

Introduction

However much systems of thought which were framed in the classical and in the early modern period may have differed from one another, they held a firm and unshakable conviction in common that it is both possible and necessary to describe the fundamental realities or reality of our world. It is possible to do so because human intelligence is in, or can be placed in, contact with whatever is fundamental, even if acquisition of this insight is an arduous task. Furthermore, it was thought imperative to accomplish the project because only by formulating a clear account of what the ultimate realities are may we understand the origin of all our other knowledge and, in a broader sense, understand the diversity of being that is characteristic of our world. More baldly, there was little, or rather there was no, doubt that resolution of the issues that collectively are described as metaphysical, or which Aristotle associated with first philosophy, was essential as a foundation for all other knowledge, both theoretical and practical. Doubts as to the propriety or possibility of the enterprise were stilled by the necessity of the undertaking and the success of the system proposed.

In marked contrast to classical philosophy, since the beginning of the modern period such foundational work has been accomplished by an exclusive concentration on the knowing subject and the subject's knowledge and cognitive experience. Descartes's *cogito* was the earliest modern effort explicitly directed towards presenting our knowledge of the human soul, the physical world, and God as the result of a searching analysis of the universal exigencies of thought, although it was by no means the only one. Because of this modern focus upon the human subject and human knowledge, the plausibility of metaphysics' playing a foundational role came increasingly to depend upon epistemological investigations. Either implicitly, or in some cases explicitly, modern philosophers assumed that human experience and knowledge are fundamental and irreducible givens so that the foundational role of metaphysics must include an analysis of what human understanding can accomplish. However, because knowledge and experience are fallible and limited, it was only a short step from there to the formulation of trenchant criticisms of any effort to delineate universal and necessary foundations of experience or of the physical world. In the present century many philosophers came to believe such an enterprise was a vain and wrongheaded one. This doctrine—one might say dogma—gained wide acceptance for a

time, especially among English-speaking philosophers; but its success was never complete. A large part of the reason why it was not was because—unlike classical and early modern schemes—it was never able to make clear how it is possible to connect the knowing subject's experience to the physical world without invoking a *deus ex machina*.

In the second half of the century Ivor Leclerc has been one of the most consistent and outspoken defenders of the place of metaphysics in the architectonic of human cognition, and therewith he has been one of the most constant and acute critics of the dogmas which have preoccupied contemporary thought. There is a very good reason for this. Leclerc began his investigation with a close study of the writings of A. N. Whitehead, who earlier in the century had come to appreciate the foundational nature of metaphysics as a groundwork for the philosophy of nature, after having attempted unsuccessfully to operate within the framework of the assumption, inherited from early modern thought, which insisted that human experience and human knowledge must be the starting and the endpoint of all rational inquiry. In his mature work Whitehead argued that the chief task of contemporary metaphysics was to go beyond the naive assumptions of modern philosophy and carefully to rethink the notion of subjectivity so as to articulate a clear and adequate formulation of what a subject is, and how to apprehend its relation to the physical world. Human knowledge and human subjects must be understood as important special instances of subjectivity, not as the exclusive focal point of all speculation.

Because they are concerned with these issues, the essays which constitute the present study share several convictions with Leclerc. In the first place they all accept the classical evaluation of metaphysics as being the only coherent foundation possible for the more special disciplines, even if each recognizes that the systematic foundation offered is one which must remain open and is not the articulation of a completed system such as has been proposed in the past. Their agreement on this key methodological issue, however, does not obscure the widely diverse, and in some cases conflicting, positions represented by the papers. Yet such diversity is directed towards the common goal of portraying an aspect of subjectivity through which to intensify, deepen, expand, and reinterpret the conception of the active subject as an ontological category. As such they accent the central aspects of a contemporary metaphysics which will be an adequate foundation for the philosophy of nature as a whole.

SECTION ONE: HISTORICAL ANTECEDENTS

The first four papers of this collection explore significant antecedents within the tradition in order to show how incisive the foundational metaphysics of

Leibniz, Kant and later German idealism have been for clarification of the relation between the subject and the world and to demonstrate their relevance to contemporary debate. Reiner Wiehl and Gordon Treash highlight aspects of Kant's thought which are central to resolution of the issues. Wiehl argues that in raising the issue of how reflective judgment and teleology are connected in the *Critique of Judgment* Kant has anticipated issues to which Whitehead's thought provides significant answers. In the same vein Treash insists that Kant's conception of subjectivity is much richer than Whitehead sometimes recognized, but that it has several systematically significant affinities to Whitehead's positive position. Errol Harris reconstructs Leibniz's thought in order to illustrate that no matter how impressive and startling they may be, the results of empirical science demand the foundational concerns provided by a metaphysical analysis centered upon an ontology of the subject. Finally, Hugo Meynell's examination of idealism, particularly of Schelling's idealism, suggests that proceeding in this direction requires recognition of the transcendent. He contends that Schelling's idealism not only offers a coherent philosophic option, but if supplemented by transcendental Thomism, provides a plausible foundation for the philosophy of nature.

