In the last book that Whitehead wrote there is a passage which every April brings to my mind. He is saying that all human understanding is partial, but without permanent limits.

For example, we know about the colour ‘green’ in some of its perspectives. But what green is capable of in other epochs of the universe, when other laws of nature are reigning, is beyond our present imaginations. And yet there is nothing intrinsically impossible in the notion that, as years pass, mankind may gain an imaginative insight into some alternative possibility of nature, and may therefore gain understanding of the possibilities of green in other imagined epochs.—MT ΙΙΙ 1.

In what other philosopher’s writings could we expect to find what the professionals call a “sense-datum term” being used at once to call attention to the immediate value of sensory experience, to remind us of our ignorance, and to set forth the ideal of ever enlarging our conceptual horizons? My purpose in quoting the passage, however, is not to contrast various uses of sense-datum terms. It is to indicate one of the kinds of
caution which a good metaphysician should have. What he hopes to be a quite general theory of existence may, for all he knows, be quite as special as three-dimensional Euclidean geometry. This caution is consequent upon a bold imagination concerning possibilities. The boldness makes trouble; there are obvious difficulties in the idea of a presumably infinite variety of cosmic epochs, and—for me—in the idea that green is an eternal object. I shall look at the second later. My present point is only that a metaphysics which does not boldly make a generous allowance for forms of existence "beyond our present imaginations," is in danger of a dogmatic provincialism.

Besides imagination, passion appears to be indispensable in metaphysical work. This should not surprise us; it is generally, if not quite universally, true in other fields of constructive endeavor that only those who entertain some ideas with emotional intensity have anything to say. All Whitehead's philosophical writings manifest this intensity. The Harvard students who came to the Whiteheads on Sunday evenings remember it too. What he talked about, he cared about; the care was so evident in his voice, that those who wanted a dialectical game coolly played, or who were too young to own (or too timid to show) philosophical convictions of their own, as well as those who were enjoying a flirtation with logical positivism, would say that he pontificated—which he did not.

Proper caution in metaphysics mainly has to do with temptations to stray from an objective in which one ought to be passionately interested. It depends on an active conscience, more than on detachment. Of course everyone who in reading metaphysics is doing more than going through the motions of reading, brings his metaphysical conscience to bear. When an idealist author uses the proposition that ideal knowledge defines reality, the realist reader cries "foul." The moralistic tone of the nominalist's "We do not believe in abstract entities" is unmistakable. Whitehead's repudiations were fervent.

The present author also has ideas about what should be
permitted in metaphysics and what should not. Of course none of us has charge of the permissions in this field. But one may clear the air by setting down what one would, and what one would not, with good conscience permit one's self; what does, and what does not, arouse one's skepticism when it is read in others; and why. The whys I have in mind are not comparisons with the one true metaphysics (a standard not within human reach); they are comparisons with a definition of the metaphysical enterprise that is made explicit and can be explicitly defended. This is what is to be done in the present chapter. I shall be both using Whitehead's work, and reacting against it.

II

To avoid getting bogged down at once in hopeless verbal dispute, we must agree on an initial identification of metaphysics. The major tradition in Western “metaphysics” seeks a general theory of existence. The minor tradition aims at a clear, coherent consciousness of our ways of thinking and talking about the world. Such consciousness is obviously desirable; and it appears to be sufficiently attainable to make the pursuit worth while. Let us give it (though not necessarily all forms of it) our blessing, and turn to metaphysics in Whitehead's sense, already suggested by the language of the first paragraph of this chapter—as aiming at a general theory of existence.

The most useful brief description of this business which I know is given by Whitehead's phrase, "the effort after the general characterization of the world around us." I am taking this phrase, which appears in the second sentence of his 1933 Chicago lectures, "Nature and Life" (MT p. 173), out of its immediate context—a discussion of our general concept of Nature—but not out of the wider context which Whitehead

\[1 \text{ It is wise to avoid the ambiguities inherent in "being."} \]
before many pages explicitly provided, that is, the fusion of Nature with Life in a new conception of the evolving universe. For present purposes I take "the world" to mean the totality of all existence, including whatever gods exist. But as Whitehead's most frequent name for this totality is "the universe," and as it has the advantage of not automatically suggesting a contrast with God, I shall substitute it for "the world" in our defining phrase.

I am accustomed to using the several words in this definition as so many reminders of what I seek and what I would avoid in the pursuit of metaphysics. (They do not suggest all that needs to be said.)

I would first of all avoid the suggestion that metaphysics is an established body of principles about the universe—principles doubtless subject to refinement, and the set of them perhaps to some enlargement; but still, established, so that a student can take Metaphysics down from a bookshelf and learn it. If we begin our definition, "Metaphysics is...", we must immediately bring in a term like effort to forestall the natural expectation that we are defining something which is there, awaiting inspection. Naturally I do not mean that metaphysics is pure effort, without results and progress. —But all this has been set forth admirably by Whitehead in the opening chapter of Process and Reality.

