

## *Introduction*

# The Nature and Vindication of Metaphysics

Time you old gypsy-man,  
Will you not stay  
Put up your caravan,  
Just for one day.  
— Ralph Hodgson

How many have not felt sympathy with the poet's desire to arrest time, the old gypsy? But the very question and the appeal to tarry just for one day entails a contradiction. If time could stop for a day, that would mean that nothing would happen for twenty-four hours; yet the time of cessation is still assumed to have been measured, so that time would not have been stayed. Without time, contemporary physicists assure us, there would be no space; without either, there would be no energy and no motion; without energy no matter, and without matter no physical world. Even if there could be a physical world without time or motion, there would be no life in it; for life is a metabolic process, the self-maintenance of a dynamic system, a perpetual renewal and persistent regeneration of organic relationships through time, the cessation of which is death. So without time there could be no world such as we know it.

Nevertheless, the very nature of the world, in its physical and biological aspects, compels us to postulate something other than continuous change, in contrast to which alone that change is possible, something other than time, on which time itself is dependent, or of which it is a necessary aspect, yet which is not and cannot be in process. Further, as the paradox exhibited above reveals, process and time are distinct, so that when the first ceases the second does not, though they

seem inseparable in our conceiving. How are they related?

This puzzling question, difficult as it is, is but the first of many into which reflection on the nature of time leads. It is clearly a metaphysical question, as are those that subsequently arise: for example, what is it about time that creates in our minds the illusion (for, as we shall presently see, it is an illusion) of motion, or flow, where none in fact occurs?

The central metaphysical problem seems to me to be how we identify the present moment; and if a solution to it could be found, it might well be the key to solving all the rest. But I have to confess that I am unable to solve it. And if the relation of time to process, with which it is so commonly confused, remains enigmatical, that of process and time to eternity is a further question to which, perhaps, at least some partial answer may be possible. The one I shall suggest depends on the logical structure of a whole, such as we are compelled by the findings of contemporary science (especially physics) to believe the world to be. This logical structure I have examined in some detail in *Formal, Transcendental, and Dialectical Thinking*. It demands, as correlatively necessary, both unity and diversity—the latter inevitably involving process—in ways to be explained in the body of this essay.

We shall confront these questions in the next chapter; but I have deemed it prudent first to consider the legitimacy of raising metaphysical questions at all, whether about time or any other matter.

### Prevalent Repudiation of Metaphysics

Nowadays metaphysics is frowned upon by a large body of philosophers and, in some quarters, has become almost a term of abuse. Before presenting to the public a book the contents of which are plainly and unashamedly metaphysical, therefore, it may well be advisable to make some provision against the possibility that the reader may take Hume's advice summarily to consign it to the flames, as containing nothing but sophistry and illusion. Accordingly, the arguments which have been advanced against the practice of metaphysics must be faced before embarking upon the main theme.

At the recent XVIIth World Congress of Philosophy, I was privileged to hear two distinguished speakers, both of whom, in quick succession, declared that metaphysics was impossible. They did not say by what reasons they were persuaded to this conclusion, but I presume it

was the prevalent belief that metaphysics is the philosophical quest for “foundations,” and that it is inevitably a futile quest—like that of Locke’s Indian who believed that the earth was supported on the back of a giant elephant and the elephant on the shell of an outsize tortoise, but could not reveal any ground on which the tortoise might stand. If every “foundation” discoverable commits us to the search for another, more fundamental still, we are swept into an infinite regress without prospect of rest or fulfillment.

Some such anxiety seems to lie behind the polemics of Richard Rorty’s recent book, *Philosophy and the Mirror of Nature*. His repudiation of philosophy seems clearly to be simply the natural sceptical and relativistic fruit—probably the logically final product—of analytic philosophy. This is apparent from his own admission that it is through the vocabulary of that philosophy and its treatment of philosophical issues that he has come to the position (or lack of one) that he presents in his book. He professes to be pressing further the aim of undermining our confidence in philosophy as establishing “foundations” for knowledge and culture. Presumably, if he is to succeed, we must accept his judgements concerning philosophy and its history as true and well founded; but where are we to get assurance either of truth or foundation, if not from some metaphysical theory of truth and knowledge presupposed by Rorty’s explicit claims? This dilemma is sometimes smoothed over by the allegation that Rorty does not expect us to take him (or any other philosopher) seriously; and if we do not, of course, there is no need for us to heed his strictures against metaphysics.

