WHITEHEAD'S ANALYSIS OF PERCEPTION AS A BASIS FOR CONCEIVING TIME AND VALUE

by David R. Mason

Several years ago in a valuable assessment of the prospects for philosophical theology Malcolm Diamond urged those who are persuaded of the importance of Alfred North Whitehead's metaphysics to apply Whitehead's insights to areas other than theology lest they end up, like the Barthians, talking only to themselves.[1] He correctly noted that the consensus among contemporary analytic philosophers is still to treat both speculative metaphysics and theology as questionable enterprises. However, he remarked, if Whitehead's metaphysical thought were used to illustrate problems in areas other than theology (e.g., the biophysical sciences), and if this were "well done," contemporary thinkers would be forced to pay attention to this mode of thought in spite of their reluctance. In support of this claim he cited the example of Reinhold Niebuhr, who captured the attention of a generation of hostile intellectuals "by means of the power of his insights into politics, labor relations, international affairs, and the rest."[2] The example, alone, shows that the advice is valuable and should be taken seriously.

It is true that the concern to elucidate and give meaning to specifically theological doctrine has remained uppermost among Whiteheadians. Nevertheless, there is a growing body of Whiteheadian literature focusing on such divergent issues as those of time, freedom and agency, psychological physiology, evolution, ecology, the philosophy of science, mathematics, aesthetics, language, etc.[3] Thus the challenge to apply Whitehead's thought to problems other than strictly theological ones is already being met. This essay endeavors to add another small voice to the growing response, particularly emphasizing Whitehead's important contribution to a theory of perception. Admittedly, the point at which this essay finally arrives bears witness to what Whitehead calls "the intuition of the sacred which is at

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the foundation of all religion,"[4] namely, that every finite individual has an inherent value not only for itself and for other finite individuals but for the totality. Thus the importance of my finite, immediate decision or activity makes its mark in the universe and abides infinitely. The crucial point, however, is not that a fundamentally religious outlook is affirmed but how it is arrived at: The "intuition of the sacred" is shown, by analysis, to derive from one's immediate subjective experience which is essentially perceptual. The analysis of that percipient occasion of experience is, moreover, the basis for an adequate and useful concept of time. Thus a recurrent theme of religious literature—that there is something of abiding worth amid all that is passing—is here disclosed as compatible with the more secular insistence on the reality and importance of temporal fact. Also, it is seen that the proper conception of both time and value is grounded in the right way of conceiving our perceptual experience.

To be sure, it will not be immediately self-evident that there is an essential connection between perceptual experience and the concepts of time and value, much less that the latter two are derived from the former. Nevertheless, this essential relation of derivation is not wholly inaccessible to understanding unless, of course, one has previously decided to exclude the possibility. It is the thesis of this essay that, indeed, Whitehead has provided us with rich and suggestive concepts of time and value but that in order to grasp the full meaning and significance of these concepts we must understand his analysis of perceptual experience which is more complex than it is frequently credited with being. Whitehead's complete analysis, it is argued, is fully explanatory of all immediate perceptual experience as well as the more refined and selective acts of conscious human perception.

Whitehead's Divergence from the Tradition

Whitehead's theory of perception is best examined by first seeing what in the tradition he rejects and why he does so. His criticism of many modern views of perception is that they embody two erroneous assumptions concerning how we perceive and how we know about what we perceive. Closely related to these procedural errors are several misconceptions about the perceived world and the perceiving world. Although the assumptions can be traced to Greek thought, modern thinkers have intensified the problem by relying exclusively upon them.

The first error is in supposing that our communication with the external world is carried out wholly through a few definite channels, namely, the five senses. Among these primacy is accorded visual perception, which is the most sophisticated form of sense perception. This

supposition encourages the belief that the sole data for examination are those given directly by the sense organs: sense-data which are immediate, definite, and discrete. The exclusive reliance upon sense perception, therefore, promotes the uncritical belief that the fundamental mode of perception is that which appears only in the higher stages of physiological development and that the fundamental data are those which are contemporary with the percipient subject. Moreover, since the percipient can perceive the world only in terms of the sense-data qualifying the objects which form it, there is the tendency to conceive the world as composed of substances "with vacuously inherent qualities." That is to say, since we can perceive only contemporary sense-data which are not inherent in the objects with which they are associated, the objects themselves are conceived as "passive recipients of the qualities." Hence they are construed as "devoid of intrinsic worth" or of "subjective immediacy."[5] The perceived world is thus thought of as composed of barren substances played upon by universal qualities.

The second error is the supposition that the proper method for examining our immediate experience is by "acts of conscious introspective analysis" or what Whitehead also calls the "attitude of strained attention."[6] This attitude reinforces the first assumption but adds the notion that "consciousness" is requisite to subjectivity. Also, by attending to the clear and distinct elements of perceptual experience in abstraction from our emotional response, this method fastens on the discrete, controllable data and ignores those which are uncontrollable, dim, and causally efficacious: "It lifts the clear-cut data of sensation into primacy," Whitehead says, "and cloaks the vague compulsions and derivations which form the main stuff of experience. In particular it rules out that intimate sense of derivation from the body which is the reason for our instinctive identification of our bodies with ourselves."[7]

It should be stressed that in repudiating the method of "strained attention," together with the exclusive reliance on sense perception, Whitehead rejects neither an empirical starting point nor the "subjective turn" which Descartes introduced into philosophical inquiry. He does, however, repudiate that bias of the method which selects certain aspects from the immediately given, complex fact—the subject grasping into a unity many objects—and declares them to be concrete. For example, it has been assumed that the kind of concrete fact with which to begin generalizations about the world is that expressed in the proposition, "This stone is gray." Thus "gray stone" would be taken as the concrete fact. On the contrary, Whitehead remarks, "If we are to go back to the subjective enjoyment of experience the type of primary

starting point is 'my perception of this stone as grey.' "[8] In addition, he notes that Descartes, who introduced the subjectivist principle into philosophy, "missed the full sweep of his own discovery, and he and Locke and Hume, continued to construe the functioning of the subjective enjoyment of experience according to the substance-quality categories."[9] Following their lead, philosophers have tended to regard as concrete fact one or several of the following: (1) "material objects" devoid of subjective experiences, (2) "sense-data" privately perceived but associated with substances other than the percipient, (3) the "percipient subject" which is conscious and enduring.