The word characterization reminds us that the metaphysician's task is to describe something; as I like to say, existence in its most general features is the formulandum to which his formulations must be faithful. In talking about metaphysics, where the gap between the two is most formidable, "characterize" and "formulate" are better words than "describe," because they carry a positive suggestion of this gap. "Characterize" also implies that the primary aim is not to express or evoke experiences, whether private and special or widespread and sociocultural. Of course a metaphysics may have interest and value when it is read as an intellectual expression of cultural aspirations or forces; and some of the words used should be capable of arousing in the reader the feelings (about
certain aspects of existence) which stirred the writer. But for all that, metaphysics is meant to be a kind of telling. Only as a metaphysics ignominiously fails to help us understand the experienceable world may we assign it, as Dewey once assigned philosophy in general, to the realm of cultural meaning (along with Shakespeare and Athenian civilization) rather than the realm of difficult, partial truth. Such re-assessment must be separately made for each distinct metaphysical system, as a system. I have not seen any argument to show that all metaphysics is really something else, that did not either beg the question, or ask for too much.

General is a word of degree. The metaphysician is to get as high up the ladder of generality as he can. We have no trouble in recognizing relative heights; but much, if we try to define the ladder in a way which will not spoil the rest of our definition, e.g., by directing us from the universe around us to universes of discourse. The only direct clarification of that supreme generality which metaphysics seeks, I find in Whitehead's explanation (in terms of experience and its interpretation) of the adequacy of a metaphysical scheme. I shall come back to this shortly.

The universe, one should not need to say, is the biggest possible subject matter. One merit of insisting upon this term when defining metaphysics is that its use gives notice that no mere philosophy of man is to be advanced as a metaphysics. The history of modern philosophy shows, I think, that it is on this point much more than on the distinction of science from metaphysics that lapses must be guarded against. Also, we think of the universe as, relative to man, not only an ongoing, but an antecedent reality. Metaphysics, so far as it is successful, is a form of knowledge which resists Dewey's claim that the object known in knowledge is not an antecedent reality but is constituted by the consequences of directed operations, of changes instituted. It would be ridiculous to suppose that the operations of any metaphysician institute changes in the general characteristics of the universe.

The universe to be characterized is the universe, the one and only actual universe—not a "possible world," and decidedly not "all possible worlds." The usual meaning of "possible" in connection with worlds (or universes \(^3\)) is "consistently thinkable." Different applied meanings then arise, depending upon what one intends to be consistent with. Consistency with what is known marks out what ought to be called "epistemic possibility." For example, I know that there is now some money in my pocket, but I do not know how much. Suppose it is $11.30. Then a world which is just like the one I suppose actual, except that I have $11.35 in my pocket, is a possible world. Plainly, I can think of an indefinite number of worlds which are possible in this sense. But this plurality is already noticed and left behind in our statement of the metaphysical purpose as a general characterization of the universe. And that is the better way to describe the situation, because "possible" is too tricky a word in philosophical discussion to be used when it isn't needed. It is needed in the theory of human thought,\(^4\) and in some types of metaphysics; but to say that metaphysical propositions, if true, are true of all possible worlds (where "possible" means "thinkable in terms which are self-consistent and consistent with our present empirical knowledge") and "world" is meant in the inclusive sense stipulated above (not as denoting a sub-world such as the "created world" of Leibniz), is an unnecessary, misleading, and grandiose way of saying that these propositions present the most general facts about the actual world.

Like Whitehead, I cannot understand actuality without making reference to possibilities. But even if one could understand them otherwise than as within the universe of actual entities, it would still be the case that the subject matter, for

\(^3\) In discussing this point I revert from "universe" to "world," to be in accord with the customary phraseology.

\(^4\) E.g., C. I. Lewis has shown this need in the theory of the meaning of terms and propositions: see Chap. III of *An Analysis of Knowledge and Valuation* (La Salle, Ill., 1946) (my illustration is a true-life form of his in Sect. 5); also my paper, "The Concept of the Individual," *Methodos*, 5 (1953), especially 158 ff.
the sake of understanding which they were introduced, was the actual universe and not being in any other mode.

One reason why I have devoted a bit of space to a notion as indefensible as the notion that metaphysics has for subject matter not what is but what might be, is that it represents the bold romantic way, in contrast to divers cautious ways, in which philosophers try to find a distinctive work to do during this age of science. It was ardently presented as the path of glory by the late William Pepperell Montague, who pleaded with philosophers to give the earth to the scientists and devote themselves to exploring the ocean of possibilities. By imagination and vision philosophy should propose possibilities, and let science dispose of them. An emphatic subsistentialist metaphysics underlay this simple notion of the division of labor between science and philosophy. The necessity of imagination in metaphysics is undeniable. But is it addressed to anything but the actual world? It is truer to say that a first-rate metaphysician loves the world (and so is motivated to construct a vision of it), than that he becomes a metaphysician by casting off from it.