May it not be that the difficulty with “foundations” is due to the imagery entertained by both metaphysician and critic alike, itself suggested by a repressed metaphysic? If we envisage the world in crudely material form, we are apt to require substantial support for its contents. But such imagery is crude, and, like so many of the doctrines criticized by Rorty, long outdated and abandoned by reputable philosophers. Perhaps there may be more coherent conceptions that do not succumb to his critique.

Similarly, we tend to feel that theories subject and vulnerable to adverse criticism should be reinforced by the support of principles more basic and secure than they themselves establish. This is the pursuit of certainty that has enthralled philosophers at least since Descartes (if we overlook Plato and his successors). It is a pursuit which more recent philosophers have come to regard as futile and frustrating, besides being

altogether unnecessary, because, they say, no knowledge ever is or need be certain, as long as it is sufficiently well supported by good evidence and sound reasons. But then, again, we must wonder how we are to assess the evidence and the soundness of the reasoning.

Contentions of this sort seldom confine “good reasons” to purely formal arguments, and, so far as they do, they overlook (or deny) the metaphysical presuppositions of the very formal logic they employ, if they are ever aware of the suggestion that there are any such. I have tried to demonstrate in some detail elsewhere<sup>1</sup> that formal logic does involve metaphysical presuppositions, and it would be tedious to repeat that argument here; but I have claimed that they include the empiricist presumption that knowledge is originally acquired through immediate sense-perception, which is the source of the belief that uninterpreted observation is sufficient to constitute “good evidence.” So that too tacitly presupposes a metaphysic, and one that I have on numerous occasions striven to expose as incoherent, self-refuting, and false.<sup>2</sup> Moreover, those who declare that all knowledge (apart from tautologies revered as logical truths) is merely probable, ignore the fact that probability, which they admit is a matter of degree, is an approximation to truth, the necessity of which, as certainty, they deny, while, at the same time, they insist that if anything is to rank as knowledge at all, it must be absolutely warranted. It would seem, then, that some definition of truth is indispensable to any coherent thinking, and that the search for a criterion is not altogether uncalled for.

Empiricist presuppositions also account for the fact that critics of metaphysics seldom adopt an attitude of scepticism towards the natural sciences. These, they would claim, have a firm basis in observational evidence; and even though some of them are acclaimed philosophers of science, their convictions seem to remain unshaken despite the widespread acknowledgment, since the writings of N.R. Hanson and Thomas Kuhn, that all observation is theory-laden, which plays havoc with the primary assumption of philosophical Empiricism. Moreover, the objectivity of science itself has come under attack from a variety of sources. Karl Popper has classified scientific hypotheses as mere conjectures and declared verifiability to be logically impossible;<sup>3</sup> Kuhn has pronounced all scientific theories to be esoteric to a closed community of investigators working under the aegis of a “paradigm” of their own making, their theories being incommensurable with any other standard, or any with the least claim to objectivity;<sup>4</sup> Feyerabend has hailed science

as a form of imaginative art and welcomed a profusion of hypotheses without any pretence of factual support as a sign of intellectual fruitfulness.<sup>5</sup> From a different quarter, Husserl has maintained that the sciences are secondarily derived from a more radical form of consciousness inalienably subjective,<sup>6</sup> and has been followed by Heidegger with a kindred argument and one not dissimilar from that of Kuhn.<sup>7</sup> So if metaphysics is suspect, empirical science, according to these estimates, is in no better shape.

For years I have been under the impression that all the stock arguments against metaphysics, from Kant to Wittgenstein, had long since been exposed as self-refuting; and that so far from being impossible, metaphysics is indispensable and unavoidable, always inescapably presupposed in whatever philosophical position is adopted—even one that repudiates it—as, in mid-century, the followers of the Vienna Circle, having first repudiated metaphysics as devoid of sense, later discovered for themselves.

But, having made the discovery, instead of acting upon it by examining the implied metaphysic of their own position (along with that of others) and correcting its errors in the endeavor to make it coherent and self-sustaining, they concluded that metaphysics and its progeny were all the consequences of the misuse and misapplication of ordinary language, which could only be remedied by a therapeutic course in a sort of linguistic psychoanalysis to make the speaker (the metaphysician) aware of his mislocutions. They saw that Wittgenstein's search for an ideal logical language which would "show forth the form of the fact" was inspired by a belief in logical atomism, and that that was metaphysical. So they concluded that there was no such language, and that, of the possible alternative forms of symbolization, none could be in this way ideal. One could, therefore, only examine the "logical grammar" of one's linguistic habits in order to purge them of the confusions which occasion philosophical puzzlement. It did not occur to these therapists that their theory and practice itself made tacit metaphysical presuppositions about the nature and function of language, its relation to the actual world and our experience of it, and about what these (the world and our experience) were like.

