions of experience and lures actuality into novelty. Possibilities and projects are definitive of the self-creation of actuality, of the 'self' which emerges from process. Another aspect of an actual occasion's finitude is that it is birthed out of a world that conditions its becoming and 'perishes' back into that world, losing its individual immediacy—its achievement becoming a definite fact left as a further condition for future actualities. During the epoch of its becoming, an actuality transcends the rest of the world, meaning that it, alone, is responsible for determining what it is to be. Moreover, echoing William James and anticipating Maurice Merleau-Ponty, Whitehead stresses that the vague aspects of our experience, more so than the clear and distinct ones, hold great potential for philosophical discovery. This is especially true of the vague feelings within and of our bodies. Above all, Whitehead does not want to be narrow in his selection of evidence from lived experience when constructing his philosophical system.[482] In this, he is true to the spirit of William James's radical empiricism.

[482] Cf. Whitehead, *Adventures of Ideas*, 290-291: "In order to discover some of the major categories under which we can classify the infinitely various components of experience, we must appeal to evidence relating to every variety of occasion. Nothing can be omitted, experience drunk and experience sober, experience sleeping and experience waking, experience drowsy and experience wide-awake, experience self-conscious and experience self-forgetful, experience intellectual and experience physical, experience religious and experience sceptical, experience anxious and experience care-free, experience anticipatory and experience retrospective, experience happy and experience grieving, experience dominated by emotion and experience under self-restraint, experience in the light and experience in the dark, experience normal and experience abnormal."

Nevertheless, Whitehead was a metaphysician and philosopher of nature, not an "existentialist." His thought is systematic and technical, his scope grand. He did not write about the above themes in the same way, in the same language, or with the same emphasis as did later existentialist thinkers. But he did have an *existential sensibility*, meaning he was concerned with and sensitive towards the *inner life* of human beings, the values and meanings we experience, and the effects of the self, the world, and others upon this life of our experiencing, doing, and undergoing.[483] For Whitehead, this sensibility takes on an aesthetic character, meaning that he finds our situation in the world to be characterized predominantly by aesthetic values. These are values that result from comparison, adjustment, and contrast in unity. Thus Whitehead lays the ground for transforming metaphysics into an aesthetics of existence, or for understanding reality as oriented and shaped by aesthetic concerns and ideals. To draw out what this means and describe how our experience is characterized by aesthetic value is my purpose in this chapter.

The idea of *value* is crucial for our discussion but difficult to define, for the apprehension of this idea is essentially intuitive—that is, value is *felt*, *lived*, and *enjoyed* prior to its cognitive apprehension or articulation. We shall build upon the following understanding of value as the discussion progresses: value is *a feeling of worth, positive or negative, that takes some definite form*. As Whitehead writes in *Modes of Thought*: "Our enjoyment of actuality is a realization of worth, good or bad. It is a value experience. Its basic expression is—Have a care, here is something that matters! Yes—that is the best

[483] I was introduced to the term and the idea of 'existential sensibility' by John J. McDermott, whose own writings are rich in such a sensibility. See, for a number of examples, John J McDermott, *The Drama of Possibility: Experience as Philosophy of Culture*, ed. Douglas R. Anderson (New York: Fordham University Press, 2007).

phrase—the primary glimmering of consciousness reveals, something that matters."[484] This sense of mattering is "the sense of existence for its own sake, of existence which is its own justification, of existence with its own character."[485] There is a worthiness to immediate experience in virtue of its immediacy as *my* experience, and the value of experience is tethered to the things experienced (including felt possibilities) as they compose the total occasion through dynamic union. This sense of worth extends out to the world and the other things I experience in it. Not only do I matter, but other things matter, and the worth of other things melts into my own. From out of this experiential matrix, we become attracted to or repelled from everyday objects, people, places, and activities. To matter, to be of worth, to have value constitutes "the essential nature of each pulsation of actuality."[486] For Whitehead, value so permeates actuality that the two terms, value and actuality, are virtually synonymous.[487] And since actuality is always in the making, so, too, is worth gradually created and achieved, and in a variety of ways.

In this chapter, I ask and begin to answer—How might Whitehead's metaphysical rendering of experience and value shed light on our existential situation as finite beings thrown into the world? How might it help us think about and respond to the precipitating crises of modernity? And what is the role of aesthetics, or aesthetic value, in shaping a Whiteheadian existential sensibility? The first step to answering these questions is to

[484] Whitehead, *Modes of Thought*, 116.
[485] Whitehead, *Modes of Thought*, 109.
[486] Whitehead, *Modes of Thought*, 111.
[487] Cf. Whitehead, *Science and the Modern World*, 93: "Remembering the poetic rendering of our concrete experience, we see at once that the element of value, of being valuable, of having value, of being an end in itself, of being something which is for its own sake, must not be omitted in any account of an event as the most concrete actual something. 'Value' is the word I use for the intrinsic reality of an event. Value is an element which permeates through and through the poetic view of nature."

become clearer about how Whitehead characterizes our existential situation. For this we begin by turning to his writings on religion.

Solitude and Existence

Many thinkers throughout history have displayed some measure of existential sensibility. It is by no means a modern phenomenon. Indeed, vital strands of religious thought and practice are characterized by such a sensibility, especially within mystical traditions. The ongoing concern with the health and sickness of our souls in many religious traditions is a perfect example.[488] So it is not surprising that Whitehead's existential sensibility is most explicit in his discussions of religion, though I contend it suffuses his entire metaphysics. In what follows I shall focus on Whitehead's discussions of religious experience and its metaphysical implications, leaving many of his ideas about religious belief, dogma, and God in the background.

Whitehead construes religion broadly as "the art and the theory of the internal life of man, so far as it depends on the man himself and on what is permanent in the nature of things."[489] For now it will suffice to say that the "permanencies" in the nature of things center on the constant press of possibilities upon experience. These possibilities are felt in their relevance to the current decisions faced in this moment of self-realization, providing for the emergence of value and giving to living existence a continual sense of reaching beyond the present, towards novelty. Thus religion is concerned with the infusion of ideality into actuality and the individual's role as the site and enaction of this infusion through self-determination, or decision. In the metaphysical language developed in

[488] For potent illustrations of this concern, see William James's chapters on these topics in his *Varieties of Religious Experience*. James, *Works: The Varieties of Religious Experience*, 71-138.
[489] Whitehead, *Religion in the Making*, 16.

previous chapters, religion concerns the efficacy of ideals or possibilities within the process of self-realization and how possibility is resolved into actuality through decision. What are our ideals? And how are we to realize them? What I focus on at present is the emphasis on the internal life of human beings.

Importantly, the inner life of a human being is in the first instance solitary—we are alone. "Life," Whitehead writes, "is an internal fact for its own sake, before it is an external fact relating itself to others."[490] We do enter into community, we are social beings, but our sociality is not complete. The fact of individuality is that the realization of value, felt and enjoyed as an act of self-constitution, is firstly a private experience born out of a creature's reaction to and decisions about its world. Sociality conditions the incipient occasion, but the decision and final adjustment lies with it alone, disconnected and in isolation. This is the transcendence of each actual occasion, the privacy and atomicity of its becoming, its epochal solitude. This is a metaphysical rendering of what Whitehead calls, "the awful ultimate fact, which is the human being, consciously alone with itself, for its own sake."[491]

Solitariness, then, is a major factor of our existential situation, a 'generic trait' (to use a Deweyan phrase) that characterizes a certain phase in all experiences. Religion, according to Whitehead, "is what the individual does with his own solitariness."[492] What occurs within this solitariness such that it can stand as the anchor for religious thought and practice? Whitehead writes:

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[490] Whitehead, *Religion in the Making*, 15-16.
[491] Whitehead, *Religion in the Making*, 16.
[492] Whitehead, *Religion in the Making*, 16.

> In its solitariness the spirit asks, What, in the way of value, is the attainment of life? And it can find no such value till it has merged its individual claim with that of the objective universe…. The spirit at once surrenders itself to this universal claim [that value must be realized] and appropriates it for itself.[493]

That is to say, the drive of interiority is the attainment of value, of individual self-value, an attainment that can only be realized in the context of the values expressed by the antecedent world as taken up and reevaluated by the solitary spirit. For though value is achieved and enjoyed by the self, it cannot emerge except upon a background of order that contributes to the experienced enjoyment of being a part of, yet also distinct from, that background, that environment. The value of others and of the world is fused into my own present value, which, however, stands out and exists in its own right.[494] To experience value is to feel this contrast, to feel oneself—to make oneself—an individual in the world.