"... the universe around us." The last two words remind us of a fact on which the very possibility of the metaphysical effort depends, namely, that the universe is the metaphysician's environment, indefinitely extended. His subject is not out beyond the bounds of space and time; it is all around him—under his nose, in his dreams, in his memories. What is commonly called "experience" is his foothold in his environment, his point of departure for imaginative thought. It is his datum, what he must interpret; and the testing ground to which he must return. It is careless to say that metaphysical systems are so many "interpretations of the world." "Interpret," carefully used, takes as object something which is a datum and so may be inspected and consulted. The world to be characterized is no such datum; only conscious experience can play that role. In short, we interpret our conscious experi-

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6 Prologue in his Great Visions of Philosophy (La Salle, Ill., 1950).
ence by characterizing the universe or some part of it; and conversely. Whitehead’s repeated statements, that the actual world is the datum for philosophy, and is what we experience though we are conscious of much less, will mislead unless we remember that only what can emerge in consciousness (e.g., the conscious sense of a vague totality, and the corresponding, consciously noticeable characteristics of everyday language), can be suggestive for thought or be empirical evidence for or against what we think.

“The universe around us” is meant in the sense in which it would normally be understood—as including ourselves. The exclusive sense in which someone might take it is not merely not intended; it is implicitly condemned as a falsification of the relation of experience to nature. There is a continuity here which, though it must not foolishly be supposed to preclude differences, has got to be remembered. Whitehead liked to remind philosophers (and Dewey emphatically agreed with him) that “the living organ of experience is the living body as a whole,” and that though experience “seems to be more particularly related to the activities of the brain,”

We cannot determine with what molecules the brain begins and the rest of the body ends. Further, we cannot tell with what molecules the body ends and the external world begins. The truth is that the brain is continuous with the body, and the body is continuous with the rest of the natural world.—AI xv vi.

As we know, Whitehead argued that all experience-events exhibit a common “texture,” causal and purposive, which we can discover if we permit our attention to be drawn from the special details of experiences. It is to be used to suggest cosmological categories; and our knowledge of our environment is to be used to inform us of what we might otherwise miss concerning immediate experience. The maxim, that ex-

* He often said just this, usually in the form of a challenging question, in his lectures at Harvard.
experiences are natural events, is thus a two-edged instrument. This position is a convincing one.

In additional respects given experience is for Whitehead alive with suggestions which quietly start an empirical philosopher's interpretations of it in just one direction. I do not find all these suggestions binding. Still, given experience is for metaphysical purposes much more than the epistemological absolute which a pure theorist of perceptual knowledge, e.g., C. I. Lewis, demands. (The adjective which Whitehead usually attaches to "experience" is not "given," but "concrete." Experience for him is not a flat display; it has depths and meanings which may be caught intuitively by poets and others. There is a good deal of truth in such a conception of experience; but the dangers which it presents to the ordinary thinker are obvious.)

Our interpretations of experience naturally vary with our purposes. In that way many equally true characterizations of existing things can arise. When the purposes are identical, this latitude disappears. Even if all metaphysicians pursue the same purpose, their imaginative powers are so limited by the varying special characteristics of their first-hand experience, their intellectual period, etc., that we must expect great differences between metaphysical systems. In attending to the purpose of metaphysics we are concentrating upon the source of those other large differences, which are theoretically, though not practically or perhaps always desirably, eliminable.

III

The metaphysical objective, then, is a general characterization of the universe, capable of making every type of experience intelligible; a scheme of ideas such that (in Whitehead's words) "everything of which we are conscious, as enjoyed, perceived, willed, or thought, shall have the character of a
particular instance of the general scheme" (PR I ii i)—when that scheme is applied under the circumstances (planetary, human, etc.) of the experiences we have, or believe others to have had. The test of metaphysical truth is the "general success" of the system in such applications.

The desired scheme of ideas is not revealed to us by any rational, or mystical, power of intuition. There is nothing for it but to try to frame one, and see if it will interpret diverse areas of experience better than earlier systems did. The first positive act of the cautious metaphysician is to grant permission to speculate—not at random, but under conditions of which Whitehead has given the classic statement (in the opening chapter of *Process and Reality*).

The permission to speculate is also a permission to go in thought "behind the scenes" (as a hostile critic would say) — to explain what is perceived by something conceived. This sounds very bad to many modern ears, but is not. Our everyday thought interprets conscious experience by characterizing some part of the universe; for example, we interpret a sound when we conceive what produced it, and how. The phenomenalist language, which some philosophers try to insist upon, generally gives way to causal language when they try by illustrations to convince us that their doctrine can be applied. An intelligible conception of the sources of experience must of course maintain analogies with what is experienced; for example, no event can be explained by reference to an ultimate being which in its own nature does not involve temporality.

It is not so much in relation to sense perception as in relation to the emotional and practical demands of human beings that the approach to metaphysics calls for an attitude of restraint. William James wrote in his first notable prag-

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*The difficulties and requirements of empiricism in metaphysics are briefly discussed in the following chapter.*
matistic essay, "The Sentiment of Rationality": "Man needs a rule for his will, and will invent one if one be not given him." 9 It is the business of a complete philosophy to give him a rule—but not the business of metaphysics. James of course argued the contrary. Each and all of the "great periods of revival, of expansion of the human mind," he wrote, "... have said to the human being, 'The inmost nature of the reality is congenial to powers which you possess.'" 10 James's statement is very likely true; but the question of what general characterization of the universe makes it most congenial to man is pertinent only to our understanding of man.