Nevertheless, the erstwhile "queen of the sciences" seems in this century to have become a mere historical relic of no scientific validity and of little philosophical interest, except (to change the metaphor) as a whipping boy. Attacks made upon it, for different reasons and from

different angles, by Positivists, Logical Empiricists, Historicists, Phenomenologists, and Existentialists, seem to have relegated metaphysics to the limbo of abandoned superstitions. Such contempt of the discipline—although more recently it may have been somewhat mollified—has affected the whole tradition of philosophizing, so that in these times of dominant technology, it appears largely to have been superseded by symbolic logic and computer science.

But attacks on metaphysics are not peculiar to the present day. They have been launched throughout the history of speculative thinking. If we overlook those of Epicurus and Lucretius as directed more against superstition than metaphysics, we cannot ignore those made by Hume and Kant, by Nietzsche and Marx, long before Carnap or Wittgenstein entered the fray. Yet, somehow, or in some form, metaphysics has always survived, and its survival is to be expected as inevitable because it is the product, indeed the most characteristic and essential expression, of that self-reflective capacity which is definitive of human thinking and without which there could be no science or technology. In fact, the very attacks that have been made on metaphysics are the outcome of the same self-reflection which gives rise to metaphysics, and they are all made, if not (like Kant's) in the cause of metaphysics itself, yet in the interests of some, even if unacknowledged, metaphysic tacitly presupposed. Every attack presupposes a metaphysic of its own. For this reason metaphysics is ineradicable from any critical and reflective thinking.

The most strident denunciation of metaphysics in this century was that of the Logical Positivists led by Rudolph Carnap and the early Wittgenstein. Their weapon was the Verification Principle, and, while their critique initially had devastating effects and far-reaching consequences, in many ways still very potent, it soon became apparent, even to the exponents of the doctrine themselves, that the weapon was double-edged. The Verification Principle was, by its own criterion, unverifiable, and stood revealed as a metaphysical principle. Moreover, it was derivative from an acknowledged Empiricism which gave rise to a metaphysical theory explicitly stated by Bertrand Russell, as well as by Wittgenstein, in his *Tractatus Logico-Philosophicus*: that of logical and ontological atomism. So the later Wittgenstein, while professedly abandoning atomism, modified his central position; and some of his followers became more tolerant of metaphysics, both "descriptive" and "revisionary," as conceded by Strawson, tied though it was to linguistic analysis (the metaphysical grounds for which were not investigated).

The Marxist attack was not so much on metaphysics as such as upon the alleged "idealism" of Hegel and his predecessors; for Marx and his followers openly espoused historical and dialectical materialism,<sup>8</sup> which, though they claimed for it scientific status, was in fact a metaphysic, for which empirical evidence was neither sought nor available, and the internal inconsistencies of which remained unnoticed.

In the early decades of the twentieth century Constantin Brunner castigated "metaphysics" as a form of superstition.<sup>9</sup> But the kind of metaphysics he opposed was rather pseudometaphysics than genuine philosophical thinking, the older metaphysic which Kant, Fichte and Hegel rejected as "dogmatism." Brunner criticized Kant's notion of the *Ding-an-sich* as metaphysical and is here in agreement with Hegel; but he is himself an idealist of a sort, not unlike F. H. Bradley, and as much a metaphysical thinker as Spinoza, whom he admired and closely followed, basing his own system on Spinoza's (although he does not always interpret Spinoza correctly).

The followers of Husserl have defended him and themselves against positivist attacks by claiming that Phenomenology is neutral to all metaphysical disputes, and while it seeks to provide a new route and new access to the traditional problems, is not primarily concerned (if at all) with the ultimate nature of reality or of the consciousness the phenomenal disclosure of which it describes. Husserl's first aim was to establish philosophy on firm ground and give it a rigorous method.<sup>10</sup> In consequence, metaphysics might come to be defined afresh and to be seen in a new light. This is a much gentler renunciation than that of the Positivists, but the claim to neutrality can hardly be sustained. The reader of Husserl's *Cartesian Meditations* is left in little doubt of the metaphysical position from which his proposed methods flow. Its central and fundamental tenet is the indubitable existence and originary activity of the transcendental subject, whose constitutive performance is indispensable to the nature of its intentional objects.