This self-valuation is characteristic of actuality, in that to be actual is to take an interest in "what one's existence…comes to."[495] Having such an interest spurs the activity of self-creation, or self-valuation. To be interested in this way, Whitehead writes, "is the ultimate enjoyment of being actual. But the actuality is the enjoyment, and this enjoyment is the experiencing of value."[496] Value emerges—becomes actual—out of one's taking an interest in what one's existence comes to, both with respect to oneself and for the wider

[493] Whitehead, *Religion in the Making*, 60. For the inclusion of the text in brackets, see Judith Jones's introduction to this text in the 1996 Fordham University Press edition, page lxiii.
[494] Cf. Whitehead, *Modes of Thought*, 116-118.
[495] Whitehead, *Religion in the Making*, 100.
[496] Whitehead, *Religion in the Making*, 100.

world. To be interested in existence is to create the value of existence.[497] There is thus a direct connection between actuality and the experience of value, or, more properly, value-experience. There must be some strength or intensity of feeling for there to be actuality at all.[498] As Whitehead puts it, "[e]xistence, in its own nature, is the upholding of value intensity."[499] The aim of religion is to promote the intensity of felt value through a cultivation of an individual's spiritual strength and sensitivity. This sensitivity is directed towards the mutual compatibility of possible values with those presented by the world as the actual ground, or the starting-point, for the process of self-realization. In this way, new vistas of achievement are opened, and the self is suffused with a sense of its worth, or of its strength of existence.

Accordingly, Whitehead writes that, "what *should* emerge from religion is individual worth of character."[500] For character, when taken in a positive sense, strengthens "the internal life which is the self-realization of existence."[501] Worth of character is partially exhibited in the quality of our actions but fundamentally concerns the way in which the many facts of the world are adjusted, re-valuated, and merged with possibilities in the concrescence of a new occasion of experience. Is this done with care for the many things that are felt to comprise the new occasion? With a deftness that promotes intensity? Or is it a slipshod affair, resulting in a mild feeling of value—perhaps confusion, or, worse, boredom?

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[497] Cf. Whitehead, *Modes of Thought*, 8-9, for Whitehead's connecting of the ideas of "importance" and "interest." Importance is closely related to, and is often a synonym for, value—or 'something that matters.'
[498] Cf. Whitehead, *Religion in the Making*, 103: "The zero of intensiveness means the collapse of actuality."
[499] Whitehead, *Modes of Thought*, 111.
[500] Whitehead, *Religion in the Making*, 17. Emphasis mine.
[501] Whitehead, *Religion in the Making*, 16.

This internal activity of composition is self-realization, and strength or worth of character is one way of indicating that this internal activity aims at, and strives for, greatness or importance, immediately realized and enjoyed and externally efficacious. Religion, in its best aspects, should promote a rich 'internal life,' which life in turn expresses its worth to the world and thereby occasions shifts in the self-constitution of other lives. Individual achievement adds to the growth and value of the world.

In order to clarify the above, I note that Whitehead is not naively eulogistic about worth, enjoyment, or religion. For Whitehead "worth" can be positive or negative, beneficial or harmful.[502] As referenced earlier, Whitehead describes the sense of worth, whether we find it in ourselves or in other things, as "the sense of existence for its own sake, of existence which is its own justification, of existence with its own character."[503] The existence that burns with intensity may be *too* focused on "its own character" (narcissism) and, in the wider world, cause destruction and strife. And "enjoyment" expresses more the immediacy of feeling as *mine* than it does something necessarily pleasant. To 'enjoy' pain or bitterness is to *be together with* the pain or bitterness, for it to be felt as part of my present constitution, not necessarily to reap pleasure or spiritual gain from it. Finally, Whitehead is clear that "[r]eligion is by no means necessarily good. It may be very evil."[504] That is, religion may cut off individuals from the fullness of possibility that is available to them, instead promoting the lessening or leveling of intensity. For evil is exhibited socially "in its character of a destructive agent among things greater than

[502] See Whitehead, *Religion in the Making,* 17: "But worth is positive or negative, good or bad." Cf. Whitehead, *Modes of Thought*, 116: "Our enjoyment of actuality is a realization of worth, good or bad."
[503] Whitehead, *Modes of Thought*, 109.
[504] Whitehead, *Religion in the Making,* 17.

itself."[505] Evil is the prevention of comparatively greater and more fecund possibilities from being realized.[506] The aim, though—the hope—is that the value and the meaning cultivated by an individual in solitude is lasting and worthwhile for the one who creates and enjoys it and that it promotes such feelings in others; not that it is a flash of self-satisfaction that inhibits the realization of value beyond itself.

It is within our solitariness that it becomes possible to overcome the leveling influences of human social psychology and even the habitude of our own existence.[507] Whitehead finds most human psychology to be "herd-psychology," though these collective emotions leave untouched the "awful" fact of our solitariness.[508] Turning towards and coming to inhabit our solitude can be a relief for us, for the commitment to answering the question that rings out of our solitude—'What, in the way of value, is the attainment of life?'—means we must consider *novel* possibilities of value and work towards the realization of whatever value is chosen through the determination of the self as a process experienced for its own sake. Whitehead wishes us to avoid acquiescing to the habitual simply *because* it is habitual. However, at the level of human consciousness a certain amount of inner strength is necessary to truly engage with novel possibilities, for a confrontation with our own solitariness can induce deep anxiety. The cultivation of this strength is one task of religion.

Although solitariness is of religious significance, it is also a moment of aesthetic composition and decision, determinative of actuality. At this point, it will be helpful to

[505] Whitehead, *Religion in the Making*, 95. Cf. Whitehead, *Adventures of Ideas*, 333.
[506] Cf. Whitehead, *Religion in the Making*, 95-97.
[507] Cf. Judith Jones's "Introduction" to Whitehead, *Religion in the Making*, lxii.
[508] Whitehead, *Religion in the Making*, 16.

look at two related texts by Whitehead. The first text will help us distill a metaphysical description of the world from what has been discussed thus far. Though the language is in a different register, this description should resonate with our discussions in previous chapters.

> The actual world, the world of experiencing, and of thinking, and of physical activity, is a community of many diverse entities; and these entities contribute to, or derogate from, the common value of the total community. At the same time, these actual entities are, for themselves, their own value, individual and separable. They add to the common stock and yet they suffer alone. The world is a scene of solitariness in community.[509]

Though the becoming of an actual entity is characterized by its solitariness, each occasion of experience begins with a broad feeling of its world, prehending every other existent entity so that it is "a microcosm representing in itself the entire all-inclusive universe," and ends by a presentation of its achievement, a new individuality encapsulating *its* take on the universe, for feeling by future occasions.[510] It is in solitude, which I previously called the transcendence of becoming, that the occasion adjusts the initial welter of feelings into the richness of *an* experience and achieves concreteness, actuality. This is the process that embodies creativity and characterizes the world, a process which Whitehead acknowledges may be lonely and filled with much suffering. Yet this process requires its environment, draws its materials from it, contrasts itself with it, and issues back into the community. Having value, or 'mattering,' is born out of individual (atomic) effort, but also requires

[509] Whitehead, *Religion in the Making*, 88.
[510] See Whitehead, *Religion in the Making*, 91.

expression beyond oneself. Value cannot be held in pure isolation. It is relational. As Whitehead articulates it in *Modes of Thought*, an occasion of experience "upholds value intensity for itself, and this involves sharing value intensity with the universe. Everything that in any sense exists has two sides, namely, its individual self and its signification in the universe."[511] Thus "[t]here is no such thing as absolute solitariness."[512] The creative advance of nature is characterized by many joining and disjoining, concordant and discordant, rhythms between solitariness and publicity.

The second, related text points us toward the next stage of our inquiry into Whitehead's existential sensibility, namely, the aesthetic character of existence:

> The moment of religious consciousness starts from self-valuation, but it broadens into the concept of the world as a realm of adjusted values, mutually intensifying or mutually destructive.[513]

Like the first text, this text emphasizes the movement from the private achievement and enjoyment of value to the community of values formed by the world of such occasions. Religious consciousness incorporates these various levels of value and seeks to cultivate the achievement of intensity through the fortunate coordination of self and world. What the text suggests, though does not explicitly state, is the aesthetic dimension of the process of actualization, or concrescence. This is the dimension by which the self-creative entity composes and valuates itself and, by passing into the world, contributes to the creation of a world of "adjusted values." To adjust is to make and act upon an aesthetic judgment,

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[511] Whitehead, *Modes of Thought*, 111. Cf. Whitehead, *Religion in the Making*, 137-138: "Even for individual intuitions outward expression is necessary…. [W]hat is known in secret must be enjoyed in common, and must be verified in common."
[512] Whitehead, *Religion in the Making*, 137.
[513] Whitehead, *Religion in the Making*, 59.

aiming at aesthetic satisfaction. The aesthetic dimension of experience is the adjustment and contrast enacted such that certain feelings are intensified or reduced so that a complex, integral feeling can be achieved, becoming an actual occasion of experience.