It is clear that Whitehead accepts the Cartesian requirement that we begin with subjective experience. But this acceptance does not entail that the "subject" be an enduring thing requiring nothing but itself in order to exist. Neither does it require that the data which are given in the experience be precise and instantaneous. And by no means does it require that "consciousness" be an essential ingredient in the experience. Therefore Whitehead maintains that the appeal to actual experience—the foundation of empiricism with which he readily concurs—has been redirected by an appeal to "those elements of our experience which stand out clearly and distinctly in our consciousness."[10] Yet, surely, these elements are not concrete fact! They are, rather, "simplified editions of immediate matters of fact" which, when treated as concrete, are instances of the "Fallacy of Misplaced Concreteness."[11] Hence the modern insistence on a subjective and empirical basis for knowledge is proper. It should not, however, necessitate the view that perception be limited to definite acts performed by a conscious agent.

Reformed Subjectivity and the Critique of Hume

In contrast to the prevailing view, Whitehead maintains that a rigorous adherence to the subjectivist principle discloses the following five points: First, "consciousness" is not a primary ingredient in most perceptual experience. It is, rather, a special form in the subjective experience of high-grade organisms in their phases of complex integration. Thus "consciousness presupposes experience and not experience consciousness."[12] Second, the analysis of an immediate subjective experience discloses that fundamental to that act of experience is its sense of derivation from factors in its immediate past and of anticipation of an immediate future for which it will be a factor. This feeling does not yield clear-cut sense-data. Rather, as what Whitehead sometimes calls "non-sensuous perception" or "sense reception"[13]—in order to distinguish it from "sense perception"—the data provided in this mode of perception are "vague, not to be controlled [and] heavy

with emotion."[14] Notwithstanding their lack of clarity, the data perceived in this mode are insistent and causally efficacious. Third, the primary organ of experience for nonsensuous perception is "the living body as a whole" rather than the specific sense organs which yield discrete, controllable data.[15] As Whitehead says, "In the human experience the fundamental fact of perception is the inclusion, in the datum, of the objectification of an antecedent part of the human body with such-and-such experiences."[16] Fourth, the subjectivist principle, as it is seen to emerge from the analysis of immediate experience, also maintains that each percipient occasion is itself more than a passive recipient of data provided for it; it is a subject which imposes its own subjective form upon the data which it integrates. In turn this percipient subject becomes a datum for a subsequent subject. Finally, the analysis of the immediate human subjective experience, as fundamentally perceptual, becomes the basis for the "reformed subjectivist principle," namely, that "the whole universe consists of elements disclosed in the analysis of the experience of subjects."[17] This means, of course, that the subject-object distinction is not that between the conscious and nonconscious world or even the human and the nonhuman world. Subjectivity, rather, must be defined in terms of present immediacy, derivation from the past, and signification for the future and, also, in terms of unity or individuality. And this applies generally to all occasions of experience. Whitehead elsewhere expresses his fundamental conviction regarding the primacy of reformed subjectivity by asserting that "all final individual actualities have the metaphysical character of occasions of experience."[18]

Now the last point naturally raises the question: How does Whitehead justify his move from the direct evidence of an immediate occasion of human experience to the metaphysical character of "all final actualities"? He does so on the ground that any human subjective experience is necessarily a bodily experience. In addition, he accepts the principle, which has proved so fruitful for scientific inquiry, that "no arbitrary breaks be introduced into nature" in order to shore up a certain rendering of the facts.[19] All natural events or experiences are to be interpreted in the same terms. Thus "the living body is to be interpeted according to what is known of other sections of the universe." This principle is, however, "double edged," requiring that the "other sections of the universe are to be interpreted in accordance with what we know of the human body."[20] That is to say, if we are convinced by the naturalistic argument that there is a uniformity of application of laws, that no factor in the universe is to be exempt from investigation and explanation according to principles which apply fruitfully elsewhere, then we should be prepared to accept an in-

terpretation of nonhuman occasions of experience according to the most generally adequate principles which are applicable to human occasions. We have no warrant, for example, for limiting the principles of explanation to those of material and efficient causation. An empircist, moreover, should begin with what presents itself most directly, namely, "the immediate facts of our psychological experience."[21] But in starting here we should always remember that consciousness is not an inevitable feature of what is meant by a "psychological experience." Consciousness appears, dominates, and recedes, but it is not inevitable.[22] The necessary feature, as we have seen, is the sense of derivation from factors in one's past, the anticipation of an immediate future for which one will be a significant factor, together with the experience of synthesizing activity in the present. In order to understand why Whitehead holds this to be the fundamental and inevitable feature of immediate psychological experience we need to turn to his criticism of Hume. For he considers Hume to be the clearest and most consistent exponent of the view of perception which he wishes to refute.