There are other ways in which illegitimate requirements of this sort have been imposed upon the metaphysical effort. John Dewey wrote a classic description of one, and himself eagerly embraced another. Men, as he often said, seek stability in a precarious environment; and philosophers have depicted "reality" as

what existence would be if our reasonably justified preferences were so completely established in nature as to exhaust and define its entire being and thereby render search and struggle unnecessary. ... Then the problem of metaphysics alters: instead of being a detection and description of the generic traits of existence, it becomes an endeavor to adjust or reconcile to each other two separate realms of being.11

Namely, the realms of actual experience, and of the "reality" depicted. Dewey never hid his own nonmetaphysical motive for being interested in what, quite misleadingly, he called "the generic traits of existence." His discussions of them are entirely concerned with those features of man's situation in nature which are both irreducible matter of fact, and always important for the experimental art of controlling human

9 The Will to Believe and Other Essays in Popular Philosophy (New York, 1937; first published in 1896), p. 86.
10 Ibid., p. 86; italics in text.
affairs. In the end, fortunately, Dewey stopped calling the
detection and description of such traits "metaphysics." 12

In Whitehead's metaphysics there are two worlds—a world
of finite existents and a divine being—but both are equally
real, and everything he says about them is shaped by the re­
quirement that they be in essential communion with each
other. Also, Whitehead never tried to conceive "reality" in
such a way as to render human search, struggle, and experi­
ment unnecessary. But there is a disturbing element in the
exposition of the theistic side of his metaphysical system.
In some passages he seems to be suggesting that the satisfaction
of our deepest emotional cravings is an added merit in a meta­
physics. In Chapter 4 we briefly examined Whitehead's way
of dealing with the religious craving, and saw that his language
conveys at the same time the idea of religious knowledge by
intuition. We commented:

This mutual involvement of craving and insight inevitably
makes the value of religious evidence for metaphysics prob­
lematic for those who have had no personal experience of in­
sight. The occurrence of just such experience demands ex­
planation, but does not determine the soundest mode of ex­
planation. We know too little about ourselves to eliminate
the possibility that no religious experience, frequent or infre­
quent, reveals anything about the universe.

On the other hand, we said, if a thinker produces a meta­
physics which, among other things, justifies an insistent re­
ligious craving, this result does not discredit the metaphysics.
"The zest of self-forgetful transcendence belonging to Civiliza­
tion at its height" (AI xx xi) must sooner or later be ex­
plained, in one way or another, and it is an achievement to
offer an explanation which coheres as perfectly with meta­
physics drawn from ordinary experience as Whitehead's ex­
planation does. The conclusion drawn in Chapter 4 was that

12 "Experience and Existence: A Comment," Philosophy and Pheno­
nomenological Research, 9 (June, 1949), 712.
"the marvelous coherence of Whitehead's completed metaphysics constitutes the strongest argument for the theistic element in it—provided this general characterization of the universe has any considerable success as an interpretation of mundane experience"—as I think it does.

It would be unrealistic to suppose that any human being can produce a substantial work of metaphysics which is motivated simply and solely by desire to frame a general characterization of the universe around us, capable of making every type of experience intelligible. Being an emotional animal and a civilized animal, he is bound to desire one kind of characterization more than another. This additional motive shows, whether you consider Spinoza, or Bergson, or Russell—or any philosopher. But the coherence and the empirical verification of the system are the only grounds for accepting it. The satisfaction of a mere craving—any craving—cannot be an added metaphorical merit of a general theory of existence. We are justified, then, in giving special scrutiny to those elements in a philosophy which make the universe support what the metaphysician, or mankind at large, cherishes; and we are always saddled with this task. There is also a danger that, leaning over backward, a metaphysician might fall over backward, as Nietzsche might be said to have done.

Whitehead nowhere, so far as I can remember, says that the universe is "just," or demands that it be just; he was too wise and too loving to take that line. But Lecture Six of *Modes of Thought* is entitled "Civilized Universe," and begins, "In this lecture we seek the evidence for that conception of the universe which is the justification for the ideals characterizing the civilized phases of human society." I shudder to think of what metaphysics could become if this sentence and title-phrase were to be widely adopted as guides in man's approach to metaphysics. Whitehead kept his discussion, for the most part, genuinely metaphysical, by founding it upon discernible features of the general texture of our experience—
beginning with the vague, omnipresent sense of maintenance or discard, and the differentiation of this value-experience into the feeling of the ego, the others, and the totality. This level of experience, Whitehead rightly insisted, is much more fundamental than the clear discrimination of sense-data. A refusal to use it would be a case of misplaced caution.