For example, instead of allowing a feeling of disappointment and a feeling of joy to inhibit one another, an incipient occasion can foreground the joy upon a background of disappointment, feeling both and allowing the contrast to sweeten the joy.[514] Such an experience is a thing of beauty. Indeed, this adjustment and adaptation of the various contents of an experience so that these contents are mutually intensifying within the experience is what Whitehead calls Beauty.[515] This means that beauty is realized in actual occasions, and its realization varies in degree depending upon how well a particular occasion is composed. Beauty characterizes the compositional activity of experience and is an aim of experience, but is not a unitary thing characterized by static perfection.[516] It is really another name for aesthetic experience, an experience characterized by strength, importance, and intensity, where the experient occasion has made itself the site of outward-looking value. Beauty derivatively applies to the components and contents of experience, which are beautiful insofar as they are capable of contributing to beauty, that is, to a robust, aesthetic experience.[517] Only through aesthetic adjustment aiming at beauty is the determinate unity of experienced actuality possible. For this reason, Whitehead writes that

[514] The occasion might also feel the disappointment with more intensity, inhibiting the joy, which yields an aesthetic satisfaction of a different character. Cf. Whitehead, *Adventures of Ideas*, 334.
[515] Cf. Whitehead, *Adventures of Ideas*, 341: "Beauty is the internal conformation of the various items of experience with each other, for the production of maximum effectiveness." See also Chs. XVII and XVIII of *Adventures of Ideas*, titled "Beauty" and "Truth and Beauty," for Whitehead's most extended treatment of the topic of beauty.
[516] Cf. Whitehead, *Adventures of Ideas*, 329-330.
[517] See Whitehead, *Adventures of Ideas*, 328-329.

"an actual fact is a fact of aesthetic experience."[518] The world of such actualities, varied and numerous, is what presents itself in beautiful array for novel synthesis by a new occasion.

Thus we can begin to understand what Whitehead meant when he wrote: "The metaphysical doctrine, here expounded, finds the foundations of the world in the aesthetic experience."[519] This statement, made in *Religion in the Making*, applies generally to Whitehead's metaphysical *Weltanschauung*. Whitehead thinks that religious consciousness, in its quest to achieve meaningful existence through the introduction of ideality into actuality, reveals pointedly the aesthetic character of existence.[520]

Now we shall leave the realm of religious experience aside to discuss more fully the broader idea of aesthetic experience. We shall thus see how Whitehead finds "the foundations of the world" in such experience.

Aesthetics

Though Whitehead uses the term "aesthetic" somewhat frequently and, as we have just seen, in ways central to his philosophy, he never wrote a work specifically on aesthetics and he never lays out precisely what he means by the word. Its meaning, especially as used in his metaphysics, is quite broad, though it is rooted in the concreteness of aesthetic experience. 'The aesthetic' describes a mode of experience, perhaps its most

[518] Whitehead, *Religion in the Making*, 115.
[519] Whitehead, *Religion in the Making*, 105.
[520] And conversely, the aesthetic character of existence serves as a crucial foundation for religious experience. See the following marvelous text from Whitehead, *Modes of Thought*, 120: "For example, take the subtle beauty of a flower in some isolated glade of a primeval forest. No animal has ever had the subtlety of experience to enjoy its full beauty. And yet this beauty is a grand fact in the universe. When we survey nature and think however flitting and superficial has been the animal enjoyment of its wonders, and when we realize how incapable the separate cells and pulsations of each flower are of enjoying the total effect—then our sense of the value of the details for the totality dawns upon our consciousness. This is the intuition of holiness, the intuition of the sacred, which is at the foundation of all religion."

fundamental mode. I shall briefly indicate here the general sense of the aesthetic in Whitehead's philosophy before going on to discuss aesthetic experience more thoroughly.

Generically, the aesthetic is what characterizes any composition of a one from many, that is, a gathering that is processively integral. Such a composition brings together and adjusts the many into a mutually reinforcing whole; the strength, liveliness, or intensity thereby experienced is the aesthetic quality of the whole, that is, its beauty. The palmary instance of such aesthetic composition is the unification of the plurality of the world in present experience. It is through aesthetic composition and comparison that layered rhythms of process generate various systems of order and culture, interwoven so as to comprise an organic environment that makes possible the intensities we experience in our conscious lives. Grades of connectivity and separateness, and of transition, are affectively felt, which feelings mark the prehensive-aesthetic unity that characterizes occasions of experience. The process through which feelings are felt *together*, whether in harmony or strife, is the process of concrescence, the process of aesthetic attunement aiming at intensity of feeling. The issue of any such process is the realization of some form of value intensity. The aim at aesthetic intensity, at that mutual interweaving of parts into an intensely felt, organic whole productive of value, is, according to Whitehead, self-justifying.[521] In *Adventures of Ideas*, Whitehead terms the shaping of this aesthetic whole, intense, transient, and productive, Beauty.[522] Thus every occasion of experience has, for itself, its own beauty. This aesthetic vision permeates Whitehead's thought, though generally in the role of the abiding but unobtrusive background.

[521] Cf. Whitehead, *Adventures of Ideas*, 342.
[522] See Whitehead, *Adventures of Ideas*, 324.

This broad notion of aesthetics applies to every occasion in the universe, including physical ones, such that each actual fact may be considered a fact of aesthetic experience, as mentioned above.[523] Thus aesthetics, on Whitehead's metaphysical rendering of experience, captures everything. As Whitehead writes in *Modes of Thought*, "when the topic of aesthetics has been sufficiently explored, it is doubtful whether there will be anything left over for discussion."[524] We must be careful in interpreting this statement, though, because Whitehead quickly qualifies his remark, writing that "this doubt is unjustified. For the essence of great experience is penetration into the unknown, the unexperienced."[525] Whitehead's point is that all starting points for thought have their merits and limitations, but so far as philosophy is concerned, and given our current state of knowledge and culture, the best and most fruitful starting point "is that section of value-theory which we term aesthetics."[526] Whitehead explains that this is because "[o]ur enjoyment of the values of human art, or of natural beauty, our horror at the obvious vulgarities and defacements which force themselves upon us—all these modes of experience are sufficiently abstracted to be relatively obvious. And yet evidently they

[523] Cf. Whitehead, *Religion in the Making*, 116: "Thus physical quantities are aggregates of physical vibrations, and physical vibrations are the expression among the abstractions of physical science of the fundamental principle of aesthetic experience." This "fundamental principle" is that "[a]ll aesthetic experience is feeling arising out of the realization of contrast under identity" (Whitehead, *Religion in the Making*, 115). The topic of aesthetic experience will receive more attention in the main text as we continue, but for now this principle may be understood as an alternative to the way I formulated the meaning of the aesthetic, above. To repeat, "the aesthetic is what characterizes any composition of a one from many, that is, a gathering that is processively integral." The contrast of 'many' in the dynamic union of 'one' experience gives rises to aesthetic feeling, the feeling of manyness-in-one where individuality and totality are enjoyed as enhancing one another and thus the experient occasion. The adjustments, limitations, and enhancements enacted such that the many can become one make the emergent occasion an aesthetic composition, a relational synthesis. Aesthetics is thus concerned with relationality and dynamic unification, and aesthetic enjoyment is the enjoyment of relations, the enjoyment of feeling the ways in which things are dynamically related to one another.

[524] Whitehead, *Modes of Thought*, 62.

[525] Whitehead. *Modes of Thought*, 62.

[526] Whitehead, "Analysis of Meaning," in *Essays in Science and Philosophy*, 129.

disclose the very meaning of things."[527] Thus Whitehead broadens aesthetics to encompass the study of reality. This is an enlargement of aesthetics, not a reduction of other modes of inquiry *to* aesthetics. The term aesthetics does not becomes so broad so as to lose meaning on Whitehead's account, for it still bears similarity to, and is in fact derived from, more usual and specialized understandings of the topic that restrict it to the study of beauty and taste as these matters relate to sense perception and arise out of human art and natural occurrences.[528]

For Whitehead, aesthetics is still concerned with beauty, but now beauty is understood as a fundamental character and aim of compositional or synthetic processes (concrescence). The beauty of a concrescent process, or actual occasion, stems from its effective and affective interrelations insofar as these interrelations suffuse experience with feelings of intensity and importance. The value or importance—the actuality—realized by such a process "is my emotional worth now, embodying in itself derivations from the whole, and from the other facts, and embodying in itself reference to future creativity."[529] For Whitehead, the very basis of existence is emotional value and intensity, or aesthetic feeling. This "emotional worth" is enjoyed by the experient occasion as its feeling of self, but this worth grows out of its world and contributes to the future growth of the world. The structure just articulated of (i) present feeling, (ii) derivation of feeling, and (iii) anticipation of future feeling is the structure of time. Thus we see that the dynamic union

[527] Whitehead, *Essays in Science and Philosophy*, 129.
[528] Cf. Whitehead, *Process and Reality*, 279: "An intense experience is an aesthetic fact, and its categoreal conditions are to be generalized from aesthetic laws in particular arts." This gives us an important clue for how to read and interpret Whitehead's 'Categoreal Scheme.' See also page 317 of *Process and Reality*: "The canons of art are merely the expression, in specialized forms, of the requisites for depth of experience."
[529] Whitehead, *Modes of Thought*, 117.

of time, described in earlier chapters, is closely related to beauty, value, and aesthetic activity. In fact, temporal process is aesthetic activity, and time gets its epochal character from the aesthetic unities of actual occasions. Each epoch is an enjoyment and expression of value.