SECTION TWO: THE SUBJECT AS CREATIVE

Whitehead was able to formulate a new metaphysical synthesis by eliciting the notion of creativity into great importance as the root category of his system. More than that, it is the creative activity of subjects—understood from an ontological perspective—which constitutes the central point of Whitehead's thought, and the other novel aspects of his system are related directly to this crucial category. The second section of the book examines some of the implications of Whitehead's having adopted this strategy with special attention to its adequacy as a foundation for our natural knowledge. Jan van der Veken and André Cloots insist that an interpretation of the key Whiteheadian conception of creativity, which is richer than the one usually adopted, is a promising starting point for extending the dialogue between Whitehead and key figures in continental thought, including Spinoza, Hegel, and Heidegger. Donald Sherburne objects sharply to the way in which the past of a creative entity, and indeed the creative subject itself, has been understood by some students of Whitehead's thought. He contends that those whose interpretations he criticizes come much closer to Sartre than to Whitehead. Lewis Ford studies carefully the ontological principle, which is intimately connected to creativity and to the conception of the subject as creative activity, and argues that in the course of his philosophical development Whitehead extended or broadened his use and conception of this principle. George Kline explores the difficulties that Whitehead's syntactical ambigui-

ties have given rise to and shows that many of the problems encountered in Whitehead's philosophical analysis of creative subjects can be resolved by attention to them. Norris Clarke warns against discarding the category of substance altogether, as some interpreters have done. Rather, the category is to be retained, but also understood as involving active and self-communicative agency, so that the relational aspect of being is emphasized.

SECTION THREE: THE SUBJECT AS FOUNDATION

The three papers in this section propose quite different ways in which a more substantial appreciation of the foundational role played by the subject grounds nature and human actions. Albert Shalom examines the close relation that exists between the emergence of the subject, or of subjectivity, and the role of time which he understands as central to physical existence. Again, the activity of subjects is at the heart of Edward Pols's exploration of what may be expected of any foundational metaphysics. Pols argues that although the endeavor to articulate foundations has a useful function, it is no more than a metaphor which must finally be discharged by radical realism—with a strong emphasis on the active and acting subject. While these two papers are concerned with the internal subjectivity of every being or of every actual existent, in the final paper of this section Jude Dougherty directs attention to the relationship between human subjects. He explores in detail some problems of legal and ethical philosophy, which demonstrate clearly the dangerous consequences of attempting to rely upon the notion of responsibility—particularly of groups as reflected, for example, in their collective guilt—without an adequate ontological foundation's having been laid for this form of interaction between subjects.

SECTION FOUR: SCIENCE, INTERACTION AND THE PHILOSOPHY OF NATURE

The theme of interaction is crucial for the fourth section from another standpoint. If it is true that metaphysical investigation plays the foundational role that this volume contends it can and must do, then concrete manifestations of that role ought to be apparent, particularly in interpretation of the physical world. This section revolves around the insight that it is impossible to achieve such an explication of the physical unless physical entities are construed with essential reference to their mutual interaction. Friedrich Rapp shows that the criticisms which have been leveled against metaphysical enterprises conceived as foundational are by no means conclusive, and have proven inadequate within the philosophy of science. A theory of natural science framed within a metaphysical system such as Whitehead's, which is grounded in an ontological interpretation of the subject, is needed to replace

the accounts that evolved early in the modern era. Understood in this way, metaphysics plays a role which can be structurally compared to science. Paul Bogaard reviews the difficulties theoretical chemists have recognized in providing a conceptual interpretation of the products of chemical bonding. An explication of the philosophical content of theoretical chemistry makes very doubtful the presumption typically endorsed by philosophers of science that complex molecular systems are reducible to their physical components. That assumption, he insists, ignores the substantive interaction among components, which in turn rests upon an outmoded metaphysical foundation. Joseph Earley relies upon explicit metaphysical foundations to describe the five different senses in which chemical entities may be understood to exist. This description, Earley argues, requires that due consideration be extended to both the nature of compounds and to the interaction of elements within the compound. Finally, Ilya Prigogine examines the nature of time, from a standpoint which, as he explains, derives directly from Leclerc and derivatively from Whitehead. He argues that the irreversibility of time on the phenomenological level, and its direction on a more fundamental one, must be woven into a cosmology in which no object in the universe is regarded as being in equilibrium and in which time-ordering is a statistical description, ultimately dependent upon the interactive correlations of the components involved.

SECTION FIVE: SUBJECTIVITY AND GOD

The final section of the book explores an issue which traditionally has constituted an important aspect of the foundations of knowledge and existence, that is to say the role of God in metaphysical accounts. The last two essays examine the dogma of contemporary philosophy which insists that God, understood in a sense consistent with if not derived from religious practice and natural theology, can play no significant role in our understanding of reality. This dogma means that human subjects are the most complex ones which can be coherently described by rational inquiry. It is a proposition challenged directly by several papers of the collection but is addressed with special intensity by Charles Hartshorne who explores the logic of necessity and contingency as applied to the world in order to argue that metaphysics without God is impossible. That exploration from the perspective of formal logic is balanced by Hywel Lewis, who insists that it is essential to confront the issue of origins in any rational account and that the universe that we encounter must be regarded as grounded in a transcendent reality, which is adequate both to the understanding of human subjectivity and religious experience.