The cautious metaphysician may be strongly tempted to secure himself in advance against all kinds of wishful thinking, by laying down the broad rule that no value-concept is to be introduced in philosophy beyond the boundaries of the philosophy of man, or of sentient beings generally. He will appeal to common sense: is it not silly to try to think up a value-concept with general ontological application? Now this is quite a different question from that of the cosmic significance of religious experience and human ideals. It concerns intrinsic value; but not in the forms which are most familiar in moral philosophy, like pleasurable experience—nor does it concern value as any object of any interest. The question is whether we are so surely right when we habitually characterize most of the population of the universe as sheer matter of fact devoid of intrinsic value. Probably we are simply being unimaginative, and substituting a parochially human point of view for a metaphysical one. The world view which sits easiest with our desires is just the one which restricts the occurrence of intrinsic value to ourselves, the higher animals, creatures like us and them who may exist on planets of other suns, and God if he exists. Of course, it would be absurd to ascribe any kind of intrinsic value to an object like a typewriter. The great challenge for "pan-valuism"—if I may introduce an awkward label—is to devise a conception of what the individuals of the universe are if all possess some definable for-itself character. Whitehead devised such a conception, which to my mind definitely supersedes the panpsychisms of the history of metaphysics. In general: the question whether value in some form is an ontological attribute, is one which in the approach to metaphysics should be looked upon as an

\[13\] This is what Whitehead called "vacuous actuality."
open question. As there is no empirical evidence against the possibility of pan-valuism, we are not debarred from favoring a hypothesis of this type when indirect reasons for favoring it appear—the superior coherence of a metaphysical system of which it is a part, for instance.

By way of contrast, consider a type of metaphysics which, because of the unwarranted transfer to metaphysics of a necessity in the theory of perceptual knowledge, has sometimes been said to be the only possible one. I mean the respectable view that the things, not ourselves, which make up the world (or including ourselves, in James's world of strands of "pure experience") are just those sensa which are given in sense-perception, plus unsensed sensa; or are aggregates of these. This view is rendered improbable by a mass of physiological and psychological evidence to the effect that sense perception is a transforming, partly creative, agency. That thinkers should strain at intrinsic value as an ultimate feature of actualities while swallowing a phenomenalistic ontology, is one of the curiosities in the history of tough-mindedness among philosophers.

What is the general significance of essential features of human practice for metaphysics? Whitehead said, "Metaphysics is nothing but the description of the generalities which apply to all the details of practice" (PR I 1 v). The word to underline here is generalities. Then we may give this Whiteheadian illustration of the principle: a metaphysics that does not in a generalized form embody our practice of expecting a future which will continue some characteristics of the present and deviate from others, does not describe the world we live in. It is obvious, however, that the burden of explaining our practices (more generally, of interpreting our experience) never falls on metaphysics alone. It falls on a complex conjunct, consisting of the general theory of existence, plus the philosophy of man, plus the biological and cultural sciences of man. If some invariable feature of human practice contradicts, or stands in no relation to, this conjunct, some member of the conjunct is defective. It is not always easy to say which one this is.
Let us turn to alleged necessities of language and of thought, in their relation to the metaphysical effort.

Do necessities of speech have metaphysical significance? Plainly, the universe is under no obligation to be such that *homo sapiens* can talk about it. He *can* talk about it—for the same reason that he can talk about poltergeists: he possesses a conceiving brain, vocal chords, and culture. Any universe in which these can arise is one that can be babbled about. The real problem is how it is possible for some of these babblings to approximate truth.

We should look with the utmost suspicion on every dilemma of the form, "Either you accept this metaphysical position, or you deny the possibility of meaningful speech"—or as people used to say, "of significant discourse." The necessities posed may reflect nothing more than the limitations of the author's vocabulary or the characteristics of the language in which he writes. Hence the potential value of new ways of talking metaphysics. Not that we can ever hope to possess a perfect metaphysical language; but we may hope to continue the progress which has occurred. It is an achievement to show that some things cannot be said in English without paradox, but it is mere intellectual conservatism to anathematize all efforts to talk in new ways. As Whitehead somewhere says, our language was formed for the market place, not for metaphysical purposes. His reminders of the inadequacies of language have been misunderstood as complaints and condemnations, and said to be "completely nongenuine" because he saw the redesigning of language as an endless task. What other view of the relation of language to metaphysics would be sensible?

In Whitehead's view, this endless task serves another process of endless approximation, that of constructing an adequate

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network of metaphysical concepts. The nature of things out-
runs human thought, and thought may outrun speech. When
some metaphysical thesis is presented to us as a logical neces-
sity and we find no logical mistake, we should remember that
the author is not the universe but a human thinker. The
necessity flows from his initial concepts, his meanings. So we
search our stock of concepts for better beginnings. And we
may never assume that this stock is perfect.

In contrast to particular alleged necessities of thought, which
are always in reality hypothetical, stands the broad require-
ment of consistency. But it is a genuine necessity for meta-
physics only because of our daily evidence that the world is
not literally "a fiction . . . made up of contradiction." I have
never heard anyone report that for a moment he saw some-
thing as both red all over and not red all over. If the universe
were in large part made up of contradiction, consistency
would be a demerit in a metaphysical system, though it might
still be a convenience to an occasional reader.

A second broad necessity for metaphysics is coherence, in
Whitehead's sense: the general features of existence are to be
so formulated that the full understanding of any one, as
formulated, will take you to the others. Otherwise your sys-
tem falls into unrelated parts (as Descartes's did). So far,
this is only coherence as an ideal of the understanding. To
be more than that, the coherences which the system exhibits
must be findable in experience, and pervasive enough to
warrant generalization to metaphysical status. This is gener-
ally the case with Whitehead's metaphysics. The immediate
experience which is myself now, includes a feeling of its own
derivation from other actualities, which collectively compose
its environment; and also includes appetition for unrealized
potentialities. This single sentence must suffice here as a
sample of Whitehead's empirical warrant for developing his
theory of the coherence of the universe, as that of a process
in which actual entities come into being by prehending other
actual entities and eternal objects.