If one is inclined to think of aesthetics as concerned with what is given in and by sense perception, Whitehead retains this idea in the broadened form of how the 'out there' is made 'in here' through prehension (transition). Affective presence, or the prehensive localizing of feelings, takes the place of sensations as the source of our aesthetic feelings and enjoyments. That is, an incipient occasion's feeling of derivation from without, which Whitehead describes as "the self-enjoyment of others melting into the enjoyment of the one self," is the basis of aesthetic satisfaction.[530] But in being derived from without, an occasion also has a sense of its influence upon and transition towards the future. Aesthetic feeling is thus based on temporal existence, on the revelation and creation of relations in time. Such revelation occasions our sense of life and energy in the world and gives us "the sense of external reality—that is to say, the sense of being one actuality in a world of actualities."[531] This sense of *a world*, Whitehead says, "is the gift of aesthetic significance."[532] Such significance reveals value and importance beyond present immediacy.

Thus, for Whitehead aesthetics is concerned with the nutritive relationship between an experient occasion and its world, with the relationships within that world as felt, and with the internal interweaving of feelings that constitutes *an* experience. All aspects of

[530] Whitehead, *Modes of Thought*, 117-118
[531] Whitehead, *Modes of Thought*, 120.
[532] Whitehead, *Modes of Thought*, 120-121.

aesthetics concern experience and the possibilities for experience. That is, the fundamental topic of aesthetics is aesthetic experience.

The condensed account of Whitehead's aesthetics given above will become clearer as our metaphysical inquiry into aesthetic experience continues. My task in what follows is to reprise the account of experience I have been developing throughout this manuscript, but to do so in the language of aesthetics.

Aesthetic Experience

As an initial and proximate description, we can say that an aesthetic experience is one characterized by a feeling of satisfaction or significance due to the ordering, arrangement, and adjustment of what is felt and the way this feeling is incorporated into the experiencing subject. Walking through the woods, leaves rustling and creatures scurrying; viewing the facades of the Sagrada Familia; listening to the sounds of a city street; participating in the preparation of the evening meal; spending a night tucked away with a book; all can be appreciated aesthetically for the intensity of feeling they can promote in a receptive experiencer. The quality that makes an experience *aesthetically satisfying* is that it encompasses a variety of details, individually felt and appreciated, which strengthen the feeling of the whole through their contrasts with one another. The web of relations constituting the whole in turn heightens our apprehension of the individual significance of the details to the overall pattern of feeling. Thus the individual notes of a symphony are woven together into a satisfying whole, yet this unity does not obscure the loveliness of the notes but actually serves to put the importance of their individuality into relief.

In Whitehead's terms, the aim of aesthetic experience is Beauty, which is characterized by 'massiveness' and 'intensity' of feeling. Massiveness is "variety of detail with effective contrast," the 'effective contrast' of the details with one another promoting rather than hindering intensity of feeling.[533] Intensity is the comparative depth or vivacity of feeling, an idea that abstracts from the qualitative variety of the experience.[534] These two notions, massiveness and intensity, cannot really be separated from one another; Whitehead combines them in the idea of 'strength.'[535] We could also say 'greatness' or 'importance' instead of strength.[536] Thus in an aesthetic experience, what is sought is vivacity that builds upon, rather than excludes, variety. An experience may be vivid but narrow—the problem here is that the intensity of such an experience fades quickly and it becomes dull, boring, lifeless. There is a richness to a strong aesthetic experience that is worth returning to and that can sustain our future endeavors. Alternatively, an experience can be full of variety but with few elements standing out in terms of intensity, resulting in mere confusion, inhibition, and indecision. This situation points to the need for an environmental order to serve as a backdrop against which aesthetic experiences can emerge. Order allows the variety of the world to enter into experience as contrasts rather than as destructive incompatibilities.[537] We may say, then, that an aesthetic experience is a "feeling arising out of the realization of contrast under identity," meaning that the occasion of experience agrees with its inherited environment, its past, while combining this

[533] Whitehead, *Adventures of Ideas*, 325.
[534] For a further discussion of 'intensive quantity' and its relationship to qualitative patterns, see Whitehead, *Process and Reality*, 233-235.
[535] Whitehead, *Adventures of Ideas*, 325.
[536] Cf. Whitehead, *Modes of Thought*, Ch. 1 ("Importance"), esp. 12-14.
[537] Cf. Whitehead, *Process and Reality*, Part II, Ch. III, esp. 83-84.

agreement with novel effect.[538] Thus the symphony, experienced as a musical piece emerging out of a cultural tradition, is appreciated for its peculiar sonic and structural qualities as they relate to this tradition, perhaps as a paradigm of excellence or perhaps as an adventurous leap towards a new style. The power and delicacy of the music is made manifest and appreciable through the confluence of various interweaving historical environments.[539]

As I mentioned above, Whitehead thinks that the most far reaching and broadly applicable character of our experience is its aesthetic quality. His speculative generalization from this idea is that the interweaving of details into patterned contrasts, issuing in an aesthetic unity of feeling, is characteristic of all occasions of experience. An aesthetic unity of feeling, or the feeling of many things as one, is the realization of value. This is also called the 'satisfaction' of an occasion of experience. The coming to be of this unity is the process of self-actualization, or concrescence. In the initial phase of concrescence, the actual world is felt in its multiplicity as so many 'others.'[540] "The second stage," Whitehead writes, "is governed by the private ideal, gradually shaped in the process

[538] Whitehead, *Religion in the Making*, 115; cf. Whitehead, *Process and Reality*, 279-280.
[539] I understand this point to apply to the enjoyment of 'pure noise' or 'pure sound' as well. Cacophony is implicitly if not explicitly contrasted with the sounds of nature, daily life, and known musical styles, providing a backdrop against which 'noise' can be appreciated (or found to be grating, annoying, and painful). True, Whitehead's descriptions of 'effective contrast' and 'harmony' in *Adventures of Ideas* would seem to point towards an understanding of cacophony as disruptive or even anesthetic *by definition*, rather than aesthetic, but I think this interpretation is not nuanced enough to capture the scope of Whitehead's aesthetics. I think it is closer to Whitehead's meaning to say that a *metaphysical cacophony*, or diverse actual entities working at cross purposes, is necessarily inhibitive of intensity of feeling—though even this statement requires qualification, the outlines of which are given later in this chapter, in the discussion of discord—but a cacophony of physical sounds need not be destructive or inhibitive at the level of consciousness. This, though, depends on the contexting environments of the percipient occasion, physiological, personal, and cultural, for example, as does aesthetic appreciation generally. It would be interesting to consider the conditions under which cacophony can contribute to aesthetic enjoyment, though this investigation lies beyond the scope of this project.
[540] Cf. Whitehead, *Adventures of Ideas*, 233.

itself; whereby the many feelings, derivatively felt as alien, are transformed into a unity of aesthetic appreciation immediately felt as private."[541] In this stage, the world is swathed in the emotional feelings of the potentialities it exhibits, potentialities now felt as potentials *for* a novel aesthetic unity, a 'private' recreation of the given world.[542] These emotional feelings re-valuate the given world by modifying the intensity with which the many entities of the world are felt—"they clothe the dry bones with the flesh of a real being, emotional, purposive, appreciative."[543] This "is the phase of inhibitions and intensifications…the phase in which blue becomes more intense by reason of its contrasts, and shape acquires dominance by reason of its loveliness."[544] This is where the occasion in its solitariness selects, adjusts, omits, and arranges, aiming at an enjoyment of the world, massive and intense, felt as one, felt as beautiful. This aim is enjoyed for its own sake, for the aim at and experience of beauty is self-justifying.[545]

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[541] Whitehead, *Process and Reality*, 212.

[542] Cf. Whitehead, *Process and Reality*, 213. Here Whitehead tells us that in the second stage of concrescence "there is an emotional appreciation of the contrasts and rhythms inherent in the unification of the objective content in the concrescence of one actual occasion."

[543] Whitehead, *Process and Reality*, 85. See *Process and Reality*, 248-249 for more detail on 'conceptual valuation.'

[544] Whitehead, *Process and Reality*, 213.

[545] See Whitehead, *Adventures of Ideas*, 342. Whitehead actually says something stronger than simply, 'the aim at beauty is self-justifying.' He writes that "Beauty is left as the *one* aim which *by its very nature* is self-justifying" (emphasis mine). The exclusivity he attributes to beauty as the one self-justifying aim in the universe, the ultimate aim that guides the concrescence of actual occasions, establishes aesthetics as the study of ultimate reasons. That is, the best and most complete answers we can give to any question as to why something is the way it is, or why it happens the way it happens, or why we ought to do this rather than that, will make use of the notions of aesthetics. The most succinct way to understand this within Whitehead's system is by bringing together two principles already discussed. First, the 'ontological principle,' which can be summarized as 'actual entities are the only reasons.' And second, that every actual occasion is a fact of aesthetic experience. Thus aesthetics, through which we explore the features and principles of aesthetic experience, is a study of the reasons for things. The answers to 'why' questions are always grounded in the intensity, value, and composition of some one or more actual occasions. Why things happen—as they do, and at all—comes down to the emotional desires and achievements of the many actualities that comprise the world.