Hume sees the problem which is generated by the view which maintains that sense impressions are the only source of information about the external world: the problem of the derivation of the idea of "causation." His solution, of course, is that after a repetition of a number of similar instances "habit" gives rise to the idea of causation or "necessary connection." A passage from the *Enquiry* summarizes the longer argument in the *Treatise:*

> It appears, then, that this idea of a necessary connection among events arises from a number of similar instances which occur of the constant conjunction of those events; nor can that idea ever be suggested by any one of these instances, surveyed in all possible lights and positions. But there is nothing in a number of instances, different from every single instance, which is supposed to be exactly similar; except only, that after a repetition of similar instances, the mind is carried by habit, upon the appearance of one event, to expect its usual attendant, and to believe that it will exist. This connection, therefore, which we *feel* in the mind, this customary transition of the imagination from one object to its usual attendant, is the sentiment or impression from which we form the idea of power or necessary connection.[23]

When we examine this passage, we find Hume asserting that no one instance can occasion the idea of necessary connection. There is no single impression which may be said to be the impression of causality. Furthermore, there is nothing in a succession of similar impressions which would occasion the idea of causality any more than one impression. That is to say, if no single instance can account for anything beyond itself, a repetition of similarly discrete instances can add noth-

ing to the single instance. This observation is the basis for the charge that Hume's thought leads to complete skepticism or what Santayana termed the "solipsism of the present moment."[24] Nevertheless, Hume has recourse beyond his stated principle to "habit" in order to find a basis for our ordinary belief in a causal order among things. Thus habit has become the "impression from which we form the idea of power or necessary connection." However, as Whitehead demonstrates, with the arbitrary introduction of "habit," Hume "has confused a *'repetition* of impressions' with an *'impression* of repetition of impressions,' "[25] That is to say, Hume has created out of nothing, as it were—nothing which his principles allow for—his all-important "impression" which is the ground for forming the idea of necessary connection among events. But "habit" is no more an impression of sensation than is "causation." Making use of Hume's own precept that "if you cannot point out *any such impression* you may be certain you are mistaken when you imagine you have *any such idea,*"[26] we are justified in demanding to be shown the impression which gives rise to the idea of habit. There is none, of course. And so Whitehead quite properly asks "why Hume exempts 'habit' from the same criticism as that applied to 'cause.' " "We have no 'impression' of 'habit,' " he says, "just as we have no 'impression' of 'cause.' Cause, repetition, habit are all in the same boat."[27]

The point of this attack on Hume's doctrine is not to discredit the belief that we perceive discrete sense-data. It is, rather, that, solely on the basis of this way of construing perception, we are unable to affirm what we all believe to be true—that we live in a causally efficacious world. This power or "causal efficacy" cannot be derived from the mere repetition of discrete sense-data. Neither does the appeal to "habit" establish a ground for the idea of causality. Hume's way of analyzing his experience, by attending to the clear-cut data and neglecting the vaguer but insistent fact of the sense of derivation, inverts the true order of things. By thus neglecting the primary mode of perception common to all subjective experiences—the perception of causal efficacy as the sense of derivation—the relation of causation to perception has been misconstrued. For the attempt has been to derive the idea of causation from the perception of discrete sense-data—the mode of perception appropriate to high-grade organisms in states of consciousness.

Clearly, Whitehead regards the usual way of interpreting our experience as productive of error by treating the clear and distinct elements of high-grade perception as yielded by the senses as the fundamental, or even the only, mode of perception. By contrast, he endeavors to build a case for the primacy of the mode of causal

efficacy in perceptual experience. His case is not built entirely on the critique of Hume. In fact, it appeals to a number of instances of ordinary experience in which clearly defined sense-data, habitually associated with one another, are only minimally present yet with an overwhelming feeling of being causally acted upon. For example, fears that grip us in the dark when familiar and clear-cut sensations are absent; the irresistible feeling of the efficacy of nature in the silence and stillness of "an August woodland"; the feeling of influences which pervade us in the fading consciousness of half-sleep. As Whitehead says, "Every way of omitting the sensa leaves us a prey to vague feelings of influence."[28]

This brief survey of vague, emotional influences will, no doubt, appear unconvincing as a basis for asserting that the perception of causal efficacy is fundamental to experience. Therefore, let us consider the case of reflex action, to which Whitehead appeals: "In the dark the electric light is suddenly turned on and the man's eyes blink."[29] On the basis of Hume's doctrine we can discern only three sense-data: the flash, the feeling of eye closure, and the instant of darkness. We add to this the habit of expecting the eye closure to be the attendant upon the flash. Of course, the physiological explanation is given in terms of causation: The retina receives the impulse generated by the flash of light and passes on the impulse, via some nerve route, to the occipital cortex in the brain; thence an impulse is forced back to the eyelid. All along the route there is causal action of one element upon another. Moreover, if we turn to the experience of the man, without the aid of either the philosophic theory or the physiological explanation, we find that he claims to experience the feeling of causality. This feeling is, for the man, an indubitable fact: "It is the feeling of causality," Whitehead writes, "which enables the man to distinguish the priority of the flash; and the inversion of the argument, whereby the temporal sequence 'flash to blink' is made the premise for the 'causality' belief, has its origin in pure theory. The man will explain his experience by saying, 'The flash made me blink'; and if his statement be doubted, he will reply, 'I know it, because I felt it.' "[30] Whitehead emphasizes his own acceptance of the man's rendering of the facts of his experience.

The result of Whitehead's critique of Hume, together with his appeal to ordinary experiences, has been to reinforce the conviction that fundamental to any experience is the feeling of the causal efficacy of something from beyond in the present, living, subjective experience: "The crude aboriginal character of direct perception is inheritance. What is inherited is feeling-tone with evidence of its origin; in other words, vector feeling-tone."[31] For the disclosure of such direct per-

ception, "the living body as a whole" is more fundamental than the five senses which yield relatively clear and distinct data. Moreover, there is no absolute separation between the external world and some percipient occasion within the body. The body is the complex and well-integrated (when healthy) part of the wider environment, highly organized to transmit data—either in specific channels or by diffusion—to a particular percipient occasion in the brain. Yet, even when the information comes to the ultimate percipient occasion ("ultimate" because every occasion of experience constituting the living body, and beyond, is a percipient occasion) through the specific organs, it is felt and transmitted by them to subsequent percipient occasions.