That the universe, or being, is intelligible, is often said to
be an indispensable and undeniable premise of metaphysics. But Whitehead has shown how the matter can and should be conceived:

That we fail to find in experience any elements intrinsically incapable of exhibition as examples of general theory, is the hope of rationalism. This hope is not a metaphysical premise. It is the faith which forms the motive for the pursuit of all sciences alike, including metaphysics.

In so far as metaphysics enables us to apprehend the rationality of things, the claim is justified. It is always open to us, having regard to the imperfections of all metaphysical systems, to lose hope at the exact point where we find ourselves. The preservation of such faith must depend on an ultimate moral intuition into the nature of intellectual action—that it should embody the adventure of hope.—PR II i ii.

I wish next, and finally, to note and briefly consider necessities for definiteness and distinctness. The human animal cannot think clearly without defining the object of his thought. This introduces a danger for metaphysics. Actualities are bigger than human concepts; the moment a metaphysician forgets this he ascribes to existence some limitation of his thought, and makes the universe foot the bill for his own clarity. It is not too much to suggest that whatever he clearly and distinctly conceives to be the case cannot be the case in the universe—unless his thought has been as obedient to the coherences intimated in experience, as to Bishop Butler's "Everything is what it is, and not another thing." That dictum is a dangerous rule for metaphysical discussion because it is too easily used to sanction the erection of fences which may not exist in reality or in given experience but only between our concepts. The obvious example of such dictatorial thinking is the out of hand rejection of Bergson's metaphysics on the ground that it is sheer confusion of concepts to imagine that any kind of "interpenetration" can occur in the temporal world. I do not suggest and do not believe that his metaphysics should be accepted; I am saying only that con-
ceptual thought has no business forbidding one existent from embodying something of or from another. Furthermore, it is not a genuine necessity of thought to do this. James showed the preposterousness of it in his protest against the attempt of some monistic idealists to rule out pluralism with the argument that when you say there are many individuals in the universe you are logically bound to say that no connections exist between them. But in *A Pluralistic Universe* James professed to find no positive alternative other than one drawn largely along Bergsonian lines. The man who, by doing it full-scale, showed that perfectly definite ontological concepts of intrinsic connection between individuals can be framed was Whitehead.

He has often been charged with abandoning the intellectual ideals of clarity and definiteness in his metaphysics of process. If our civilization is allowed to continue, the historians of philosophy two hundred years from now are likely to find this reckless charge amusingly misplaced. It is a bit like saying that the designers of the first submarines did not believe in travel by water. A thoroughgoing conceptualization of process—done with an insistence on the absolute self-identity of concepts rather than by making each turn into its opposite—is odd evidence of disloyalty to the intellect.

It would be more sensible to inquire whether his approach to metaphysical construction was not in one sense too intellectualistic. I am thinking of his category of eternal objects, which roughly corresponds to the historic category of universals. The use of universals is of course no vice of the intellect but a necessity of thought. I pass by the old question of whether they must also be considered a category for metaphysics, in order to discuss briefly the larger form which that sort of question takes concerning Whitehead's eternal objects, (William A. Christian has included in his recent book, *An Interpretation of Whitehead's Metaphysics*, a needed reminder of the ways in which Whitehead dissented from the traditional view at the base of the old disputes—the view that

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15 See William James, *A Pluralistic Universe*, Lects. II, VI, VII.
16 New Haven, 1959; Chapter 13.
the main use of universals is to classify individuals into genera and species.)

Things have characters. Some philosophers will not budge from the thesis that the characters of particular things are particulars rather than universals. That seems an untenable extreme view. Whitehead went all the way in the opposite direction. In his metaphysics the actual world is a process composed of individual processes; but he insists that none of these, nor any group of them, nor any element in any one of them, nor anything in the world, could be a definite entity unless it exemplified a form of definiteness which bears in itself no temporal limitation whatsoever. To Whitehead this is obvious, and probably always appeared obvious. It is not quite obvious to me. Granted that an existent has a character, and that at least component characters of this character can be exemplified elsewhere, I am not convinced that in conceiving them as eternal objects we are being faithful to their mode of existence in the universe. We may be converting a normal step—possibly a necessity—of conceptual thought into a necessity for metaphysics. We must remember that Whitehead's eternal objects are "ideal entities," and "in themselves not actual," but "such that they are exemplified in everything that is actual, according to some proportion of relevance" (RM III iii). We must not think of them as things which do something in the world; Whitehead's position is the sound one that eternal objects are abstract entities, and only actual entities act. Nevertheless his language, in all the books in which he writes about eternal objects, is half the time suggesting either too much or too little: that they are agents, or that they "express" the definiteness of actualities. Plainly, Whitehead's doctrine that eternal forms of definiteness are exemplified in actualities is his way of expressing the definiteness of actualities. He often claims that without such forms no rational description of actual things is possible. If this were true, it would of course not prove that forms of definiteness

17 See Part II of his premetaphysical book, PNK, and Note II to the second edition; also Chapter 6, Section VII, above.
are eternal in the universe, but only that if they are not, we must either write metaphysics as if they were or not write metaphysics. But I doubt that Whitehead’s assertion is altogether true.