One consequence of this view that aesthetic experience provides reasons is that reason itself is an aesthetic feeling. In this, Whitehead is once again of a piece with William James. Indeed, the scope of

The aim at aesthetic satisfaction, inherent in the process of concrescence, impels the attainment of order. We can understand the intertwining of aesthetic experience and forms of order by seeing that with *no* order, there is no world. There is at best a morass of confused and mutually inhibiting feelings. Aesthetic arrangement and adjustment introduces order, a reciprocally reinforcing structure that promotes intensity of feeling. Organization within the incipient occasion thereby produces a strong satisfaction, relative to other occasions with weaker aesthetic modifications. Inherited by other occasions, this satisfaction can be reproduced as a strongly felt component within the subjective immediacy of these other occasions, thereby spreading and maintaining order. It is within certain intricately ordered societies of occasions that the higher phases of experience, including consciousness, become possible. These phases represent the pinnacle of selection, of raising elements into focus, and of pushing elements into a vague background—activities that open the possibility for high contrast aesthetic enjoyment.

The realization of order in the world depends upon feeling the plurality of the past and its exhibition of certain dominating values, a dominating character. That is, the press of the past puts weight behind certain values by reason of their prevalence and intensity among the entities felt by the present occasion. The many modes of order inherited by the present—mathematical, physical, ecological, biological, personal, and so on—are appeals by the past to continue its chosen paths. These appeals condition present experience. As

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Whitehead's conception of aesthetics, especially as it pertains to rationality, can be seen in nascent form in James's "The Sentiment of Rationality," where James contends that rationality is a certain feeling of smoothness or quickness of thought, of ease at passing to others, both in a thought's relations with other thoughts and in its practical consequences in action. By bringing rationality under the domain of feeling, James sets the stage for a fully aesthetic interpretation of experience. See James, "The Sentiment of Rationality," in James, *Works: The Will to Believe*, 57-89.

Whitehead writes, "No actual entity can rise beyond what the actual world as a datum from its standpoint—*its* actual world—allows it to be."[546] Inheritance conditions spontaneity, or originality of decision. Since the initial phase of an experience must conform to the actual world as the ground from which it emerges, these dominating characteristics continue into the present as material for the aesthetic synthesis, and thus there is an order felt and maintained. Inherited order can be of many levels, from the deep background of the 'extensive continuum' and the specific physical laws that characterize our 'cosmic epoch,' to the laws and customs of a human society, the physiology of *this* human body, and the way one keeps one's desk arranged. All order, though, finds its root in the inheritance of a world, its modification, and its integration towards the self-creation of a new entity, a new enjoyed value that feels itself *of* the world and yet contrasts itself with it. Thus Whitehead writes, "All order is therefore aesthetic order."[547]

This includes moral order, which is "merely certain aspects of aesthetic order."[548] The subsumption of moral order under aesthetic order is not meant to denigrate the importance of morality or moral experience in human life, but it is to say that the origins of morality lie within the more fundamental aim at beauty, or greatness of experience. The function of morality is to help guide the development of aesthetic experience. As Whitehead renders it, "[m]orality consists in the control of process so as to maximize

[546] Whitehead, *Process and Reality*, 83. See the rest of *Process and Reality*, Part II, Ch. III for more on the notion of order.
[547] Whitehead, *Religion in the Making*, 105.
[548] Whitehead, *Religion in the Making*, 105. An analogous point can be made about logical order being 'certain aspects of aesthetic order.' For example, the idea of logical coherence is a limited and specialized version of the idea of aesthetic harmony.

importance."[549] For example, Whitehead contends that the doctrine of responsibility is "entirely concerned" with the "successive decisions" that modify and reduce the initial welter of feeling into a compositional unity.[550] Consequently, "the subject is responsible for being what it is in virtue of its feelings."[551] In other words, responsibility is grounded in the ordering and integrating process of aesthetic experience and concerns guiding this process towards the flowering of importance. This aim at importance is cast in explicitly aesthetic terms, as when Whitehead writes, "[m]orality is always the aim at that union of harmony, intensity, and vividness which involves the perfection of importance for that occasion."[552]

Thus morality—as a spirit of activity, not as a codification of behavior—is essential to the cultivation of beautiful and ever more beautiful experience.[553] This spirit might generically be termed the 'ethos of creativity.' The *ordering* and *enaction* of the ethos of creativity, if this ordering comes to prevail in an environment, yields a code or system of behavior—'moral order'—intended to further the achievement of aesthetic intensity in that environment. And yet, since moral order is subsumed under aesthetic order, there are fields of experience where "[codes of] morals vanish and beauty remains."[554] Though the aim of morality is to aid in the achievement of beauty within the sphere of human life, morality is

[549] Whitehead, *Modes of Thought*, 13-14.
[550] Whitehead, *Process and Reality*, 224. See also page 255.
[551] Whitehead, *Process and Reality*, 222.
[552] Whitehead, *Modes of Thought*, 14.
[553] Cf. Whitehead, *Modes of Thought*, 14: "Thus morality does not indicate what you are to do in mythological abstractions. It does concern the general ideal which should be the justification for any particular objective."
[554] Whitehead, *Modes of Thought*, 13. As we retreat from human experience towards that of other animals and eventually to the purely physical, the hold of moral feeling seems to lose sway. But such feeling also does not hold sway throughout the vast field of human experience. As Whitehead points out on this same page of *Modes of Thought*, "the retreat of morals in the presence of music, and of dancing, and the general gaiety of theatre, is a fact very interesting to philosophers and very puzzling to the official censors."

not needed for the attainment of beauty, and beauty is sometimes realized precisely through the exclusion of moral codes. But whether or not morality is prevalent in some society of occasions or successful in its aim of heightening experience, some environmental order is necessary for aesthetic realization.

A dominating environmental order—say, a culture, or, more narrowly, a moral order—is an *aesthetics of existence*, nurturing and promoting a certain range of values for realization. An order makes possible certain types and perfections of aesthetic satisfaction. Within any system of order there is a limitation of possibilities and a promotion of certain ways of being, thus encouraging intensity and discouraging disruptive or inhibitive elements from robbing strength from the satisfactions achievable within that order. These limitations are another expression of the finitude characterizing actual entities. In a world of finite creatures, the idea of the 'perfection' of an aesthetic satisfaction is entirely relative; meaning, perfection is an ideal of strength for *this* incipient occasion *given* the background of order out of which it emerges. There is no perfect perfection, meaning that "there is no perfection which is the infinitude of all perfections."[555] But in approaching one ideal of perfection we can feel the enticement of perfections not currently within reach. The idea of a perfection set against the background of a given order is both a lure to its attainment and to its supersession.

Promoting some form of order without allowing it to stagnate is to exhibit an aspect of what Whitehead calls "world-loyalty."[556] World-loyalty grows out of the apprehension of one's inextricable embeddedness within a world exhibiting both order and creativity,

[555] Whitehead, *Adventures of Ideas*, 330.
[556] Cf. Whitehead, *Religion in the Making*, 60-61.

and it involves appropriating this world and the aesthetics of existence it promotes as one's own.[557] Such loyalty cannot be understood in a rigid or static sense, for in the "flux of circumstance" the "freshness of being evaporates under mere repetition."[558] No order is complete in its dominance; there is always some discord and imperfection due to the creativity or spontaneity realized in an actual occasion. The reason an occasion is birthed and merits the title of 'actuality' is precisely that it is *not* a pure repetition, but a new individuality. Consequently, in the creative passage of nature a rigid and unchanging order that is influential in some society of occasions will eventually become distanced from the wider environment and thus lose its ability to support vivid experiences. There is a craving for novelty; repetition dulls intensity. Thus an order must be maintained insofar as it promotes rich aesthetic experiences and be allowed to change to the extent that it does not.

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[557] The idea of world-loyalty does not have an easy or simple definition, and thus I fear it will be easily misunderstood. It is also not a well-developed idea in Whitehead's writings or in the scholarly literature. Nevertheless, I offer my initial understanding here and, in a more metaphysical register, in the main text.

Appropriating the world as one's own does not mean accepting it as given. It means coming to terms with the ground of your existence, even if this ground is deeply flawed or troubling. From here, one may embark on endeavors of reconciliation, healing, and growth. The world can be changed, an aesthetics of existence modified. World-loyalty does not mean accepting the world of your birth as is, alternatives and renovations be damned; it is not another name for nationalism, ethnocentrism, or tribalism. World-loyalty means loyalty to the beautiful, the nutritive. It means discarding or altering the facets of the world, facets of order, that do not promote the realization of beauty or the intensity of experience in its many possible varieties. World-loyalty is not meant to close down possibility once and for all, locking the world-loyal onto a set trajectory; rather, world-loyalty is the endeavor to keep as wide, rich, and nutritive a field of possibility available as can be done.

In this way, world-loyalty is not loyalty to a specific world, a specific mode of order. Rather, it is loyalty to *world* as such, that is, to order that promotes and supports life and the aim of capturing aesthetic intensity by leaving open and expanding the realm of potentiality available for realization. World-loyalty is emphatically *not* loyalty to order even as it decays and induces 'life-tedium' or 'fatigue' (cf. Whitehead, *Process and Reality*, 16 (life-tedium); and Whitehead, *The Function of Reason*, 23 (fatigue)). Thus, I think feminists, proponents of civil and human rights, and environmental activists, for example, exhibit more world-loyalty on the whole than do defenders of corporate capitalism. One of the implicit arguments in this statement, which I shall not elaborate here, is that modern capitalist, misogynist, and racist practices are destructive agents in the world, inhibiting more beauty and closing off more possibilities than they create.

