CHAPTER ONE

Some Formal Criteria of Good Metaphysics

Hume and Kant are by many supposed to have shown that metaphysics is a vain enterprise, and Wittgenstein to have shown that it consists in misuse of words. My view is that Hume and Kant begged the question by assuming metaphysical positions of their own. On the basis of some bad metaphysics they refuted some other forms of bad metaphysics, and declared the vanity of all metaphysics. Although Wittgenstein was right that some metaphysical views misuse words, he did not even consider the kind of metaphysics that the last ten or twelve decades have seen emerging. The outstanding representative of this new metaphysics is Whitehead. However, Bergson and Lequier in France, Varisco in Italy, the physicist and psychologist Fechner in Germany, and Charles Peirce in my country, are also to be included in the general movement. Before I knew much of Whitehead or Peirce, I was already thinking in somewhat similar ways. In my doctoral dissertation I did not mention Peirce or Whitehead or use their technical terms or concepts. But two years later, as I began to read the writings of these two, I saw that they were the ones from whom I could learn most. Whitehead had the advantage of knowing relativity physics and early phases of quantum theory and knowing a more advanced formal logic than Peirce had arrived at. Also Whitehead had a more fortunate career and worked out his system more fully than Peirce. So I learned most from him, but much from Peirce.

I hold that we now have some good criteria for the distinction between good and bad metaphysics. One criterion was the proposition of Leibniz that in metaphysics the mistakes have been in denials, not in assertions. Metaphysical truth is all positive. By the definition given by Aristotle and Kant, metaphysics seeks "universal and necessary truths" about existence. Hence metaphysical falsity is necessary falsity, impossibility. What is to be denied in metaphysics is itself negative, and such a double denial is positive. "Accentuate the positive" is a sound maxim in metaphysics. All that metaphysical

assertions exclude is contradiction or logical absurdity. Metaphysical error *is* misuse of language, but to define metaphysics as such misuse is an illicitly persuasive, question-begging definition.

Another criterion is that metaphysical truth is "the unity of contraries." Hegel was right about this. For instance, possibility and actuality belong together, there can be no such thing as "pure actuality," *actus purus*; no such thing as the merely infinite or merely finite, merely absolute or merely relative, merely necessary or merely contingent, merely subjective or merely objective, merely universal or merely particular. Hegel saw this and Peirce and Whitehead saw it. It is a permanent acquisition in metaphysical thinking at its best. That metaphysics is wholly positive, affirming something and denying only absurdity or words badly used, means that both poles of ultimate contrarieties must be affirmed. Hegelians and Marxists seem to think this means logical contradiction. Not so. For S is P and S is not P is saved from contradiction provided P and not P are affirmed of different aspects of S.

A third criterion of good metaphysics is that, given an extreme position to which there is a contrary extreme, the truth is a mean between the extremes, or a higher synthesis of the two positions. Extreme monism is false and extreme pluralism is false, in both cases because of the extremism. The truth is a moderate monism, which is also a moderate pluralism.

Our three criteria really come to the same thing. One must not affirm one pole of an ultimate contrariety in such fashion that it excludes the contrary pole. Both poles must apply positively.

A fourth criterion is the Principle of Contrast. The function of a concept is to distinguish something from something else. To say everything is necessary and nothing is contingent is to deprive "necessary" of any distinctive meaning. The same with saying everything is contingent. If we set aside all the philosophers that have said one or other of these two empty affirmations, we see that not very many are left. The Stoics and Spinoza, with their necessitarianism, and William James and countless others with their contingentism, were all extremists. The Principle of Contrast is a fourth way of stating the Leibnizian-Hegelian principle.

In putting together these four criteria I have, so far as I know, done something never done before. But the philosophers who come closest to thinking in accordance with the principle are Peirce and Whitehead, in some ways one, in some ways the other. In my opinion neither Leibniz nor Hegel applied the criterion nearly so well as these two have done. I will now try to show this for Whitehead especially.