In the course of disclosing Whitehead's divergence from certain aspects of the modern tradition stemming from Descartes and his repudiation of Hume's analysis of perception, we have uncovered several points which are fundamental to Whitehead's own developed doctrine of perception. We may summarize them as follows: (1) The "reformed subjectivist principle" that "the whole universe consists of elements disclosed in the experience of subjects." (2) The idea that fundamental to the experience of a subject is that it feels the data as given—the data, nevertheless, being constitutive of its subjective experience. There is, thus, essentially a feeling of causal efficacy of factors from beyond the present subject in the present subject. (3) The idea that in the human subjective experience the feeling of causal efficacy from the external world derives primarily through internal bodily occasions receiving data from antecedent occasions and transmitting their own subjective experience. In addition, the point was made that the proper understanding of our immediate psychological experience as fundamentally a bodily experience is the basis for the "reformed subjectivist principle."

Causal Efficacy and the Derivation of the Concept of Time

In the course of this exposition it was intimated that in the human perceptual experience there is perception of discrete sense-data which illustrate the contemporary world. It is called "perception in the mode of presentational immediacy." Nevertheless, this is not the fundamental mode of perception which I have been discussing. Whitehead's full doctrine of perception is woven around the two modes of causal efficacy and presentational immediacy. These two "pure" modes do not, however, exhaust human perception. There is the "mixed mode of symbolic reference" which is a combination of the two and is what we refer to when we speak of ordinary human

perception.[32] Whitehead's quarrel with Hume, then, is not that Hume finds the perception of discrete sense-data in his analysis of experience but that he tends to consider perception exclusively in terms of this highly developed mode and thus to ignore the ubiquitous feature of all subjects: the perception of causal efficacy. It is only as we focus on this fundamental, ubiquitous feature of experience that we can account for the sense of temporality and thus understand the derivation of the concept of time from perceptual experience.

Whitehead makes use of a number of words and phrases to express the general features of subjective experience. Some of them are "reception," "conformation," "inheritance," "feeling of emotional energy," "memory," "vector-feeling," "derivation," "object-to-subject structure of experience," "physical prehension."[33] Most of these words and phrases express the basic fact that the subject, in some sense, derives from and conforms to objects which are given for it, which themselves become constitutive of its subjective experience. Thus the interrogation of subjective experience discloses that this experience is not altogether discontinuous with the objective data given to it; it derives, in part, from actual entities in its given world. In this respect Whitehead's explanation of the ground for any experience inverts that of Kant. Whereas the German philosopher regards an experience as rooted in the intuition so that "the process whereby there is experience is a process from subjectivity to apparent objectivity," Whitehead "explains the process as proceeding from objectivity to subjectivity, namely, from the objectivity, whereby the external world is a datum, to the subjectivity, whereby there is one individual fact."[34] He does not mean that the "one individual fact" is merely a repetition of the objective data. Nevertheless, it derives from and must conform to objects in its world. But the "objects" have been "subjects" in their own day. This is the meaning of the "reformed subjectivist principle." The data are these subjects as "objectified." In this way there is efficient causation between actual entities, or vector-feeling "*from* the cause which acquires the subjectivity of the new effect without loss of its original subjectivity in the cause."[35] Also, to reiterate, the present subject is not simply acted upon; it feels the data, and, as will become clearer, it synthesizes them.

This account has emphasized the aspect of perception as derivation from and conformation to objective data. But in using such phrases as "the 'objects' have been 'subjects' in their own day," or "the new effect," or "the present subject," we have been unable to escape the implication of what is made explicit in the use of such terms as "inheritance" or "memory"—that in efficient causation the cause is temporally prior to the effect. Thus, in the mode of causal efficacy, that

which is perceived is always the past as active in the present subject. To put the matter negatively, while a percipient subject may perceive aspects of the contemporary world, it cannot be causally affected by it. Whitehead writes that "so far as physical relations are concerned, contemporary events happen in *causal* independence of each other."[36] Thus he defines "contemporaneousness" in terms of causal independence. "Actual entities are called 'contemporary' when neither belongs to the 'given' actual world defined by the other."[37] This means that when neither entity belongs to the world which is causally efficacious for the other, they are contemporaries. They may have "actual worlds" (i.e., "pasts") in common, but neither belongs to the actual world of the other.

This doctrine of the causal independence of contemporaries has obvious implications for perception in the mode of presentational immediacy. By definition we cannot derive the idea of causation from that mode which apprehends an immediate cross section of the present world. Hume's search for causation among impressions of sensation which are "immediately present to the senses" was, therefore, doomed from the start. To grasp the notion of the causal independence of contemporaries, however, does not itself explain the correlate doctrine that the past is causally efficacious in the present. By our account we cannot conceive the past as simply lost or gone by—a mere nothing. The past must be understood as energizing in the present. But the idea must be stated so as to preserve the distinction between past and present. Just as the past is not to be conceived as simply lost, neither is it to be conceived as simply present.

Whitehead's way of dealing with this problem is in terms of the "becoming, the perishing, and the objective immortality" of actual entities.[38] The entity as subject or percipient occasion is not a static being but is an act transforming the many indeterminate data into one determinate individual. This "self-functioning is the real internal constitution of the actual entity," constituting its "own immediacy."[39] It also belongs to the nature of an actual entity that, in becoming determinate, it is significant beyond itself. This is part of the meaning of the "principle of relativity," to wit, "that it belongs to the nature of a 'being' that it is a potential for every 'becoming.' "[40] In other words, having become determinate, the entity projects itself forth as an object for succeeding subjects. Therefore, when Whitehead speaks of the "perishing" of occasions, he intends to retain two fundamental aspects: "significance" and "attainment." On the one hand, when an occasion perishes, it is not thereby lost; it remains "stubborn fact" conditioning succeeding occasions. Perishing "is how the past lives in the present. It is causation. It is memory. . . . [It] is the initiation of