Subsequent thinkers have made strenuous and heroic efforts to repudiate and evade this metaphysical underpinning of Phenomenology. Heidegger (Husserl's sometime pupil) strove to replace it with the direct existential experience of "being-in-the-world"; but that, we shall see in a later chapter, did not absolve him from the implication of a subject, transcendental at least in the same way as Kant's "unity of apperception," despite his failure to acknowledge it. Much the same sort

of move was made by Merleau-Ponty, who sought to replace the transcendental *ego* by the organizing effects upon perception of the sensory-motor skills of the "lived body." The apparent success of this strategem, however, depends upon an ambiguity in the use of the word "lived," which, when detected and clarified, should reinstate the conscious subject with similar implications of transcendental idealism to those of Husserl (see Chap. V, below).

Related to Phenomenology, and in part derived from it, there is today an influential school of Hermeneutics, whose approach, motivated similarly by an aversion to Husserl's transcendental "*Sinngebung*," is also antimetaphysical. Its contribution to epistemology, like that of Phenomenology, is nevertheless important and often profound. It is antimetaphysical so far as it rejects the conception of any ultimate or independent reality that is objective to knowledge and the existence of which can be established *a priori*. Hermeneutics is in essence historicist in its attitude, and is a reaction against the Rankian notion that "*the facts*" can be ascertained as they were (or are) in themselves—"as they really happened"—free from all interpretive bias or historically conditioned prejudice. Heidegger castigated such alleged "objectivity" as (on the contrary) an eminent example of subjectivism, just as Husserl had criticized the contemporary scientific outlook as "objectivation" through imposition of artificial restrictions on direct experience. If no such "objective" reality can be isolated and identified, it follows that our views of the world are all interpretations, and philosophy becomes analogous to, and in large measure actually is, the interpretation of written texts, in which the author's meaning has to be recovered by the application of a methodological technique—a hermeneutic—in which due weight must be given to the interpreter's own thinking, conditioned as it is by cultural and historical circumstances and customary linguistic usage.

This approach obviously owes much to Nietzsche's insistence on "exegesis" as a condition of all knowledge and even of all existence, with consequently ineliminable perspective bias. "There is no set of facts"; he writes, "everything is fluid, evasive, receding; our opinions are the most enduring things of all." But just as this view of Nietzsche's implies a metaphysical theory of the nature of man and of human cognition (not to mention that his other attacks on metaphysics consort ill with his addiction to the belief in eternal recurrence), even if he does not work out these metaphysical ideas systematically, so Hermeneutics rests on metaphysical presumptions about the reality and nature of history as a



process, as well as others about the nature of human society, human intercourse, human cognition and reflection, and their relation to their objects. All this, again, implies some conception of the relation of man to nature, as the background and underpinning of society and of the hermeneutical activity itself.

The problem of objectivity is central and crucial to any theory whatsoever, be it hermeneutical or other; for unless some satisfactory and self-sustaining criterion of truth can be established, there can be no such thing as knowledge. Hermeneutics itself requires a standard of sound interpretation, which if it were radically unstable would be constantly dissolving, so as to make all interpretation invalid and all hermeneutics futile. But the establishment of a standard of objectivity is impossible if it does not bear some relation to the real world as well as to the nature of the knowing mind, of either of which any conception will of necessity be metaphysical.

A still more radical revolt against transcendentalism has appeared in the endeavor of Structuralism to dispense with not only the knowing subject but even with meaning itself, claiming (in the words of Hubert Dreyfus and Paul Rabinow) to find "objective laws which govern all human activity."<sup>11</sup> To whom they would be "objective" once the subject had been abolished is difficult to imagine, and without meaning it is not clear how they would operate, or how the structuralist would discover them. Of course, "meaning" here may be intended to refer only to the understanding of human beings whose activity is said to be governed by objective laws. They need not be, and are seldom if ever, aware of such laws—at least, until they begin, as structuralist sociologists, to reflect upon their own activity. Yet if they are to do that, they must once again be viewed as subjects cognizant of meanings, a status they may not deny to other human beings, whose social conduct they theorize upon, any more than they can exempt themselves from the restrictions they place upon others (which would make the pursuit of their discipline impossible). Nor, if we are dealing with human action, can objective laws be wholly indifferent to human awareness of the environment and circumstances in which, as persons, they act; and that again requires the presumption that every agent is a subject of consciousness.