In most respects Whitehead avoids the contrary extremes: he is not an extreme monist or an extreme pluralist, an extreme subjectivist or extreme objectivist, an extreme partisan of necessity or of contingency, of the infinite or the finite. An extreme monist either denies that there is a plurality of actualities, or holds, as Royce did, that these actualities are completely

interdependent, any one implicating all the rest. The opposite extreme is seen in Hume's dictum, "what is distinguishable is separable," implicating nothing else. Whitehead's doctrine is that only relations to past actualities are intrinsic to a present actual entity. We depend on our childhood and our ancestors, not on our future states or our descendents. Leibniz held the opposite view about the future. Strict determinism also implies a symmetrical interdependence of events upon both predecessors and successors. It destroys time's arrow. Peirce is with Whitehead here in rejecting determinism, not only of human actions, but of all actions. There is, both held, some freedom, some creativity, on all levels of nature. Fechner, Varisco, and Bergson held similar views. But these men rejected Hume's extreme pluralism as true of either the past or future. For them, although the present does not depend upon future particulars, it does depend upon certain abstract features of the future as expressed by the laws of nature, which are statistical or probabilistic, not fully determining of particulars. The present is partly self-determined and partly, but only partly, determines the future.

Whitehead's "reformed subjectivism" does not deprive subjects of their objects; but it implies that in memory obviously, and in perception less obviously, what is on the objective side is previous subjectivity. Memory is experiencing of past experiences, not of mere matter; perception is also experiencing of past experiences. The difference is that, whereas in memory the past experiences are one's own human experiences, in perception they are experiences of a radically subhuman kind, most immediately in the microconstituents of our own bodies (cells or still smaller parts). In physical suffering, not alone do we suffer, the living members of our bodies also suffer. Our sensations are sympathetic participations in their feelings.

Note that this new subjectivism, or new idealism, is also a realism. The past experiences we experience really occurred or we could not now experience them. All that Whitehead denies of materialism or dualism is itself only a denial, the notion of *mere* dead, *insentient* matter, stuff, or process. Materialism as distinctive is essentially negative; what is positive in it Whitehead can accept. Certain negations—such as that tables and chairs, perhaps even trees, do not feel or sense—Whitehead can also accept, but they are not metaphysical negations; they do not entail an absolute zero of feeling in trees or chairs. The cells of the trees, the molecules of the chair, may feel. A trio of people together in an elevator, taken as a single entity, does not feel. What feels as one acts as one, the trio in the elevator does not act, and need not feel as one. So with the chair we sit on. It is a crowd of molecules. This point is Leibnizian, and since Leibniz all idealists who have read their Leibniz intelligently take the distinction between singular and aggregate for granted. Berkeley missed this point as, I think, did Hegel.

Hegel said, and to this Whitehead would agree: in the contrariety subjectobject, subject "overlaps." Whitehead, however, analyzes experience as "feeling of (others') feeling," that is, as essentially social in structure; and, as Leibniz did, he generalizes feeling sufficiently to take into account all the differences between an animal, a plant cell, a molecule or atom, all the *singular dynamic agents* in nature.³

I will mention briefly a number of other one-sided extremes that Whitehead avoids. He does not, as he accuses others of doing, focus almost exclusively on vision, which tends to give a static and seemingly value-neutral view of nature; rather he takes as the paradigm of direct perception a throb of bodily pain (or pleasure), which shows that something is happening in the body, and something not value-neutral. Similarly, as already indicated, he takes memory as direct awareness of at least the immediate past and interprets perception by analogy with memory rather than the reverse. Rightly, because in memory we know what we are talking about, namely, awareness of past experience, whereas in perception we may have the illusion of being aware only of mere inanimate, insentient matter. For modern physics there is no inanimate matter if that means inactive matter. The idea of inactive matter prevented the Greeks from arriving at a metaphysical, that is, a positive, view of what matter in general is. Common sense and many philosophers have yet to assimilate the discovery that all matter is (partly) self-moved, which by the Platonic principle means that it is not soulless or without feeling.