becoming. How the past perishes is how the future becomes."[41] The notion of "perishing," therefore, should first be construed in its essentially relative sense as "perishing forth" or perishing "into the status of an object for other occasions."[42] On the basis of our understanding of this aspect of perishing we are enabled to see that "past" entities are, in no sense, "non-entities"; they live as objectified in the present. Thus they gain "objective immortality."[43] On the other hand, we must also keep in view that aspect of perishing without which the temporal process collapses into a monism of indeterminate becoming, namely, that, in becoming determinate, a present actual occasion terminates the particular act of concrescence which defines its being. As Whitehead says: "The process of concrescence terminates with the attainment of a fully *determinate* 'satisfaction.' . . . Completion is the perishing of immediacy."[44] Such "perishing of immediacy" cannot mean, as we have seen, that the "real internal constitution" is lost, but rather it must mean that a determinate individuality is attained. Whitehead says emphatically: "Actual entities perish, but do not change; they are what they are."[45] We may call this the "absolute" sense of perishing. That is to say, while an occasion can, and does, add itself to the transcendent world, nothing more can be added to that occasion. Therefore, in the idea of "perishing" Whitehead has encompassed two notions: that the past cannot change—it is what it has attained—and yet it is objectified by, and energizes in, the present occasion.

It is thus that Whitehead sees efficient causation and memory as two aspects of the same phenomenon, that is, that feature common to all occasions of experience: perception in the mode of causal efficacy, also called "physical perception."[46] Moreover, it is from the perspective of the present subjective experience of an actual entity that the sense of temporality derives. For the present subject is, in part, constituted by its feeling of derivation from the given actual world of its past. This is its memory. It is also partially constituted by its anticipation of significance in the immediate future. Thus the present subjective experience defines the past and the future. The perceptual experience is a "feeling from a beyond which is determinate and pointing to a beyond which is to be determined. But the feeling is subjectively rooted in the immediacy of the present occasion: it is what the occasion feels for itself, as derived from the past and as merging into the future."[47]

Perhaps the most compelling example of perception in the mode of causal efficacy, and thus of the perceptual basis of time, is "the knowledge of our own immediate past." Discussions of memory too often presuppose "consciousness" and concentrate on long stretches of

time, in which case we are only dimly aware of fragments of an experience. However, Whitehead stresses the importance of attending to one's own immediate bodily past, which is to say oneself approximately one-tenth to one-half second ago: "It is gone, and yet it is here. It is our indubitable self, the foundation of our present existence."[48] His well-known illustration is that of the speaker pronouncing the name, "United States." There are several syllables involved and to a citizen they are the usual attendants upon their predecessors. Now suppose the speaker, who is a citizen, inserts the words "Fruit Company" after saying the word "United." Moreover, suppose he is proposing a name for a new company and thus uttering the combined sound, "United Fruit Company," for the first time in history. Habit or the association of the usual attendants of one sense-datum upon another would, of course, lead him to the phrase, "United States." But the energizing of his intention of the immediate past in the present caused him to join "Fruit" to "United," and then "Company" to "Fruit." Whitehead uses this example to elaborate his point:

> He uttered the word "United" with the non-senuous anticipation of an immediate future with the sensum "Fruit," and he then uttered the word "Fruit" with the non-sensuous perception of the immediate past with the sensum "United." . . . The final occasion of his experience which drove his body to the utterance of the sound "Company" is only explicable by his concern with the earlier occasions with their subjective forms of intention to procure the utterance of the complete phrase. Also . . . there was direct observation of the past with its intention finding its completion in the present fact. This is an instance of direct intuitive observation which is incapable of reduction to the sensationalist formula. Such observations have not the clear sharp-cut precision of sense-perception. But surely there can be no doubt about them.[49]

This example of a human occasion of experience prehending its immediate past occasion as energizing in the present and anticipating its immediate future probably affords the most convincing illustration of perception in the mode of causal efficacy as the ground of temporality. For it exemplifies the following points: The present means the subjective experience of prehending what is given and anticipating being prehended by supervening occasions; the past means that which is given as an efficient cause for the present subjective experience; the future means that indeterminate "beyond" which is to be affected by the present occasion and which is, in some sense, anticipated in the present.

Thus the past is defined as that determinate "stubborn fact" which yet energizes in the present, and the present as the immediate percipient subject. Can we be any more precise about the future? What status does it have in this scheme which is based on present experi-

ence and in what sense can it be anticipated? Whitehead writes: "The future is not nothing. It lives actively in its antecedent world."[50] This statement, taken by itself, can be very misleading, for it seems to affirm that the future has the same status as the past. But Whitehead does not intend to produce such a confusion, and he is at pains to distinguish the objectivity of past, determinate occasions as functioning in the present from the objective fact that there must be a future for this occasion. Yet the future is indeterminate. It is likely that the failure to make this distinction renders incoherent many well-meaning attempts to proclaim the power and the "presence" of the future. Although he says that "the future is to the present as an object to a subject," Whitehead realizes that it cannot act as an efficient cause: "There are *no actual occasions in the future* to exercise efficient causation in the present. 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 the present occasion. The future belongs to the essence of the present fact, and has no actuality other than the actuality of the present fact."[51] It is clear from this that "objectivity" is not simply to be equated with being determinate and causally efficacious. For the future is an object for any given subject, part of whose essence is to be superseded and to anticipate some of its effects beyond itself. Thus the important truth emerges that the anticipation of the future, together with the feeling of past occasions, is "subjectively rooted in the immediacy of the present occasion." The basis for any sense of temporality, and thus for a concept of time, is grounded in a fundamental feature of any subjective experience: the nonsensuous perception of past occasions as causally efficacious in the present subject and the nonsensuous anticipation of a future which must conform to and embody that subject.

This exposition has, by no means, laid bare Whitehead's full concept of time. To do so would entail an elaboration of the derivation of "instants" from the fundamental entities, the fact that "time" is inseparable from the space-time manifold, the notion of the irreversibility of time, the interpretation of alternative time series, the intrinsic measurability of time, and, of course, the full philosophical conception of time as embodied in the "epochal theory." Despite the partial character of this exposition, however, it has endeavored to establish that, for Whitehead, the concept of time is grounded in perception. Moreover, it has given good reason for maintaining that a proper understanding of the fundamental nature of perception is essential to a right understanding of time. For example, if this account conforms to experienced reality, it becomes clear that time is neither wholly

independent of an observer nor to be construed as simply "mind-dependent." It is "subject-dependent," but this observation cannot have the effect of restricting our attention to human subjects; "time" is a necessary correlate of all final individual actualities.