Simply as a holistic approach to the social sciences, Structuralism has much to recommend it; and that is how it is described and defended by Jean Piaget in his book of that name.<sup>12</sup> But, as such, it has definite metaphysical implications, not unlike those unfolded in my

ensuing discussion of time. Merely as an attempt to exclude the postulation of a subject of experience, and of an interpretable meaning inspiring human behavior, however, it is (as we shall discover more fully anon) a self-defeating form of positivism, that in the last resort is both incoherent and false.

Michel Foucault, strongly influenced by Structuralism although he disavows allegiance to its doctrines, has repudiated interpretation altogether, refusing to seek for what lies below the surface of the spoken and written word. His so-called archeology of knowledge is starkly antimetaphysical, and in fact is not strictly philosophical at all. At most, it seems to be the suggestion of a method, not altogether new, for historiography, eschewing philosophical reflection in any recognizable form. But once one allows oneself to reflect upon the presuppositions of its requirements (e.g., the account Foucault himself gives of statement and discourse), a more penetrating philosophy of history becomes inescapable, disclosing metaphysical implications. To these I shall return in the proper place.<sup>13</sup> Here I must make clearer the position that I myself wish to espouse.

### What is Metaphysics?

So far I have been taking for granted that everybody knows what metaphysics is and does, and I must now make some attempt to justify this assumption. It would be tedious and, for the purpose of this introduction, it would hardly be appropriate for me to expatiate upon the meaning and use by Aristotle of the phrase, *meta ta phusika*, or to thread my way through the labyrinths of the traditional *metaphysica generalis* and *metaphysica specialis*. It was against the tortuous reasonings and the obscure abstractions of these disciplines that the protest of Hume was levelled and the critiques of Kant, Fichte, and Hegel were directed. What I shall try to do is to grasp afresh and to define the nature and function of metaphysical thinking, and to indicate what I think its appropriate role should be at the present time, in the hope that this may give some excuse for what I have to offer in succeeding chapters and some justification of the manner in which I have treated my subject.

As I hinted earlier, self-reflective and self-determining thought is the predominant characteristic of humanity, cursed though we may also be with other more irrational traits consequent upon the finite conditions of human existence. For without self-consciousness in some degree, and

some capacity for self-reflection, we could not even recognize our own shortcomings and finitude, nor could anyone properly be described as more than animal. Even when this restriction seems to give rise to moral and ethical problems, as it does in some circumstances, we have to recognize that unless it were appropriate those very ethical perplexities would not arise.

Self-awareness and reflection go hand in hand with an insistent demand for self-knowledge, for understanding of ourselves and our place in the world; and that demand carries with it the inevitable need to unify and systematize our experience of that world and of ourselves. As Kant unerringly taught us, the center and source of this systematization, or (as he called it) “synthesis,” is the undeniable and inescapable unity of the apperceptive subject, always aware of itself as “I” and of its objects as “mine.” Accordingly, the experience of each one of us, necessarily related as it is to a single subject, is a unified experience of interrelated and interconnected elements constituting an organized whole. The demand, in consequence, is to grasp—to conceive (*begreifen*)—all of it as a whole, to understand each of its elements and phases as exemplifying the principle of order which unifies the whole. This is what we mean (or should mean) by explanation; and it is in response to this demand that we seek to systematize our experience in the sciences and in philosophy, so as to see it, in the final outcome, as a single systematic unity. That is the task of metaphysics.

The sciences are steps along the way, and the various branches of philosophy are specific and overlapping phases of the self-exposition of this unity. Thus it has been well said that all philosophy is, or participates in, metaphysics; and every branch of philosophy involves every other, each being interdependent with the rest. Metaphysics is the comprehension of the whole and the exposition of the principle of structure by which it is pervaded.

It is this endeavor to comprehend the world of our experience as a whole and to grasp the universal and fundamental principle of its unity that lies behind Aristotle’s definition of metaphysics as the science of Being *qua* Being; and, similarly, it is this to which Whitehead refers as “the endeavor to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted.”<sup>14</sup> The generality on which Whitehead insists, and the ultimacy implicit in Aristotle’s definition, reflect the universality of the principle of organization in terms of which the total system of our

experience and of the world which it discloses become intelligible; and the conception and exposition of this principle is the aim of metaphysics. Let us consider a little more closely what is involved in such a concept.