To some of his critics Whitehead is an extremist in his theory of the changing individual as a sequential society of actual entities, rather than a single actuality with changing properties. Here too, however, Whitehead has a moderate position. The extremes are quite definite. Hume, holding that between successive states of a substance or individual there is no identity at all, only at most similarity, proposed one extreme; Leibniz, holding that the "law of succession of states" in a "monad" is immanent in each state, making the individual completely identical with itself at all times, made explicit the other extreme. Thus, he thought, when Adam was created, all the experiences Adam would ever have were already in him as that monad. Indeed, because of the preestablished harmony, all the other monads were entailed. Either (Hume) no identity at all, or (Leibniz) complete, absolute identity. For Whitehead there is genuine but only partial identity. In each state, there is awareness, "prehension," of *preceding* states. After my first experience as a fetus or infant, I have always been a prehender of that early state in my mostly subconscious memory. So far Leibniz would agree, but not Hume. For Whitehead, later states are not prehended, no matter how subconsciously, as they are for Leibniz. Thus the asymmetry of time is lost by Leibniz but preserved by Whitehead. Hume misses this asymmetry twice over: he holds that, since they are distinguishable, the states are separable, mutually independent; yet, being a determinist in his causal theory, he takes past and future as equally implicated in the present. Here Hume was as wrong as possible. Only an Englishman, I am tempted to say, could be that far from metaphysical insight. Whitehead was an Englishman, but so untypical that not many of the English have yet discovered him.

In still another way Whitehead is moderate. For Leibniz there is no interaction between monads, they are logically independent of one another. For Whitehead a changing individual prehends in each of its states, not only preceding states in its own "personally ordered" series, but prehends also, though not in the same way and degree, past states of neighboring individuals in accordance with the principles of relativity physics. In Whitehead's characteristically generalized sense, 'neighbor' includes dynamically singular members of one's own body. Thus Whitehead avoids the artificiality of Leibniz's divinely preestablished harmony that enables us to have the illusion of acting upon our neighbors and being acted upon by them. Whitehead's individuals do have windows through which influences pass.

Aristotle admits no law of succession making it logically necessary that each of a person's states should follow from the identity of the person. On the contrary, things happen to persons by chance interactions with others. Thus, before they existed, Aristotle was (from our point of view) between Leibniz and Hume, and in the doctrinal middle with Whitehead. (No less than the logician Bochenski said so to me once.) What then separates Whitehead from Aristotelianism? The answer is clear: Aristotle supposes that the becoming of experience is continuous. A continuum has no least parts, and in any stretch of it, however short, there are an infinity of lesser parts. Aristotle regards this infinity of parts as potential not actual, and rightly so. Reality is not actually divided infinitely. But this means that the real parts, if any, of a finite portion are finite in number and hence not punctiform or instantaneous but finite in extent. Becoming then is "epochal" or quantized. Not only quantum physics but Zeno-type arguments, independent of physics, are probably partly responsible for Whitehead's view here. The logician von Wright has propounded a similar doctrine, as have the Buddhists for many centuries. The reason for regarding becoming as discontinuous is that becoming involves relations of succession, yet these relations lack terms if becoming is continuous. Points or instants yield no such terms, only least, yet finite, units of becoming can do so. The Buddhists, Whitehead, von Wright, and William James (somewhat unclearly), but not many others, have seen the point. Bergson did not; hence many of his worst troubles. Oddly enough, Peirce also did not. His Synechism, or continuity-ism, stood in the way. He inherited this from his mathematician father. It was Peirce's worst extremism. In some passages he suggests better things. But he had fallen in love with an extreme. Continuity was to be everything. Yet he said himself that continuity is the order of the conceivably possible. If it is the order also of the contingently actual, then it is the order of everything, violating the Principle of Contrast. On this point Whitehead and the Buddhists are the moderates, not the usual Western tradition of reality as a plurality of individuals, each simply identical with itself

and simply nonidentical with its neighbors. In Leibniz we have the uttermost caricature of this. For Whitehead the final units of reality are not you or I, but you-now, I-now, and even then our bodies are vast multiplicities of units rather than single units. With the last point Leibniz would agree—with a quibble or two.