If every form of definiteness is eternal, it must be because each always has some relevance to whatever is happening, no matter how far that happening, or the whole universe in that stage of its history, may be from realizing this form. That which is relevant to a process but not certain to be realized in it must be called a potential for it. Now the metaphysician has not only to note that there are actual things and that they have characters; his formulations must describe the general way in which, in arising, they get their characters. This means using some notion of potentiality. Those who refuse to do this are abstracting from ongoing time—looking at the universe (either in their approach to metaphysics or at some point in their construction) as if it were a completed whole, spread out before them. They can then announce that it consists of the totality of actual things and nothing else; that is “what there is.” But the universe we face is not like that. It has a tomorrow. Thus we need the notion that today contains potentialities (one or many) for tomorrow. The notion will take different forms, depending upon whether we think that new existence arises by efficient causation or by final causation or by both. In no case may we eliminate the notion of potentiality when we undertake to write the metaphysics of an ongoing universe.18

However, I do not think we need carry to this task the full sweep of the notion, as Whitehead did. He introduced his forms of definiteness as “pure potentials,” each to all eternity a potential for every process. It is the maintenance of this eternal potentiality which first required a concept of God in Whitehead’s system. Whatever we may conclude about

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this conception of the universe, we are bound to admit its magnificence. Of course his boundless realm of possibility staggers the imagination. I can’t quite believe in it; but I don’t find it an unintelligible notion. One alternative, which I do not think has been mentioned by any of Whitehead’s unconvinced admirers, is that we may just possibly be able to construct a metaphysical theory of potentiality which does not assume eternal objects, by exploiting (with alterations) another of his categories of existence: “propositions.” These are limited, “impure” potentials, “matters of fact in potential determination.” They are not timeless logical entities, but natural entities which come into being in the history of the universe.19 Perhaps we can think of such propositions as embodying all the effective potentiality that there is. Some of them may be for practical purposes almost eternal,20 but none completely so. The notion of a form of definiteness would appear in such a metaphysics as that of a predicate abstracted from a proposition; and the eternalization of such a form (a quality, relation, or pattern) would be a further abstraction which is performed by human thought and discussed in the philosophy of man, not in metaphysics.21 There

19 Whitehead is explicit on this; see, in 11 ii of Process and Reality, the third Category of Explanation; also the fifteenth, and the sixth Category of Existence. A reference to p. 42, above, may be helpful. For Whitehead’s general discussion of these entities one might turn first to Al XVI iii, then to PR II ix i and III iv i, ii. When Whitehead reminds us that “every idea once was new, and for that reason was then vague, ill-defined, with glorious possibilities or with hideous consequences” (ESP p. 203)—which is “the great secret of history”—his examples are the propositions suggested by the words, “that two and two make four,” “that Caesar should be murdered,” “that Caesar had been murdered.” Note also: “The unconscious entertainment of propositions [by an actual occasion] is a stage in the transition from the Reality of the initial phase of experience to the Appearance of the final phase” (Al XVI iii).

20 “One and one make two,” as discussed by Whitehead in PR II ix iv, is an example.

21 The distinction between these fields will be touched upon again in Chap. 14, Sect. V. In Whitehead’s system, propositions of course presuppose eternal objects. “A proposition is the abstract possibility of some specified nexus of actualities realizing some eternal object, which may
are surely problems here, e.g., the problem of the status to be given to mathematical propositions, and to what we are pleased to call the "metaphysical propositions" which we entertain in our stabs at characterizing the universe. We shan't know how difficult these problems are until someone works with this approach.22

Whitehead was always warning against turning inabilities either be simple, or may be a complex pattern of simpler objects" (AI loc. cit.). The proposition is "a manner of germaneness" of the eternal object(s) to the actualities. This is the clean way to introduce the Proposition, as a type of entity, into metaphysics. The line I suggest would be more complicated, but possibly more faithful to the way the creative advance of the world proceeds. "Proposition" would be undefined, and Whitehead's definition, just quoted, would first appear not in metaphysics but in the theory of human thought, subsequent to the introduction there of atemporal, or pseudo-eternal, objects.

Any revision of Whitehead's metaphysics in which the category of eternal objects was eliminated would affect everything in his system. No such scheme can be much more than half Whiteheadian.

22 Eternal objects are eliminated in a different way by Dr. Lucio Chiaraviglio, who substitutes special sets of becoming entities. One of the most interesting things yet done with the philosophy of organism is his formalization—and reformulation—of part of it. This particularly concerns Part IV, "The Theory of Extension," of Process and Reality. In "Strains" (Journal of Philosophy 58, September 14, 1961, 528-534), Dr. Chiaraviglio sketches a formalized theory of feelings and of extension in terms of set theory. He has kindly shown me two other papers. In his "Extension and Abstraction" (to be published in that collection of essays in honor of Charles Hartshorne mentioned in Chap. 1, n. 13, above), the construction is more detailed, and his reformulation of Whitehead's theory of the transmission of feelings is developed. In a later paper on "Eternal Objects" he uses a variant of the same approach to highlight the elimination of these entities.