Finite and Infinite Value

What is there in the preceding analysis of perceptual experience which justifies the deep sense of value as residing in finite occasions and yet the intuition that the value produced in the temporal world abides infinitely? Although Whitehead does not articulate a fully developed and systematic value theory, he does make a number of important remarks about value in terms of his metaphysical thought. I will not endeavor to trace out all the implications of his thought about value. Rather, I will confine our attention to the relation between value and perception, as we have come to understand the latter, and also the relation between finite and infinite value. Whitehead gives us a clue as to how he conceives the intrinsic connection of perception, temporality, and value in some remarks on "perishing" at his seventieth birthday celebration: "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."[52]

In this statement we see a reiteration of the point that the perishing of an occasion means that it is significant beyond itself. Significance is, of course, necessary if there is to be causation. From the perspective of the new concrescing subject, the feeling of such causation is memory, which depends upon past occasions having "perished forth," so to speak. Also, we should not miss the other point which is being made here, namely, that the very experience which is the basis for the ideas of memory and causation yields, at the same time, the sense of value in existence. The analysis of subjective occasions of experience discloses that each finite occasion has intrinsic worth in itself and worth beyond itself, infinitely. This is the meaning of the statement: "We feel that what we are is of infinite importance because as we perish we are immortal."

This point, admittedly, requires some elaboration. The basic principle is that not merely human occasions but every finite occasion of experience, every fact or unitary event, is a value experience. As Whitehead says: " 'Value' is the word I use for the intrinsic reality of an event. . . . Realisation therefore is in itself the attainment of value."[53] Such a view, of course, is not always readily apparent to

commonsense thought, which treats only certain things and events contributing to human enhancement as of value. Commonsense thought, however, is based on the "bifurcation of nature," which assumes that acts of perception can be analyzed into a conscious percipient subject and data which are universal qualities associated with a world of barren substances. We have seen that such a view does not accord very well with our convictions about memory and causation and that, in fact, it falls apart under analysis. The reformed subjectivist principle, on the other hand, insists that "apart from the experience of subjects there is nothing, nothing, nothing, bare nothingness."[54] Every final individual actuality is to be conceived as a subject synthesizing many objects into a novel unity. To be a percipient subject, therefore, means ultimately to be *causa sui*, to preside over one's process of concrescence. And *this* is a value experience; it is the attainment of "existence for its own sake . . . which is its own justification . . . with its own character."[55] It is to be noted that the concept of value or of "intrinsic worth," in this connection, must not be interpreted in a "purely eulogistic sense"; that is to say, value or worth is not to be equated with "truth," "beauty," or "goodness." Such positive values must finally be accounted for, of course. Here it is enough to make the point that value is inherent in actuality. Thus to be valuable means to count for something, to have attained realization, and so to make a difference in the universe. As Whitehead says: "The 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."[56] To be a percipient subject, then, is to be "something that matters," and this is to be a unit of value.

Having established, in this way, that actuality and value are inseparable, Whitehead attempts to elaborate the idea of value so that its implications become clearer. A value experience, as something that matters, cannot be limited to being value for itself; it must also be value for others. To say this, of course, is simply to speak explicitly about the meaning of actuality as a value experience just as in speaking of an individual unit of actuality as a percipient subject. Something that matters for itself embodies in itself the power to transcend that self. We recall the dual meaning of perishing and the necessity of bearing in mind both aspects of this notion: It essentially includes the ideas of both "attainment" and "significance." Precisely this twofold idea lies at the heart of the meaning of value. To have attained satisfaction and thereby to become causally efficacious in a subsequent entity is to be something that matters for that entity as well as for oneself. Thus Whitehead says that his concept is "the concept of actuality as something that matters, by reason of its own self-enjoyment,

which includes enjoyment of others and transitions towards the future."[57] Just as there is no fact devoid of value, so there can be no value which exists solely for its own sake. To be sure, the value for others will not be the same as the value for self. In other words, a subsequent finite entity, in being affected by a given entity, will selectively prehend that entity; it will not be felt with the same concrete definiteness with which it closed its own subjective immediacy. Nevertheless, the concrete value attained cannot be lost.

In working out the implications of a value experience Whitehead sees that value which is thought to be limited to finite occasions—self and others—but which may be said, somehow, to dissipate is not value in the sense of something that matters. That which dissolves is not ultimately important. It is difficult, of course, for us to imagine our importance beyond a relatively short stretch of time. Except in the rare cases of great persons who exercise influence over generations, we normally do not think of occasions, or of persons, as having importance much beyond a lifetime. Indeed, the memories that we have of formative experiences in the early part of our own lifetime fade and grow dim. Thus our experience is often that of the apparent loss of value. Whitehead acknowledges this experience. "Objectification involves elimination," he says. "In the temporal world it is the empirical fact that process entails loss; the past is present under an abstraction." Nevertheless, as many students of Whitehead have noted, the qualification which immediately follows this statement is essential to the full understanding of actuality: "But there is no reason of any ultimate metaphysical generality why this should be the whole story."[58] In fact, there is good reason why this cannot be the whole story. If "to be" means "to be of value" and the very notion of "value" essentially requires nonlimitation to a finite individual ocasion, then other equally finite occasions cannot restrict nonlimitation; whatever may be lost to the finite series must be registered somewhere.