Both the Buddhists and Whitehead see profound ethical and religious significance in the quantized view of becoming. For if my or your life is a single changing reality, then, it seems, self-interest must be a simple identity relation; I am I, you are you; therefore, of course I care about me and you care about you, but I may not care about you and you may not care about me. On the contrary, in no case is love a simple identity relation; always it involves partial nonidentity, as well as partial identity. I-now cares about me-yesterday or tomorrow, but I also care about you-yesterday or tomorrow. In the words of the greatest of the Pauls, we are "members one of another." Mahayana Buddhists believed this and so did Whitehead. So also did Peirce. But he lacked a metaphysics to express it adequately.

In another respect Whitehead too is an extremist; and in this respect Peirce is a moderate. Oddly, on this point continuity is again involved and here it is Peirce who is right. Whitehead never denies, and sometimes seems to concede, that possible qualities are continuous, whereas actual qualities are not. The continuum of color can have no definite least parts. Whitehead's own theory of extensive abstraction holds that points are not parts of space or instants of time but are only ways of conceiving the divisibility of spatiotemporal process. Why should this not apply to continuous color qualities? Yet Whitehead speaks of eternal objects as though they formed a definite plurality, and says "blue is an eternal object" (italics mine). How small a portion of the continuum between blue-green and purple is this single eternal object? When I put this question to Whitehead he said, "That's a very subtle argument. Perhaps I've missed something." Peirce says that what is eternal about quality is a continuum with no definite least parts. It is a "multitude beyond multitude." And he writes about an "evolution of the Platonic forms themselves," as definite actualities emerge out of the vague primordial continuum of possible qualities.4

That Whitehead is no moderate on this issue is clear when one considers the long tradition of nominalism according to which similarities are not to be resolved into partial identities. For one thing, the eternal objects or universals have their own similarities and differences. Similarity and difference are ultimate notions not to be compounded of something else. Whitehead's antinominalism is extreme. He too is human and makes mistakes.

Pure nominalism is, of course, an extreme. The point here is not, however, that similarity must be equated with partial identity in terms of eternal objects. The point is in the temporal structure of reality. Becoming is new actualities arising out of past actualities, which are then united into new syntheses as the present prehends its past. The past consists of definite entities, the future of more or less indefinite or general potentialities. "There are no occasions in the future," says Whitehead.⁵ Peirce says, "the past is the sum of accomplished facts," and the future consists, not of definite facts with a later date, but of more or less general, unparticularized tendencies, wouldbe's, might-be's, more or less probable may-be's.⁶ (Compare Popper's "propensities.") The nominalist can only conceive the future in the same terms as the past, as a sequence of particulars. There are no such things as future particulars. Nominalism, Peirce said, cannot understand futurity or possibility. He saw with exemplary clarity that actualization and particularization are one operation.

We come to the question of deity. The extreme idea that God is wholly infinite, absolute, independent, immutable, the unmoved mover of all, Whitehead definitely rejects. In principle, actuality is finite and definite; possibility is infinite and more or less indefinite. The primordial nature of God is indeed infinite, immutable, independent of all particular creatures; but it is only an abstraction from the fullness of the divine reality. The consequent nature of God is God as receiving particular content from the world as God prehends the world, that is, feels the feelings of the creatures. This is the divine love. God is, he says, "the fellow sufferer who understands." This statement follows logically from the requirements of the system, and is no mere concession to religious feeling.

The long reign of the worship of naked power is over, for some of us. I grew up in a religion of love, and in the belief (it was my father's) that God is love in eminent form. Is God ideally powerful? Yes, but in exactly the sense in which love in eminent or ideal form is also power in ideal form. The key is love, not power. We should not worship God because besides divine love there is also divine power. It is the love that explains the power, not vice versa. Whitehead puts it bluntly, "the power of God is the worship He inspires." As Whitehead knew, the Greeks had the idea long ago that the divine beauty or persuasiveness is the secret of supreme power. But the Greeks could not quite see that love is the most beautiful thing there can be. Why not? Because they had the idea that love, implying dependence on others and openness to change, was a weakness, and they supposed that only some deficiency gave any reason for change. The perfect, Plato argued, cannot change. Implied was the harmless-seeming but unjustifiable assumption that there could be such a thing as absolute perfection, taken to mean all possible positive values exhaustively actualized in one actuality. Leibniz saw that not all possibilities of good are mutually compatible, but he tried to show that this need not apply to God. Kant rightly rejected his argument here but failed to revise the idea of God to take this "incompossibility" into account. Whitehead was the first great thinker to take it clearly into account in thinking about God. The actualization of all possible good is impossible; hence the only thing for God to do is to go on endlessly actualizing more good. Since possible value is inexhaustible by any actualization, becoming, not being, is final. Even God changes, but only by increase. God does not become more righteous, loving, or holy but does acquire additional creatures to love and appreciate. Ethical good, righteousness, is abstract compared to aesthetic good, beauty, or happiness. The latter has no possible absolute maximum, in spite of Plato.