The general metaphysical idea I have been emphasizing, potentiality, is omitted, and I suppose must be omitted, in Dr. Chiaraviglio's theory. So are other essential ideas of the philosophy of organism, such as subjective aim and subjective immediacy. I am uncertain about "organism" itself, and about the fate of the category of existence which Whitehead named "contrasts." (Contrasts are not relations, but modes of synthesis of entities in a prehension, and a multiple contrast is not an aggregate of dual contrasts.) It is to be hoped that Dr. Chiaraviglio will further expound and develop his theory of actuality. I have grave doubts about set theory as a language for metaphysics, but in any case his papers should be valuable to logicians interested in important new uses of set theory.
EXPERIENCE AND METAPHYSICS

of our imagination into limitations of the universe. Metaphysics has also to remember that in some ways our thought tends to go beyond what is effective in the process of the universe.

V

It is mainly because of its tendency to slight the difference between metaphysics and the philosophy of man that I do not like to use an approach to metaphysics which can quote Whitehead's authority but differs from the approach sketched in this chapter. It conceives of philosophy as Henry Sidgwick did, in a remark which Whitehead quoted with approval: "It is the primary aim of philosophy to unify completely, bring into clear coherence, all departments of rational thought, . . ." 23 A statement of this sort does not tell us what to look for in the various fields, or how to put what we find to metaphysical use. It is really only a beginning for a definition. Whitehead's way of completing it is suggested by his statement that it is one of the functions of philosophy "to harmonise, refashion, and justify divergent intuitions as to the nature of things" (SMW Preface). This brings the ordinary thinker up against the question, What intuitions are genuine? Suppose we substitute a weaker notion, e.g., that of the point of view which is characteristic of a field, e.g., of jurisprudence, or ethics, or physics. Unfortunately it is not true that all recognized "departments of rational thought" are co-ordinate in their possible metaphysical significance. Those which deal with human peculiarities must be somewhat discounted, and the notion of the universe brought in. Whitehead remarked that "The various human interests which suggest cosmologies, and also are influenced by them, are science, aesthetics, ethics, religion" (SMW Preface). If ethics be replaced by sociology,

23 From Henry Sidgwick: A Memoir, Appendix I (London and New York, 1906); quoted in SMW p. 197; see also SMW pp. 26, 122.
this is a fair list of the areas which Whitehead himself drew upon. Other thinkers with wide sympathies will prefer a different list. Under the modern departmentalization of knowledge, the whole “integration of diverse fields” approach to metaphysics is in constant danger of encouraging a mere reconciliation of the different human standpoints embodied in the current division of intellectual labor. Its value for philosophy lies chiefly in the reminder that philosophy is to be a constant and constructive critic of abstractions; its value for metaphysics, in the insistence that the physicists’ perspective of the universe around us must be confronted with other perspectives.

If you ask a scholar to define the metaphysical effort, he will take you first to Aristotle: “There is a science which investigates being as being and the attributes which belong to this in virtue of its own nature.” He may elucidate this as meaning inquiry into the nature of that which has “being” or “existence” in the primary and full sense of the term, to which all other being, such as (for Aristotle) the being of Platonic forms, refers. A conception of this sort is to be found also in Whitehead’s Adventures of Ideas: “It [philosophy] seeks those generalities which characterize the complete reality of fact, and apart from which any fact must sink into an abstraction.”24 Aristotle’s definition of metaphysics is not easy to understand. And probably the statement from Whitehead, which looks somewhat clearer to me, means little to readers who know nothing else in Whitehead. Most descriptions of the metaphysical enterprise, naturally enough, refer to something historical, like Aristotle’s difference from Plato, or to something other than existence (as Aristotle’s description25 referred to the different ways in which we say that things have being), or to our sense of contrast between “concrete existence” and “abstract existence,” or to the contrasting words, “appearance” and “reality” (whereby we are nudged into

24 AI ix iii. See Chap. 9, n. 41, above, and Leclerc, Whitehead’s Metaphysics, esp. pp. 17-34.
25 Metaphysica, Book Gamma, 1-2.
an epistemological approach to metaphysics). All these definitions, carefully used, are helpful. In this chapter I have tried to define metaphysics in a way which requires no such auxiliaries, and is understandable by anyone who has a living general wonder about existence. (You may call it the naïve approach to the subject; I have tried to show that fidelity to it requires more than naïveté.) It embodies, I hope, the spirit in which Whitehead wrote of philosophy in the opening sentences of "Nature and Life":

Philosophy is the product of wonder. The effort after the general characterization of the world around us is the romance of human thought.—MT p. 173.

and on his last page:

Philosophy begins in wonder. And, at the end, when philosophic thought has done its best, the wonder remains. There have been added, however, some grasp of the immensity of things, some purification of emotion by understanding.—MT p. 232.