[558] Whitehead, *Science and the Modern World*, 201.

The modification of order provides an opportunity for powerful aesthetic satisfaction by opening up a new range of possible experiences for enjoyment. As Whitehead writes in a short essay reflecting on *Process and Reality*:

> Freshness provides the supreme intimacy of contrast, the new with the old. A type of order arises, develops its variety of possibilities, culminates, and passes into the decay of repetition without freshness. That type of order decays; not into disorder, but by passing into a new type of order.[559]

This leads us to understand that an encounter with or the development of a different system of value or type of order is not to be avoided, but is an opportunity for growth.[560] When the meeting is not forthrightly hostile, but approached with a spirit of adventure, discord provides a glimpse of new vistas of experience and offers the possibility of enrichment through the feeling of contrast, rescuing experience from tameness.[561] Though harmony is an important aesthetic idea, we cannot let it overshadow the appetite for adventure, which always begins with individuality and discord.[562] But when handled improperly, a discordant clash of values may result in a general anesthesia or destruction of feeling—"evil lies in the loss to the social environment."[563] The purpose of mental activity is to adjust and modify inhibitive discord into a contrast felt to be burgeoning with

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[559] Whitehead, "Process and Reality," in *Essays in Science and Philosophy*, 118.
[560] Cf. Whitehead, *Science and the Modern World*, 207: "Other nations of different habits are not enemies: they are godsends."
[561] Cf. Whitehead, *Adventures of Ideas*, 329-335, 364. The discussion of the four ways an actual entity can approach the experience of discord in *Adventures of Ideas*, pages 334-335, is particularly relevant here.
[562] Whitehead sounds this warning against an undue emphasis on harmony in *Modes of Thought*, writing: "In the history of European thought, the discussion of aesthetics has been almost ruined by the emphasis upon the harmony of the details. The enjoyment of Greek art is always haunted by a longing for the details to exhibit some rugged independence apart from the oppressive harmony." See Whitehead, *Modes of Thought*, 62.
[563] Whitehead, *Religion in the Making*, 97.

possibility.[564] Thus, "successful organisms modify their environment."[565] Loyalty to one's world involves changing that world, seeking an improved environment for the promotion of importance and intensity of feeling.

In discussing order, I have mainly been concerned with the press of the past upon the incipient occasion, conditioning its private feelings and the decisions it makes in its solitude. The correlate of this idea is that the present occasion of aesthetic experience insists upon relevance beyond itself. An occasion of experience does not just feel the past as its conditioning ground, but it also feels the future as something to which it can contribute. The future is anticipated, and in this anticipation we see the becoming occasion's aim at transcendence—projects are founded, hopes nurtured. Thus, not only is the subject responsible for being what it is in virtue of its own feelings, but "it is also derivatively responsible for the consequences of its existence because they flow from its feelings."[566]

The aesthetic adjustments inherent within the process of self-creation originate and are immediately enjoyed in solitude, but it is a feature of aesthetic satisfaction that it bears within itself a claim to universality.[567] In Whitehead's language, the experience of aesthetic significance "claims a relevance beyond the finite immediacy of any one occasion of experience."[568] An important part of the immediate enjoyment of an actual occasion is the

[564] Cf. Whitehead, *The Function of Reason*, 8. On this page, Whitehead writes that reason in its "active attack on the environment" is embodied in the three-fold urge "(i) to live, (ii) to live well, (iii) to live better."
[565] Whitehead, *Science and the Modern World*, 205.
[566] Whitehead, *Process and Reality*, 222.
[567] Cf. Whitehead, *Religion in the Making*, 137-138.
[568] Whitehead, *Modes of Thought*, 121.

anticipation of its worth beyond itself.[569] This anticipation is the expression of the occasion's claim to transcendent worth and expansive relevance, a claim grounded in the fact that aesthetic enjoyment and the aim at beauty are self-justifying.

Immanuel Kant expresses this idea of the broad relevance of private aesthetic experience in his *Critique of the Power of Judgment* when he says that a judgment of taste necessarily claims universal assent.[570] It is important to note that this is a *claim* to universality, not an actual or achieved universality. Not everyone will agree that some painting you enjoy is a good painting, though you think all ought to agree that it is good. The very fact of your enjoyment means you take the painting to be worth enjoying, 'worth' carrying a claim to 'universal assent' beyond that of the immediate self. Within the creative process that characterizes nature, this claim is best thought of as an *impulse*, a *desire*, an *appetition*.[571] The beauty enjoyed in this one experience is felt as worthy of much more than purely individual, subjective enjoyment, and in pressing this claim the occasion expresses itself within the becoming of other occasions. This is the return from solitariness to community and the press of the past upon the present. We can call this the 'universal appetition of aesthetic satisfaction.' This appetition is exhibited by the actual

[569] Cf. Whitehead, *Process and Reality*, 350: "The sense of worth beyond itself is immediately enjoyed as an overpowering element in the individual self-attainment."

[570] See Immanuel Kant, *Critique of the Power of Judgment*, trans. Paul Guyer and Eric Matthews, The Cambridge Edition of the Works of Immanuel Kant (Cambridge: Cambridge University Press, 2000 [1790]), 121-127 (5: 236-5:244). These page numbers refer to the Fourth Moment of the Critique of the Aesthetic Power of Judgment. See esp. § 22.

[571] Cf. William James, *Human Immortality* (1898), in William James, *Essays in Religion and Morality*, ed. Fredson Bowers and Ignas K. Skrupskelis, The Works of William James (Cambridge: Harvard University Press, 1982), 75-101; 99: "The Universe, with every living entity which her resources create, creates at the same time a call for that entity, and an appetite for its continuance,—creates it, if nowhere else, at least within the heart of the entity itself." This text can be profitably related to our discussion of appetition and ideals in the previous chapter. It should also be considered in connection with the immediately following footnote and the idea of 'conatus.'

occasion in its perishing, whereby it effects transition to new occasions, passing on the creative urge of actuality. We may, somewhat provocatively, call aesthetic appetition 'erotic hunger,' whereby there is a desire for and projective activity towards the expansion of being and its aesthetic intensity.[572] In Whitehead's terminology, the universal appetition of aesthetic satisfaction reveals itself in the perishing occasion's becoming 'objectively immortal.'[573]

As we have seen in previous chapters, the term objective immortality is meant to capture an item's ability to be taken up by and play a role in other occasions of experience once its own immediacy has faded. An occasion perishes, and yet it remains as a felt component in future occasions, lending its character to the material that an incipient occasion must adjust and integrate. Objective immortality is the expressive capacity of an item, proclaiming to the future that it is worth feeling. In Chapter II, this idea was

[572] Though I am here linking the idea of 'universal appetition of aesthetic satisfaction' to Kant and his work in the *Third Critique*, we can also look back to Spinoza's idea of 'conatus,' or the essential tendency towards the preservation and increase of one's being through activity. Thus, for Spinoza all things strive to express themselves beyond their current boundaries. Indeed, we can think of Whitehead's 'Creativity,' acting as a principle of unrest while aiming at and for heightened modes of aesthetic intensity and beauty, as an aestheticization of Spinoza's conatus. Concerning the ideas of appetition, unrest, and especially the primordial nature of God, Whitehead considered his thoughts close to those of Samuel Alexander on 'nisus,' or the impulse of creativeness (see Whitehead, "Process and Reality," in *Essays in Science and Philosophy*, 126), and Alexander explicitly ties his idea of nisus to Spinoza's conatus (see Samuel Alexander, *Spinoza and Time* (London: George Allen & Unwin Ltd., 1921), 69-78). I bring up this connection to Spinoza in the hope that it offers insight to some readers regarding Whitehead's claim that an actual occasion is always expressive beyond itself.