Another extreme that Whitehead avoids is the one-sided emphasis on moral goodness compared to aesthetic values, the enjoyment of beauty—especially the beauty of friendship and love. Ethics comes in as we take future as well as present values into account, and values for others as well as for ourselves. In Whitehead there is nothing of the idea that we should live to receive rewards or escape punishments after death. There is little of Dante in this religion. So much the better, say some of us. Yet Whitehead agrees with Dante that it is love that moves the world.

For Whitehead the final service God does for us is also the final service we do for God, that our ephemeral, mortal lives on earth shall have abiding significance as ideally prehended in the consequent nature of God. In this philosophy the aim of life is quite literally to enhance the glory of God, meaning the beauty of the creation as enjoyed by God. If this is extremism, it is a very old one. The ancient Jews had it and so did some of the Hindus. I think it is the most moderate view that makes much sense out of our human condition—or of any nondivine being's, actual or possible.

Whitehead's belief in God is based not only on the idea that without God our mortal lives could have no value from a long-run point of view, but on several other difficulties with a nontheistic view of reality.

One such difficulty is the following. Since there is freedom in every creature, the orderliness that any going world requires is an inexplicable mystery unless the freedom of the creatures is inspired by a cosmically influential ordering power. Either the creatures conspire to maintain a minimal order, or they are all ordered by the same universal Influence. Since the order is contingent, there being other possible cosmic schemes, it is as though a cosmic decision had been made. Neoclassical theism says there can be a cosmos of free creatures only because all the lesser freedoms are influenced by the supreme freedom, whose decisions determine the basic laws that are the rules for the game of life. The rules obtain not for eternity but for some cosmic epoch. If other laws are possible, with their own aesthetic possibilities, they too should be tried in good time. Only a sublime imagination could have thought up this idea of an infinite succession of cosmic epochs with God the architect, not of the detailed structure of the epochs but of the basic styles, the laws that make them possible. Whitehead implies a few other reasons for belief, but these two are the obvious ones. I think myself there are half a dozen that fit this type of philosophy. If any other philosopher since Plato has made so magnificent a contribution to philosophical theism as Whitehead, I do not know his name.

That "subject overlaps object" illustrates a basic asymmetry or directional order. In formal logic one-way relations are the principles and two-way or symmetrical relations are special cases, as equivalence (or the biconditional) is of simple conditioning. Again, the contingent includes the necessary, not vice versa; in every basic contrariety there is such one-way inclusion. I seem to be the first to make a list of these asymmetrically inclusive polarities (under the label of "ultimate contrasts," in Chapter VI of my book *Creative Synthesis*). I claim to do there what Hegel should have done but failed with any clarity to do. And the key is formal logic, not his pseudo-logic, as in the *Logik*.

Whitehead has a "dipolar" conception of deity, as compared to the main one-sided tradition, yet in treating God as a single actuality rather than the eminent form of personally ordered *society* of actualities I think he introduces difficulties that can be mitigated by preferring the latter analogy, emphasizing of course that the "supreme exemplification" of the categories is bound to be mysterious for we who are nonsupreme examples. I also view as a mistake Whitehead's scornful rejection of the Platonic analogy of a divine World Soul, of which all else is the cosmic body. The justification given for this rejection I find invalid. If the human mind-body relation is not a clue to the way mind relates to inferior levels of reality, what is? Even Hume made this point. As Consequent, God analogically has a body, and Whitehead's categories work better if applied to God in that way. I argue elsewhere that Merleau-Ponty's generalized idea of "flesh" supports the position. The property of the main of the ma