The argument depends on the understanding of "finitude" as "the attainment of determinate status." But the attainment of determinate status for an individual entity—such that nothing more can be added to *it*—does not entail that the entity thereby disappears from existence. Rather, it adds itself to the expanding totality. "Finitude" and "infinitude," therefore, should not be construed as sheer opposites or contradictories. "Significance," which is as intrinsic a mark of finite individuality as is "attainment," requires that finite value be incorporated in the infinite and increasing value of the whole. Thus Whitehead says: "Importance, limited to a finite individual occasion, ceases to be important. In some sense or other, Importance is derived from the immanence of infinitude in the finite."[59]

To be sure, it is often the case that finite occasions are mutually obstructive and that a present subject, in prehending past actual occasions, eliminates what does not contribute to the fulfillment of its subjective aim. Thus "the past is present under an abstraction." But this does not mean that the full immediacy of a past occasion is simply lost or that what does not contribute to the attainment of value for a particular subject, or even for a society of subjects, is ultimately devoid of worth. As I have argued, once the subjective immediacy of an occasion is attained, its mark is made everlastingly. If the importance of an occasion cannot be fully appreciated by a subsequent finite occasion, it is, nonetheless, important for the ever-expanding totality. The "ever-expanding totality" is also termed the "consequent nature of God."[60]

This analysis of actuality as residing in percipient subjects has disclosed that these units of actuality can also be characterized as centers of value which project the value attained beyond themselves—infinitely. The foregoing is well summarized in the following passage: "Everything has some value for itself, for others and for the whole. This characterizes the meaning of actuality. . . . Existence, in its own nature, is the upholding of value-intensity. Also no unit can separate itself from the others, and from the whole. And yet each unit exists in its own right. It 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."[61]

Conclusion

The main intention of this essay has been to disclose the perceptual basis for the concepts of time and value in Whitehead's thought. The analysis stems ultimately from an intrinsic interest in his metaphyiscal thought. But Whitehead himself insisted that such thought be "applicable and adequate" to all experience.[62] Thus the demand that his insights be used to illuminate issues other than specifically theological ones is regarded as wholly legitimate, and I have here attempted to respond to the challenge. Admittedly, the point at which the essay finally arrives—the concept of value as the achievement of something that matters for self, for others, and for the infinite whole—seems to bear the marks of a religious birth. And, of course, the birth of the concept is, in a sense, "religious" in that it conceives facts as intrinsically valuable, as significant beyond themselves, and, therefore, as bearers of purposiveness. Nevertheless, the primordial facts to which Whitehead appeals in deriving his concepts are facts which are available to inspection and analysis by anyone: the facts of immediate

bodily experience or facts of perception. Therefore, this "religious" character should not obscure the broad applicability of the analysis and the concepts disclosed.

Because of his close attention to immediate experience and his ability to generalize from it, Whitehead's thought should prove fruitful to a wide range of intellectual disciplines. This is not true of much present-day philosophy. Lord Brain, an eminent neurologist and a competent philosopher, has remarked that the role of the body in perception is of fundamental importance for philosophy and yet is so much neglected. "Whitehead alone, among recent philosophers," he says, "seems to me to give due weight to it."[63] In fact, if the paucity of references to bodily existence in philosophical discussion is an index to the importance attached to it, we might well conclude that many philosophers disregard the body's role in perception or else that they are embarrassed by their bodies. Of course, Whitehead's thought is not to be commended merely because of the importance accorded the body in analyzing perception. His interpretation of perception in its most fundamental and generic mode is seen to entail an important concept of time which itself is applicable to psychological as well as physical theories. Most philosophers, of course, have simply ignored his concept of time. Unfortunately, several who have taken cognizance of it have encouraged this neglect by badly misinterpreting fundamental aspects of the concept.[64] But it becomes more and more apparent that such neglect impoverishes philosophic thought and wider interests. In addition to generating a fruitful concept of time, the analysis of perception has provided the ground for an important theory of value—what Hartshorne has called the "Aesthetic Matrix of Value."[65] Thus the analysis of perception becomes the basis for several concepts of considerable consequence.

I have not attempted to elaborate these concepts as Whitehead himself does. I am aware both of having left his value theory in a state of infancy and of the many features of time left untreated. For example, he develops criteria for distinguishing truth, beauty, and goodness from falsity, ugliness, and evil—which is essential if the theory is to sustain human civilization.[66] My task has been to shed light on these concepts as rooted in perceptual experience and thereby to point out some frequently unnoticed features of time and value. Insofar as I have succeeded in this limited task it may be argued that Whitehead's "Speculative Philosophy" is deserving of attention beyond that given it by the theologians and is, in fact, "productive of important knowledge" in many areas of thought.[67]