[573] Cf. Whitehead, *Process and Reality*, 83: "'[I]ntensity' in the *formal constitution* of a subject-superject involves 'appetition' in its *objective* functioning as superject." This means that the value intensity realized in the immediacy of an actual occasion 'outlives' the immediacy of *that* occasion and remains as a 'lure' or 'appetite' for feeling within other occasions which feel it, calling for reenactment or repetition. More simply, the value achieved during some occasion of existence outlives that moment of existence, remaining as having shaped our world and as something that *could be* done again. For example, think about the way you cannot wait to get back to your favorite activities after some time away, or about how many of the proclivities, tendencies, and lessons of childhood remain in adulthood—a fondness for peanut butter cookies. These are fairly potent examples of how the intensities and values of now perished occasions remain within present experience. They remain, appetitively, as potentialities, as lures for feeling. Aesthetic satisfaction extends itself beyond immediate feeling by functioning appetitively in other occasions of experience, sometimes nudging and sometimes urging for its reenactment.

introduced using the language of power, where power was cast as the affective imposition of conformation. Now we can appreciate more fully the aesthetic dimension of power. Power is an expression of worth, directed towards the attainment of future worth. As Whitehead writes: "The essence of power is the drive towards aesthetic worth for its own sake. All power is derivative from this fact of composition attaining worth for itself. There is no other fact."[574] The power expressed by the past, by occasions in their objective immortality, stems from the aesthetic worth attained by the perished occasions. This power is felt within an incipient occasion as "the compulsion of composition," directing it towards a new aesthetic synthesis.[575] But the final composition, the final unity of power, is that of the occasion alone, created and enjoyed in solitude—"Aesthetic enjoyment demands an individualized universe."[576] The expression of this power, this worth, this enjoyment, is the newly perished occasion's objective immortality.[577]

In the objective immortality or power of perishing occasions, we see in germ the functioning of an art object.[578] In perishing, in becoming objectively immortal, an aesthetic experience passes into a beacon or a sign for a value realized and that might be realized again; it serves to highlight potentiality for feeling. We might say that an aesthetic experience perishes into an art object or a beautiful thing, a thing which serves to elicit feeling and provoke the re-creation in experience of an immediacy no longer felt but now

[574] Whitehead, *Modes of Thought*, 119.
[575] Whitehead, *Modes of Thought*, 119.
[576] Whitehead, "Analysis of Meaning," in *Essays in Science and Philosophy*, 130.
[577] Cf. Whitehead, *Process and Reality*, 310: "There is nothing in the real world which is merely an inert fact. Every reality is there for feeling: it promotes feeling; and it is felt. Also there is nothing which belongs merely to the privacy of feeling of one individual actuality. All origination is private. But what has been thus originated, publicly pervades the world."
[578] Cf. Whitehead, *Adventures of Ideas*, 328-329.

felt anew and felt as relevant to present connections, relations, and meanings, thereby contributing to the strength of the satisfaction realized by the occasion that takes it up. But this would be to take the term 'art object' at its widest possible meaning, making the entirety of the past a collection of art objects.

Taking 'art object' in its more usual sense, we can see in such an object the same qualities as described above, but functioning at a higher pitch. An art object, or, more generally, a beautiful thing, serves to quicken our sense and appreciation of life, to intensify the experience of which it is a part. Adapting a phrase from *Religion in the Making*, we can say that an art object, experienced and interpreted, extends our "apprehension of the ordered universe by penetrating into the inward nature of the originator" of the art object, namely, the now perished complex of aesthetic experiences constituting the object's creation.[579] The "direct intuition" of the artist is now embodied in the art object, and it is capable of eliciting in us intuitions "which would not otherwise emerge into individual distinctiveness."[580] This is not to say that an art object is a gateway into 'the mind of the artist,' if 'mind' is here construed as 'conscious intention.' The thick relational fringe of experience is never wholly manifest in awareness, though it colors it always. In a successful art object, a relational pattern often hidden or furtive is brought forward, however slightly, into awareness. As Whitehead writes, "the work of art is a message from the Unseen. It unlooses depths of feeling from behind the frontier where precision of consciousness fails."[581] Thus, in creating an artwork, the artist occasions something beyond what is situated in her own awareness. An artwork is a pathway into a

[579] Whitehead, *Religion in the Making*, 132.
[580] Whitehead, *Religion in the Making*, 133.
[581] Whitehead, *Adventures of Ideas*, 349.

new relational fabric, one capable of recasting the influx of feeling, and thus the possibilities, of the experiencing admirer.

Art objects draw into immediate enjoyment connections and relations that might have passed by unconsidered or ignored for whatever reasons. Great art keeps experiences alive in a particularly vivid manner. We can express this point by saying that *art objects are eddies in the flow of time*. They are gateways into nutritive experience that elsewise might not be available in the present. Art does this by encouraging the reenactment in present experience of feelings, purposes, and emotions now faded or submerged, feelings to be lived again in separation from the conditions of their origins and thus eliciting a novel and free enjoyment that contributes to the intensity and beauty of the present experience. This enjoyment is free because, in art, intense experience "has outlived the compulsion which was its origin."[582] Art thus enables us to "enjoy freely the vividness of life which first arises in moments of necessity."[583] The gain in freedom through aesthetic appreciation is the enrichment of a sense of possibility in experience and a strengthening of the power to realize novel possibilities.[584]

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[582] Whitehead, *Adventures of Ideas*, 350.

[583] Whitehead, *Adventures of Ideas*, 350. Whitehead also writes on the same page: "If Odysseus among the shades could hear Homer chanting his Odyssey, he then re-enacted with free enjoyment the perils of his wanderings." Art and storytelling are ways in which experience can be pedagogical in separation from "dire necessity." We can learn from the Odyssey, and alter our course of living on this basis, without being Odysseus. That there is beauty in every experience means that all experience can be pedagogical, even if at the original time of its happening the experience was perilous, harmful, destructive, or otherwise evil. Conversely, that every experience has something to teach indicates that even occurrences that are better avoided, and those that are roundly condemned and lamented, have beauty, if of a thin, attenuated sort. All this means is, that even after destruction, there remains the possibility for growth. It does not mean that growth is assured, will be easy, or will come soon. It certainly does not mean there will be a return to the prior state.

[584] There is a family resemblance between Whitehead's idea of 'free enjoyment' and Kant's idea that aesthetic experience involves the 'free play' of our faculties. The two thinkers obviously develop their ideas out of very different systematic backgrounds, so congruence is not to be expected. But the key insight—that

To be a great art object is to enhance the function of "ordinary" objective immortality, resisting the dulling influence of time and provoking the freedom of incipient experience to make something of what has been, to create a future from the past. Art objects allow penetration through time and across space to bring something to the attention of many, to reinforce and heighten our sense of aesthetic satisfaction in the present, or to rattle us and get us thinking about possibilities for the future. A self-creative aesthetic experience is a self-justifying end, the art object or beautiful thing it becomes is a means to further ends.[585] But art contributes to more than simply individual enjoyment. It can also aid in establishing nutritive social order and relations. In bringing something to the attention of many, art facilitates the creation of "a community of intuition by reason of the sacrament of expression proffered by one and received by the other."[586] Such a community shares an aesthetics of existence, a world, from out of which value is created and shared.

Thus we see, in an adumbrated form, how Whitehead's appreciation of aesthetic experience suffuses his metaphysics. Aesthetic experience is the link between everyday life, with its joys and sorrows, and the metaphysical description Whitehead gives of the creative passage of the universe.[587]

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the encounter with beautiful things can free and empower human mentality, putting new possibilities in play for experience—is common to both.

[585] Cf. Whitehead, *Process and Reality*, 350: "The function of being a means is not disjoined from the function of being an end."

[586] Whitehead, *Religion in the Making*, 132.

[587] In *Art as Experience*, especially the first few chapters, John Dewey provides a deeply congenial description and interpretation of aesthetic experience to the one offered here. These chapters are well worth reading on their own and in conjunction with a study of Whitehead. Dewey's description of the 'live creature,' a creature exhibiting the foundational qualities of aesthetic experience in top form, and his discussion of 'having *an* experience' are particularly illuminating of the movement and synthesis here described as 'aesthetic.' A few texts from *Art as Experience* will serve to whet the reader's appetite. The texts are from Dewey, *Later Works: Art as Experience*. Page numbers will follow in parentheses.

Aesthetic-Existential Sensibility

For Whitehead, our existential situation is fundamentally aesthetic, meaning, in our self-creation or becoming we are each asked and must answer the following questions: How do I put myself together so as to promote strength and importance of feeling? How do I compose myself so that I am not a mere chance assemblage of meaningless details? There is no predestined answer to these questions. Possibilities abound, conditioned by the play of circumstance, and the aesthetic integration that leads to new value and meaning exhibits a measure of freedom and self-determination. In an occasion of experience, the decision, the act of aesthetic self-creation, is *mine*, its pleasure and its pain are *mine*. Yet even the most intimate look at the self flows out into an awareness of community as part of one's own aesthetic satisfaction and as that to which one's own satisfaction will contribute. Whitehead writes that, "the self-enjoyment of an occasion of experience is initiated by an enjoyment at the past as alive in itself and is terminated by an enjoyment of itself as alive in the future."[588] According to Whitehead, this is the fundamental situation in which we exist.

To those who take Whitehead's philosophy seriously, its pervasive emphasis on aesthetic relationships must impact how we think about social, political, and environmental

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"That which distinguishes an experience as esthetic is conversion of resistance and tensions, of excitations that in themselves are temptations to diversion, into a movement toward an inclusive and fulfilling close." (62)

"Experience in the degree in which it *is* experience is heightened vitality. Instead of signifying being shut up within one's own private feelings and sensations, it signifies active and alert commerce with the world; at its height it signifies complete interpenetration of self and the world of objects and events." (25)

"[T]he live creature adopts its past; it can make friends with even its stupidities, using them as warnings that increase present wariness. Instead of trying to live upon whatever may have been achieved in the past, it uses past successes to inform the present. Every living experience owes its richness to what Santayana well calls 'hushed reverberations.'" (23)

[588] Whitehead, *Adventures of Ideas*, 249.

problems. An aspect of the 'sickness of modernity' as diagnosed by the thinkers with which I opened this chapter—Marx, Kierkegaard, and Nietzsche—is the impoverishment of aesthetic experience, that is, the leveling of aesthetic intensity. Providing a balm for this sickness requires a reinvigoration of culture and an increased sensitivity to aesthetic forms and satisfactions, so that a new vivifying order is found to replace that which decays while retaining what still works.