The ineluctable unity of self-consciousness guarantees that experience will be a systematic whole, which it could not be unless, as Kant maintained, it were a system of related and connected elements (*Vorstellungen*), without which no such thing as knowledge would ever arise.<sup>15</sup> The principle of unity by which a system is integrated determines both the nature and the interrelations of all the particular elements and phases by which it is constituted. In both of these it will, in consequence, be immanent, and they will exemplify it in varying degrees. No such system is possible without diversified and interrelated contents, for no merely blank unity is a system of any kind. Now, interrelated terms, as I have argued elsewhere, always, of necessity, overlap, even when *prima facie* they appear to be separated; because, to be related at all, they must be connected by a continuous gradation of some common matrix or quality—e.g., different colors in the color series, tones in the sonic scale, relatives in degree of consanguinity, and likewise, whatever examples one chooses. All terms in relation, therefore, are and must be embedded in a qualitative or quantitative continuum (or both) of gradually diverging phases, are necessarily interdependent, both for their place in the continuum and for their distinctive natures, upon their mutual relations. All this is because of the immanence in them of the universal principle of order governing the system to which they belong.

Thus every portion or limited element in the system will imply the whole, and the development of this implication will involve the successive explication of the interrelations between the part and its determinants within the system, until the entire structure has been serially unfolded, the principle of its organization being thereby progressively revealed. As all experience is necessarily unified in its diversity (Kant would have said, “in synthetic unity”), each phase of this progressive revelation is itself a whole of sorts; but according to its degree of abstraction, the degree of its systematic integration will vary. Knowledge, in consequence, develops itself through successive stages, in each of which it is a whole, progressively increasing in degree of systematic unity, beginning with the perceptual world of “the natural attitude” (or common sense), continuing through the sciences—the exact, the natural, and the social sciences—and culminating in

philosophy, which is a body of overlapping and intermeshing reflection upon our total experience, combining to form, and issue as, the body of metaphysical speculation.

What we have before us is, then, a series of wholes or systems of knowledge progressively differing in degree of reflective self-awareness, ranging from the crassly empirical to the comprehensively speculative, and culminating in metaphysics; so that Plato's descriptions of the dialectician are true of the metaphysician, that he "sees all things together" and becomes "a spectator of all time and all eternity."<sup>16</sup> As such a conspectus, metaphysics remains, or is reinstated as, the queen of the sciences.

### The Restoration of Metaphysics

This restoration is taking place only gradually at the present time, but the signs of its growing influence are clearly discernible. A recent interpretation of Husserl by André de Muralt recasts the structure of Phenomenology as a dialectical system in a series of endeavors, increasing in clarity, tending towards the complete and perfect cognition of the intended object. The two poles of this process are the empirical, or "factual," and the ideal, the *eidōs*. The series issues, for de Muralt, in a science very similar to what I have here described as metaphysics, though he regards it as unattainable in its full development and approachable only asymptotically.<sup>17</sup>

Heidegger urges the metaphysician to return to the origin of speculative thinking and to appreciate existentially the problem of the Presocratics with respect to Being—the relation to it of beings and of the *Dasein* of human awareness. In all this his precise meaning remains obscure, but what he writes strongly suggests the pervasiveness of a universal principle (Being), which manifests itself in all existences (*Seiendes*), and reveals itself as undeniably present in human self-consciousness.<sup>18</sup> This universal essence is the true and proper object of metaphysics.

Whitehead found such a principle in the "Primordial Nature of God," which he saw as universally ingredient into the actual entities of the world, perpetually reconstituting in themselves a microcosm of the universe out of the perished "superjects" of their predecessors, in a continuously creative process. The description of this process, in accordance with general definitive categories—that is, "a coherent,

logical, necessary system of general ideas”—constitutes for him the science of metaphysics. That Whitehead’s theory answers to the account I have given of the subject is not difficult to show. The Primordial Nature of God is the ordering principle of the whole; the creative process of concrescence issues as a complex series of actual entities and nexūs in increasing degree of integration, which ultimately culminate as the Consequent Nature of God—the total system displaying the universal principle of structure in complete elaboration. The growing body of process philosophy at the present time, which develops these ideas, gives further evidence of the resurgence of metaphysics.