NOTES

1. Malcolm L. Diamond, "Contemporary Analysis: The Metaphysical Target and the Theological Victim," *Journal of Religion* 47 (1967): 210–32.
2. Ibid., p. 230.
3. E.g., see many of the articles in the special Whitehead issue of *Southern Journal of Philosophy,* vol. 7 (Winter 1969–70), or in *Process Studies;* also the articles by Robert Palter, Milič Čapek, and Sewall Wright in *Process and Divinity: Philosophical Essays Presented to Charles Hartshorne,* ed. William L. Reese and Eugene Freeman (La Salle, Ill.: Open Court Publishing Co., 1964), and Abner Shimony's "Quantum Physics and the Philosophy of Whitehead," in *Philosophy in America,* ed. Max Black (Ithaca, N.Y.: Cornell University Press, 1965). Some important, book-length studies are: Robert Palter, *Whitehead's Philosophy of Science* (Chicago: University of Chicago Press, 1961); J. M. Burgers, *Experience and Conceptual Activity* (Cambridge, Mass.: M.I.T. Press, 1965); Donald W. Sherburne, *A Whiteheadian Aesthetic: Some Implications of Whitehead's Metaphysical Speculation* (New Haven, Conn.: Archon Books, 1970); Paul F. Schmidt, *Perception and Cosmology in Whitehead's Philosophy* (New Brunswick, N.J.: Rutgers University Press, 1967).
4. Alfred North Whitehead, *Modes of Thought* (New York: Capricorn Books, 1958), p. 164.
5. Alfred North Whitehead, *Adventures of Ideas* (New York: Macmillan Co., 1933), p. 281, and *Process and Reality: An Essay in Cosmology* (New York: Macmillan Co., 1967), p. 43. Unless otherwise specified, all cited references are by Whitehead.
6. *Adventures of Ideas,* pp. 288, 290.
7. Ibid., p. 290.
8. *Process and Reality,* p. 241.
9. Ibid.
10. Ibid., p. 245.
11. *Science and the Modern World* (New York: Macmillan Co., 1927), pp. 75, 77.
12. *Process and Reality,* p. 83.
13. *Adventures of Ideas,* pp. 231–33; *Process and Reality,* p. 174.
14. *Process and Reality,* p. 271.
15. *Adventures of Ideas,* p. 289.
16. *Process and Reality,* p. 180.
17. Ibid., p. 252.
18. *Adventures of Ideas,* p. 284.
19. *Science and the Modern World,* p. 107.
20. *Process and Reality,* pp. 181–82.
21. *Science and the Modern World,* p. 107.
22. *Modes of Thought,* pp. 156–59.
23. David Hume, *An Enquiry concerning Human Understanding* (Chicago: Henry Regnery Co., 1956), pp. 75–76 (sec. 7: "Of the Idea of Necessary Connection").
24. George Santayana, *Scepticism and Animal Faith: Introduction to a System of Philosophy* (New York: Dover Publications, 1955), pp. 15, 17 (cited by Whitehead in *Process and Reality,* p. 240, and in *Symbolism: Its Meaning and Effect* [New York: Capricorn Books, 1955], pp. 29, 31).
25. *Process and Reality,* p. 204; my emphasis.
26. David Hume, *A Treatise of Human Nature,* ed. L. A. Selby-Bigge (Oxford: Clarendon Press, 1968), bk. 1, pt. 2, sec. 5.
27. *Process and Reality,* p. 213.
28. Ibid., p. 267.
29. Ibid., p. 265.
30. Ibid., pp. 265–66.
31. Ibid., p. 182.
32. Ibid., pp. 255–79.
33. Ibid., pp. 28–29, 35, 173–84, 361–65; *Adventures of Ideas,* pp. 235, 239, 241, 243.
34. *Process and Reality,* p. 236.

35. Ibid., pp. 363–64.
36. Ibid., p. 95.
37. Ibid., p. 102.
38. Ibid., p. ix.
39. Ibid., p. 38.
40. Ibid., p. 33.
41. *Adventures of Ideas,* p. 305.
42. Ibid., p. 227.
43. *Process and Reality,* pp. 44, 71, 125, passim.
44. Ibid., p. 130.
45. Ibid., p. 52.
46. Ibid., p. 365.
47. Ibid., p. 247.
48. *Adventures of Ideas,* p. 233.
49. Ibid., pp. 234–35.
50. Ibid., p. 247.
51. Ibid., pp. 250–51; my emphasis.
52. *Interpretation of Science,* ed. A. H. Johnson (Indianapolis: Bobbs-Merrill Co., 1961), p. 218.
53. *Science and the Modern World,* p. 136; cf. *Modes of Thought,* p. 150.
54. *Process and Reality,* p. 254.
55. *Modes of Thought,* p. 149.
56. Ibid., p. 159.
57. Ibid., p. 161.
58. *Process and Reality,* p. 517.
59. *Modes of Thought,* p. 28.
60. *Process and Reality,* pp. 524, 527, 531.
61. *Modes of Thought,* p. 151.
62. *Process and Reality,* p. 4.
63. Lord Brain, "The Neurological Approach," in *Perception and the External World,* ed. R. J. Hirst (New York: Macmillan Co., 1965), p. 46.
64. E.g., V. C. Chapell, "Whitehead's Theory of Becoming," in *Alfred North Whitehead: Essays on His Philosophy,* ed. George Kline (Englewood Cliffs, N.J.: Prentice-Hall, 1963), pp. 70–80. Chapell is shown to have missed much of the point by David Sipfle in "On the Intelligibility of the Epochal Theory of Time," *Monist* 53 (1969): 505–18. Another writer, on whom Chapell seems to have relied for some of his understanding of Whitehead, is Adolf Grünbaum. For Grünbaum's understanding of Whitehead see his *Philosophical Problems of Space and Time* (New York: Alfred A. Knopf, 1963), esp. pp. 48–65 and chaps. 12, 15. Grünbaum says that Whitehead gives a "perceptualistic version" of the intrinsic measurability of time based on the "deliverance of sense," which he clearly takes to be "sense perception"; cf. pp. 48–49. But this is to miss half—the more important half—of Whitehead's analysis. Also, C. I. Lewis has shown that Whitehead's defense of the intrinsic measurability of time is not at all based on so contingent a matter as the deliverance of sense but is securely grounded in the analysis of fundamental events or actual occasions (see "The Categories of Natural Knowledge," in *The Philosophy of Alfred North Whitehead,* ed. Paul Arthur Schillp, 2d ed. [New York: Tudor Publishing Co., 1951], pp. 701–44). For a more recent misreading of Whitehead see Adolf Grünbaum, *Modern Science and Zeno's Paradoxes* (Middletown, Conn.: Wesleyan University Press, 1967), pp. 52–55. Here Grünbaum associates "perception" with "acts of consciousness"; thus "perceptual time" is said to be "mind-dependent," and so physical events are thought to be "tenseless." Of course, if one insists that perception requires "mind," the outcome is inevitable. But this, clearly, is to have missed nearly all of Whitehead's analysis of perception.
65. Charles Hartshorne, *Creative Synthesis and Philosophic Method* (La Salle, Ill.: Open Court Publishing Co., 1970), chap. 16.
66. See esp. *Adventures of Ideas,* pt. 4.
67. *Process and Reality,* p. 4.