To live aesthetically rich lives, brimming with felt connections and meanings, we must strive to be 'live creatures' in John Dewey's sense: "The live animal is fully present, all there, in all of its actions: in its wary glances, its sharp sniffings, its abrupt cocking of ears. All senses are equally on the *qui vive*."[589] A creature's response to its world, how it understands, moves, behaves, and lives, is aesthetic—it takes in, adjusts, and fashions the present into a unity inclusive of its own original decisions and actions, projecting itself into an uncertain future. Our everyday, practical pursuits are characterized by aesthetic considerations and judgments in the broad sense here outlined (not solely those made observing a statue in a museum). Whitehead makes this point by saying that, "when the pragmatist asks whether 'it works,' he is asking whether it issues in aesthetic satisfaction."[590] There is a connection between 'working, 'the directional or purposeful flow of connectivity between experiences,' and 'aesthetic satisfaction.' It is satisfying when something works, and when one is satisfied something is working. As far as the philosophical tradition of pragmatism is concerned, drawing this connection between

[589] Dewey, *Later Works: Art as Experience*, 24.
[590] Whitehead, "Analysis of Meaning," in *Essays in Science and Philosophy*, 129-130.

'working' and 'aesthetic satisfaction' is not a stretch once one has read Dewey's *Art as Experience*.

I call this alertness and sensitivity to the mutual interrelations of things and their possibilities for integration into immediately enjoyed meaning an aesthetic-existential sensibility. Whitehead might call such an attitude 'religious.' To be religious in this sense is to cultivate solitariness, one's inner life, so as to yield an aesthetically aware being in the world, able to recognize beauty in its many forms. To develop an aesthetic-existential sensibility is to become attuned to the grain of things, to show concern for the overall picture as well as the details and contrasts that comprise it, and to strive after an ideal felt as possible but as yet unrealized—all to promote the deepest, broadest intensity of experience and enjoyment of meaning and value, both in the present and in the future.

Aside from certain sections of *Religion in the Making* and *Modes of Thought*, Whitehead's most forthright expression of his aesthetic-existential sensibility is probably the last chapter of *Science and the Modern World*, titled "Requisites for Social Progress."[591] Here he highlights the importance of education in developing such a sensibility and describes the kind of general education that can aid in this project.[592] What is needed most of all is the cultivation of "habits of aesthetic apprehension," which will provide the resources for guiding our experiences to fructifying, satisfying, intense ends.[593]

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[591] Whitehead, *Science and the Modern World*, 193-208.
[592] The essays comprising Whitehead's *Aims of Education* offer more detail into Whitehead's ideas about education. There is much material in this book that supports and extends the aesthetic/existential reading of Whitehead initiated in the present chapter. See Alfred North Whitehead, *The Aims of Education* (New York: The Free Press, 1967 [1929]). I have begun an exploration of the connection between aesthetics and education in Whitehead's philosophy in a soon to be published essay, "The Cultivation of Aesthetic Intensity: A Whiteheadian Philosophy of Education."
[593] Whitehead, *Science and the Modern World*, 199.

Such habits are to be directed not just to the appreciation of "normal" art objects such as paintings, but to things such as factories as well.[594] Sensitive aesthetic awareness will aid us in recognizing and understanding the relations of things and the messages that flow along these relations. It will help us transform struggle into nutrition, help us in figuring out how we can organize and adjust the various orders in the social environment such that they can operate in experience as an aesthetic unity and nurture vivid satisfactions without anesthetizing feeling or causing aesthetic destruction. The essence of aesthetic adjustment is conversion, transformation. To so transform our world is the project of turning this world, pluralistic and chaotic, from 'some place' into a home.

[594] See Whitehead, *Science and the Modern World*, 200: "The habit of art is the habit of enjoying vivid values. / But, in this sense, art concerns more than sunsets. A factory, with its machinery, its community of operatives, its social service to the general population, its dependence upon organising and designing genius, its potentialities as a source of wealth to the holders of its stock is an organism exhibiting a variety of vivid values. What we want to train is the habit of apprehending such an organism in its completeness."

CHAPTER VIII

CONCLUSIONS

This brings to a close a version of the philosophy of Alfred North Whitehead that emphasizes the importance of radical empiricism and of aesthetic experience to his thought. There is much more that needs to be done with respect to developing Whitehead's ideas, both in interpreting and elaborating his philosophy on its own terms and in extending it beyond scholastic bounds for application in diverse areas of human life. But what I have presented here is the contention that an adequate rendering of Whitehead's philosophy must include a consideration and discussion of the aesthetic dimension and character of experience. By conceiving of the world in processual and compositional terms, Whitehead is conceiving of the world in aesthetic terms, in terms of feeling, affect, value, possibility, and achievement. Without this grounding in aesthetic experience and expression, Whitehead's philosophy loses its purchase. It fails to be radically empirical.

While the importance of the aesthetic to Whitehead's philosophy is the terminal issue of the present manuscript, it is far from all that has been accomplished. I have, for example, articulated the metaphysical sweep of radical empiricism and its unwavering commitment to rendering the world intelligible in experiential terms. In the discussion of time and possibility, the spirit of radical empiricism was extended to exploring the way that these two ideas, properly understood, are essential to understanding Whitehead's theory of actual occasions and thus his rendering of process and of experience. Various contrasts and oppositions—for example, the successiveness of physical time and the non-successive dynamic unity of becoming, continuity and atomism, immanence and

transcendence, and possibility and actuality—were resolved; that is, they were shown to have an ineliminable role in the description of any concrete pulse of experience. I do not mean that they were resolved as in ultimately explained, but rather that each pole of each pair is accorded its due place in metaphysical speculation according to the way it informs concrete experience. The resultant version of Whitehead's metaphysics makes the transition to understanding the aesthetic dimension of experience and the various applications of Whitehead's ideas that much more coherent.

The significance of the way I have set up and elaborated Whitehead's philosophy is that it makes his philosophy available for addressing questions that, otherwise, we might not think it suitable for answering. For example, I have already begun the discussion of existential and aesthetic questions, and the application of Whitehead's aesthetic understanding of experience to education lies just beyond the edge of my discussion. I also hold that thinking in terms of aesthetic intensity will help bring Whitehead's thought into contact with political, economic, and environmental problems. Contemporary Whitehead scholars have moved in all of these directions, and I think a robust understanding of the aesthetic dimension of Whitehead's thought can only help in these endeavors.

There remains, though, much difficult work to be done. First, the vision of aesthetics in a Whiteheadian mold must be more completely elaborated. What I have offered is only a partial sketch. Second, in order to make Whiteheadian aesthetics applicable and appreciable within different fields of inquiry, detailed study into those diverse fields is necessary. There is an issue of translation here. The general ideas of metaphysics and aesthetics must be given more narrow and specific forms so as to be applicable within the special sciences. Creatively determining the application of

metaphysical ideas to other areas of experience is both necessary and requires adequate knowledge of the target field. Lastly, and related to the issue of translation, there is the similarly difficult task of getting Whitehead understood within such conversations, philosophical and interdisciplinary, that are already ongoing. This applies just as much to discourses in other philosophical traditions as to discourses in the sciences, literature, or the arts. One aspect of this task revolves around the lexical issue, as Whiteheadian vocabulary is not widespread. Another aspect of it is getting others, especially in non-philosophical fields, to appreciate the importance of a philosophical critique and reorientation of foundational ideas. This cluster of projects is not meant to be a task for any one scholar, though I shall soon take on other work which will further these intents. I desire, first of all, to complete a more thorough study of the aesthetic dimension of Whitehead's thought.

I consider engaging with Whitehead's philosophy in this way a worthwhile task in part because Whitehead was a thinker of both humanistic and scientific proclivities. In 1959, C.P. Snow drew a distinction between two intellectual cultures, literary and scientific, that were becoming increasingly unable to understand one another.[595] While the distinction could be drawn more finely, whereby we could recognize three, four, or one thousand cultures, I think Snow's basic point holds today in the form of STEM fields and 'the rest.' The values of the modern university revolve around this distinction, and there is seepage into (and seepage from) economic and, more broadly, cultural values. The danger is woeful misunderstandings of both humanity and the natural world and the practical

[595] See Snow, *The Two Cultures: And A Second Look*.

consequences engendered by such misunderstandings. Whitehead's philosophy reflects the fact that he did not recognize a division which has settled into intellectual and practical life. Now, this is an admittedly oversimplified picture, but I do think there is a problem of communication and understanding between the increasingly specialized fields of human knowledge. There is ameliorative potential in Whitehead's insights, and by taking up and developing his insights we might ease the problem of intellectual fragmentation. Whitehead does not provide a cure-all for our troubles, but I think he points us in the right direction for understanding an interconnected world.

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