Still more recently, developments in Hermeneutics contribute further to this revival of metaphysics, even in spite of themselves. Gadamer’s plea for the recognition of a dialectical interplay between present and past in the process of interpretation, and of the necessary prevalence of the encompassing “horizon” of interrelated ideas and “prejudices” (in part prepredicative and unthematized), in terms of which we understand,<sup>19</sup> leads directly to the presupposition of a comprehensive totality of experience embracing both past and present, the interpretation of which requires the grasp of its principle (or principles) of structure, so that they transpire as the rules or canons of hermeneutic. The science of Hermeneutics then corresponds to what I identify as metaphysics.

One of the most interesting, and perhaps the most neglected accounts of metaphysics produced during this century is that given by R. G. Collingwood. In his *Essay on Metaphysics*<sup>20</sup> he maintains that the aim of the discipline is to discover and to trace the development of the absolute presuppositions of science. A presupposition he defines as a postulate, or belief, which gives rise to questions. If it is itself the answer to a prior question, he calls it a relative presupposition; but if there is no prior question which it answers, and the questions to which science seeks answers arise out of it, it is an absolute presupposition. Those ingrained prejudices which, according to Gadamer, are engendered by our cultural environment and tradition, and which condition and determine our methods of interpretation seem at least to be analogous to Collingwood’s absolute presuppositions.

In Collingwood’s view, it is the task of metaphysics to isolate, by a method of logical analysis, the absolute presuppositions of the sciences in any given period. If it is the science of a former day, the investigation will obviously be historical; but even the analysis of present-day scientific

theories requires methods of the same kind, for the study of the present and the study of the immediate past coincide. The task set is to discover what presuppositions have actually prompted scientific questions in the minds of practising scientists and ultimately lie behind the course of their investigations.

The absolute presuppositions made by the sciences of any one historical period, Collingwood holds, form a "constellation" of theses, which ought to be, but are not always, consumpionable. If they are not, they give rise to "strains," to remove which the constellation must be modified, so that constellations change and develop in the course of time. The metaphysician's task, in consequence, is not simply to reveal the presuppositions of science but also, and more significantly, to trace the process, and presumably, to detect the reasons, for their changes.<sup>21</sup>

In his earlier *Essay on Philosophical Method*,<sup>22</sup> Collingwood had very cogently argued that an historical process of this kind constitutes a scale of forms, in which each philosophical (or metaphysical) theory exemplifies, in a specific degree of adequacy, a generic essence, or universal. Each theory is a specific form of the universal, and each as superseding its predecessor and correcting its errors stands in opposition to it. Every metaphysical theory should then be a more or less adequate exemplification of a generic essence (or universal) presupposed by, and expressing itself in, every science; and the history of metaphysics should be a series of progressively more adequate expressions (in some sense of "adequate" yet to be defined) of the universal principle immanent in all experience.

Thus we reach an account of metaphysics similar to that which I have already outlined, requiring only an explanation of the sense in which successive metaphysical doctrines become more adequate. That to which they become more adequate is, of course, the universal principle of order and unification, which in origin is the unity of the self-conscious *ego* (the unity of the universal whole immanent in human cognition). Hence, as we have already found, the scale is one of increasing self-awareness on the one hand, and of more coherent integral unity on the other. Degree of adequacy, accordingly, turns out to be the degree of systematic unification required by what Whitehead called "a coherent, logical, necessary system of ideas," as well as the degree of explicit self-awareness. This is the criterion of advance in all knowledge at every stage, whether explicitly it takes the form of "agreement with experience" (i.e., between theory and fact), or, as for the Pragmatist, between theory

and practice. In every case, what is sought is a coherent experience eliminating conflict and contradiction.

Contradiction and conflict is the stimulus to advance, through the demand for its removal. It is this stimulus that prompts the advance from common sense to science. Common experience is notoriously flawed by contradictions—if only the ubiquitous paradoxes, exploited by Zeno, in the phenomena of movement and change. These exercised the minds of the Ancient philosophers, along with the contradictory appearances in the motion of the heavenly bodies. It was the effort to “save the appearances” and remove the contradictions that gave rise to science, and which has in the course of time burgeoned out into a system of sciences, each in itself systematically unified, and all interconnected and mutually sustaining, so that they form, if only ideally and in aspiration, a single unified system. What the metaphysician seeks is the universal principle ordering this whole and the way in which it expresses itself as the absolute presupposition of science at each stage of its development.

There is now no danger of an infinitely regressive search for “foundations,” because it is not by retrogression that we reach the ultimate principle of explanation but by dialectical progression. The ordering principle of a system developing as a graded scale of forms is not what lies at its base—not the vague immediacy from which the beginning of the investigation starts—but what reveals itself at its culmination. The whole is self-complete and self-sustaining. The universal principle of order reveals itself fully only at the end of the scale as that which has been immanent from the beginning. The imagery which we rejected above of an underlying fundament is inappropriate. There is no infinite regress; but there is a circle—not, however, vicious, but simply what is necessarily involved in the return upon itself of progressively self-reflective thinking, which discovers in the final phase what has all along been implicit in the earlier. The criterion of truth and validity emerges at the end as what has throughout been the sustaining principle of order and rationality. No infinite regress is involved, therefore, as the system closes in upon itself and maintains itself in its integral wholeness, justifying Spinoza’s claim that truth is the measure both of itself and of falsity.

To see metaphysics in this way is to dispose once and for all of the positivistic denunciation that because of its lack of empirical evidence it can have no factual meaning. In any case, the recent rediscovery (becoming, at long last, generally recognized) that empirical evidence is always theory-laden has undermined empiricism so fatally that the



accusation itself has lost all plausibility. Likewise, the outworn slander that metaphysics is mere cerebration without practical significance loses all force in an age when science and technology have permeated our entire way of life, frequently to its detriment, so that the examination of the presuppositions of science can scarcely fail to have practical relevance.

The history of science thus constitutes a scale of forms in which each major epoch is dominated by a conceptual scheme, somewhat inappropriately called by Thomas Kuhn a "paradigm," and more suggestively by Collingwood a constellation of absolute presuppositions. The ultimate and most comprehensive conceptual scheme in any period is metaphysical, and the sciences operate under its aegis as long as the latent contradictions inherent in it can be overlooked—so long as they do not interfere too seriously with the solution of minor problems (what Kuhn calls "normal" science). When that does occur, as it did, for example, in the fifteenth century, the conflicts become intolerable and the conceptual scheme is modified, producing a scientific revolution and establishing a new metaphysical system in which previous contradictions have been resolved. So progress has been made from Aristotelian to Copernican, from Copernican to Newtonian, and from Newtonian to Einsteinian science—to the contemporary system of relativity and quantum physics (passing over for the moment other sciences, which are, however, not unconnected with or uninfluenced by developments in physics). At each stage a new conceptual scheme is presupposed, which, as set out by the philosophers of the day, is the appropriate metaphysical theory. But whereas the metaphysics of the Ancients, and subsequently that of the seventeenth-century Rationalists and Empiricists, each expressing the absolute presuppositions of their contemporary science, were systematically set out by the philosophers of those times, the appropriate metaphysic of the twentieth century is still in the process of gestation.

I have tried to give some indication of the way in which this is proceeding, although as yet there is considerable confusion of voices. It must be a metaphysic at once of relativity, of evolution, and of historical interpretation; and this has been developing first through the systems of Samuel Alexander, Henri Bergson, and A. N. Whitehead; then, after an interruption by the somewhat abortive efforts of Positivism to dispense with metaphysics altogether, through Phenomenology and Hermeneutics, which have taken up the trail at a different point and from a

different angle. With the help of Collingwood's theories of absolute presuppositions and the scale of forms, adumbrating a universal principle of systematic wholeness (implied, if not always clearly expressed), the process may continue further.

Positivism, despite its vociferous claims, failed, with its throwback to eighteenth-century Empiricism, to provide adequate interpretation or expression of the scientific spirit of the age; and Phenomenology and Existentialism, as well as Hermeneutics, have failed to relate their metaphysical schemata to a sufficiently wide range of scientific thought. Phenomenology and Existentialism have obvious important relations to psychology, and Hermeneutics has similar important relations to the social sciences—to anthropology and history. But what is needed and still remains to be worked out is a metaphysic in the style of Alexander and Whitehead, which will comprehend the fundamental presuppositions at once of physics and biology as well as of psychology and the social sciences.

The chapters which follow can scarcely claim to offer more than a very small contribution to this task, although elsewhere I have tried to pursue it at more length. Here attention is devoted only to one central topic, that of time. I have not explicitly raised Collingwood's question as to the absolute presupposition of contemporary science with respect to time, but it will be obvious to the reader that it is the crucial issue throughout. For a return to metaphysics in an age of scepticism I make no apology. What I have written above aims at establishing its legitimacy, and the parlous condition of our contemporary society, which has been brought about largely through the overpowering domination of a technology devised by sciences, of which the absolute presuppositions have remained for the most part unexamined, is a sure indication of its necessity.